STATE OF NEW MEXICO
ENERGY, MINERALS, AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION

IN THE MATTER OF THE HEARING CALLED BY THE OIL CONSERVATION COMMISSION FOR THE PURPOSE OF CONSIDERING:

CASE NO. 11705
Order No. R-10987

APPLICATION OF OIL CONSERVATION DIVISION FOR TO AMEND ORDER R-8170, AS AMENDED, "GENERAL RULES FOR THE PRORATED POOLS OF NEW MEXICO" AND ORDER NO. R-333, AS AMENDED, " RULES OF PROCEDURE FOR PRORATED GAS POOLS IN NORTHWEST NEW MEXICO"

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 o'clock a.m. on April 9, 1998, at Santa Fe, New Mexico, before the Oil Conservation Commission of New Mexico, hereinafter referred to as the "Commission."

NOW, on this 7th day of May, 1998, the Commission, a quorum being present, having considered the record and being fully advised,

FINDS THAT:

(1) Due public notice having been given as required by law, the Commission has jurisdiction of this cause and the subject matter thereof.

(2) New Mexico Oil Conservation Division (the "Division") Order No. R-8170, as amended, sets forth the general rules for the prorated gas pools in New Mexico as well as special pool rules for the individual prorated gas pools. Order No. R-8170 has been amended several times throughout the years.

(3) Division Order No. R-333, as amended, sets forth the tests and test procedures for the prorated gas pools in Northwest New Mexico. Order No. R-333 has also been amended several times throughout the years.

(4) Early in the productive life of the San Juan Basin it was determined by testing and reservoir studies that the producing ability of a gas well and the acreage dedicated to that gas well were both indicators of the producible reserves of that well. The results of a standardized deliverability test combined with the amount of acreage dedicated to the well have been used by the Division in a complex formula to calculate that well's equitable share of the total amount of gas produced from the pool. This allocation of production has been performed by the Division in furtherance of its duties of protecting correlative rights and preventing waste. Due to the natural decline of producing wells, the drilling of new wells, and other changing conditions, wells within a pool have had to be tested periodically.

(5) Due to the declining productivity of wells in prorated pools, very few (approximately 6 of 4000 gas proration units) of these wells can produce more than their assigned allowables, i.e., are classified as nonmarginal. This is not anticipated to change in the foreseeable future. In addition, the current allowable calculation formula for the prorated gas pools in Northwest New Mexico may no longer be applicable due to the current gas market and the maturity of the reservoir production in the Northwest. However, existing Division rules require deliverability testing of many wells which will not be affected by allowable limitations and therefor will not affect correlative rights nor cause waste. This unnecessary testing is a burden on the operators as well as the Division.

(6) The Division determined, after consulting with numerous gas well operators in the Northwest, that the Division rules regarding testing of gas wells in prorated gas pools in the Northwest are in need of amendment to reduce the amount of gas well testing and change the basis for requiring testing. Frank Chaves, the District Supervisor of the Division Aztec District Office, formed a committee consisting of representatives from Amoco Production Company, Burlington Resources and Williams Field Services, that met several times to review the existing Division rules and recommend changes.

(7) The amendments recommended by the committee would limit the required deliverability testing to only nonmarginal wells and classify all wells in prorated gas pools in the Northwest as marginal by default unless substantial evidence indicates the well should be reclassified as nonmarginal.

(8) The information acquired from the testing of wells in non-prorated pools in Northwest New Mexico, required under Chapter IV of Order No. R-333, has become of little or no importance. This requirement should be eliminated which will eliminate testing of approximately 2500 wells.

(9) Since the general rules for prorated pools in New Mexico as contained in Order R-8170, as amended, are applicable statewide, the Division recommends that the general rules be formatted in compliance with the New Mexico Administrative Code (NMAC) and adopted in their amended form as Division Rule 605. Likewise, since the rules for testing and test procedures for gas wells in the prorated gas pools in Northwest New Mexico, as contained in Order No. R-333, as amended, are applicable to all such gas wells, the Division recommends that such rules be formatted in compliance with NMAC and adopted in their amended form as Division Rule 606.

(10) The Division also recommends that the special pool rules for the prorated pools in Northwest New Mexico, as set forth in Order No. R-8170, as amended, be amended to reflect the changes made in Rules 605 and 606.

(11) These amendments are in the best interests of conservation, the prevention of waste and the protection of correlative rights.

IT IS THEREFORE ORDERED THAT:

(1) That portion of Division Order No. R-8170, as amended, entitled "General Rules for Prorated Gas Pools of New Mexico" is hereby amended and shall be promulgated as a Division Rule, Rule 605 (19 NMAC 15.H.605), entitled "Gas Proration" as shown on Exhibit A attached hereto and made part of this order. That portion of Order No. R-8170, as amended, setting forth special pool rules for individual prorated gas pools in New Mexico is also amended as shown on Exhibit B attached hereto and made part of this order.

(2) Division Order No. R-333, as amended, is hereby amended and promulgated as a Division Rule, Rule 606 (19 NMAC 15.H.606), entitled "Tests and Test Procedures for Prorated Gas Pools in Northwest New Mexico" as shown on Exhibit C attached hereto and made part of this order.

(3) Rules 605 and 606 shall be effective as of the date of publication in the New Mexico Register. The amendments to the special pool rules shall be effective as of the date of this order.

(4) Jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinafter designated.

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

JAMI BAILEY, Member

WILLIAM J. LEMAY, Member

LORI WROTENBERY, Chairman

S E A L

EXHIBIT "A"

605 GAS PRORATION RULES

605.A DEFINITIONS

(1) ACREAGE FACTOR: A GPU's acreage factor shall be determined to the nearest hundredth of a unit by dividing the acreage assigned to the GPU by a number equal to the number of acres in a standard GPU for such pool. However, the acreage tolerance provided in 605.B(2) shall apply. [5-30-98]

(2) AD FACTOR: An acreage times deliverability factor is calculated in pools in which acreage and deliverability are proration factors. The product obtained by multiplying the acreage factor by the calculated deliverability (expressed as MCF per day) for that GPU shall be known as the AD factor for that GPU. The AD Factor shall be computed to the nearest whole unit. [5-30-98]

(3) ALLOCATION HEARING: A hearing held by the Division twice each year to determine pool allocations for the ensuing allocation period. [5-30-98]

(4) ALLOCATION PERIOD: A six-month period beginning at 7:00 A.M. April 1 and October 1 of each year. [5-30-98]

(5) BALANCING DATE: The date 7:00 A.M. April 1 of each year shall be known as the balancing date, and the twelve months following this date shall be known as the gas proration period. [5-30-98]

(6) BROKER: A third party who negotiates contracts for purchase and resale. [5-30-98]

(7) CLASSIFICATION PERIOD: A three month period beginning at 7:00 A.M. April 1, July 1, October 1, and January 1 of each year. [5-30-98]

(8) GAS POOL: Any pool which has been designated as a gas pool by the Division after notice and hearing. [5-30-98]

(9) GAS PRORATION UNIT (GPU): The acreage allocated to a well, or in the case of an infill well or wells to a group of wells, for purposes of spacing and proration. GPU's may be either of a standard or nonstandard size as provided in these rules. (GPU's means plural GPU). [5-30-98]

(10) GAS TRANSPORTER: Any taker of gas, the party servicing the well meter, or the party responsible for measurement of gas sold from the well or beneficially used off-lease. This could be at the wellhead, at any other point on the lease, or at any other point authorized by the Division where connection is made for gas transportation or utilization (other than is necessary for maintaining the producing ability of the well). The Gas Transporter can be the gatherer, transporter, producer, or a delegate of one of those parties. The Gas Transporter shall be identified on Form C-104 and will be responsible for filing Form C-111 as required under the provisions of Rule 1111. [5-30-98]

(11) GAS PURCHASER: The purchaser (where ownership of the gas is first exchanged by the producer to the purchaser for an agreed value) of the gas from a gas well or GPU. [5-30-98]

(12) HARDSHIP GAS WELL: A gas well wherein underground waste will occur if the well is shut-in or curtailed below its minimum sustainable flow rate. No well shall be classified as a hardship gas well except after notice and hearing or upon appropriate administrative action of the Division. [5-30-98]

(13) INFILL WELL: An additional producing well on a GPU which serves as a companion well to an existing well on the GPU. [5-30-98]

(14) MARGINAL GPU: A proration unit which is incapable of producing or has not produced the non-marginal allowable based on pool allocation factors. Marginal GPU's do not accrue over or underproduction. [5-30-98]

(15) NON-MARGINAL GPU: A proration unit receiving an allowable based upon pool allocation factors. Non-marginal proration units accrue over or underproduction. [5-30-98]

(16) OVERPRODUCTION: The volume of gas produced on a GPU in any month greater than the assigned non-marginal allowable (does not include gas used in maintaining the producing ability of the well(s) of the GPU). Overproduction accumulates month to month during the proration period. [5-30-98]

(17) PRORATED GAS POOL: A prorated gas pool is a gas pool in which, after notice and hearing, the production is allocated by the Division according to these Rules and any applicable special pool rules. [5-30-98]

(18) PRORATION PERIOD: The twelve-month period beginning April 1 of each year shall be the gas proration period. [5-30-98]

(19) SHADOW ALLOWABLE: The gas volume calculated for a marginal GPU that is equal to the allowable assigned to a non-marginal GPU in the same pool of the same A (acreage) or A and AD (acreage deliverability) factors as the marginal GPU. [5-30-98]

(20) UNDERPRODUCTION: The volume of assigned non-marginal allowable not produced on a GPU. Underproduction accumulates month to month during the proration period. [5-30-98]

605.B. WELL ACREAGE AND LOCATION REQUIREMENTS

(1) STANDARD GAS PRORATION UNIT SIZE AND WELL SPACING:

(a) Unless otherwise provided for in applicable special pool rules, gas wells in prorated gas pools shall be drilled according to the well spacing and acreage requirements contained in these Rules provided that when wells are drilled in pools with 640 acre spacing, a government section shall comprise the proration unit.

(b) Any GPU drilled according to paragraph (a) which contains acreage within the tolerances below shall be considered a standard GPU for calculating allowables:

STANDARD PRORATION UNIT	ACREAGE TOLERANCE
160 acres	158-162 acres
320 acres	316-324 acres
640 acres	632-648 acres

[5-30-98]

(2) NON-STANDARD GAS PRORATION UNITS:

(a) The District Supervisor of the appropriate district office of the Division has the authority to approve a nonstandard GPU without notice and hearing when the unorthodox size and shape of the GPU is necessitated by a variation in the legal subdivision of the U.S. Public Land Surveys and the nonstandard GPU is not less that 75% nor more than 125% of a standard GPU by accepting a Form C-102 land plat showing the proposed nonstandard GPU with the number of acres contained therein, and shall assign an allowable

to the nonstandard GPU based upon the acreage factor for that acreage.

(b) Nonstandard proration units and unorthodox locations may be approved by the Division according to applicable special pool rules or Division Rules.

[5-30-98]

605. C. NOMINATIONS

(1) GAS PURCHASERS OR GAS TRANSPORTERS SHALL NOMINATE: Each gas purchaser or each gas transporter as herein provided shall file with the Division its nomination for the amount of gas which it in good faith desires to purchase and/or expects to transport during the ensuing allocation period from each gas pool regulated by this order. The purchaser may delegate the nomination responsibility to the transporter, operator, or broker by notifying the Division's Santa Fe office. One copy of such nomination for each pool shall be submitted to the Division's Santa Fe office on Form C-121-A by the first day of the month during which the Division will consider at its allocation hearing the nominations for the succeeding allocation period. The Division shall consider at its allocation hearing the nominations received, actual production, and such other factors as may be deemed applicable in determining the amount of gas that may be produced without waste during the ensuing allocation period.

The Division Director may, at his discretion, suspend this rule whenever it appears that the nominations are of little or no value. [5-30-98]

(2) SCHEDULE: The Division shall issue a gas proration schedule for each allocation period showing the monthly allowable for each GPU that may be produced during each month of the ensuing allocation period, the current classification of each GPU, and such other information as is necessary to show the allowable production status of each GPU on the schedule. The Division may issue supplemental proration schedules during an allocation period as necessary to show changes in GPU classification, adjustments to allowables due to changes in market conditions, or to reflect any other changes as the Division deems necessary. [5-30-98]

(3) PRORATION OF ALL GAS WELLS WITHIN A POOL: The Division shall include in the proration schedule the gas wells in the gas pools regulated by this order delivering to a gas transporter, and shall include in the proration schedule any well which it finds is being unreasonably discriminated against through denial of access to a gas transportation facility, which is reasonably capable of handling the type of gas produced by such a well. [5-30-98]

605.D. ALLOCATION AND GRANTING OF ALLOWABLES

(1) FILING OF FORM C-102 AND FORM C-104 REQUIRED: No GPU shall be assigned an allowable before receipt of Form C-102 (well location and acreage dedication plat) and the approval date of Form C-104 (Request for Allowable and Authorization to Transport Oil and Natural Gas). [5-30-98]

(2) HOW ALLOWABLES ARE CALCULATED: The total allowable to be allocated to each gas pool regulated by this order for each allocation period shall be equal to the estimated market demand as determined by the Division, plus any adjustments the Director deems necessary to equate the total pool allowable to the estimated market demand. The Director may make such adjustments as he deems necessary to compensate for overproduction, underproduction, and other circumstances which may necessitate such adjustment to equate pool allowable to the anticipated market demand. The estimated market demand for each pool shall be established from any information the Director requires and can consist of nominations from purchasers, transporters or other parties having knowledge of market demand for gas from such pools, actual past production figures, seasonal trends, or any other factors deemed necessary to establish estimated market demand. The Director shall not be bound to use all the information requested and can establish market demand by any method so approved. A monthly allowable shall be assigned to each GPU entitled to an allowable for the ensuing allocation period by allocating the pool allowable among all such GPU's in that pool according to the procedure set forth in the following paragraphs of this order. Should market conditions indicate a change is necessary, the Director may adjust allowables up or down during the 6-month allocation period using a maximum of 10% as a guideline. [5-30-98]

(3) MARGINAL GPU ALLOWABLE: The monthly allowable to be assigned to each marginal GPU shall be equal to its average monthly production from its latest classification period. [5-30-98]

(4) NON-MARGINAL GPU ALLOWABLE: Non-marginal GPU allowables shall be determined in conformance with the applicable special pool rules. [5-30-98]

(a) In pools where acreage is the only proration factor, the total non-marginal allowable shall be allocated to each GPU in the proportion that each GPU acreage factor bears to the total acreage factor for all non-marginal GPU's. [5-30-98]

(b) In pools where acreage and deliverability are proration factors:

(i) A percentage as set forth in special pool rules, of the non-marginal allowable shall be allocated to each GPU in the proportion that each GPU's AD factor bears to the total AD factor for all non-marginal GPU's in the pool; and

(ii) The remaining non-marginal allowable shall be allocated to non-marginal GPU's among each GPU in the proportion that each GPU's acreage factor bears to the total acreage factor for all non-marginal GPU's in the pool.

[5-30-98]

(5) NEW CONNECTS ASSIGNMENT OF ALLOWABLES: Allowables to newly completed gas wells shall commence, in pools where acreage is the only proration factor, on the date of first delivery of gas to a gas transporter as demonstrated by an affidavit furnished by the transporter to the appropriate Division district office or the approval date of Form C-102 and Form C-104, whichever is later. [5-30-98]

(6) GAS CHARGED AGAINST GPU'S ALLOWABLE: Except as provided in the Special Pool Rules, the volume of produced gas sold or beneficially used other than lease fuel from each GPU shall be charged against the GPU's allowable; however, the gas used in maintaining the producing ability of the well shall not be charged against the allowable. [5-30-98]

(7) CHANGE IN ACREAGE: If the acreage assigned to a GPU is changed, the operator shall notify the appropriate Division district office in writing of such change by filing a revised Plat (Form C-102). The revised allowable, as determined by the Division, assigned to the GPU shall be effective on the first day of the month following receipt of the notification. [5-30-98]

(8) MINIMUM ALLOWABLES: After notice and hearing, the Division may assign minimum allowables for prorated gas pools to avoid waste, encourage efficient operations, and to prevent the premature abandonment of wells. (See Special Pool Rules for minimum allowable amount.) In determining the volume of minimum allowable for a well with a standard proration unit, the Division shall take into account economic and engineering factors such as drilling and operating costs, anticipated revenues, taxes, and any similar data that will establish that the ultimate recovery of hydrocarbons will be increased from the pool because of the adoption of a minimum allowable for the pool. Once adopted, the minimum allowable for wells with nonstandard proration units shall be proportionally adjusted. [5-30-98]

(9) DELIVERABILITY TESTS: In pools where acreage and deliverability are proration factors, wells on non-marginal GPUs will be tested in accordance with Division Rules and the test results shall be used in calculating deliverabilities for the succeeding proration period. Wells on GPUs reclassified to non-marginal shall be tested within 90 days of the order and thereafter in accordance with the appropriate testing schedule for the pool. Wells on marginal GPUs are exempt from deliverability testing. [5-30-98]

605.E. BALANCING OF PRODUCTION

(1) UNDERPRODUCTION: Any non-marginal GPU which has an underproduced status as of the end of a gas proration period shall be allowed to carry such underproduction forward in the next gas proration period and may produce such underproduction in addition to the allowable assigned during such succeeding period. Any underproduction carried forward into a gas proration period and remaining unproduced at the end of such gas proration period shall be canceled. [5-30-98]

(2) BALANCING UNDERPRODUCTION: Production during any one month of a gas proration period greater than the allowable assigned to a GPU for such a month shall be applied against the underproduction carried into such a period in determining the amount of allowable, if any, to be canceled. [5-30-98]

(3) OVERPRODUCTION: Any GPU which has an overproduced status as of the end of a gas proration period shall carry such overproduction forward into the next gas proration period. Said overproduction shall be made up by underproduction during the succeeding gas proration period. Any GPU which has not made up the overproduction carried into a gas proration period by the end of said period shall be shut in until such overproduction is made up. [5-30-98]

(a) TWELVE-TIMES OVERPRODUCED, NORTHWEST: For the prorated gas pools of Northwest New Mexico, if it is determined that GPU is overproduced in an amount exceeding twelve times its current year January allowable (or, in the case of a newly connected well, a marginal well, or a well recently reclassified as non-marginal, twelve times the January allowable assigned to a non-marginal GPU of similar acreage and deliverability factors), it shall be shut in until its overproduction is less than twelve times its January allowable, as determined hereinabove. [5-30-98]

(b) SIX-TIMES OVERPRODUCED, SOUTHEAST: For the prorated gas pools of southeast New Mexico, if it is determined that a GPU is overproduced in an amount exceeding six times its current year January allowable (or, in the case of a newly connected well, a marginal well, or a well recently reclassified as non-marginal, six times the January allowable assigned to a non-marginal GPU of a similar acreage factor), it shall be shut in until its overproduction is less than six times its January allowable, as determined hereinabove. [5-30-98]

(4) EXCEPTION TO SHUT IN FOR OVERPRODUCTION: The Director shall have authority to permit a GPU which is subject to shut-in, pursuant to (3) (a) or (b) above to produce up to 250 MCF of gas per month upon proper showing to the Director that complete shut-in would cause undue hardship, provided however, such permission may be rescinded for any GPU produced greater than the monthly rate authorized by the Director. [5-30-98]

(5) BALANCING OVERPRODUCTION: Allowable assigned to a GPU during any one month of a gas proration period greater than the production for the same month shall be applied against the overproduction chargeable to such GPU in determining the overproduction which must be made up pursuant to the provisions of (3)(a) or (b) above. [5-30-98]

(6) EXCEPTION TO BALANCING OVERPRODUCTION: The Director may allow overproduction to be made up at a lesser rate than permitted under (3)(a) or (b) or (5) above upon a showing at public hearing that the same is necessary to avoid material damage to the well. [5-30-98]

(7) HARDSHIP GAS WELLS: If a GPU containing a hardship gas well is overproduced, the operator must take the necessary steps to reduce production in order to reduce the overproduction. Any overproduction existing at the time of designation of a well as a hardship gas well or accruing to the GPU thereafter shall be carried forward until it is made up by underproduction. No GPU containing a hardship gas well, which GPU is overproduced, shall be permitted to produce at a rate higher than the minimum producing rate authorized by the Division. [5-30-98]

(8) MORATORIUM ON SHUT-INS: The Director shall have authority to grant a pool-wide moratorium of up to three months as to the shutting in of gas wells in a pool during periods of high demand emergency upon proper showing that such emergency exists, and that a significant number of the wells in the pool are subject to shut-in pursuant to the provisions of (3)(a) or (b) above. No moratorium beyond the aforementioned three months shall be granted except after notice and hearing. [5-30-98]

(9) The Director may reinstate allowable to wells which suffered cancellation of allowable under (1) above or F.(3) below or loss of allowable due to reclassification of a well under F.(2) below. If such cancellation or loss of allowable was caused by non-access or limited access to the average market demand in the pool rather than inability of the well to produce. Upon petition, with a showing of circumstances which prevented production of the non-marginal allowable, and evidence that the well was capable of producing at allowable rates during the period for which reinstatement is requested, the allowable may be reinstated in such amounts needed to avoid curtailment or shut-in of the well for excessive overproduction. Such petition shall be approved administratively or docketed for hearing within 30 days after receipt in the Division's Santa Fe office. [5-30-98]

605.F. CLASSIFICATION OF GPU's

(1) RECLASSIFICATION BY THE DIRECTOR: The Director may reclassify a marginal or non-marginal GPU anytime the GPU's producing ability justifies such reclassification. The Director may suspend the reclassification of GPU's on his own initiative, or upon proper showing by an affected interest owner, should it appear that such suspension is necessary to permit underproduced GPU's, which would otherwise be reclassified, a proper opportunity to make up such underproduction. [5-30-98]

(2) RECLASSIFICATION TO MARGINAL: A non-marginal well may be reclassified as marginal in either of the following ways:

(a) After the production data is available for the last month of each classification period, any GPU which had an underproduced status at the beginning of the allocation period shall be reclassified to marginal if its highest single month's production during the classification period is less than its average monthly allowable during such period; however, the operator of any GPU so classified, or other affected interest owner, shall have 30 days after receipt of notification of marginal classification in which to submit satisfactory evidence to the Division that the GPU is not of marginal character and should not be so classified; or

(b) A GPU which is underproduced more than the overproduction limit as described in E.(3)(a) or (b) above, whichever is applicable, shall be reclassified as marginal.

[5-30-98]

(3) CANCELLATION OF UNDERPRODUCTION FOR MARGINAL GPU: A GPU which is classified as marginal shall not be permitted to accumulate underproduction, and any underproduction accrued to a GPU before its classification as marginal shall be canceled. [5-30-98]

(4) RECLASSIFICATION TO NON-MARGINAL: If, at the end of any classification period, a marginal GPU has produced more gas during the proration period to that time than its shadow allowable for that same period, the GPU shall be reclassified as a non-marginal GPU. [5-30-98]

A-9

(5) REINSTATEMENT OF STATUS: A GPU reclassified to non-marginal under the provisions of (4) above shall have reinstated to it all underproduction which accrued or would have accrued as a non-marginal GPU from the current proration period, underproduction from the prior proration period may be reinstated after notice and hearing. All uncompensated-for overproduction accruing to the GPU while marginal shall be chargeable upon reclassification to non-marginal. [5-30-98]

605.G. REPORTING OF PRODUCTION - FILING C-111 AND C-115 REPORTS: Transporters and operators shall file gas transportation and production reports pursuant to Rules 1111 and 1115 of the Division Rules provided that upon approval by the Director as to the specific program to be used, any producer or transporter of gas may be permitted to report metered production of gas on a chart-period basis; provided the following provisions shall be applicable to each gas well:

(1) Reports for a month shall include not less that 24 nor more than 32 reported days.

(2) Reported days may include as many as the last seven days of the previous month but no days of the succeeding month.

(3) The total of the monthly reports for a year shall include not less than 360 nor more than 368 reported days.

(4) For purposes of these rules, the term "month" shall mean "calendar month" for those reporting on a calendar month basis, and shall mean "reporting month" for those reporting on a chart-period basis according to the exception provided in this rule.

[5-30-98]

EXHIBIT "B"

SPECIAL RULES FOR INDIVIDUAL PRORATED GAS POOLS

SPECIAL RULES AND REGULATIONS FOR THE BASIN-DAKOTA GAS POOL

The vertical limits for the Basin-Dakota Gas Pool shall be from the base of the Greenhorn Limestone to a point 400 feet below the base of the said formation and consisting of the Graneros formation, the Dakota formation and the productive upper portion of the Morrison formation.

The Basin-Dakota Gas Pool was created February 1, 1961, and gas proration became effective February 1, 1961.

WELL ACREAGE AND LOCATION REQUIREMENTS

The STANDARD GPU (Gas Proration Unit) in the Basin-Dakota Gas Pool shall be 320 acres.

WELL LOCATION:

1) THE INITIAL WELL drilled on a GPU shall be located not closer than 790 feet to any outer boundary of the quarter section on which the well is located and not closer than 130 feet to any quarter-quarter section line or subdivision inner boundary.

2) THE INFILL WELL drilled on a GPU shall be located in the quarter section of the GPU not containing a Dakota well, and shall be located with respect to the GPU boundaries as described in the preceding paragraph.

No Dakota infill well shall be drilled nearer than 920 feet to an existing Dakota well on the same GPU.

The plat (Form C-102) accompanying the Application for Permit to Drill (OCD Form C-101 or the federal form) for the subsequent well on a GPU shall have outlined thereon the boundaries of the GPU and shall show the location of all existing Dakota wells on the GPU plus the proposed new well.

In the event an infill well is drilled on any GPU, both wells shall be produced for so long as it is economically feasible to do so.

ALLOCATION AND GRANTING OF ALLOWABLES

NON-MARGINAL GPU ALLOWABLE: The pool allowable remaining each month after deducting the total allowable assigned to marginal GPU's shall be allocated among the non-marginal GPU's entitled to an allowable in the following manner:

- GPU's shall be allocated among such GPU's in the proportion that each GPU's AD Factor bears to the total AD Factor for all non-marginal GPU's in the pool.

- When calculating the allowable for a GPU containing an infill well, the deliverability of both wells shall be added in calculating the AD Factor and the allowable may be produced from both wells.

- Sixty percent (60%) of the pool allowable remaining to be allocated to non-marginal GPU's shall be allocated among such GPU's in the proportion that each GPU's acreage factor bears to the total acreage factor for all non-marginal GPU's in the pool.

MINIMUM ALLOWABLES: A minimum allowable of 250 MCF per month per GPU will be assigned to prevent the premature abandonment of wells.

A GPU in the BASIN DAKOTA GAS POOL shall be classified as marginal unless reclassified by the Director pursuant to Rule 605.F.(2). Any operator in the BASIN DAKOTA GAS POOL may request a reclassification of a GPU in that pool.

(General Pool Rules also apply unless in conflict with these Special Pool Rules.)

SPECIAL RULES AND REGULATIONS FOR THE BLANCO-MESAVERDE GAS POOL

The VERTICAL LIMITS for the Blanco-Mesaverde Gas Pool shall be as follows:

- North and east of a line generally running from the northwest corner of Township 31 North, Range 13 West, San Juan County, New Mexico, to the southwest corner of Township 24 North, Range 1 East, NMPM, Rio Arriba County, New Mexico, (as fully described on Exhibit "A" of Order R-5459, August 1, 1977, as amended, and in Rule 25 of this order), the vertical limits shall be from the Huerfanito Bentonite marker to a point 500 feet below the top of the Point Lookout Sandstone.

- South and west of the line described in (A) above, the vertical limits shall be from a point 750 feet below said Huerfanito Bentonite marker to a point 500 feet below the top of the Point Lookout Sandstone.

- The Blanco-Mesaverde Gas Pool was created February 25, 1949 and gas proration became effective March 1, 1955.

WELL ACREAGE AND LOCATION REQUIREMENTS

The STANDARD GPU (GAS PRORATION UNIT) in the Blanco-Mesaverde Gas Pool shall be 320 acres.

WELL LOCATION:

1. THE INITIAL WELL drilled on a GPU shall be located not closer than 790 feet to any outer boundary of the quarter section on which the well is located and not closer than 130 feet to any quarter-quarter section line or subdivision inner boundary.

2. THE INFILL WELL drilled on a GPU shall be located in the quarter section of the GPU not containing a Mesaverde well, and shall be located with respect to the GPU boundaries as described in the preceding paragraph.

The plat (Form C-102) accompanying the Application for Permit to Drill (OCD Form C-101 or the federal form) for the subsequent well on a GPU shall have outlined thereon the boundaries of the GPU and shall show the location of all existing Mesaverde wells on the GPU plus the proposed new well.

In the event an infill well is drilled on any GPU, both wells shall be produced for so long as it is economically feasible to do so.

ALLOCATION AND GRANTING OF ALLOWABLES

NON-MARGINAL GPU ALLOWABLE: The pool allowable remaining each month after deducting the total allowable assigned to marginal GPU's shall be allocated among the non-marginal GPU's entitled to an allowable in the following manner:

A) Seventy-five percent (75%) of the pool allowable remaining to be allocated to the non-marginal GPU's shall be allocated among such GPU's in the proportion that each GPU's AD Factor bears to the total AD Factor for all non-marginal GPU's in the pool.

When calculating the allowable for a GPU containing an infill well, the deliverability of both wells shall be added in calculating the AD Factor and the allowable may be produced from both wells.

B) Twenty-five percent (25%) of the pool allowable remaining to be allocated to non-marginal GPU's shall be allocated among such GPU's in the proportion that each GPU's acreage factor bears to the total acreage factor for all non-marginal GPU's in the pool.

MINIMUM ALLOWABLES: A minimum allowable of 250 MCF per month per GPU will be assigned to prevent the premature abandonment of wells.

A GPU in the BLANCO MESAVERDE GAS POOL shall be classified as marginal unless reclassified by the Director pursuant to Rule 605.F.(2). Any operator in the BLANCO MESAVERDE GAS POOL may request a reclassification of a GPU in that pool.

MISCELLANEOUS SPECIAL POOL RULES

VERTICAL LIMIT BOUNDARY: Exhibit "A" of Order R-5459 which defines a dividing line across the Blanco-Mesaverde Pool reads as follows:

EXHIBIT "A"

This Exhibit defines the Northwest-Southeast trending line established by Order R-5459, as amended, that divides the Blanco-Mesaverde pool for defining the vertical limits of the pool. Said line traverses the South side or West side of the sections listed below:

<u>TOWNSHIP 24 NORTH, RANGE 01 EAST, NMPM</u>
Section 31: West

<u>TOWNSHIP 24 NORTH, RANGE 01 WEST, NMPM</u>
Section 03: West
Section 10: West and South
Section 14: West and South
Section 24: West
Section 25: West and South

TOWNSHIP 25 NORTH, RANGE 01 WEST, NMPM
Section 07: West
Section 18: West and South
Section 20: West and South
Section 28: West
Section 33: West and South

TOWNSHIP 25 NORTH, RANGE 02 WEST, NMPM
Section 01: West and South

TOWNSHIP 26 NORTH, RANGE 02 WEST, NMPM
Sections 07 and 08: South
Section 16: West and South
Section 22: West and South
Section 26: West
Section 35: West and South

TOWNSHIP 26 NORTH, RANGE 03 WEST
Sections 02 and 03: South
Section 04: West and South
Section 12: West and South

TOWNSHIP 27 NORTH, RANGE 03 WEST, NMPM
Section 31 and 32: South

TOWNSHIP 27 NORTH, RANGE 04 WEST, NMPM
Sections 31 through 36: South

TOWNSHIP 27 NORTH, RANGE 05 WEST, NMPM
Section 31: West and South
Sections 32 through 36: South

TOWNSHIP 27 NORTH, RANGE 6 WEST, NMPM
Section 06: West
Section 07: West and South
Sections 08 and 09: South
Section 14: South
Section 15: West and South
Section 24: West
Section 25: West and South

TOWNSHIP 28 NORTH, RANGE 06 WEST, NMPM
Sections 07, 18, 19, 30, and 31: West

TOWNSHIP 29 NORTH, RANGE 7 WEST, NMPM
Section 31: West and South
Sections 32 through 36: South

TOWNSHIP 29 NORTH, RANGE 08 WEST, NMPM
Section 17: South
Section 18: West and South
Section 21: West and South
Section 22: South
Section 25: South
Section 26: West and South

TOWNSHIP 29 NORTH, RANGE 09 WEST, NMPM
Section 03: South
Section 04: West and South
Section 11: West and South
Section 12: South

TOWNSHIP 30 NORTH, RANGE 09 WEST, NMPM
Section 31: West and South
Section 32: South

TOWNSHIP 30 NORTH, RANGE 10 WEST, NMPM
Section 18: South
Section 20: West and South
Section 21 and 22: South
Section 25: South
South 26: West and South

TOWNSHIP 30 NORTH, RANGE 11 WEST, NMPM
Section 06: West and South
Section 08: West and South
Sections 09, 10, 11: South
Section 13: West and South

TOWNSHIP 31 NORTH, RANGE 12 WEST, NMPM
Section 19: South
Sections 27 and 28: South
Section 29: West and South
Section 35: West and South
Section 36: South

TOWNSHIP 31 NORTH, RANGE 13 WEST, NMPM
Sections 07 and 08: South
Sections 14 and 15: South
Section 16: West and South
Section 24: West and South

TOWNSHIP 31 NORTH, RANGE 14 WEST, NMPM
Section 12: South

(General Pool Rules also apply unless in conflict with these Special Pool Rules.)

SOUTH BLANCO-PICTURED CLIFFS GAS POOL

THE VERTICAL LIMITS of the South Blanco-Pictured Cliffs Gas Pool shall be the Pictured Cliffs formation.

The South Blanco-Pictured Cliffs Gas Pool, Rio Arriba, San Juan, and Sandoval Counties, New Mexico, was created May 20, 1952 and gas proration became effective March 1, 1955.

WELL ACREAGE AND LOCATION REQUIREMENTS

STANDARD GPU (GAS PRORATION UNIT) in the South Blanco-Pictured Cliffs Gas Pool shall be 160 acres.

ALLOCATION AND GRANTING OF ALLOWABLES

NON-MARGINAL GPU ALLOWABLE: The pool allowable remaining each month after deducting the total allowable assigned to marginal GPU's shall be allocated among the non-marginal GPU's entitled to an allowable in the following manner:

A) Seventy-five percent (75%) of the pool allowable remaining to be allocated to the non-marginal GPU's shall be allocated among such GPU's in the proportion that each GPU's AD Factor bears to the total AD Factor for all non-marginal GPU's in the pool.

B) Twenty-five percent (25%) of the pool allowable remaining to be allocated to non-marginal GPU's shall be allocated among such GPU's in the proportion that each GPU's acreage factor bears to the total acreage factor for all non-marginal GPU's in the pool.

MINIMUM ALLOWABLES: A minimum allowable of 250 MCF per month per GPU will be assigned to prevent premature abandonment of wells.

A GPU in the SOUTH BLANCO PICTURED CLIFFS GAS POOL shall be classified as marginal unless reclassified by the Director pursuant to Rule 605.F.(2). Any operator in the SOUTH BLANCO PICTURED CLIFFS GAS POOL may request a reclassification of a GPU in that pool.

(General Pool Rules also apply unless in conflict with these Special Pool Rules.)

SOUTH BLANCO-PICTURED CLIFFS GAS POOL

THE VERTICAL LIMITS of the South Blanco-Pictured Cliffs Gas Pool shall be the Pictured Cliffs formation.

The South Blanco-Pictured Cliffs Gas Pool, Rio Arriba, San Juan, and Sandoval Counties, New Mexico, was created May 20, 1952 and gas proration became effective March 1, 1955.

WELL ACREAGE AND LOCATION REQUIREMENTS

STANDARD GPU (GAS PRORATION UNIT) in the South Blanco-Pictured Cliffs Gas Pool shall be 160 acres.

ALLOCATION AND GRANTING OF ALLOWABLES

NON-MARGINAL GPU ALLOWABLE: The pool allowable remaining each month after deducting the total allowable assigned to marginal GPU's shall be allocated among the non-marginal GPU's entitled to an allowable in the following manner:

A) Seventy-five percent (75%) of the pool allowable remaining to be allocated to the non-marginal GPU's shall be allocated among such GPU's in the proportion that each GPU's AD Factor bears to the total AD Factor for all non-marginal GPU's in the pool.

B) Twenty-five percent (25%) of the pool allowable remaining to be allocated to non-marginal GPU's shall be allocated among such GPU's in the proportion that each GPU's acreage factor bears to the total acreage factor for all non-marginal GPU's in the pool.

MINIMUM ALLOWABLES: A minimum allowable of 250 MCF per month per GPU will be assigned to prevent premature abandonment of wells.

A GPU in the SOUTH BLANCO PICTURED CLIFFS GAS POOL shall be classified as marginal unless reclassified by the Director pursuant to Rule 605.F.(2). Any operator in the SOUTH BLANCO PICTURED CLIFFS GAS POOL may request a reclassification of a GPU in that pool.

(General Pool Rules also apply unless in conflict with these Special Pool Rules.)

SPECIAL RULES AND REGULATIONS FOR THE TAPACITO-PICTURED CLIFFS GAS POOL

THE VERTICAL LIMITS of the Tapacito-Pictured Cliffs Gas Pool shall be the Pictured Cliffs formation.

The Tapacito-Pictured Cliffs Gas Pool, Rio Arriba County, New Mexico, was created April 18, 1956 and gas proration in this pool became effective August 1, 1958.

WELL ACREAGE AND LOCATION REQUIREMENTS

STANDARD GPU (GAS PRORATION UNIT) in the Tapacito-Pictured Cliffs Gas Pool shall be 160 acres.

ALLOCATION AND GRANTING OF ALLOWABLES

NON-MARGINAL GPU ALLOWABLE: The pool allowable remaining each month after deducting the total allowable assigned to marginal GPU's shall be allocated among the non-marginal GPU's entitled to an allowable in the following manner:

A) Seventy-five percent (75%) of the pool allowable remaining to be allocated to the non-marginal GPU's shall be allocated among such GPU's in the proportion that each GPU's "AD Factor" bears to the total "AD Factor" for all non-marginal GPU's in the pool.

B) Twenty-five percent (25%) of the pool allowable remaining to be allocated to non-marginal GPU's shall be allocated among such GPU's in the proportion that each GPU's acreage factor bears to the total acreage factor for all non-marginal GPU's in the pool.

MINIMUM ALLOWABLES: A minimum allowable of 250 MCF per month per GPU will be assigned to prevent premature abandonment of wells.

A GPU in the TAPACITO PICTURED CLIFFS GAS POOL shall be classified as marginal unless reclassified by the Director pursuant to Rule 605.F.(2). Any operator in the GAS POOL may request a reclassification of a GPU in that pool.

(General Pool Rules also apply unless in conflict with these Special Pool Rules.)

EXHIBIT "C"

606 TESTS AND TEST PROCEDURES FOR PRORATED POOLS IN NORTHWEST NEW MEXICO

606.A. TYPE OF TESTS REQUIRED FOR WELLS COMPLETED IN PRORATED GAS POOLS

(1) Reclassified GPUs: An operator of a well on a Gas Proration Unit (GPU) that has been reclassified as non-marginal will conduct deliverability tests on that well within 90 days of the order reclassifying it, unless there are current tests on file with the Division or that order requires a new test. A current test is a test which was conducted during the last test period for that pool or later. [5-30-98]

(2) Non-marginal GPUs: Operators will conduct deliverability tests on wells on non-marginal GPUs every five years. If the Division determines that a well's test data and production data warrant more frequent testing of a well, the Division may set up special testing schedules for that well. [5-30-98]

(3) Scheduling of Tests

(a) Notification of Pools to be Tested: By September 1 of each year the Aztec District Office of the Division will notify operators of non-marginal GPUs if their wells will be tested during the following test period. [5-30-98]

(b) The results of all deliverability tests required must be filed with the Aztec District Office within 90 days following the completion of each test. Provided however, that any test completed between December 31 of the test year and March 10 of the following year are due no later than March 31. No extension of time for filing tests beyond March 31 will be granted except after notice and hearing. [5-30-98]

(c) Failure to file any test within the above-prescribed times will subject the GPU to the loss of one day's allowable for each day the test is late. [5-30-98]

(d) Any well scheduled for testing during its test year may have the conditioning period, test flow period, and part of the seven-day shut-in period conducted in December of the previous year provided that, if the seven-day shut-in period immediately follows the test flow period, the seven-day shut-in pressure is to be measured in January of the test year. The earliest date that a well can be scheduled for a deliverability test would be such that the test flow period would end on December 25 of the previous year. [5-30-98]

(e) Downhole commingled wells are to be scheduled for tests on dates for the pool of the lowermost prorated completion of the well. [5-30-98]

(f) In the event a well is shut-in by the Division for overproduction, the operator may produce the well for a period of time to secure a test after written notification to the Division. All gas produced during this testing period will be used in determining the over/under produced status of the well. [5-30-98]

(g) An operator may schedule a well for a deliverability retest upon notification to the Aztec District Office at least ten days before the test is to be commenced. Such retest will be for substantial reason and will be subject to the approval of the Division. A retest will be conducted in conformance with the deliverability test procedures of these rules. The Division, at its discretion, may require the retesting of any well by notification to the operator to schedule such retest. These tests, as filed on Form C-122A, should be identified as "RETEST" in the remarks column. [5-30-98]

(4) Witnessing of Tests: Any deliverability test may be witnessed by any or all of the following: a representative of the Division, an offset operator, a representative of the gas transportation facility connected to the well under test, or a representative of the gas transportation facility taking gas from an offset operator. [5-30-98]

606.B. PROCEDURE FOR TESTING

(1) The test shall begin by producing a well in the normal operating manner into the pipeline through either the casing or tubing, but not both, for a period of fourteen consecutive days. This shall be known as the conditioning period. The production valve and choke settings shall not be changed during either the conditioning or flow periods, except during

the first ten days of the conditioning period when maximum production would over-range the meter chart or location production equipment. The first ten days of the conditioning period shall not have more than 48 hours of cumulative interruptions of flow. The eleventh to fourteenth days, inclusive of the conditioning period, shall have no interruptions of flow whatsoever. Any interruption of flow that occurs as normal operation of the well as stop-cock flow, intermittent flow, or well blow down will not be counted as shut-in time in either the conditioning or flow period. [5-30-98]

(2) The daily flowing rate shall be determined from an average of seven or eight consecutive producing days, following a minimum conditioning period of 14 consecutive days of production. This shall be known as the flow period. [5-30-98]

(3) Instantaneous pressure shall be measured by a deadweight gauge or other method approved by the Division during the seven-day or eight-day flow period at the casinghead, tubinghead, and orifice meter, and shall be recorded along with instantaneous meter-chart static pressure reading. [5-30-98]

(4) If a well is producing through a compressor that is located between the wellhead and the meter run, the meter run pressure and the wellhead casing pressure and the wellhead tubing pressure are to be reported on Form C-122A. (Neither the suction pressure nor the discharge pressure of the compressor is considered wellhead pressure.) A note shall be entered in the remarks portion on Form C-122A stating: "This well produced through a compressor." [5-30-98]

(5) When it is necessary to restrict the flow of gas between the wellhead and the orifice meter, the ratio of the downstream pressure, psia, to the upstream pressure, psia, shall be determined. When this ratio is 0.57 or less, critical flow conditions shall be considered to exist across the restriction. [5-30-98]

(6) When more than one restriction between the wellhead and the orifice meter causes the pressures to reflect critical flow between the wellhead and the orifice meter, the pressures across each of these restrictions shall be measured to determine whether critical flow exists at any restriction. When critical flow does not exist at any restriction, the pressures taken to disprove the critical flow shall be reported to the Division on Form C-122A in item (n) of the form. When critical flow conditions exist, the instantaneous flowing pressures required above shall be measured during the last 48 hours of the seven-day or eight-day flow period. [5-30-98]

(7) When critical flow exists between the wellhead and the orifice meter, the measured wellhead flowing pressure of the string through which the well flowed during the test shall be used as P_t when calculating the static wellhead working pressure (P_w) using the method established below. [5-30-98]

(8) When critical flow does not exist at any restriction, P_t shall be the corrected average static pressure from the meter chart plus friction loss from the wellhead to the orifice meter. [5-30-98]

(9) The static wellhead working pressure (P_w) of any well under test shall be the calculated seven-day or eight-day average static tubing pressure if the well is flowing through the casing; it shall be the calculated seven-day or eight-day average static casing pressure if the well is flowing through the tubing. The static wellhead working pressure (P_w) shall be calculated by applying the tables and procedures set out in the "Gas Well Testing Manual for Northwest New Mexico" ("the Manual") available from the Division. [5-30-98]

(10) To obtain the shut-in pressure of a well under test, the well shall be shut-in some time during the current testing season for a period of seven to fourteen consecutive days, which have been preceded by a minimum of seven days of uninterrupted production. Such shut-in pressure shall be measured on the seventh to fourteenth day of shut-in of the well with a deadweight gauge or other method approved by the Division. The seven-day shut-in pressure shall be measured on both the tubing and the casing when communication exists between the two strings. The higher of such pressures shall be used as P_c in the deliverability calculation. When any such shut-in pressure is determined by the Division to be abnormally low or the well can not be shut-in due to "HARDSHIP" classification, the shut-in pressure to be used as P_c shall be determined by one of the following methods:

(a) A Division-designated value.

(b) An average shut-in pressure of all offset wells completed in the same zone. Offset wells include the four side and four corner wells, if available.

(c) A calculated surface pressure based on a calculated bottom-hole pressure. Such calculations shall be made in accordance with the examples in the Manual.

[5-30-98]

(11) All wellhead pressures, as well as the flowing meter pressure tests which are to be taken during the seven-day or eight-day deliverability test period as required above, shall be taken with a deadweight gauge or other method approved by the Division. The pressure readings and the date and time according to the chart shall be recorded and maintained in the operator's records with the test information. [5-30-98]

(12) Orifice meter charts shall be changed and arranged so as to reflect upon a single chart the flow data for the gas from each well for the full seven-day or eight-day deliverability test period; however, no tests shall be voided if satisfactory explanation is made as to the necessity for using test volumes through two chart periods. Corrections shall be made for pressure base, measured flowing temperature, specific gravity, and supercompressibility; provided however, if the specific gravity of the gas from any well under test is not available, an estimated specific gravity may be assumed therefore, based upon that of gas from near-by wells, the specific gravity of which has been actually determined by measurement. [5-30-98]

(13) The average flowing meter pressure for the seven-day or eight-day flow period and the corrected integrated volume shall be determined by the purchasing company that integrates the flow charts and furnished to the operator or testing agency. [5-30-98]

(14) The seven-day or eight-day flow period volume shall be calculated from the integrated readings as determined from the flow period orifice meter chart. The volume so calculated shall be divided by the number of testing days on the chart to determine the average daily rate of flow during said flow period. The flow period shall have a minimum of seven and a maximum of eight legibly recorded flowing days to be acceptable for test purposes. The volume used in this calculation shall be corrected to the Division's standard conditions of 15.025 psia pressure base, 60° F. temperature base and 0.60 specific gravity base. [5-30-98]

(15) The daily volume of flow, as determined from the flow period chart readings, shall be calculated by applying the Basic Orifice Meter Formula or other acceptable industry standard practices.

$$Q = C' (h_w P_f)^{.5}$$

Where:

Q = Metered volume of flow Mcf/d @ 15.025 psia, 60° F., and 0.60 specific gravity.

C' = The 24-hour basic orifice meter flow factor corrected for flowing temperature, gravity, and supercompressibility.

h_w = Daily average differential meter pressure from flow period chart.

P_f = Daily average flowing meter pressure from flow period chart.

[5-30-98]

(16) The basic orifice meter flow factors, flowing temperature factor, and specific gravity factor shall be determined from the tables in the Manual. [5-30-98]

(17) The daily flow period average corrected flowing meter pressure, psig, shall be used to determine the supercompressibility factor. Supercompressibility tables may be obtained from the Division. [5-30-98]

(18) When supercompressibility correction is made for a gas containing either nitrogen or carbon dioxide in excess of two percent, the supercompressibility factors of such gas shall be determined by the use of Table V of the C.N.G.A. Bulletin TS-402 for pressures 100-500 psig, or Table II, TS-461 for pressures in excess of 500 psig. [5-30-98]

(19) The use of tables for calculating rates of flow from integrator readings which do not specifically conform to the Division's "Back Pressure Test Manual", or the Manual, may be approved for determining the daily flow period rates of flow upon a showing that such tables are appropriate and necessary. [5-30-98]

(20) The daily average integrated rate of flow for the seven-day or eight-day flow period shall be corrected for meter error by multiplication by a correction factor. Said correction factor shall be determined by dividing the square root of the deadweight flowing meter pressure, psia, by the square root of the chart flowing meter pressure, psia. [5-30-98]

(21) "Deliverability pressure" is a defined pressure applied to each well and used in the process of comparing the abilities of wells in a pool to produce at static wellhead working pressures equal to a percentage of the seven-day shut-in pressure of the respective individual wells. Such percentage shall be determined and announced periodically by the Division based on the relationship of the average static wellhead working pressures (P_w) divided by the average seven-day shut-in pressure (Pc) of the pool. [5-30-98]

(22) The deliverability of gas at the deliverability pressure of any well under test shall be calculated from the test data derived from the tests above required by use of the following deliverability formula:

$$D = Q\left[\frac{(P_c^2 - P_d^2)}{(P_c^2 - P_w^2)}\right]^n$$

Where:

D = Deliverability Mcf/d at the deliverability pressure, (P_d), (at Standard Conditions of 15.025 psia, 60°F. and 0.60 sp. gr.).

Q = Daily flow rate in Mcf/d, at wellhead pressure (P_w).

P_c = Seven-day shut-in wellhead pressure, psia.

P_d = Deliverability pressure, psia, as defined above.

P_w = Average static wellhead working pressure, as determined from seven-day or eight-day flow period, psia, and calculated from tables in the Manual entitled "Pressure Loss Due to Friction Tables for Northwest New Mexico".

n = Average pool slope of back pressure curves as follows:

For Pictured Cliffs and shallower formations, 0.85

For formations deeper than Pictured Cliffs, 0.75

(Note: Special rules for any specific pool or formation may supersede the above values. Check special rules if in doubt.)

[5-30-98]

(23) The value of the multiplier in the above formula (ratio factor after the application of the pool slope) by which Q is multiplied shall not exceed a limiting value to be determined and announced periodically by the Division. Such determination shall be made after a study of the test data of the pool obtained during the previous testing season. [5-30-98]

(24) Downhole commingled wells are to be tested in the test year for the pool of the lowermost prorated completion of the well and shall use pool slope (n), and deliverability pressure of the lowermost pool. The total flow rate from the downhole commingled well will be used to calculate a value of deliverability. For each prorated gas zone of a downhole commingled well, a Form C-122A is required to be filed. Also, in the Summary portion of that form all zones will indicate the same data for line h, P_c, Q, P_w, and P_d. The value shown for Deliverability (D) will be that percentage of the total deliverability of the well that is applicable to this zone. A note shall be placed in the remarks column that indicates the percentage of deliverability to be allocated to this zone of the well. [5-30-98]

(25) Any test prescribed herein will be considered acceptable if the average flow rate for the final seven-day or eight-day deliverability test is not more than ten percent in excess of any consecutive seven-day or eight-day average of the preceding two weeks. A deliverability test not meeting this requirement may be declared invalid, requiring the well to be re-tested. [5-30-98]

(26) All charts relative to deliverability tests or copies thereof shall be made available to the Division upon its request. [5-30-98]

(27) Operators shall use only testing agencies, whether individuals, companies, pipeline companies, or operators, that maintain a log of all tests accomplished by them including all field test data. The operator shall maintain the above data for a period of not less than two years plus the current test year. [5-30-98]

(28) All forms heretofore mentioned are hereby adopted for use in the northwest New Mexico area in open form subject to such modification as experience may indicate desirable or necessary. [5-30-98]

(29) Deliverability tests for gas wells in all formations shall be conducted and reported in accordance with these Rules. Provided, however, these Rules shall be subject to any specific modification or change contained in Special Pool Rules adopted for any pool after notice and hearing. [5-30-98]

606.C. INFORMATIONAL TESTS

(1) One-Point Back Pressure Test: A one-point back pressure test may be taken on newly completed wells before their connection or reconnection to a gas transportation facility. This test shall not be a required official test, but may be taken for informational purposes at the option of the operator. When taken, this test must be taken and reported as prescribed below. [5-30-98]

(2) Test Procedure

(a) This test shall be accomplished after a minimum shut-in of seven days. The shut-in pressure shall be measured with a deadweight gauge or other method approved by the Division. [5-30-98]

(b) The flow rate shall be that rate in Mcf/d measured at the end of a three hour test flow period. The flow from the well shall be for three hours through a positive choke, which has a 3/4 inch orifice. [5-30-98]

(c) A 2-inch nipple which provides a mechanical means of accurately measuring the pressure and temperature of the flowing gas shall be installed immediately upstream from the positive choke. [5-30-98]

(d) The absolute open flow shall be calculated using the conventional back pressure formula as shown in the Manual or the Division's "Back Pressure Test Manual." [5-30-98]

(e) The observed data and flow calculations shall be reported in duplicate on Form C-122, "Multi-Point Back Pressure Test for Gas Wells." [5-30-98]

(f) Non-critical flow shall be considered to exist when the choke pressure is 13 psig or less. When this condition exists the flow rate shall be measured with a pitot tube and nipple as specified in the Manual or in the Division's Manual of "Tables and Procedure for Pitot Tests." The pitot test nipple shall be installed immediately downstream from the 3/4-inch positive choke. [5-30-98]

(g) Any well completed with 2-inch nominal size tubing (1.995-inch ID) or larger shall be tested through the tubing. [5-30-98]

(3) Other tests for informational purposes may be conducted prior to obtaining a pipeline connection for a newly completed well upon receiving specific approval therefore from the Aztec District Office. Approval of these tests shall be based primarily upon the volume of gas to be vented. [5-30-98]

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION

IN THE MATTER OF THE HEARING
CALLED BY THE OIL CONSERVATION
DIVISION FOR THE PURPOSE OF
CONSIDERING:

CASE NO. 7335
Order No. R-5459 A

APPLICATION OF C & E OPERATORS, INC.
FOR AMENDMENT TO DIVISION ORDER NO.
R-5459, SAN JUAN COUNTY, NEW MEXICO.

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 9 a.m. on August 26, 1981, at Santa Fe, New Mexico, before Examiner Richard L. Stamets.

NOW, on this 30th day of September, 1981, the Division Director, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises,

FINDS:

(1) That due public notice having been given as required by law, the Division has jurisdiction of this cause and the subject matter thereof.

(2) That the applicant C & E Operators, Inc., seeks the amendment of Division Order No. R-5459 by amending the location of the Northwest-Southeast trending line as described in Exhibit A of said Order No. R-5459 pertaining to Township 30 North, Range 11 West, as follows: Section 6: West and South; Section 8: West and South; Sections 9, 10, and 11: South; and Section 13: West and South.

(3) That the proposed amendment will permit the applicant to more efficiently and effectively develop its acreage in Section 8, Township 30 North, Range 11 West, NMPM, San Juan County, New Mexico.

(4) That the application should be approved.

IT IS THEREFORE ORDERED:

(1) That effective September 1, 1981, that portion of Exhibit "A" to Division Order No. R-5459 covering Township 30 North, Range 11 West, NMPM, San Juan County, New Mexico, is hereby amended to read in its entirety as follows:

"Township 30 North, Range 11 West, NMPM
Section 6: West and South
Section 8: West and South
Section 9, 10, and 11: South
Section 13: South"

(2) That 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

JOE D. RAMEY
Director

S E A L

BEFORE THE OIL CONSERVATION COMMISSION
OF THE STATE OF NEW MEXICO

IN THE MATTER OF THE HEARING CALLED BY THE OIL CONSERVATION COMMISSION OF NEW MEXICO ON ITS OWN MOTION TO CONSIDER REDEFINITION OF THE VERTICAL LIMITS OF THE BLANCO-MESAVERDE POOL, RIO ARRIBA AND SAN JUAN COUNTIES, NEW MEXICO.

CASE NO. 5893
Order No. R-5459

Also see R-5459-A

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on March 23, 1977, at Santa Fe, New Mexico, before the Oil Conservation Commission of New Mexico, hereinafter referred to as the "Commission."

NOW, on this 14th day of June, 1977, the Commission, a quorum being present, having considered the testimony presented and the exhibits received at said hearing, and being fully advised in the premises,

FINDS:

(1) That due public notice having been given as required by law, the Commission has jurisdiction of this cause and the subject matter thereof.

(2) That the Blanco-Mesaverde Pool, located in Rio Arriba and San Juan Counties, New Mexico, was created by Commission Order No. 799, dated February 25, 1949.

(3) That Section (2) of said Order No. 799 defined the vertical limits of said Blanco-Mesaverde Pool as the "4200-5100 feet productive horizon where the productive sands are contained between the top of the Cliff House Sand and the base of the Point Lookout Sand of the Mesaverde."

(4) That said definition of the vertical limits of said Blanco-Mesaverde Pool has proved inadequate for the following reasons:

A. The definition does not take into account variations in surface elevations and formation dip which can cause the "Mesaverde" productive horizon to occur above or below the 4200 feet to 5100 feet interval.

B. The definition does not adequately take into account the transgressive, regressive, gradational nature of formations composing the "Mesaverde" productive horizon.

(5) That because of the imprecise nature of said vertical limits definition, Mesaverde productive zones above or below the 4200 foot to 5100 foot interval in any particular well might not be completed in said well.

(6) That failure to complete such zones could result in waste of gas in the ground.

(7) That the current infill drilling program within said Blanco-Mesaverde Pool has increased the need for a more precise definition of the vertical limits of such pool.

(8) That in December, 1976, the Commission appointed an industry-government study committee to examine the problem and report its findings to the Commission.

(9) That, based on geological evidence, the study committee recommended that the vertical limits of said Blanco-Mesaverde Pool be redefined as that interval from the Huerfanito bentonite marker to a point 500 feet below the top Point Lookout formation.

(10) That the Induction-Electrical Log of the El Paso Natural Gas Company Johnston State Well No. 1 located in Unit A of Section 32, Township 26 North, Range 6 West, NMPM, Rio Arriba County, New Mexico, should be the type log for said Blanco-Mesaverde Pool.

(11) That the Huerfanito bentonite marker and the top of the Point Lookout formation are found at depths of 3255 feet and 5100 feet, respectively, on said type log.

(12) That such definition should permit maximum development of productive horizons within the Blanco-Mesaverde Pool, thereby preventing waste.

(13) That there are several Chacra Sand gas pools developed along the Southwest flank of the Blanco-Mesaverde Pool which have been separately drilled and developed which would be included within the revised definition of the vertical limits of the Blanco-Mesaverde Pool.

(14) That such pools are completed in porous Chacra sands.

(15) That such porous Chacra sands lie South and West of a line generally running from the Northwest corner of Township 31 North, Range 13 West, NMPM, San Juan County, New Mexico, to the Southwest Corner of Township 24 North, Range 1 East, NMPM, Rio Arriba County, New Mexico, as more fully described on Exhibit "A" of this order.

Exhibit "A" amended 9-1-81 by R-5459-A

(16) That to protect the correlative rights of the owners in said Chacra pools, the top vertical limit of said Blanco-Mesaverde Pool should be lowered to a point 750 feet below the Huerfanito bentonite marker within the area South and West of the line defined in Finding No. (15) above and Exhibit "A".

(17) That there are 4 wells North and East of the line defined in Finding No. 15 above and Exhibit A which may be producing from fractured shale or siltstone zones equivalent to said Chacra sands and which may or may not be connected to other producing zones in said Blanco-Mesaverde Pool.

(18) That to protect the correlative rights of the owners of said four wells, the effective date of any redefinition of the vertical limits of said Blanco-Mesaverde Pool should be delayed to provide such owners with the opportunity to bring a case for an exception before the Commission.

(19) That with the safeguards provided in Finding No. (16) and No. (18) above, the proposed redefinition of the vertical limits of the Blanco-Mesaverde Pool will not violate correlative rights.

(20) That to prevent waste, the vertical limits of said Blanco-Mesaverde Pool should be redefined in accordance with the study committee recommendation as adjusted to protect Chacra gas pools as set out in Finding No. (14) above.

IT IS THEREFORE ORDERED:

(1) That effective August 1, 1977, the vertical limits of the Blanco-Mesaverde Pool, Rio Arriba and San Juan Counties, New Mexico, as previously described and defined by the Commission are hereby redefined as follows:

A. That North and East of a line generally running from the Northwest corner of Township 31 North, Range 13 West, San Juan County, New Mexico, to the Southwest corner of Township 24 North, Range 1 East, NMPM, Rio Arriba County, New Mexico, as fully described on Exhibit "A" attached to this order, and incorporated herein by reference the vertical limits of the Blanco-Mesaverde Pool shall be from the Huerfanito bentonite marker to a point 500 feet below the top of the Point Lookout Sandstone.

Exhibit "A" amended 9-1-8 R-5459-A

B. That South and West of the line described under A above, the vertical limits of the Blanco-Mesaverde Pool shall be from a point 750 feet below said Huerfanito bentonite marker to a point 500 feet below the top of the Point Lookout Sandstone.

(2) That jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

PHIL R. LUCERO, Chairman

EMERY C. ARNOLD, Member

JOE D. RAMEY, Member & Secretary

S E A L

jr/

EXHIBIT "A"

COMMISSION ORDER NO. R-5459

This exhibit defines the Northwest-Southeast trending line that divides the Blanco-Mesaverde Pool, Rio Arriba and San Juan Counties, New Mexico, for purposes of defining the vertical limits for said pool. Said line traverses the South side or west side of the sections listed below:

TOWNSHIP 31 NORTH, RANGE 14 WEST, NMPM
Section 12: South

TOWNSHIP 31 NORTH, RANGE 13 WEST, NMPM
Sections 7 and 8: South
Section 16: West and South
Sections 15 and 14: South
Section 24: West and South

TOWNSHIP 31 NORTH, RANGE 12 WEST, NMPM
Section 19: South
Section 29: West and South
Sections 28 and 27: South
Section 35: West and South
Section 36: South

TOWNSHIP 30 NORTH, RANGE 11 WEST, NMPM
Section 6: West and South
~~Section 5: South~~ Section 8: West and South
~~Section 9: West and South~~
Sections 10, and 11: South
Section 13: West and South

Amended by R-5459-A
Effective 9-1-81

TOWNSHIP 30 NORTH, RANGE 10 WEST, NMPM
Section 18: South
Section 20: West and South
Sections 21 and 22: South
Section 26: West and South
Section 25: South

TOWNSHIP 30 NORTH, RANGE 9 WEST, NMPM
Section 31: West and South
Section 32: South

TOWNSHIP 29 NORTH, RANGE 9 WEST, NMPM
Section 4: West and South
Section 3: South
Section 11: West and South
Section 12: South

TOWNSHIP 29 NORTH, RANGE 8 WEST, NMPM
Section 18: West and South
Section 17: South
Section 21: West and South
Section 22: South
Section 26: West and South
Section 25: South

TOWNSHIP 29 NORTH, RANGE 7 WEST, NMPM
Section 31: West and South
Sections 32 through 36: South

TOWNSHIP 28 NORTH, RANGE 6 WEST, NMPM
Sections 7, 18, 19, 30, and 31: West

TOWNSHIP 27 NORTH, RANGE 6 WEST, NMPM
Section 6: West
Section 7: West and South
Sections 8 and 9: South
Section 15: West and South
Section 14: South
Section 24: West
Section 25: West and South

TOWNSHIP 27 NORTH, RANGE 5 WEST, NMPM
Section 31: West and South
Sections 32 through 36: South

TOWNSHIP 27 NORTH, RANGE 4 WEST, NMPM
Sections 31 through 36: South

TOWNSHIP 27 NORTH, RANGE 3 WEST, NMPM
Sections 31 and 32: South

TOWNSHIP 26 NORTH, RANGE 3 WEST, NMPM
Section 4: West and South
Sections 3 and 2: South
Section 12: West and South

TOWNSHIP 26 NORTH, RANGE 2 WEST, NMPM
Sections 7 and 8: South
Sections 16 and 22: West and South
Section 26: West
Section 35: West and South

TOWNSHIP 25 NORTH, RANGE 2 WEST, NMPM
Section 1: West and South

TOWNSHIP 25 NORTH, RANGE 1 WEST, NMPM
Section 7: West
Sections 18 and 20: West and South
Section 28: West
Section 33: West and South

TOWNSHIP 24 NORTH, RANGE 1 WEST, NMPM
Section 3: West
Sections 10 and 14: West and South
Section 24: West
Section 25: West and South

TOWNSHIP 24 NORTH, RANGE 1 EAST, NMPM
Section 31: West

BEFORE THE OIL CONSERVATION COMMISSION
OF THE STATE OF NEW MEXICO

IN THE MATTER OF THE HEARING
CALLED BY THE OIL CONSERVATION
COMMISSION OF NEW MEXICO FOR
THE PURPOSE OF CONSIDERING:

CASE NO. 5264
Order No. R-1670-T

APPLICATION OF EL PASO NATURAL GAS
COMPANY FOR THE AMENDMENT OF ORDER
NO. R-1670, BLANCO MESAVERDE POOL,
SAN JUAN AND RIO ARRIBA COUNTIES,
NEW MEXICO.

also see R-1670-T-A
R-1670-T-B
R-1670-W

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on August 13 and August 14, 1974, at Santa Fe, New Mexico, before the Oil Conservation Commission of New Mexico, hereinafter referred to as the "Commission."

NOW, on this 14th day of November, 1974, the Commission, a quorum being present, having considered the testimony presented and the exhibits received at said hearing, and being fully advised in the premises,

FINDS:

(1) That due public notice having been given as required by law, the Commission has jurisdiction of this cause and the subject matter thereof.

(2) That the Blanco Mesaverde Pool, located in San Juan and Rio Arriba Counties, New Mexico, was created by Commission Order No. 799, dated February 25, 1949.

(3) That the Blanco Mesaverde Pool is governed by special rules and regulations, promulgated by the Commission in Order No. R-1670, as amended, which provide for 320-acre proration units and well locations in the NE/4 and SW/4 of each governmental section, and for the assignment of allowable to each proration unit in the pool based on the amount of acreage in the unit and the deliverability of the unit well.

(4) That the applicant, El Paso Natural Gas Company, seeks an order amending said Order No. R-1670 to permit the optional drilling of an additional well on each 320-acre proration unit in the Blanco Mesaverde Pool; to determine the deliverability of each proration unit upon which an additional well is drilled by adding the deliverabilities of the two wells; to permit the production of the allowable assigned to a proration unit containing two wells from both wells in any proportion; to consider both wells on a proration unit as one well for purposes of balancing underproduction or overproduction; to report the production of each well on the unit as well as the total unit production; and to compare the unit production against the unit allowable for determining whether a unit should be classified marginal or non-marginal.

(5) That the Blanco Mesaverde Pool has been developed for approximately 20 years on 320-acre proration units.

(6) That to change the unit size now in said pool would disturb the equities under many of the existing proration units.

(7) That the proration unit size in the Blanco Mesaverde Pool should continue to be 320 acres.

(8) That Section 65-3-10, New Mexico Statutes Annotated, 1953 Compilation, empowers the Commission to prevent waste of hydrocarbons and to protect the correlative rights of the owners of each interest in said hydrocarbons.

(9) That Section 65-3-5, New Mexico Statutes Annotated, 1953 Compilation, confers jurisdiction on the Commission over all matters relating to the ~~conversion~~ conservation of oil and gas. R-1670-T-A

(10) That "waste" is defined by Section 65-3-3, New Mexico Statutes Annotated, 1953 Compilation.

(11) That the evidence reveals that the Blanco Mesaverde Pool is not a homogeneous, uniform reservoir.

(12) That the producing formation of the Blanco Mesaverde Pool is comprised of various overlapping, interconnecting, and lenticular sands of relatively low permeability, many of which are not being efficiently drained by existing wells in the pool but which could be more efficiently and economically drained and developed by the drilling of additional wells pursuant to the rule changes proposed by the applicant.

(13) That infill drilling will substantially increase recoverable reserves from the Blanco Mesaverde Pool.

(14) That infill drilling will result in greater ultimate recovery of the reserves under the various proration units in the pool.

(15) That infill drilling in the Blanco Mesaverde Pool will result in more efficient use of reservoir energy and will tend to ensure greater ultimate recovery of gas from the pool, thereby preventing waste.

(16) That if infill drilling is implemented in the Blanco Mesaverde Pool, each operator will be afforded the opportunity to produce, without waste, his just and equitable share of the gas from the Pool, and his correlative rights, as defined by Section 65-3-29, New Mexico Statutes Annotated, 1953 Compilation, therefore, will not be impaired.

(17) That both wells on a proration unit should be produced so long as it is economically feasible to do so.

(18) That the application should be approved.

IT IS THEREFORE ORDERED:

(1) That the Special Rules for the Blanco Mesaverde Pool in San Juan and Rio Arriba Counties, New Mexico, as promulgated by Order No. R-1670, as amended, are hereby amended to permit the optional drilling of a second well on each proration unit; to provide that the deliverability of a proration unit containing two wells shall be the sum of the deliverabilities of each of the wells; to provide that the unit allowable may be produced from both of the wells in any proportion; to consider both wells on the proration unit as one well for purposes of balancing underproduction or overproduction; to provide for the reporting of production from each well individually and to require the reporting of total production from the unit; and to compare the unit production against the unit allowable in determining whether a unit should be classified marginal or non-marginal.

(2) That Rule 2 of the Special Rules for the Blanco Mesaverde Pool, as promulgated by Order No. R-1670, as amended, is hereby amended to read in its entirety as follows:

> "RULE 2 (A). The initial well drilled on a proration unit shall be located 990 feet from the outer boundary of either the Northeast or Southwest quarter of the section, subject to a variation of 200 feet for topographic conditions. Further tolerance shall be allowed by the Commission only in cases of extremely rough terrain where compliance would necessarily increase drilling costs.

"RULE 2 (B). The second well drilled on a proration unit shall be located in the quarter section of the unit not containing a well, and shall be located with respect to the unit boundaries as described in Rule 2 (A) above.

"The plats (Form C-102) accompanying the Application for Permit to Drill (OCC Form C-101 or Federal Form 9-331-C) for the second well on a proration unit shall have outlined thereon the boundaries of the unit and shall show the location of the first well on the unit as well as the proposed new well.

"RULE 2 (C). In the event a second well is drilled on any proration unit, both wells shall be produced for so long as it is economically feasible to do so."

(3) That the Special Rules for the Blanco Mesaverde Pool as promulgated by Order No. R-1670, as amended, are hereby amended by the addition of the following Special Rule 9:

RULE 9 (A). The product obtained by multiplying each proration unit's acreage factor by the calculated deliverability (expressed as MCF per day) for the well(s) on the unit shall be known as the AD Factor for the unit. The acreage factor shall be determined to the second decimal place by dividing the acreage within the proration unit by 320, subject to the acreage tolerances provided in Rule 5 (A). The AD Factor shall be computed to the nearest whole number.

RULE 9 (B). The monthly allowable to be assigned to each marginal proration unit shall be equal to its latest available monthly production.

RULE 9 (C). The pool allowable remaining each month after deducting the total allowable assigned to marginal proration units shall be allocated among the non-marginal units entitled to an allowable in the following manner:

1. Seventy-five percent (75%) of the pool allowable remaining to be allocated to non-marginal units shall be allocated among such units in the proportion that each unit's "AD Factor" bears to the total "AD Factor" for all non-marginal units in the pool.

2. Twenty-five percent (25%) of the pool allowable remaining to be allocated to non-marginal units shall be allocated among such units in the proportion that each unit's acreage factor bears to the total acreage factor for all non-marginal units in the pool.

RULE 9 (D). The current deliverability tests, taken in accordance with the "Gas Well Testing Procedures-San Juan Basin, New Mexico," shall be used in calculating allowables for the proration units in the pool for the 12-month period beginning April 1 of the following year.

RULE 9 (E). When calculating the allowable for a proration unit containing two wells, in accordance with Rule 9 of these rules, the deliverability of both wells shall be added in calculating the AD Factor and the unit allowable may be produced from both wells.

(4) That said Special Rules for the Blanco Mesaverde Pool are hereby amended by the addition of the following Special Rule 10 (C):

RULE 10 (C). The calculated deliverability at the "deliverability pressure" shall be determined in accordance with the provisions of the current "Gas Well Testing Rules and Procedures - San Juan Basin, New Mexico."

amended by R-1670-W Cabresa R-353

No well shall be eligible for reclassification to "Exempt Marginal" status unless ~~it is located on the a marginal~~ proration unit upon which it is located is a marginal proration unit and unless all wells on the proration unit meet the qualification for "exempt marginal" status.

(5) That said Special Rules for the Blanco Mesaverde Pool are hereby amended by the addition of the following Special Rule 12:

RULE 12. The full production of gas from each well, including drilling gas, shall be charged against the proration unit's allowable regardless of the disposition of the gas; provided, however, that gas used in maintaining the producing ability of the well shall not be charged against the allowable.

(6) That said Special Rules for the Blanco Mesaverde Pool are hereby amended by the addition of the following Special Rule 14:

RULE 14 (A). Underproduction: Any non-marginal proration unit which has an underproduced status as of the end of a gas proration period shall be allowed to carry such underproduction forward into the next gas proration period and may produce such underproduction in addition to the allowable assigned during such succeeding period. Any allowable carried forward into a gas proration period and remaining unproduced at the end of such gas proration period shall be cancelled.

RULE 14 (B). Production during any one month of a gas proration period in excess of the allowable assigned to a proration unit for such month shall be applied against the underproduction carried into such period in determining the amount of allowable, if any, to be cancelled.

(7) That said Special Rules for the Blanco Mesaverde Pool are hereby amended by the addition of the following Special Rule 15:

RULE 15 (A). Overproduction: Any proration unit which has an overproduced status as of the end of a gas proration period shall carry such overproduction forward into the next gas proration period. Said overproduction shall be made up during the succeeding gas proration period. Any unit which has not made up the overproduction carried into a gas proration period by the end of said period shall not be produced until such overproduction is made up.

RULE 15 (B). If, during any month, it is discovered that a proration unit is overproduced in an amount exceeding six times its average monthly allowable for the preceding twelve months (or, in the case of a newly connected well, six times its average monthly allowable for the months available), it shall not be produced that month nor each succeeding month until it is overproduced in an amount six times or less its average monthly allowable, as determined hereinabove.

RULE 15 (C). Allowable assigned to a proration unit during any one month of a gas proration period in excess of the production for the same month shall be applied against the overproduction chargeable to such unit in determining the amount of overproduction which must be made up pursuant to the provisions of Rules 15 (A) or 15 (B) above.

RULE 15 (D). The Secretary-Director of the Commission shall have authority to permit a well which is subject to shut-in, pursuant to Rules 15 (A) or 15 (B) above, to produce up to 500 MCF of gas per month upon proper showing to the Secretary-Director that complete shut-in would cause undue hardship, provided however, such permission shall be rescinded for any well produced in excess of the monthly rate authorized by the Secretary-Director.

RULE 15 (E). The Commission may allow overproduction to be made up at a lesser rate than permitted under Rules 15 (A), 15 (B), or 15 (D) above upon a showing at public hearing that the same is necessary to avoid material damage to the well.

RULE 15 (F). Any allowable accruing to a proration unit at the end of a gas proration period due to the cancellation of underage in the pool and the redistribution thereof shall be applied against the unit's overproduction.

RULE 15 (G). The Secretary-Director of the Commission shall have authority to grant a pool-wide moratorium of up to three months on the shutting in of gas wells in a pool during periods of high-demand emergency upon proper showing that such emergency exists, and that a significant number of the wells in the pool are subject to shut-in pursuant to the provisions of Rules 15 (A) or 15 (B) above. No moratorium beyond the aforementioned three months shall be granted except after notice and hearing.

(8) That said Special Rules for the Blanco Mesaverde Pool are hereby amended by the addition of the following Section E:

E. CLASSIFICATION OF UNITS

RULE 16 (A). The proration period (as defined in Rule 13) shall be divided into four classification periods of three months each, commencing on April 1, July 1, October 1, and January 1. After the production data is available for the last month of each classification period, any unit which had an underproduced status at the beginning of the proration period shall be classified marginal if its highest single month's production during the classification period is less than its average

monthly allowable during said classification period; provided however, that the operator of any unit so classified, or other interested party, shall have 15 days after receipt of notification of marginal classification in which to submit satisfactory evidence to the Commission that the unit is not of marginal character and should not be so classified.

RULE 16 (B). The Secretary-Director may reclassify a marginal or non-marginal proration unit at any time the unit's production data, deliverability data, or other evidence as to the unit's producing ability justifies such reclassification.

RULE 17. A proration unit which is classified as marginal shall not be permitted to accumulate underproduction, and any underproduction accrued to the unit prior to its classification as marginal shall be cancelled.

RULE 18. If, at the end of a proration period, a marginal proration unit has produced more than the total allowable for the period, assigned to a non-marginal unit of like deliverability and acreage, the marginal unit shall be reclassified non-marginal and its allowable and net status adjusted accordingly. (If the unit has been classified as marginal for one proration period only, or a portion of one proration period only, any underproduction cancelled as the result of such classification shall be reinstated upon reclassification back to non-marginal status. All uncompensated-for overproduction accruing to the unit while marginal shall be chargeable upon reclassification to non-marginal.)

RULE 19. A proration unit containing a well which has been reworked or recompleted shall be classified non-marginal as of the date of reconnection of the well to a pipeline until such time as production data, deliverability data, or other evidence as to the unit's producing ability indicates that the unit should be classified marginal.

RULE 20. All proration units not classified marginal shall be classified non-marginal.

(9) That said Special Rules for the Blanco Mesaverde Pool are hereby amended by the addition of the following Special Rule 21 (A):

RULE 21 (A). The monthly gas production from each well shall be metered separately and the gas production therefrom shall be reported to the Commission on Form C-115 in accordance with Rule 1115 of the Commission's Rules and Regulations, so as to reach the Commission on or before the 24th day of the month next succeeding the month in which the gas reported was produced. The operator shall show on such report what disposition has been made of the gas produced. The sum of the production from both wells on the proration unit shall also be reported for multiple-well units.

(10) That said Special Rules for the Blanco Mesaverde Pool are hereby amended by the addition of the following Special Rule 23:

RULE 23. Failure to comply with the provisions of this order or the rules contained herein shall result in the cancellation of allowable assigned to the affected proration unit. No further allowable shall be assigned to the affected unit until all rules and regulations are complied with. The Secretary-Director shall notify the operator of the unit and the purchaser, in writing, of the date of allowable cancellation and the reason therefor.

(11) That jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

I. R. TRUJILLO, Chairman

ALEX J. ARMIJO, Member

A. L. PORTER, Jr., Member & Secretary

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BEFORE THE OIL CONSERVATION COMMISSION
OF THE STATE OF NEW MEXICO

IN THE MATTER OF THE HEARING CALLED BY THE OIL CONSERVATION COMMISSION OF THE STATE OF NEW MEXICO FOR THE PURPOSE OF CONSIDERING:

CASE NO. 5264
Order No. R-1670-T-A

APPLICATION OF EL PASO NATURAL GAS COMPANY FOR THE AMENDMENT OF ORDER NO. R-1670, BLANCO MESAVERDE POOL, SAN JUAN AND RIO ARRIBA COUNTIES, NEW MEXICO.

Also see R-1670-T and R-1670-T-B

NUNC PRO TUNC

BY THE COMMISSION:

It appearing to the Commission that Order No. R-1670-T, dated November 14, 1974, does not correctly state the intended order of the Commission in one particular.

IT IS THEREFORE ORDERED

(1) That Paragraph (9) on Page 2 of Order No. R-1670-T, be and the same is hereby corrected to read in its entirety as follows:

> (9) That Section 65-3-5, New Mexico Statutes Annotated, 1953 Compilation, confers jurisdiction on the Commission over all matters relating to the conservation of oil and gas.

(2) That the correction set forth in this order be entered nunc pro tunc as of November 14, 1974.

DONE at Santa Fe, New Mexico, on this 19th day of November, 1974.

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

I. R. TRUJILLO, Chairman

ALEX J. ARMIJO, Member

A. L. PORTER, Jr., Member & Secretary

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STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION

IN THE MATTER OF THE HEARING CALLED BY THE OIL CONSERVATION DIVISION ON ITS OWN MOTION FOR THE PURPOSE OF CONSIDERING THE AMENDMENT OF DIVISION ORDER NO. R-1670-T.

CASE NO. 6691
Order No. R-1670-T-B

ORDER OF THE DIVISION

Also see R-1670-T and R-1670-T-B

BY THE DIVISION:

This cause came on for hearing at 9 a.m. on October 2, 1979, at Santa Fe, New Mexico, before Examiner Richard L. Stamets.

NOW, on this 18th day of October, 1979, the Division Director, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises,

FINDS:

(1) That due public notice having been given as required by law, the Division has jurisdiction of this cause and the subject matter thereof.

(2) That an amended well test procedure should be adopted for the Blanco Mesaverde Pool, Rio Arriba and San Juan Counties, New Mexico, in order to permit the assignment of more appropriate allowables to proration units following completion of a second or "infill" well thereon.

(3) That such test procedure should be established by amending the Special Rules and Regulations for the Blanco Mesaverde Pool, as promulgated by Division Order No. R-1670 and as amended by Division Orders Nos. R-1670-T and R-1670-T-A, to include the following Special Rule 10(D):

> RULE 10 (D). Within ninety (90) days after gas from the second well on the unit is first delivered to a gas transportation facility, both wells on the unit shall have been tested in accordance with "Gas Well Testing Rules and Procedures - San Juan Basin, New Mexico" and the results of the test filed with the Division's Aztec office and with the gas transportation facility to which the well is connected. If a test for the current test

period has previously been filed for the first well on the unit, a second test of said well will not be required. Both tests will be treated as Initial Tests for purposes of assigning allowables to the unit. This rule shall apply to newly completed wells.

IT IS THEREFORE ORDERED:

(1) That the Special Rules and Regulations for the Blanco Mesaverde Pool as promulgated by Division Order No. R-1670 and amended by Division Orders Nos. R-1670-T and R-1670-T-A are hereby amended by the addition of the following Special Rule 10(D):

RULE 10 (D). Within ninety (90) days after gas from the second well on the unit is first delivered to a gas transportation facility, both wells on the unit shall have been tested in accordance with "Gas Well Testing Rules and Procedures - San Juan Basin, New Mexico" and the results of the test filed with the Division's Aztec office and with the gas transportation facility to which the well is connected. If a test for the current test period has previously been filed for the first well on the unit, a second test of said well will not be required. Both tests will be treated as Initial Tests for purposes of assigning allowables to the unit. This rule shall apply to newly completed wells.

(2) That 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

JOE D. RAMEY
Director

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STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION

IN THE MATTER OF THE HEARING CALLED BY THE OIL CONSERVATION DIVISION ON ITS OWN MOTION TO CONSIDER THE AMENDMENT OF ORDER NO. R-1670-T, RULE 2(A), BLANCO MESAVERDE POOL, SAN JUAN AND RIO ARRIBA COUNTIES, NEW MEXICO.

CASE NO. 6312
Order No. R-1670-U

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 9 a.m. on August 30, 1978, at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this 20th day of September, 1978, the Division Director, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises,

FINDS:

(1) That due public notice having been given as required by law, the Division has jurisdiction of this cause and the subject matter thereof.

(2) That Rule 2(A) of the Oil Conservation Division Special Rules and Regulations for the Blanco Mesaverde Pool as promulgated by Division Order No. R-1670, as amended, provides that the initial well drilled on a proration unit shall be located 990 feet from the outer boundary of either the Northeast or Southwest quarter of the section, subject to a variation of 200 feet for topographic conditions.

(3) That said rule, providing for the location of wells in alternate quarter sections, was adopted early in the life of Blanco Mesaverde Pool development, and has materially contributed to the orderly development of over 2000 proration units.

(4) That by Order No. R-1670-T, dated November 14, 1974, the special rules for the Blanco Mesaverde Pool were amended to permit the drilling of a second well on each proration unit, said second well to be drilled in the opposite quarter section of the proration unit, with the deliverability of the wells to be additive for the purpose of calculating the unit's allowable.

(5) That subsequent to the issuance of said Order No. R-1670-T, over 600 infill wells have been drilled.

(6) That all future development in the Blanco Mesaverde Pool will consist of further infill drilling and some additional primary drilling on the edges of the pool where production is often of a marginal characteristic as the limits of production are approached.

(7) That the fixed spacing pattern described in Findings Nos. (2) and (3) above has been satisfactory and even preferable in development of the pool, but the edge drilling to establish the ultimate productive limits of the pool requires additional flexibility in the location of wells which the fixed spacing does not provide.

(8) That the pool rules for the Blanco Mesaverde Pool in San Juan and Rio Arriba Counties, New Mexico, should be amended to permit the first well on the proration unit to be drilled on either 160-acre tract comprising the unit, so long as the well is no closer than 790 feet to the outer boundary of the quarter section line and no closer than 130 feet to any quarter-quarter section line or subdivision inner boundary.

(9) That to amend said pool rules in the aforesaid manner is in the interest of conservation, may prevent waste, and will protect rather than impair correlative rights.

IT IS THEREFORE ORDERED:

(1) That Rule 2(A) of the Special Pool Rules for the Blanco Mesaverde Pool, as promulgated by Order No. R-1670, and as amended, particularly by Order No. R-1670-T, is hereby amended to read in its entirety as follows:

> "RULE 2 (A). The initial well drilled on a proration unit shall be located not closer than 790 feet to any outer boundary of the quarter section on which the well is located, and not closer than 130 feet to any quarter-quarter section line or subdivision inner boundary."

(2) That 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

JOE D. RAMEY
Director

S E A L

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BEFORE THE OIL CONSERVATION COMMISSION
OF THE STATE OF NEW MEXICO

IN THE MATTER OF THE HEARING CALLED BY THE OIL CONSERVATION COMMISSION OF THE STATE OF NEW MEXICO FOR THE PURPOSE OF CONSIDERING:

CASES 330 and 330-A
(Consolidated)
ORDER NO. R-128-C

THE APPLICATION OF STANOLIND OIL AND GAS COMPANY FOR AN ORDER AMENDING ORDER R-110 RELATING TO THE BLANCO-MESAVERDE GAS POOL, SAN JUAN AND RIO ARRIBA COUNTIES, NEW MEXICO.

AND ALSO:

THE APPLICATION OF THE OIL CONSERVATION COMMISSION UPON ITS OWN MOTION FOR AN ORDER PROMULGATING RULES AND REGULATIONS AFFECTING AND CONCERNING THE BLANCO-MESAVERDE GAS POOL, SITUATED IN SAN JUAN AND RIO ARRIBA COUNTIES, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

These causes came on for hearing at 9 o'clock a.m. on April 15, 1954 and June 21, 1954, before the Oil Conservation Commission of New Mexico, hereinafter referred to as the "Commission".

NOW, on this 16th day of December, 1954, the Commission, a quorum being present, having considered the testimony adduced and the exhibits received at said hearings, and being fully advised in the premises,

FINDS:

(1) That due notice of the time and place of hearing and the purpose thereof having been given as required by law, the Commission has jurisdiction of these cases and the subject matter thereof.

(2) That under the date of February 25, 1949, the Commission issued its Order 799 creating the Blanco-Mesaverde Gas Pool. That Order 799 defined the vertical and horizontal limits of the Blanco-Mesaverde Gas Pool, and that by subsequent orders the Commission extended the horizontal limits of the Blanco-Mesaverde Gas Pool.

(3) That under the date of November 9, 1951, the Commission issued Order No. R-110, amending and revising Order 799, to provide for 320 acre proration units, drilling and pipe cementing procedures, well spacing, and other pertinent rules.

(4) That the producing capacity of the gas wells in the Blanco-Mesaverde Gas Pool is greater than the market demand of gas from the Blanco-Mesaverde Gas Pool.

(5) That for the purpose of preventing waste and for the protection of correlati rights Order R-110 should be amended to provide a method of allocating gas between proration units in the Blanco-Mesaverde Gas Pool.

IT IS THEREFORE ORDERED:

(1) That Order R-110, dated November 9, 1951 is hereby amended to read as follows:

Section 15: Gas Proration and Allocation

RULE 1. (a) The acreage allocated to a gas well for proration purposes shall be known as the Gas Proration Unit for that well. For the purpose of Gas Allocation in the Blanco-Mesaverde Gas Pool, a standard proration unit shall consist of between 316 and 324 contiguous surface acres, substantially in the form of a rectangle which shall be a legal subdivision (half section) of the U. S. Public Land Surveys; provided however, that a non-standard gas proration unit may be formed after notice and hearing or under the provisions of paragraph (b) of this rule. Any proration unit containing less than 316 acres or more than 324 acres shall be a non-standard proration unit. The allowable production from any non-standard proration unit as compared with the allowable production therefrom if such tract were a standard unit shall be in the ratio of the area of such non-standard proration unit expressed in acres to 320 acres. Any gas proration unit containing between 316 and 324 acres shall be considered to contain 320 acres for the purpose of computing allowables.

(b) The Secretary of the Commission shall have authority to grant an exception to Rule 1 (a) without Notice and Hearing where application has been filed in due form and where the following facts exist and the following provisions are complied with;

1. The non-standard gas proration unit consists of contiguous quarter-quarter sections and/or lots.

2. The non-standard gas proration unit lies wholly within a single governmental section.

3. The entire non-standard gas proration unit may reasonably be presumed to be productive of gas.

4. The applicant presents written consent in the form of waivers from (a) all operators owning interests in the section in which any part of the non-standard gas proration unit is situated and which acreage is not included in said non-standard gas proration unit, and (b) all operators owning interests in acreage offsetting the non-standard gas proration unit.

5. In lieu of paragraph 4 of this rule, the applicant may furnish proof of the fact that said offset operators were notified by registered mail of his intent to form such non-standard gas proration unit. The Secretary of the Commission may approve the application if, after a period of 30 days following the mailing of said notice, no operator has made objection to formation of such non-standard gas proration unit.

RULE 2. At least 30 days prior to the beginning of each gas proration perio the Commission shall hold a hearing after due notice has been given. The Commission shall cause to be submitted by each gas purchaser its "Preliminary Nominations" of the amount of gas which each in good faith actually desires to purchase within the ensuing proration

period, by months from the Blanco-Mesaverde Gas Pool. The Commission shall consider the "Preliminary Nominations" of purchasers, actual production, and such other factors as may be deemed applicable in determining the amount of gas that may be produced without waste from the pool within the ensuing proration period. "Preliminary Nominations" shall be submitted on a Form C-121-A as prescribed by the Commission.

RULE 3. In the event a gas purchaser's market shall have increased or decreased he may file with the Commission prior to the 10th day of the month a "supplemental nomination", showing the amount of gas he actually in good faith desires to purchase during the ensuing proration month from the Blanco-Mesaverde Gas Pool. The Commission shall hold a public hearing between the 13th and 20th days of each month to determine the reasonable market demand for gas for the ensuing proration month, and shall issue a proration schedule setting out the amount of gas which each well may produce during the ensuing proration month. "Supplemental Nominations" shall be submitted on a Form C-121-A as prescribed by the Commission.

Included in the monthly proration schedule shall be (a) a summary of the total pool allocation for that month showing nominations, and adjustments made for underage or overage applied from a previous month, (b) a tabulation of the net allowable and production for the second preceding month together with a cumulative overage or underage computation, (c) a tabulation of the current and net allowables for the preceding month, (d) a tabulation of current monthly allowable for the ensuing proration month, and (e) a tabulation of the acreage and deliverabilities assigned each well, and the factors assigned each well for use in calculating individual well allowables. The Commission shall include in the proration schedule the gas wells in the Blanco-Mesaverde Gas Pool delivering to a gas transportation facility, or lease gathering system, and shall include in the proration schedule of the Blanco-Mesaverde Gas Pool any well which it finds is being unreasonably discriminated against through denial of access to a gas transportation facility, which is reasonable capable of handling the type of gas produced by such well. The total allowable to be allocated to the pool each month shall be equal to the sum of the preliminary or supplemental nominations (whichever is applicable), together with any adjustment which the Commission deems advisable.

If during a proration month the acreage assigned a well is increased the operator shall notify the Director in writing (Box 871, Santa Fe, New Mexico) of such increase. The increased allowable assigned the gas proration unit for the well shall be effective on the first day of the month following receipt of the notification by the Director.

RULE 4. The monthly allocation to the Blanco-Mesaverde Gas Pool shall be divided and allocated among the wells connected to a gas transportation facility in the following manner:

The product obtained by multiplying each well's acreage factor by the calculated deliverability (expressed as MCF per day) for that well shall be known as the "AD" factor for that well. The acreage factor shall be determined to the nearest hundredth of a unit by dividing the acreage within the proration unit by 320. The "AD factor" shall be computed to the nearest whole unit.

(1) A tentative allocation shall be made by dividing seventy-five percent (75%) of the pool allocation among the wells in the proportion that each well's "AD factor" bears to the sum of all the AD factors in the pool.

(2) The remaining twenty-five (25%) of the pool allocation shall be divided among the wells in the proportion that each well's acreage factor bears to the sum of all the acreage factors in the pool.

When the tentative allowable received by a well is in excess of its known producing ability the well shall be classed as a marginal well and its allowable limited to its known producing ability. The sum of the difference between the tentative allowables and the limited allowables of all marginal wells on the proration schedule shall be reallocated to the non-marginal wells by application of the same formula. If such reallocation shall result in placing any other well within the marginal classification, the difference between the tentative allowable and the limited allowable of such marginal well shall be redistributed by application of the same formula until no well has received an allowable in excess of its known producing ability.

RULE 5. The calculated deliverability at the "deliverability pressure" shall be determined in accordance with the provisions of Order R-333-A;provided however, that the deliverability pressure shall be determined as follows:

"Deliverability pressure", as used herein shall be equal to fifty (50) percent of the seven (7) day shut-in pressure of the respective individual wells.

BALANCING OF PRODUCTION

RULE 6. Underproduction: The dates 7:00 a..m., February 1, and 7:00 a.m., August 1, shall be known as balancing dates and the periods of time bounded by these dates shall be known as gas proration periods. In order to effectively administer the prorationing of gas in the Blanco-Mesaverde Gas Pool, it is advisable to have a portion of each proration period include both summer and winter months. Therefore the first proration period shall commence March 1, 1955 and shall continue for a period of 11 months and future proration periods shall commence on the dates outlined above. The amount of current gas allowable remaining unproduced at the end of each proration period shall be carried forward to and may be produced during the next succeeding proration period in addition to the normal gas allowable for such succeeding period; but whatever amount thereof is not made up within the first succeeding proration period shall be cancelled.

If it appears that such continued underproduction has resulted from inability of the well to produce its allowable, it may be classified as a marginal well and its allowable reduced to the well's ability to produce.

If at the end of a proration period a marginal well has produced more than the total allowable assigned a non-marginal unit of corresponding size and deliverability, the marginal well shall be reclassified as a non-marginal well and its allowable prorated accordingly.

If during a proration period a marginal well is reworked or recompleted in such a manner that its productive capacity is increased to the extent that it should be reclassified as a non-marginal well, the reclassification shall be effective on the first day of the proration month following the date of recompletion.

The Director may reclassify a well at any time if production data or deliverability tests reflect the need for such a reclassification.

RULE 7. Overproduction: A well which has produced a greater amount of gas than was allowed during a given proration period shall have its allowable for the first succeeding proration period reduced by the amount of such overproduction and such overproduction shall be made up within the first succeeding proration period. If, at any time, a well is overproduced an amount equaling six times its current monthly allowable, it shall be shut-in during the current month.

The Commission may allow overproduction to be made up at a lesser rate than would be the case if the well were completely shut-in upon a showing at public hearing after due notice that complete shut-in of the well would result in material damage to the well.

GRANTING OF ALLOWABLES

RULE 8. No gas well shall be given an allowable until Form C-104 and Form C-110 have been filed together with a plat showing acreage attributed to said well and the locations of all wells on the lease.

RULE 9. Allowables to newly completed gas wells shall commence on the date of connection to a gas transportation facility, as determined from an affidavit furnished to the Commission (Box 697, Aztec, New Mexico) by the purchaser, or the date of filing of Form C-104 and Form C-110 and the plat described above, whichever date is the later.

No well shall be assigned an allowable unless either a deliverability test or a potential test taken in conformance with the provisions of Order R-333-A has been submitted.

In assigning allowables to newly completed wells in the absence of deliverability test data the open flow potential test taken in conformance with Order R-333-A may be used in approximating the wells deliverability. In this instance an assumed deliverability equal to 20% of the volume of gas produced on the initial potential test will be used. The allowable thus established using an assumed deliverability shall be a tentative allowable and upon submission of a deliverability test the allowables previously assigned the well shall be recalculated using the deliverability test data.

Deliverability tests shall be taken and calculated in conformance with Order R-333-A, the provisions of Rule 5 of this order and the testing schedule provisions of Order R-333-A.

Deliverability tests taken during 1954 shall be used in calculating allowables for the proration period commencing March 1, 1955. Subsequent annual tests shall be used in calculating allowables for proration periods commencing during the next ensuing year.

REPORTING OF PRODUCTION

RULE 10. The monthly gas production from each well shall be metered separately and the gas production therefrom shall be reported to the Commission on Form C-115 so as to reach the Commission on or before the 24th day of the month next succeeding the month in which the gas was produced. The operator shall show on such report what disposition has been made of the gas produced.

Each purchaser or taker of gas in the Blanco-Mesaverde Gas Pool shall submit a report to the Commission so as to reach the Commission on or before the 24th day of the month next succeeding the month in which the gas was purchased or taken.

Such report shall be filed on either Form C-111 or Form C-114 (Whichever is applicable) with the wells being listed in approximately the same order as they are listed on the proration schedule.

Forms C-111 and C-114 referred to herein shall be submitted in triplicate, the original being sent to the Commission at Box 871, Santa Fe, New Mexico, the other copies being sent to Box 697, Aztec, New Mexico and Box 2045, Hobbs, New Mexico.

Form C-115 shall be submitted in accordance with Rule 1114 of the Commission's Rules and Regulations.

The full production of gas from each well shall be charged against the well's allowable regardless of what disposition has been made of the gas, provided however, that gas used in maintaining the producing ability of the well shall not be charged against the well's allowable.

RULE 11. The term "gas purchaser" as used in these rules, shall mean any "Taker" of gas either at the wellhead or at any point on the lease where connection is made for gas transportation or utilization. It shall be the responsibility of said "taker" to submit a nomination.

RULE 12. No gas, either dry gas or casinghead gas, produced from the Blanco-Mesaverde Gas Pool except that gas used for "drilling-in purposes", shall be flared or vented unless specifically authorized by order of the Commission after notice and hearing.

PROVIDED FURTHER, That in filing Form C-101 "Notice of Intention to Drill or Recomplete" or USGS Form 3-391-A (whichever is applicable), all operators shall strictly comply with the provisions of Order R-110 and the applicable provisions of Order R-397. Accompanying the above form shall be a plat of the acreage contained in the proration unit together with a complete list of all working interest owners designating the acreage they hold within the communitized area dedicated to the well.

PROVIDED FURTHER, That failure to comply with the provisions of this order or the rules contained herein shall result in the cancellation of allowable assigned to the affected well. No further allowable shall be assigned to the affected well until all rules and regulations are complied with. The Director shall notify the operator of the well and the purchaser in writing of the date of allowable cancellation and the reason therefor.

PROVIDED FURTHER, That the provisions of Statewide Rule 104 (K) shall not apply to the Blanco-Mesaverde Gas Pool.

PROVIDED FURTHER, That all transporters of gas or users of gas shall file with the Commission a list of all wells connected to their gas transportation facility as of February 1, 1955, and shall furnish connection notices thereafter in accordance with the provisions of Rule 9 as soon as possible after the date of connection.

The list requested above shall contain the name of the operator, lease name, well number, unit, and location of the well (Section, Township and Range). Connection notices shall contain the date of connection in addition to the above listed data.

DONE at Santa Fe, New Mexico, the day and year hereinabove designated.

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

EDWIN L. MECHEM, Chairman
E. S. WALKER, Member
W. B. MACEY. Member and Secretary

S E A L

BEFORE THE OIL CONSERVATION COMMISSION
OF THE STATE OF NEW MEXICO

IN THE MATTER OF THE PETITION OF STANOLIND OIL AND GAS COMPANY FOR THE ADOPTION OF REGULATIONS ESTABLISHING UNIFORM SPACING IN THE BLANCO POOL IN SAN JUAN COUNTY, NEW MEXICO; ESTABLISHING THE LOCATION OF THE INITIAL WELL ON EACH 320 ACRES; FIXING REGULATIONS AS TO THE SETTING OF PIPE; AND FOR BACK PRESSURE TESTS OF THE VARIOUS STRATA.

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CASE NO. 163
ORDER NO. 799

ORDER OF THE COMMISSION

BY THE COMMISSION:

WHEREAS, after due notice as required by law the Commission held a public hearing in Santa Fe on October 28, 1948, to consider the petition of Stanolind Oil and Gas Company for the adoption of an order fixing the spacing of wells and other field rules for wells hereafter drilled in the Blanco (Mesaverde) Gas Pool, San Juan County, New Mexico, and related matters; and

WHEREAS, the Commission having considered the evidence adduced at such hearing, pertinent information otherwise available in the Commission's records, the statements made and viewpoints expressed by interested parties at or in connection with such hearing,

FINDS, from the evidence adduced:

A. That in order to eliminate waste of natural resources, protect correlative rights, protect potable water supplies, and encourage development in the Blanco (Mesaverde) Gas Pool, San Juan County, New Mexico;

B. That such pool has produced natural gas from the Mesaverde formation for approximately 20 years, the entire gas production being from one well;

C. That by reason of the undeveloped nature of the pool and of the general practices of certain operators, a fairly uniform spacing of one well to each 640 acres has heretofore prevailed throughout the pool;

D. That in view of present evidence and development it is not economically feasible to drill more than two wells to each 640 acre section, and accordingly, that more dense spacing may be conducive to waste and will unnecessarily increase the cost of development and production.

E. That for wells hereafter drilled, a general spacing pattern of one well on a unit of 320 acres, substantially in the shape of a rectangle, is required to protect the equities of those having interests in wells heretofore drilled on 320 or 640 acre tracts, for which general spacing pattern the pooling of properties should be encouraged when necessary;

F. That gas production and the gas productive area of the pool is likely to be substantially more extensive than the presently developed position thereof;

G. That waste, will result in drilling of wells in the pool, unless special rules and regulations are adopted for the prevention thereof;

H. That all evidence indicates that the size, outline, trend and reservoir conditions of the pool is not exactly known, and substantial revision of all present data may become necessary as development proceeds, necessitating future revision of certain parts of this order;

I. That in view of the very incomplete knowledge of the pool, it is necessary to require all operators to make complete core analysis and other special tests of the Mesaverde formation until the pool is more completely developed; and

J. That, while the Blanco-Mesaverde gas pool has been commercially productive for approximately 20 years, it has not heretofore been subject to cooperative action representative of the common interest of all operators or lease holders within the area, and there are an undetermined number of small landowners or lease-holders whose total holdings are either less than 320 acres or includes portions of 320 acre tracts.

THEREFORE, IT IS ORDERED that, effective on the date of this order, the following rules and regulations shall apply to wells hereafter drilled or completed or re-completed to the Mesaverde pool in the Blanco area, defined below, in addition to the Commission's applicable rules, regulations and orders heretofore or hereafter adopted to the extent not in conflict herewith:

Section 1. No well shall be drilled or completed or recompleted, and no Notice of Intention to Drill or drilling permit shall be approved, unless

(a) such well be located on a designated drilling unit of not less than three hundred twenty (320) acres of land, more or less, according to legal subdivisions of the United States Land Surveys, in which unit all the interests are consolidated by pooling agreement or otherwise and on which no other well is completed, or approved for completion, in the pool;

(b) such drilling unit be in the shape of a rectangle except for normal variations in legal subdivisions of the United States Lands Surveys, the north half, south half, east half or west half of each section of land constituting a drilling unit;

(c) such well shall be located 330 feet from the center of either the northeast or southwest quarter of the section subject to variation of 200 feet for topographic conditions. Further tolerance shall be allowed by the Commission only in cases of extremely rough terrain where compliance would necessarily increase drilling costs.

Section 2. The special rules and regulations for the Blanco (Mesaverde) pool contained herein shall be limited in their application to the present 4200-5100 foot productive horizon where the productive sands are contained between the top of the Cliff House Sand and the base of the Point Lookout Sand of the Mesaverde.

Section 3. Proration Units: The proration unit shall consist of 320 acres or (a) a legal U. S. General Land Office Survey half-section and (b) the approximate 320 acre unit shall follow the usual legal sub-divisions of the General Land Office Section Surveys and (c) where proration units lie along the edge of field boundaries described in Section 1 above, exceptions shall be permissible in that contiguous tracts of approximately 320 acres, following regular U.S.G.L.O. sub-divisions, may be classed as proration units.

A. The pooling of properties or parts thereof shall be permitted, and, if not agreed upon may be required in any case when and to the extent that the smallness or shape of a separately owned tract would, under the enforcement of the uniform spacing plan of proration units, otherwise deprive or tend to deprive the owner of such tract of the opportunity to recover his just and equitable share of the crude petroleum oil and natural gas in the pool; provided, that the owner of any tract that is smaller than the drilling unit established for the field, shall not be deprived of the right to drill on and produce from such tract if same can be done without waste; but in such case the allowable production from such tract, as compared with the allowable production therefrom if such tract were a

full unit, shall be in the ratio of the area of such tract to the area of a full unit of 320 acres.

Section 4. Casing and Cementing Program:

A. Surface Pipe

The surface pipe shall be set through the shallow potable water bearing beds to a minimum depth of 250 feet and a sufficient amount of cement shall be used to circulate the cement behind the pipe to the bottom of the cellar. This surface casing shall stand cemented for at least 24 hours before drilling plug or initiating tests. The surface casing shall be tested after drilling plug by bailing the hole dry. The hole shall remain dry for one hour to constitute satisfactory proof of a water shut-off. In lieu of the foregoing test the cement job shall be tested by building up pressure of 1,000 psi, closing the valves, and allowing to stand thirty minutes. If the pressure does not drop more than 100 lbs. during that period, the test shall be considered satisfactory. This test shall be made both before and after drilling the plug. In this regard all fresh waters and waters of present or probable future value for domestic, commercial or stock purposes shall be confined to their respective strata and shall be adequately protected by methods approved by the Commission. Special precaution shall be taken in drilling and abandoning wells to guard against any loss of artesian potable water from the strata in which it occurs and the contamination of artesian potable water by objectionable water, oil or gas. The Commission shall be notified at least 24 hours prior to the conducting of any test.

B. Production String

The production string shall be set on top of the Cliff House Sand with a minimum of 100 sacks of cement and shall stand cemented not less than 36 hours before testing the casing. This test shall be made by building up a pressure of 1,000 psi, closing the valves, and allowing to stand thirty minutes. If the pressure does not drop more than 100 lbs. during that period, the test shall be considered satisfactory.

C. General

All cementing shall be done by the pump and plug method. Bailing tests may be used on all casing and cement tests, and drill stem tests may be used on cement tests in lieu of pressure tests. In making bailing test, the well shall be bailed dry and remain approximately dry for thirty minutes. If any string of casing fails while being tested by pressure or by bailing tests herein required, it shall be re-cemented and re-tested or an additional string of casing should be run and cemented. If an additional string is used the same test shall be made as outlined for the original string. In submitting Form C-101, "Notice of Intention to Drill", the number of sacks of cement to be used on each string of casing shall be stated.

Rules 6, 8, 9, 10, 11, 12 and 14 of Order No. 4 of the Commission, effective 8/12/35, should be followed.

Section 5. Tubing: Any completed well which produces any oil shall be tubed. This tubing shall be set as near the bottom of the hole as practicable, but in no case shall tubing perforations be more than 250 feet from the bottom. The bottom of the tubing shall be restricted to an opening of less than 1" or bull-plugged in order to prevent the loss of pressure bombs or other measuring devices.

Section 6. Special Equipment: Any well which produces oil shall be equipped with a meter setting of adequate size to measure efficiently the gas, with this meter setting to be installed on the gas vent or discharge line. Well-Head equipment for all wells shall be installed and maintained in first class condition, so that static, bottom hole pressures and surface pressures may be obtained at any time by a duly authorized agent of the Commission. Valves shall be installed so that pressures may be readily obtained on the casing and also

on the tubing, wherever tubing is installed. All connections subject to well pressure and all well-head fittings shall be of first class material, rated at 2,000 psi working pressure and maintained in gas tight condition. Bradenheads rated at 2,000 psi shall be installed on all production string and bradenhead connections maintained in gas tight condition. There shall be at least one valve on each bradenhead. Operators shall be responsible for maintaining all equipment in first class condition and shall repair or replace equipment where gas leakage occurs.

Section 7. Safety Requirements: Drilling boilers shall not be set closer than 200 feet to any well or tank battery. All electrical equipment shall be in first class condition and properly installed.

Section 8. Shooting of Wells: Wells shall not be shot or chemically treated until the permission of the Commission is obtained. Each well shall be shot or treated in such manner as will not cause injury to the sand or result in water entering the oil or gas sand, and necessary precautions shall be taken to prevent injury to the casing. If shooting or chemical treating results in irreparable injury to the well or to the oil or gas sand, the well shall be properly plugged and abandoned. (See Rule 42 Order No. 4, Effective 8/12/35)

Section 9. Testing of Pays: All wells drilled through the Point Lookout Pay will be tested by means of separate back pressure tests in accordance with the methods adopted by the U. S. Bureau of Mines (Monograph 7) of (a) the Cliff House Pay (b) the Point Lookout Pay (c) both pays commingled with a minimum of three stabilized readings from a total minimum of three different sized orifices.

A. Wells which penetrated the Cliff House pay only will take minimum of three stabilized tests covering a total of three different sized orifices.

B. The foregoing tests shall be taken either in the process of completion, or in drilling, or by means of packer separations between the Point Lookout and Cliff House pays after completion. All tests should be certified and filed with the Commission, and the Commission shall be notified at least 24 hours prior to conducting any test.

C. Annual back pressure tests, using total of three different sized orifices, shall be taken in June, July or August on each completed well. Each test must be stabilized and plotted as a straight line function on logarithmic paper as outlined in U.S.Bureau of Mines Monograph 7.

D. Within six months of the effective date of this order, and every six months thereafter, there shall be a meeting of all operators within the Blanco-Mesaverde pool in the Commission offices in Santa Fe, New Mexico, to present and discuss new information and data gathered subsequent to the effective date of this order. The Commission may discontinue these meetings when in its opinion, the pool has reached a stage of development where such meetings are unnecessary.

Section 10. Protection of Mineral Deposits: Since the Menefee coal beds bear some gas and since these coal beds are of non-commercial value, Rule 20, Order No. 4 of the Commission dated 8/12/35 shall not apply to this field.

Section 11. Gas Wastage: Mesaverde gas shall not be flared since this is principally a gas reservoir and any well not connected to a commercial or domestic taker shall be shut-in until such market is obtained. Wells in this field shall be permitted to produce and market gas, as long as such can be done without waste, equitably between proration units for the field.

Section 12. Bradenhead Gas: Bradenhead gas shall not be used either directly or expansively in engines, pumps or torches, or otherwise wasted. It may be used for lease and development purposes and for the development of nearby leases, except as prohibited above. Wells shall not be completed as Braden-

head gas wells unless special permission is obtained from the Commission.

Section 13. Any provision herein to the contrary notwithstanding, the Commission may, and in proper cases will, on petition or on its own motion, by order entered after notice and hearing to the extent required by law, grant exceptions and permit drilling locations to become effective, thereby authorizing the drilling or completion of wells in the pool not conforming to the requirements of Sections 1 through 12 above if the Commission shall find that the property sought to be drilled would be deprived of an opportunity to produce gas from the pool in the absence of such exception, or irrespective of such findings, if the Commission shall find that by reason of all circumstances an exception is proper in the prevention of waste, or undue drainage between properties, or otherwise in the exercise by the Commission of its jurisdiction over the spacing of wells or its other powers conferred by law, express or implied.

IT IS FURTHER ORDERED that, in accordance with recommendations of the Northwestern New Mexico Nomenclature Committee approved and adopted by this Commission, the Mesaverde gas producing pool in the Blanco area, to which this order applies, is defined to include the following described land in San Juan County, New Mexico:

Township 29 North, Range 9 West
All of sections 3, 4, 5, 10, 11, 14 and 15.

Township 30 North, Range 9 West
Sec. 7, S/2; Sec. 8, S/2; all of sections 16, 17, 18, 19, 20, 21, 22, 27, 28, 29, 30, 32, 33 and 34.

All additional lands located within one-half (1/2) mile of any land in the pool as defined or as it may be extended shall conform to these rules and regulations; provided, however, that such pool shall in no event be extended so as to include any lands now or hereafter included by the Commission in some other producing area formally designated as an oil or gas pool in the Mesaverde, provided, further, by order of this Commission the pool may be redesignated from time to time so as to embrace other lands in the vicinity which are believed, on the basis of additional developments, to be capable of producing gas from the Blanco pool, whether or not such other lands shall have been at one time included in another designated field or pool producing from Mesaverde.

Entered and adopted by the Oil Conservation Commission this 25 day of February, 1949.

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

CHAIRMAN

MEMBER

SECRETARY

9/1/98 draft

CURRENT RULES FOR BLANCO MESAVERDE POOL

"A. WELL ACREAGE AND LOCATION REQUIREMENTS

RULE 2(a). **Standard GPU (gas proration unit)** in the Blanco-Mesaverde Gas Pool shall be 320 acres.

RULE 2(b) **Well Location:**

(1) THE INITIAL WELL drilled on a GPU shall be located not closer than 790 feet to any outer boundary of the quarter section on which the well is located and not closer than 130 feet to any quarter-quarter section line or subdivision inner boundary.

(2) THE INFILL WELL drilled on a GPU shall be located in the quarter section of the GPU not containing a Mesaverde well, and shall be located with respect to the GPU boundaries as described in the preceding paragraph."

PROPOSED RULE CHANGES

Burlington proposes that the Division amend the Special Rules and Regulations for the Blanco Mesaverde Gas Pool to allow a maximum of four (4) wells per GPU ("80-acre infill") in this pool as follows:

"A. WELL ACREAGE AND LOCATION REQUIREMENTS

RULE 2(a). **Standard GPU (Gas proration Unit)** in the Blanco-Mesaverde Gas Pool shall be 320 acres.

RULE 2(b) **Well locations and well density in Special Qualifying Area:**

Within the Special Qualifying Area of the Pool, a second and third optional "infill" well may be drilled within a GPU in accordance with Rule 2 (c) pursuant to the following procedures:

1. Operators of an existing GPU which contains both an original well and a first infill well and who desire to drill a second or third optional infill wells shall send a copy of its Application for Permit to Drill ("APD") to adjacent operators by certified mail-return receipt requested advising that they have twenty (20) days from receipt to file with the Division's District Supervisor a written objection to the application.

2. An adjacent operator shall be any operator of a Mesaverde GPU whose side boundary or corner adjoins the side boundary or corner of the quarter-quarter section in which the proposed optional infill well is to be located.

3. The Division's District Supervisor may approve the application for permit to drill ("APD") upon receipt of the APD and certification by the applicant that all adjacent operators have received notification and no objections have been received within a twenty (20) day notice period.

4. Well locations for approved second or third optional infill wells in the Special Qualifying Area shall not be closer than permitted by Rule 2(c)(1)(i).

5. In the event an objection is timely received, or the District Supervisor upon its own initiative, the application shall be set for a hearing before a Division Examiner.

In the event the Division desires to adopt criteria for approval of an infill well even in the absence of objection, the following is suggested:

5. Any APD requesting approval of an additional optional infill well shall include a map of the GPU showing the location of all existing Mesaverde wells, and any two (2) of the following:

(a) Initial SURFACE pressure for both the original well and first infill well, ultimate cumulative recovery and current rate for each Mesaverde well within the GPU and calculations of pressure drop per year derived from the initial pressure from the original well subtracting the initial pressure of the first infill well and then dividing that difference by the number of years between the drilling of the original well and the drilling of the first infill well.

(b) volumetric estimates of drainage areas for the original and first infill well in the GPU;

(c) reservoir simulations of drainage areas for the original and first infill wells in the GPU.

6. The District Supervisor, in the absence of objection, shall approve the APD provided that the drainage areas estimated by volumetrics or simulation for the applicant's wells(s) are not greater than the difference between the combined estimates of drainage areas in Rule 5(b) or (c) and 320-acres.

RULE 2 (c) **Well locations and well density for all acreage in the pool outside any special qualifying area:**

Within any area of the Pool outside any special qualifying area, an original well and up to three (3) optional "infill" wells may be drilled within a GPU, subject to the following restrictions:

(1) Well Locations:

(i) wells drilled on a GPU shall be located not closer than 660 feet to the South and North lines nor closer than 330 feet to the East and West lines of a GPU and not closer than 10 feet to any interior quarter or quarter-quarter section line or subdivision inner boundary.

(ii) no well shall be located closer than 990 feet to any existing Mesaverde well located in an adjacent GPU;

(iii) wells located within federal exploratory units shall not be closer than 10 feet to any section, quarter section or interior quarter-quarter section line or subdivision inner boundary except that wells located within one-half mile of the outer boundary of any such unit, shall not be closer than permitted by Rule 2(c)(1)(i) above.

(2) Well Density:

(i) the FIRST INFILL WELL drilled on a GPU shall be located in the quarter section of the GPU not containing a Mesaverde well;

(ii) the SECOND INFILL WELL drilled on a GPU shall be located in a quarter-quarter section of the GPU not containing a Mesaverde well and within a quarter section of the GPU not containing more than one (1) Mesaverde well;

(iii) the THIRD INFILL WELL drilled on a GPU shall be located in a quarter-quarter section of the GPU not containing a Mesaverde well and within a quarter section of the GPU not containing more than one (1) Mesaverde well.

RULE 3. **Administrative Exceptions**

The Division Director, in accordance with the applicable provisions of General Rule 104, may grant an exception to Rule 2 when an application has been submitted to the Division including notification to the affected parties.

Department of Agriculture | Forest Service | Jicarilla Ranger District | Bloomfield, NM 87413
(505) 632-2956
Fax: (505) 632-3173

File Code: 2820

Date: 9/15/98

Ernie Busch
New Mexico Oil Conservation Division
Aztec District Office
1000 Rio Brazos Road
Aztec, NM 87410

Dear Mr. Busch,

Thank you for you memorandum dated 8/28/98 inviting our participation and comment on the issue of proposed changes to the well density regulations for the Blanco Mesaverde Pool. Unfortunately, I will not be able to send a representative to the meeting on 9/16, but I would like to take this opportunity to present my opposition to this proposed change.

As District Ranger and line officer responsible for carrying out the laws, regulations, and policies of the Forest Service, it is my duty to protect the natural resources of the forest while still providing for multiple uses. The Jicarilla Ranger District has a long history of oil and gas exploration and development and will continue to provide for mineral leasing into the future. However, I must also weigh the factors of other resources when making decisions about how mineral leases will be developed.

The Forest Service is directed by Congress through the Code of Federal Regulations (CFR) on how mineral leasing will be managed. I must consider the direction given in 36 CFR 228.108(c), which states that "The operator [of a mineral lease] shall construct and maintain access facilities to assure adequate drainage and to minimize or prevent damage to surface resources." The direction given is not to assure the fastest and immediate drainage. The direction given also clearly states that minimizing (or even preventing) damage to the surface resource is to be given high priority. By allowing four wells per section (as per current rules), both parts of the direction are being met, but by doubling the density of wells as proposed, the surface resources will be unacceptably sacrificed.

It is highly unlikely that increasing the density will even be possible to implement on the Jicarilla Ranger District for two reasons: the first reason is that I must also manage the surface to comply with other applicable regulations such as the Endangered Species Act and the Archeological Resources Protection Act. The Jicarilla Ranger District has a high archeological site density, with approximately 800 recorded sites on only 10% of the district which has been surveyed. The district also contains habitat for threatened species which precludes development in some areas. The combination of archeological sites and protected habitats eliminates a large portion of the district from development.

The second reason I don't believe the proposed density could be reached is due to topography. The district is composed of rugged terrain with steep canyons broken by mesa-topped ridges. However, the majority of the flat terrain with

IT IS THEREFORE ORDERED:

(1) That effective August 1, 1977, the vertical limits of the Blanco-Mesaverde Pool, Rio Arriba and San Juan counties, New Mexico, as previously described and defined by the Commission are hereby redefined as follows:

A. That North and East of a line generally running from the Northwest corner of Township 31 North, Range 13 West, San Juan County, New Mexico, to the Southwest corner of Township 24 North, Range 1 East, NMPM, Rio Arriba County, New Mexico, as fully described on Exhibit "A" attached to this order, and incorporated herein by reference the vertical limits of the Blanco-Mesaverde Pool shall be from the Huerfanito bentonite marker to a point 500 feet below the top of the Point Lookout Sandstone.

B. That South and West of the line described under A above, the vertical limits of the Blanco Mesaverde pool shall be from a point 750 feet below said Huerfanito bentonite marker to a point 500 feet below the top of the Point Lookout Sandstone.

The following described lands are proposed to be included in the Special Qualifying Area.

Township 28 North	Range 05 West	NMPM	Sections 19, 29, 30
Township 28 North	Range 06 West	NMPM	Sections 8, 9, 10, 11, 13, 14 ,15, 16, 17, 21, 24
Township 29 North	Range 05 West	NMPM	Sections 5, 6, 7, 8, 9, 16, 17, 18, 20, 21
Township 29 North	Range 06 West	NMPM	Sections 1, 2, 3, 4, 11, 12, 13, 14, 28, 31, 32, 33, 34
Township 29 North	Range 07 West	NMPM	Sections 22, 23, 24, 25, 26, 36
Township 29 North	Range 08 West	NMPM	Section 6
Township 29 North	Range 09 West	NMPM	Sections 1, 2
Township 30 North	Range 05 West	NMPM	Section 31
Township 30 North	Range 06 West	NMPM	Sections 7, 8, 17, 18, 19, 20, 21, 22, 26, 27, 28, 29, 30, 32, 33, 34, 35, 36
Township 30 North	Range 07 West	NMPM	Sections 2, 3, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 22, 23, 24, 25, 30
Township 30 North	Range 08 West	NMPM	Sections 1, 2, 3, 4, 6, 9, 10, 11, 12, 13, 14, 15, 16, 21, 22, 23, 24, 25, 26
Township 30 North	Range 09 West	NMPM	Sections 1, 2, 3, 14, 15, 21, 22, 27, 28, 34
Township 31 North	Range 08 West	NMPM	Sections 25, 31, 32, 36
Township 31 North	Range 09 West	NMPM	Sections 25, 26, 27, 28, 32, 33, 34, 35, 36
Township 31 North	Range 10 West	NMPM	Sections 2, 3, 11, 12, 13, 14
Township 32 North	Range 06 West	NMPM	Sections 7, 18, 19, 30
Township 32 North	Range 07 West	NMPM	Sections 12, 13, 14, 15, 16, 21, 22, 23, 24, 25
Township 32 North	Range 10 West	NMPM	Sections 9, 10, 11, 13, 14, 15, 16, 21, 22, 23, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36
Township 32 North	Range 11 West	NMPM	Sections 25, 36

MESAVERDE WELL DENSITY/VERTICAL LIMITS MEETING
SEPTEMBER 16, 1998
ROOM 9010 SAN JUAN COLLEGE
FARMINGTON, NM

AGENDA

9:00-10:00 AM	Presentation by Burlington Resources of their study
10:00AM-10:15PM	Break
10:15PM-11:45PM	Group discussion on density issues
11:45AM-1:00PM	Lunch
1:00PM-2:00PM	Group discussion of proposed rules
2:00PM-2:15PM	Break
2:15PM-2:45PM	Lewis Shale presentation by Glenn Christiansen-Burlington Resources
2:45PM-3:00PM	Propose rule changes for Blanco Mesaverde vertical limits
3:00PM	Adjourn

STATE OF NEW MEXICO
ENERGY, MINERALS, AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION

IN THE MATTER OF THE HEARING CALLED BY THE OIL CONSERVATION COMMISSION FOR THE PURPOSE OF CONSIDERING:

CASE NO. 11705
Order No. R-10987

APPLICATION OF OIL CONSERVATION DIVISION FOR TO AMEND ORDER R-8170, AS AMENDED, "GENERAL RULES FOR THE PRORATED POOLS OF NEW MEXICO" AND ORDER NO. R-333, AS AMENDED, " RULES OF PROCEDURE FOR PRORATED GAS POOLS IN NORTHWEST NEW MEXICO"

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 o'clock a.m. on April 9, 1998, at Santa Fe, New Mexico, before the Oil Conservation Commission of New Mexico, hereinafter referred to as the "Commission."

NOW, on this 7th day of May, 1998, the Commission, a quorum being present, having considered the record and being fully advised,

FINDS THAT:

(1) Due public notice having been given as required by law, the Commission has jurisdiction of this cause and the subject matter thereof.

(2) New Mexico Oil Conservation Division (the "Division") Order No. R-8170, as amended, sets forth the general rules for the prorated gas pools in New Mexico as well as special pool rules for the individual prorated gas pools. Order No. R-8170 has been amended several times throughout the years.

(3) Division Order No. R-333, as amended, sets forth the tests and test procedures for the prorated gas pools in Northwest New Mexico. Order No. R-333 has also been amended several times throughout the years.

(4) Early in the productive life of the San Juan Basin it was determined by testing and reservoir studies that the producing ability of a gas well and the acreage dedicated to that gas well were both indicators of the producible reserves of that well. The results of a standardized deliverability test combined with the amount of acreage dedicated to the well have been used by the Division in a complex formula to calculate that well's equitable share of the total amount of gas produced from the pool. This allocation of production has been performed by the Division in furtherance of its duties of protecting correlative rights and preventing waste. Due to the natural decline of producing wells, the drilling of new wells, and other changing conditions, wells within a pool have had to be tested periodically.

(5) Due to the declining productivity of wells in prorated pools, very few (approximately 6 of 4000 gas proration units) of these wells can produce more than their assigned allowables, i.e., are classified as nonmarginal. This is not anticipated to change in the foreseeable future. In addition, the current allowable calculation formula for the prorated gas pools in Northwest New Mexico may no longer be applicable due to the current gas market and the maturity of the reservoir production in the Northwest. However, existing Division rules require deliverability testing of many wells which will not be affected by allowable limitations and therefor will not affect correlative rights nor cause waste. This unnecessary testing is a burden on the operators as well as the Division.

(6) The Division determined, after consulting with numerous gas well operators in the Northwest, that the Division rules regarding testing of gas wells in prorated gas pools in the Northwest are in need of amendment to reduce the amount of gas well testing and change the basis for requiring testing. Frank Chaves, the District Supervisor of the Division Aztec District Office, formed a committee consisting of representatives from Amoco Production Company, Burlington Resources and Williams Field Services, that met several times to review the existing Division rules and recommend changes.

(7) The amendments recommended by the committee would limit the required deliverability testing to only nonmarginal wells and classify all wells in prorated gas pools in the Northwest as marginal by default unless substantial evidence indicates the well should be reclassified as nonmarginal.

(8) The information acquired from the testing of wells in non-prorated pools in Northwest New Mexico, required under Chapter IV of Order No. R-333, has become of little or no importance. This requirement should be eliminated which will eliminate testing of approximately 2500 wells.

(9) Since the general rules for prorated pools in New Mexico as contained in Order R-8170, as amended, are applicable statewide, the Division recommends that the general rules be formatted in compliance with the New Mexico Administrative Code (NMAC) and adopted in their amended form as Division Rule 605. Likewise, since the rules for testing and test procedures for gas wells in the prorated gas pools in Northwest New Mexico, as contained in Order No. R-333, as amended, are applicable to all such gas wells, the Division recommends that such rules be formatted in compliance with NMAC and adopted in their amended form as Division Rule 606.

(10) The Division also recommends that the special pool rules for the prorated pools in Northwest New Mexico, as set forth in Order No. R-8170, as amended, be amended to reflect the changes made in Rules 605 and 606.

(11) These amendments are in the best interests of conservation, the prevention of waste and the protection of correlative rights.

IT IS THEREFORE ORDERED THAT:

(1) That portion of Division Order No. R-8170, as amended, entitled "General Rules for Prorated Gas Pools of New Mexico" is hereby amended and shall be promulgated as a Division Rule, Rule 605 (19 NMAC 15.H.605), entitled "Gas Proration" as shown on Exhibit A attached hereto and made part of this order. That portion of Order No. R-8170, as amended, setting forth special pool rules for individual prorated gas pools in New Mexico is also amended as shown on Exhibit B attached hereto and made part of this order.

(2) Division Order No. R-333, as amended, is hereby amended and promulgated as a Division Rule, Rule 606 (19 NMAC 15.H.606), entitled "Tests and Test Procedures for Prorated Gas Pools in Northwest New Mexico" as shown on Exhibit C attached hereto and made part of this order.

(3) Rules 605 and 606 shall be effective as of the date of publication in the New Mexico Register. The amendments to the special pool rules shall be effective as of the date of this order.

(4) Jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinafter designated.

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

JAMI BAILEY, Member

WILLIAM J. LEMAY, Member

LORI WROTENBERY, Chairman

S E A L

EXHIBIT "A"

605 GAS PRORATION RULES

605.A DEFINITIONS

(1) ACREAGE FACTOR: A GPU's acreage factor shall be determined to the nearest hundredth of a unit by dividing the acreage assigned to the GPU by a number equal to the number of acres in a standard GPU for such pool. However, the acreage tolerance provided in 605.B(2) shall apply. [5-30-98]

(2) AD FACTOR: An acreage times deliverability factor is calculated in pools in which acreage and deliverability are proration factors. The product obtained by multiplying the acreage factor by the calculated deliverability (expressed as MCF per day) for that GPU shall be known as the AD factor for that GPU. The AD Factor shall be computed to the nearest whole unit. [5-30-98]

(3) ALLOCATION HEARING: A hearing held by the Division twice each year to determine pool allocations for the ensuing allocation period. [5-30-98]

(4) ALLOCATION PERIOD: A six-month period beginning at 7:00 A.M. April 1 and October 1 of each year. [5-30-98]

(5) BALANCING DATE: The date 7:00 A.M. April 1 of each year shall be known as the balancing date, and the twelve months following this date shall be known as the gas proration period. [5-30-98]

(6) BROKER: A third party who negotiates contracts for purchase and resale. [5-30-98]

(7) CLASSIFICATION PERIOD: A three month period beginning at 7:00 A.M. April 1, July 1, October 1, and January 1 of each year. [5-30-98]

(8) GAS POOL: Any pool which has been designated as a gas pool by the Division after notice and hearing. [5-30-98]

(9) GAS PRORATION UNIT (GPU): The acreage allocated to a well, or in the case of an infill well or wells to a group of wells, for purposes of spacing and proration. GPU's may be either of a standard or nonstandard size as provided in these rules. (GPU's means plural GPU). [5-30-98]

(10) GAS TRANSPORTER: Any taker of gas, the party servicing the well meter, or the party responsible for measurement of gas sold from the well or beneficially used off-lease. This could be at the wellhead, at any other point on the lease, or at any other point authorized by the Division where connection is made for gas transportation or utilization (other than is necessary for maintaining the producing ability of the well). The Gas Transporter can be the gatherer, transporter, producer, or a delegate of one of those parties. The Gas Transporter shall be identified on Form C-104 and will be responsible for filing Form C-111 as required under the provisions of Rule 1111. [5-30-98]

(11) GAS PURCHASER: The purchaser (where ownership of the gas is first exchanged by the producer to the purchaser for an agreed value) of the gas from a gas well or GPU. [5-30-98]

(12) HARDSHIP GAS WELL: A gas well wherein underground waste will occur if the well is shut-in or curtailed below its minimum sustainable flow rate. No well shall be classified as a hardship gas well except after notice and hearing or upon appropriate administrative action of the Division. [5-30-98]

(13) INFILL WELL: An additional producing well on a GPU which serves as a companion well to an existing well on the GPU. [5-30-98]

(14) MARGINAL GPU: A proration unit which is incapable of producing or has not produced the non-marginal allowable based on pool allocation factors. Marginal GPU's do not accrue over or underproduction. [5-30-98]

(15) NON-MARGINAL GPU: A proration unit receiving an allowable based upon pool allocation factors. Non-marginal proration units accrue over or underproduction. [5-30-98]

(16) OVERPRODUCTION: The volume of gas produced on a GPU in any month greater than the assigned non-marginal allowable (does not include gas used in maintaining the producing ability of the well(s) of the GPU). Overproduction accumulates month to month during the proration period. [5-30-98]

(17) PRORATED GAS POOL: A prorated gas pool is a gas pool in which, after notice and hearing, the production is allocated by the Division according to these Rules and any applicable special pool rules. [5-30-98]

(18) PRORATION PERIOD: The twelve-month period beginning April 1 of each year shall be the gas proration period. [5-30-98]

(19) SHADOW ALLOWABLE: The gas volume calculated for a marginal GPU that is equal to the allowable assigned to a non-marginal GPU in the same pool of the same A (acreage) or A and AD (acreage deliverability) factors as the marginal GPU. [5-30-98]

(20) UNDERPRODUCTION: The volume of assigned non-marginal allowable not produced on a GPU. Underproduction accumulates month to month during the proration period. [5-30-98]

605.B. WELL ACREAGE AND LOCATION REQUIREMENTS

(1) STANDARD GAS PRORATION UNIT SIZE AND WELL SPACING:

(a) Unless otherwise provided for in applicable special pool rules, gas wells in prorated gas pools shall be drilled according to the well spacing and acreage requirements contained in these Rules provided that when wells are drilled in pools with 640 acre spacing, a government section shall comprise the proration unit.

(b) Any GPU drilled according to paragraph (a) which contains acreage within the tolerances below shall be considered a standard GPU for calculating allowables:

STANDARD PRORATION UNIT	ACREAGE TOLERANCE
160 acres	158-162 acres
320 acres	316-324 acres
640 acres	632-648 acres

[5-30-98]

(2) NON-STANDARD GAS PRORATION UNITS:

(a) The District Supervisor of the appropriate district office of the Division has the authority to approve a nonstandard GPU without notice and hearing when the unorthodox size and shape of the GPU is necessitated by a variation in the legal subdivision of the U.S. Public Land Surveys and the nonstandard GPU is not less that 75% nor more than 125% of a standard GPU by accepting a Form C-102 land plat showing the proposed nonstandard GPU with the number of acres contained therein, and shall assign an allowable

to the nonstandard GPU based upon the acreage factor for that acreage.

(b) Nonstandard proration units and unorthodox locations may be approved by the Division according to applicable special pool rules or Division Rules.

[5-30-98]

605. C. NOMINATIONS

(1) GAS PURCHASERS OR GAS TRANSPORTERS SHALL NOMINATE: Each gas purchaser or each gas transporter as herein provided shall file with the Division its nomination for the amount of gas which it in good faith desires to purchase and/or expects to transport during the ensuing allocation period from each gas pool regulated by this order. The purchaser may delegate the nomination responsibility to the transporter, operator, or broker by notifying the Division's Santa Fe office. One copy of such nomination for each pool shall be submitted to the Division's Santa Fe office on Form C-121-A by the first day of the month during which the Division will consider at its allocation hearing the nominations for the succeeding allocation period. The Division shall consider at its allocation hearing the nominations received, actual production, and such other factors as may be deemed applicable in determining the amount of gas that may be produced without waste during the ensuing allocation period.

The Division Director may, at his discretion, suspend this rule whenever it appears that the nominations are of little or no value. [5-30-98]

(2) SCHEDULE: The Division shall issue a gas proration schedule for each allocation period showing the monthly allowable for each GPU that may be produced during each month of the ensuing allocation period, the current classification of each GPU, and such other information as is necessary to show the allowable production status of each GPU on the schedule. The Division may issue supplemental proration schedules during an allocation period as necessary to show changes in GPU classification, adjustments to allowables due to changes in market conditions, or to reflect any other changes as the Division deems necessary. [5-30-98]

(3) PRORATION OF ALL GAS WELLS WITHIN A POOL: The Division shall include in the proration schedule the gas wells in the gas pools regulated by this order delivering to a gas transporter, and shall include in the proration schedule any well which it finds is being unreasonably discriminated against through denial of access to a gas transportation facility, which is reasonably capable of handling the type of gas produced by such a well. [5-30-98]

605.D. ALLOCATION AND GRANTING OF ALLOWABLES

(1) FILING OF FORM C-102 AND FORM C-104 REQUIRED: No GPU shall be assigned an allowable before receipt of Form C-102 (well location and acreage dedication plat) and the approval date of Form C-104 (Request for Allowable and Authorization to Transport Oil and Natural Gas). [5-30-98]

(2) HOW ALLOWABLES ARE CALCULATED: The total allowable to be allocated to each gas pool regulated by this order for each allocation period shall be equal to the estimated market demand as determined by the Division, plus any adjustments the Director deems necessary to equate the total pool allowable to the estimated market demand. The Director may make such adjustments as he deems necessary to compensate for overproduction, underproduction, and other circumstances which may necessitate such adjustment to equate pool allowable to the anticipated market demand. The estimated market demand for each pool shall be established from any information the Director requires and can consist of nominations from purchasers, transporters or other parties having knowledge of market demand for gas from such pools, actual past production figures, seasonal trends, or any other factors deemed necessary to establish estimated market demand. The Director shall not be bound to use all the information requested and can establish market demand by any method so approved. A monthly allowable shall be assigned to each GPU entitled to an allowable for the ensuing allocation period by allocating the pool allowable among all such GPU's in that pool according to the procedure set forth in the following paragraphs of this order. Should market conditions indicate a change is necessary, the Director may adjust allowables up or down during the 6-month allocation period using a maximum of 10% as a guideline. [5-30-98]

(3) MARGINAL GPU ALLOWABLE: The monthly allowable to be assigned to each marginal GPU shall be equal to its average monthly production from its latest classification period. [5-30-98]

(4) NON-MARGINAL GPU ALLOWABLE: Non-marginal GPU allowables shall be determined in conformance with the applicable special pool rules. [5-30-98]

(a) In pools where acreage is the only proration factor, the total non-marginal allowable shall be allocated to each GPU in the proportion that each GPU acreage factor bears to the total acreage factor for all non-marginal GPU's. [5-30-98]

(b) In pools where acreage and deliverability are proration factors:

(i) A percentage as set forth in special pool rules, of the non-marginal allowable shall be allocated to each GPU in the proportion that each GPU's AD factor bears to the total AD factor for all non-marginal GPU's in the pool; and

(ii) The remaining non-marginal allowable shall be allocated to non-marginal GPU's among each GPU in the proportion that each GPU's acreage factor bears to the total acreage factor for all non-marginal GPU's in the pool.

[5-30-98]

(5) NEW CONNECTS ASSIGNMENT OF ALLOWABLES: Allowables to newly completed gas wells shall commence, in pools where acreage is the only proration factor, on the date of first delivery of gas to a gas transporter as demonstrated by an affidavit furnished by the transporter to the appropriate Division district office or the approval date of Form C-102 and Form C-104, whichever is later. [5-30-98]

(6) GAS CHARGED AGAINST GPU'S ALLOWABLE: Except as provided in the Special Pool Rules, the volume of produced gas sold or beneficially used other than lease fuel from each GPU shall be charged against the GPU's allowable; however, the gas used in maintaining the producing ability of the well shall not be charged against the allowable. [5-30-98]

(7) CHANGE IN ACREAGE: If the acreage assigned to a GPU is changed, the operator shall notify the appropriate Division district office in writing of such change by filing a revised Plat (Form C-102). The revised allowable, as determined by the Division, assigned to the GPU shall be effective on the first day of the month following receipt of the notification. [5-30-98]

(8) MINIMUM ALLOWABLES: After notice and hearing, the Division may assign minimum allowables for prorated gas pools to avoid waste, encourage efficient operations, and to prevent the premature abandonment of wells. (See Special Pool Rules for minimum allowable amount.) In determining the volume of minimum allowable for a well with a standard proration unit, the Division shall take into account economic and engineering factors such as drilling and operating costs, anticipated revenues, taxes, and any similar data that will establish that the ultimate recovery of hydrocarbons will be increased from the pool because of the adoption of a minimum allowable for the pool. Once adopted, the minimum allowable for wells with nonstandard proration units shall be proportionally adjusted. [5-30-98]

(9) DELIVERABILITY TESTS: In pools where acreage and deliverability are proration factors, wells on non-marginal GPUs will be tested in accordance with Division Rules and the test results shall be used in calculating deliverabilities for the succeeding proration period. Wells on GPUs reclassified to non-marginal shall be tested within 90 days of the order and thereafter in accordance with the appropriate testing schedule for the pool. Wells on marginal GPUs are exempt from deliverability testing. [5-30-98]

605.E. BALANCING OF PRODUCTION

(1) UNDERPRODUCTION: Any non-marginal GPU which has an underproduced status as of the end of a gas proration period shall be allowed to carry such underproduction forward in the next gas proration period and may produce such underproduction in addition to the allowable assigned during such succeeding period. Any underproduction carried forward into a gas proration period and remaining unproduced at the end of such gas proration period shall be canceled. [5-30-98]

(2) BALANCING UNDERPRODUCTION: Production during any one month of a gas proration period greater than the allowable assigned to a GPU for such a month shall be applied against the underproduction carried into such a period in determining the amount of allowable, if any, to be canceled. [5-30-98]

(3) OVERPRODUCTION: Any GPU which has an overproduced status as of the end of a gas proration period shall carry such overproduction forward into the next gas proration period. Said overproduction shall be made up by underproduction during the succeeding gas proration period. Any GPU which has not made up the overproduction carried into a gas proration period by the end of said period shall be shut in until such overproduction is made up. [5-30-98]

(a) TWELVE-TIMES OVERPRODUCED, NORTHWEST: For the prorated gas pools of Northwest New Mexico, if it is determined that GPU is overproduced in an amount exceeding twelve times its current year January allowable (or, in the case of a newly connected well, a marginal well, or a well recently reclassified as non-marginal, twelve times the January allowable assigned to a non-marginal GPU of similar acreage and deliverability factors), it shall be shut in until its overproduction is less than twelve times its January allowable, as determined hereinabove. [5-30-98]

(b) SIX-TIMES OVERPRODUCED, SOUTHEAST: For the prorated gas pools of southeast New Mexico, if it is determined that a GPU is overproduced in an amount exceeding six times its current year January allowable (or, in the case of a newly connected well, a marginal well, or a well recently reclassified as non-marginal, six times the January allowable assigned to a non-marginal GPU of a similar acreage factor), it shall be shut in until its overproduction is less than six times its January allowable, as determined hereinabove. [5-30-98]

(4) EXCEPTION TO SHUT IN FOR OVERPRODUCTION: The Director shall have authority to permit a GPU which is subject to shut-in, pursuant to (3) (a) or (b) above to produce up to 250 MCF of gas per month upon proper showing to the Director that complete shut-in would cause undue hardship, provided however, such permission may be rescinded for any GPU produced greater than the monthly rate authorized by the Director. [5-30-98]

(5) BALANCING OVERPRODUCTION: Allowable assigned to a GPU during any one month of a gas proration period greater than the production for the same month shall be applied against the overproduction chargeable to such GPU in determining the overproduction which must be made up pursuant to the provisions of (3)(a) or (b) above. [5-30-98]

(6) EXCEPTION TO BALANCING OVERPRODUCTION: The Director may allow overproduction to be made up at a lesser rate than permitted under (3)(a) or (b) or (5) above upon a showing at public hearing that the same is necessary to avoid material damage to the well. [5-30-98]

(7) HARDSHIP GAS WELLS: If a GPU containing a hardship gas well is overproduced, the operator must take the necessary steps to reduce production in order to reduce the overproduction. Any overproduction existing at the time of designation of a well as a hardship gas well or accruing to the GPU thereafter shall be carried forward until it is made up by underproduction. No GPU containing a hardship gas well, which GPU is overproduced, shall be permitted to produce at a rate higher than the minimum producing rate authorized by the Division. [5-30-98]

(8) MORATORIUM ON SHUT-INS: The Director shall have authority to grant a pool-wide moratorium of up to three months as to the shutting in of gas wells in a pool during periods of high demand emergency upon proper showing that such emergency exists, and that a significant number of the wells in the pool are subject to shut-in pursuant to the provisions of (3)(a) or (b) above. No moratorium beyond the aforementioned three months shall be granted except after notice and hearing. [5-30-98]

(9) The Director may reinstate allowable to wells which suffered cancellation of allowable under (1) above or F.(3) below or loss of allowable due to reclassification of a well under F.(2) below. If such cancellation or loss of allowable was caused by non-access or limited access to the average market demand in the pool rather than inability of the well to produce. Upon petition, with a showing of circumstances which prevented production of the non-marginal allowable, and evidence that the well was capable of producing at allowable rates during the period for which reinstatement is requested, the allowable may be reinstated in such amounts needed to avoid curtailment or shut-in of the well for excessive overproduction. Such petition shall be approved administratively or docketed for hearing within 30 days after receipt in the Division's Santa Fe office. [5-30-98]

605.F. CLASSIFICATION OF GPU's

(1) RECLASSIFICATION BY THE DIRECTOR: The Director may reclassify a marginal or non-marginal GPU anytime the GPU's producing ability justifies such reclassification. The Director may suspend the reclassification of GPU's on his own initiative, or upon proper showing by an affected interest owner, should it appear that such suspension is necessary to permit underproduced GPU's, which would otherwise be reclassified, a proper opportunity to make up such underproduction. [5-30-98]

(2) RECLASSIFICATION TO MARGINAL: A non-marginal well may be reclassified as marginal in either of the following ways:

(a) After the production data is available for the last month of each classification period, any GPU which had an underproduced status at the beginning of the allocation period shall be reclassified to marginal if its highest single month's production during the classification period is less than its average monthly allowable during such period; however, the operator of any GPU so classified, or other affected interest owner, shall have 30 days after receipt of notification of marginal classification in which to submit satisfactory evidence to the Division that the GPU is not of marginal character and should not be so classified; or

(b) A GPU which is underproduced more than the overproduction limit as described in E.(3)(a) or (b) above, whichever is applicable, shall be reclassified as marginal.

[5-30-98]

(3) CANCELLATION OF UNDERPRODUCTION FOR MARGINAL GPU: A GPU which is classified as marginal shall not be permitted to accumulate underproduction, and any underproduction accrued to a GPU before its classification as marginal shall be canceled. [5-30-98]

(4) RECLASSIFICATION TO NON-MARGINAL: If, at the end of any classification period, a marginal GPU has produced more gas during the proration period to that time than its shadow allowable for that same period, the GPU shall be reclassified as a non-marginal GPU. [5-30-98]

(5) REINSTATEMENT OF STATUS: A GPU reclassified to non-marginal under the provisions of (4) above shall have reinstated to it all underproduction which accrued or would have accrued as a non-marginal GPU from the current proration period, underproduction from the prior proration period may be reinstated after notice and hearing. All uncompensated-for overproduction accruing to the GPU while marginal shall be chargeable upon reclassification to non-marginal. [5-30-98]

605.G. REPORTING OF PRODUCTION - FILING C-111 AND C-115 REPORTS: Transporters and operators shall file gas transportation and production reports pursuant to Rules 1111 and 1115 of the Division Rules provided that upon approval by the Director as to the specific program to be used, any producer or transporter of gas may be permitted to report metered production of gas on a chart-period basis; provided the following provisions shall be applicable to each gas well:

(1) Reports for a month shall include not less that 24 nor more than 32 reported days.

(2) Reported days may include as many as the last seven days of the previous month but no days of the succeeding month.

(3) The total of the monthly reports for a year shall include not less than 360 nor more than 368 reported days.

(4) For purposes of these rules, the term "month" shall mean "calendar month" for those reporting on a calendar month basis, and shall mean "reporting month" for those reporting on a chart-period basis according to the exception provided in this rule.

[5-30-98]

EXHIBIT "B"

SPECIAL RULES FOR INDIVIDUAL PRORATED GAS POOLS

SPECIAL RULES AND REGULATIONS FOR THE BASIN-DAKOTA GAS POOL

The vertical limits for the Basin-Dakota Gas Pool shall be from the base of the Greenhorn Limestone to a point 400 feet below the base of the said formation and consisting of the Graneros formation, the Dakota formation and the productive upper portion of the Morrison formation.

The Basin-Dakota Gas Pool was created February 1, 1961, and gas proration became effective February 1, 1961.

WELL ACREAGE AND LOCATION REQUIREMENTS

The STANDARD GPU (Gas Proration Unit) in the Basin-Dakota Gas Pool shall be 320 acres.

WELL LOCATION:

1) THE INITIAL WELL drilled on a GPU shall be located not closer than 790 feet to any outer boundary of the quarter section on which the well is located and not closer than 130 feet to any quarter-quarter section line or subdivision inner boundary.

2) THE INFILL WELL drilled on a GPU shall be located in the quarter section of the GPU not containing a Dakota well, and shall be located with respect to the GPU boundaries as described in the preceding paragraph.

No Dakota infill well shall be drilled nearer than 920 feet to an existing Dakota well on the same GPU.

The plat (Form C-102) accompanying the Application for Permit to Drill (OCD Form C-101 or the federal form) for the subsequent well on a GPU shall have outlined thereon the boundaries of the GPU and shall show the location of all existing Dakota wells on the GPU plus the proposed new well.

In the event an infill well is drilled on any GPU, both wells shall be produced for so long as it is economically feasible to do so.

(11)

ALLOCATION AND GRANTING OF ALLOWABLES

NON-MARGINAL GPU ALLOWABLE: The pool allowable remaining each month after deducting the total allowable assigned to marginal GPU's shall be allocated among the non-marginal GPU's entitled to an allowable in the following manner:

- GPU's shall be allocated among such GPU's in the proportion that each GPU's AD Factor bears to the total AD Factor for all non-marginal GPU's in the pool.

- When calculating the allowable for a GPU containing an infill well, the deliverability of both wells shall be added in calculating the AD Factor and the allowable may be produced from both wells.

- Sixty percent (60%) of the pool allowable remaining to be allocated to non-marginal GPU's shall be allocated among such GPU's in the proportion that each GPU's acreage factor bears to the total acreage factor for all non-marginal GPU's in the pool.

MINIMUM ALLOWABLES: A minimum allowable of 250 MCF per month per GPU will be assigned to prevent the premature abandonment of wells.

A GPU in the BASIN DAKOTA GAS POOL shall be classified as marginal unless reclassified by the Director pursuant to Rule 605.F.(2). Any operator in the BASIN DAKOTA GAS POOL may request a reclassification of a GPU in that pool.

(General Pool Rules also apply unless in conflict with these Special Pool Rules.)

SPECIAL RULES AND REGULATIONS FOR THE BLANCO-MESAVERDE GAS POOL

The VERTICAL LIMITS for the Blanco-Mesaverde Gas Pool shall be as follows:

- North and east of a line generally running from the northwest corner of Township 31 North, Range 13 West, San Juan County, New Mexico, to the southwest corner of Township 24 North, Range 1 East, NMPM, Rio Arriba County, New Mexico, (as fully described on Exhibit "A" of Order R-5459, August 1, 1977, as amended, and in Rule 25 of this order), the vertical limits shall be from the Huerfanito Bentonite marker to a point 500 feet below the top of the Point Lookout Sandstone.

- South and west of the line described in (A) above, the vertical limits shall be from a point 750 feet below said Huerfanito Bentonite marker to a point 500 feet below the top of the Point Lookout Sandstone.

- The Blanco-Mesaverde Gas Pool was created February 25, 1949 and gas proration became effective March 1, 1955.

WELL ACREAGE AND LOCATION REQUIREMENTS

The STANDARD GPU (GAS PRORATION UNIT) in the Blanco-Mesaverde Gas Pool shall be 320 acres.

WELL LOCATION:

1. THE INITIAL WELL drilled on a GPU shall be located not closer than 790 feet to any outer boundary of the quarter section on which the well is located and not closer than 130 feet to any quarter-quarter section line or subdivision inner boundary.

2. THE INFILL WELL drilled on a GPU shall be located in the quarter section of the GPU not containing a Mesaverde well, and shall be located with respect to the GPU boundaries as described in the preceding paragraph.

The plat (Form C-102) accompanying the Application for Permit to Drill (OCD Form C-101 or the federal form) for the subsequent well on a GPU shall have outlined thereon the boundaries of the GPU and shall show the location of all existing Mesaverde wells on the GPU plus the proposed new well.

In the event an infill well is drilled on any GPU, both wells shall be produced for so long as it is economically feasible to do so.

ALLOCATION AND GRANTING OF ALLOWABLES

NON-MARGINAL GPU ALLOWABLE: The pool allowable remaining each month after deducting the total allowable assigned to marginal GPU's shall be allocated among the non-marginal GPU's entitled to an allowable in the following manner:

A) Seventy-five percent (75%) of the pool allowable remaining to be allocated to the non-marginal GPU's shall be allocated among such GPU's in the proportion that each GPU's AD Factor bears to the total AD Factor for all non-marginal GPU's in the pool.

When calculating the allowable for a GPU containing an infill well, the deliverability of both wells shall be added in calculating the AD Factor and the allowable may be produced from both wells.

B) Twenty-five percent (25%) of the pool allowable remaining to be allocated to non-marginal GPU's shall be allocated among such GPU's in the proportion that each GPU's acreage factor bears to the total acreage factor for all non-marginal GPU's in the pool.

MINIMUM ALLOWABLES: A minimum allowable of 250 MCF per month per GPU will be assigned to prevent the premature abandonment of wells.

A GPU in the BLANCO MESAVERDE GAS POOL shall be classified as marginal unless reclassified by the Director pursuant to Rule 605.F.(2). Any operator in the BLANCO MESAVERDE GAS POOL may request a reclassification of a GPU in that pool.

MISCELLANEOUS SPECIAL POOL RULES

VERTICAL LIMIT BOUNDARY: Exhibit "A" of Order R-5459 which defines a dividing line across the Blanco-Mesaverde Pool reads as follows:

EXHIBIT "A"

This Exhibit defines the Northwest-Southeast trending line established by Order R-5459, as amended, that divides the Blanco-Mesaverde pool for defining the vertical limits of the pool. Said line traverses the South side or West side of the sections listed below:

TOWNSHIP 24 NORTH, RANGE 01 EAST, NMPM
Section 31: West

TOWNSHIP 24 NORTH, RANGE 01 WEST, NMPM
Section 03: West
Section 10: West and South
Section 14: West and South
Section 24: West
Section 25: West and South

TOWNSHIP 25 NORTH, RANGE 01 WEST, NMPM
Section 07: West
Section 18: West and South
Section 20: West and South
Section 28: West
Section 33: West and South

TOWNSHIP 25 NORTH, RANGE 02 WEST, NMPM
Section 01: West and South

TOWNSHIP 26 NORTH, RANGE 02 WEST, NMPM
Sections 07 and 08: South
Section 16: West and South
Section 22: West and South
Section 26: West
Section 35: West and South

TOWNSHIP 26 NORTH, RANGE 03 WEST
Sections 02 and 03: South
Section 04: West and South
Section 12: West and South

TOWNSHIP 27 NORTH, RANGE 03 WEST, NMPM
Section 31 and 32: South

TOWNSHIP 27 NORTH, RANGE 04 WEST, NMPM
Sections 31 through 36: South

TOWNSHIP 27 NORTH, RANGE 05 WEST, NMPM
Section 31: West and South
Sections 32 through 36: South

TOWNSHIP 27 NORTH, RANGE 6 WEST, NMPM
Section 06: West
Section 07: West and South
Sections 08 and 09: South
Section 14: South
Section 15: West and South
Section 24: West
Section 25: West and South

TOWNSHIP 28 NORTH, RANGE 06 WEST, NMPM
Sections 07, 18, 19, 30, and 31: West

TOWNSHIP 29 NORTH, RANGE 7 WEST, NMPM
Section 31: West and South
Sections 32 through 36: South

TOWNSHIP 29 NORTH, RANGE 08 WEST, NMPM
Section 17: South
Section 18: West and South
Section 21: West and South
Section 22: South
Section 25: South
Section 26: West and South

TOWNSHIP 29 NORTH, RANGE 09 WEST, NMPM
Section 03: South
Section 04: West and South
Section 11: West and South
Section 12: South

TOWNSHIP 30 NORTH, RANGE 09 WEST, NMPM
Section 31: West and South
Section 32: South

TOWNSHIP 30 NORTH, RANGE 10 WEST, NMPM
Section 18: South
Section 20: West and South
Section 21 and 22: South
Section 25: South
South 26: West and South

TOWNSHIP 30 NORTH, RANGE 11 WEST, NMPM
Section 06: West and South
Section 08: West and South
Sections 09, 10, 11: South
Section 13: West and South

TOWNSHIP 31 NORTH, RANGE 12 WEST, NMPM
Section 19: South
Sections 27 and 28: South
Section 29: West and South
Section 35: West and South
Section 36: South

TOWNSHIP 31 NORTH, RANGE 13 WEST, NMPM
Sections 07 and 08: South
Sections 14 and 15: South
Section 16: West and South
Section 24: West and South

TOWNSHIP 31 NORTH, RANGE 14 WEST, NMPM
Section 12: South

(General Pool Rules also apply unless in conflict with these Special Pool Rules.)

SOUTH BLANCO-PICTURED CLIFFS GAS POOL

THE VERTICAL LIMITS of the South Blanco-Pictured Cliffs Gas Pool shall be the Pictured Cliffs formation.

The South Blanco-Pictured Cliffs Gas Pool, Rio Arriba, San Juan, and Sandoval Counties, New Mexico, was created May 20, 1952 and gas proration became effective March 1, 1955.

WELL ACREAGE AND LOCATION REQUIREMENTS

STANDARD GPU (GAS PRORATION UNIT) in the South Blanco-Pictured Cliffs Gas Pool shall be 160 acres.

ALLOCATION AND GRANTING OF ALLOWABLES

NON-MARGINAL GPU ALLOWABLE: The pool allowable remaining each month after deducting the total allowable assigned to marginal GPU's shall be allocated among the non-marginal GPU's entitled to an allowable in the following manner:

A) Seventy-five percent (75%) of the pool allowable remaining to be allocated to the non-marginal GPU's shall be allocated among such GPU's in the proportion that each GPU's AD Factor bears to the total AD Factor for all non-marginal GPU's in the pool.

B) Twenty-five percent (25%) of the pool allowable remaining to be allocated to non-marginal GPU's shall be allocated among such GPU's in the proportion that each GPU's acreage factor bears to the total acreage factor for all non-marginal GPU's in the pool.

MINIMUM ALLOWABLES: A minimum allowable of 250 MCF per month per GPU will be assigned to prevent premature abandonment of wells.

A GPU in the SOUTH BLANCO PICTURED CLIFFS GAS POOL shall be classified as marginal unless reclassified by the Director pursuant to Rule 605.F.(2). Any operator in the SOUTH BLANCO PICTURED CLIFFS GAS POOL may request a reclassification of a GPU in that pool.

(General Pool Rules also apply unless in conflict with these Special Pool Rules.)

SOUTH BLANCO-PICTURED CLIFFS GAS POOL

THE VERTICAL LIMITS of the South Blanco-Pictured Cliffs Gas Pool shall be the Pictured Cliffs formation.

The South Blanco-Pictured Cliffs Gas Pool, Rio Arriba, San Juan, and Sandoval Counties, New Mexico, was created May 20, 1952 and gas proration became effective March 1, 1955.

WELL ACREAGE AND LOCATION REQUIREMENTS

STANDARD GPU (GAS PRORATION UNIT) in the South Blanco-Pictured Cliffs Gas Pool shall be 160 acres.

ALLOCATION AND GRANTING OF ALLOWABLES

NON-MARGINAL GPU ALLOWABLE: The pool allowable remaining each month after deducting the total allowable assigned to marginal GPU's shall be allocated among the non-marginal GPU's entitled to an allowable in the following manner:

A) Seventy-five percent (75%) of the pool allowable remaining to be allocated to the non-marginal GPU's shall be allocated among such GPU's in the proportion that each GPU's AD Factor bears to the total AD Factor for all non-marginal GPU's in the pool.

B) Twenty-five percent (25%) of the pool allowable remaining to be allocated to non-marginal GPU's shall be allocated among such GPU's in the proportion that each GPU's acreage factor bears to the total acreage factor for all non-marginal GPU's in the pool.

MINIMUM ALLOWABLES: A minimum allowable of 250 MCF per month per GPU will be assigned to prevent premature abandonment of wells.

A GPU in the SOUTH BLANCO PICTURED CLIFFS GAS POOL shall be classified as marginal unless reclassified by the Director pursuant to Rule 605.F.(2). Any operator in the SOUTH BLANCO PICTURED CLIFFS GAS POOL may request a reclassification of a GPU in that pool.

(General Pool Rules also apply unless in conflict with these Special Pool Rules.)

SPECIAL RULES AND REGULATIONS FOR THE TAPACITO-PICTURED CLIFFS GAS POOL

THE VERTICAL LIMITS of the Tapacito-Pictured Cliffs Gas Pool shall be the Pictured Cliffs formation.

The Tapacito-Pictured Cliffs Gas Pool, Rio Arriba County, New Mexico, was created April 18, 1956 and gas proration in this pool became effective August 1, 1958.

WELL ACREAGE AND LOCATION REQUIREMENTS

STANDARD GPU (GAS PRORATION UNIT) in the Tapacito-Pictured Cliffs Gas Pool shall be 160 acres.

ALLOCATION AND GRANTING OF ALLOWABLES

NON-MARGINAL GPU ALLOWABLE: The pool allowable remaining each month after deducting the total allowable assigned to marginal GPU's shall be allocated among the non-marginal GPU's entitled to an allowable in the following manner:

A) Seventy-five percent (75%) of the pool allowable remaining to be allocated to the non-marginal GPU's shall be allocated among such GPU's in the proportion that each GPU's "AD Factor" bears to the total "AD Factor" for all non-marginal GPU's in the pool.

B) Twenty-five percent (25%) of the pool allowable remaining to be allocated to non-marginal GPU's shall be allocated among such GPU's in the proportion that each GPU's acreage factor bears to the total acreage factor for all non-marginal GPU's in the pool.

MINIMUM ALLOWABLES: A minimum allowable of 250 MCF per month per GPU will be assigned to prevent premature abandonment of wells.

A GPU in the TAPACITO PICTURED CLIFFS GAS POOL shall be classified as marginal unless reclassified by the Director pursuant to Rule 605.F.(2). Any operator in the GAS POOL may request a reclassification of a GPU in that pool.

(General Pool Rules also apply unless in conflict with these Special Pool Rules.)

EXHIBIT "C"

606 TESTS AND TEST PROCEDURES FOR PRORATED POOLS IN NORTHWEST NEW MEXICO

606.A. TYPE OF TESTS REQUIRED FOR WELLS COMPLETED IN PRORATED GAS POOLS

(1) Reclassified GPUs: An operator of a well on a Gas Proration Unit (GPU) that has been reclassified as non-marginal will conduct deliverability tests on that well within 90 days of the order reclassifying it, unless there are current tests on file with the Division or that order requires a new test. A current test is a test which was conducted during the last test period for that pool or later. [5-30-98]

(2) Non-marginal GPUs: Operators will conduct deliverability tests on wells on non-marginal GPUs every five years. If the Division determines that a well's test data and production data warrant more frequent testing of a well, the Division may set up special testing schedules for that well. [5-30-98]

(3) Scheduling of Tests

(a) Notification of Pools to be Tested: By September 1 of each year the Aztec District Office of the Division will notify operators of non-marginal GPUs if their wells will be tested during the following test period. [5-30-98]

(b) The results of all deliverability tests required must be filed with the Aztec District Office within 90 days following the completion of each test. Provided however, that any test completed between December 31 of the test year and March 10 of the following year are due no later than March 31. No extension of time for filing tests beyond March 31 will be granted except after notice and hearing. [5-30-98]

(c) Failure to file any test within the above-prescribed times will subject the GPU to the loss of one day's allowable for each day the test is late. [5-30-98]

(d) Any well scheduled for testing during its test year may have the conditioning period, test flow period, and part of the seven-day shut-in period conducted in December of the previous year provided that, if the seven-day shut-in period immediately follows the test flow period, the seven-day shut-in pressure is to be measured in January of the test year. The earliest date that a well can be scheduled for a deliverability test would be such that the test flow period would end on December 25 of the previous year. [5-30-98]

(e) Downhole commingled wells are to be scheduled for tests on dates for the pool of the lowermost prorated completion of the well. [5-30-98]

(f) In the event a well is shut-in by the Division for overproduction, the operator may produce the well for a period of time to secure a test after written notification to the Division. All gas produced during this testing period will be used in determining the over/under produced status of the well. [5-30-98]

(g) An operator may schedule a well for a deliverability retest upon notification to the Aztec District Office at least ten days before the test is to be commenced. Such retest will be for substantial reason and will be subject to the approval of the Division. A retest will be conducted in conformance with the deliverability test procedures of these rules. The Division, at its discretion, may require the retesting of any well by notification to the operator to schedule such retest. These tests, as filed on Form C-122A, should be identified as "RETEST" in the remarks column. [5-30-98]

(4) Witnessing of Tests: Any deliverability test may be witnessed by any or all of the following: a representative of the Division, an offset operator, a representative of the gas transportation facility connected to the well under test, or a representative of the gas transportation facility taking gas from an offset operator. [5-30-98]

606.B. PROCEDURE FOR TESTING

(1) The test shall begin by producing a well in the normal operating manner into the pipeline through either the casing or tubing, but not both, for a period of fourteen consecutive days. This shall be known as the conditioning period. The production valve and choke settings shall not be changed during either the conditioning or flow periods, except during

the first ten days of the conditioning period when maximum production would over-range the meter chart or location production equipment. The first ten days of the conditioning period shall not have more than 48 hours of cumulative interruptions of flow. The eleventh to fourteenth days, inclusive of the conditioning period, shall have no interruptions of flow whatsoever. Any interruption of flow that occurs as normal operation of the well as stop-cock flow, intermittent flow, or well blow down will not be counted as shut-in time in either the conditioning or flow period. [5-30-98]

(2) The daily flowing rate shall be determined from an average of seven or eight consecutive producing days, following a minimum conditioning period of 14 consecutive days of production. This shall be known as the flow period. [5-30-98]

(3) Instantaneous pressure shall be measured by a deadweight gauge or other method approved by the Division during the seven-day or eight-day flow period at the casinghead, tubinghead, and orifice meter, and shall be recorded along with instantaneous meter-chart static pressure reading. [5-30-98]

(4) If a well is producing through a compressor that is located between the wellhead and the meter run, the meter run pressure and the wellhead casing pressure and the wellhead tubing pressure are to be reported on Form C-122A. (Neither the suction pressure nor the discharge pressure of the compressor is considered wellhead pressure.) A note shall be entered in the remarks portion on Form C-122A stating: "This well produced through a compressor." [5-30-98]

(5) When it is necessary to restrict the flow of gas between the wellhead and the orifice meter, the ratio of the downstream pressure, psia, to the upstream pressure, psia, shall be determined. When this ratio is 0.57 or less, critical flow conditions shall be considered to exist across the restriction. [5-30-98]

(6) When more than one restriction between the wellhead and the orifice meter causes the pressures to reflect critical flow between the wellhead and the orifice meter, the pressures across each of these restrictions shall be measured to determine whether critical flow exists at any restriction. When critical flow does not exist at any restriction, the pressures taken to disprove the critical flow shall be reported to the Division on Form C-122A in item (n) of the form. When critical flow conditions exist, the instantaneous flowing pressures required above shall be measured during the last 48 hours of the seven-day or eight-day flow period. [5-30-98]

(7) When critical flow exists between the wellhead and the orifice meter, the measured wellhead flowing pressure of the string through which the well flowed during the test shall be used as P_t when calculating the static wellhead working pressure (P_w) using the method established below. [5-30-98]

(8) When critical flow does not exist at any restriction, P_t shall be the corrected average static pressure from the meter chart plus friction loss from the wellhead to the orifice meter. [5-30-98]

(9) The static wellhead working pressure (P_w) of any well under test shall be the calculated seven-day or eight-day average static tubing pressure if the well is flowing through the casing; it shall be the calculated seven-day or eight-day average static casing pressure if the well is flowing through the tubing. The static wellhead working pressure (P_w) shall be calculated by applying the tables and procedures set out in the "Gas Well Testing Manual for Northwest New Mexico" ("the Manual") available from the Division. [5-30-98]

(10) To obtain the shut-in pressure of a well under test, the well shall be shut-in some time during the current testing season for a period of seven to fourteen consecutive days, which have been preceded by a minimum of seven days of uninterrupted production. Such shut-in pressure shall be measured on the seventh to fourteenth day of shut-in of the well with a deadweight gauge or other method approved by the Division. The seven-day shut-in pressure shall be measured on both the tubing and the casing when communication exists between the two strings. The higher of such pressures shall be used as P_c in the deliverability calculation. When any such shut-in pressure is determined by the Division to be abnormally low or the well can not be shut-in due to "HARDSHIP" classification, the shut-in pressure to be used as P_c shall be determined by one of the following methods:

(a) A Division-designated value.

(b) An average shut-in pressure of all offset wells completed in the same zone. Offset wells include the four side and four corner wells, if available.

(c) A calculated surface pressure based on a calculated bottom-hole pressure. Such calculations shall be made in accordance with the examples in the Manual.

[5-30-98]

(11) All wellhead pressures, as well as the flowing meter pressure tests which are to be taken during the seven-day or eight-day deliverability test period as required above, shall be taken with a deadweight gauge or other method approved by the Division. The pressure readings and the date and time according to the chart shall be recorded and maintained in the operator's records with the test information. [5-30-98]

(12) Orifice meter charts shall be changed and arranged so as to reflect upon a single chart the flow data for the gas from each well for the full seven-day or eight-day deliverability test period; however, no tests shall be voided if satisfactory explanation is made as to the necessity for using test volumes through two chart periods. Corrections shall be made for pressure base, measured flowing temperature, specific gravity, and supercompressibility; provided however, if the specific gravity of the gas from any well under test is not available, an estimated specific gravity may be assumed therefore, based upon that of gas from near-by wells, the specific gravity of which has been actually determined by measurement. [5-30-98]

(13) The average flowing meter pressure for the seven-day or eight-day flow period and the corrected integrated volume shall be determined by the purchasing company that integrates the flow charts and furnished to the operator or testing agency. [5-30-98]

(14) The seven-day or eight-day flow period volume shall be calculated from the integrated readings as determined from the flow period orifice meter chart. The volume so calculated shall be divided by the number of testing days on the chart to determine the average daily rate of flow during said flow period. The flow period shall have a minimum of seven and a maximum of eight legibly recorded flowing days to be acceptable for test purposes. The volume used in this calculation shall be corrected to the Division's standard conditions of 15.025 psia pressure base, 60° F. temperature base and 0.60 specific gravity base. [5-30-98]

(15) The daily volume of flow, as determined from the flow period chart readings, shall be calculated by applying the Basic Orifice Meter Formula or other acceptable industry standard practices.

$$Q = C' (h_w P_f)^{.5}$$

Where:

Q = Metered volume of flow Mcf/d @ 15.025 psia, 60° F., and 0.60 specific gravity.

C' = The 24-hour basic orifice meter flow factor corrected for flowing temperature, gravity, and supercompressibility.

h_w = Daily average differential meter pressure from flow period chart.

P_f = Daily average flowing meter pressure from flow period chart.

[5-30-98]

(16) The basic orifice meter flow factors, flowing temperature factor, and specific gravity factor shall be determined from the tables in the Manual. [5-30-98]

(17) The daily flow period average corrected flowing meter pressure, psig, shall be used to determine the supercompressibility factor. Supercompressibility tables may be obtained from the Division. [5-30-98]

(18) When supercompressibility correction is made for a gas containing either nitrogen or carbon dioxide in excess of two percent, the supercompressibility factors of such gas shall be determined by the use of Table V of the C.N.G.A. Bulletin TS-402 for pressures 100-500 psig, or Table II, TS-461 for pressures in excess of 500 psig. [5-30-98]

(19) The use of tables for calculating rates of flow from integrator readings which do not specifically conform to the Division's "Back Pressure Test Manual", or the Manual, may be approved for determining the daily flow period rates of flow upon a showing that such tables are appropriate and necessary. [5-30-98]

(20) The daily average integrated rate of flow for the seven-day or eight-day flow period shall be corrected for meter error by multiplication by a correction factor. Said correction factor shall be determined by dividing the square root of the deadweight flowing meter pressure, psia, by the square root of the chart flowing meter pressure, psia. [5-30-98]

(21) "Deliverability pressure" is a defined pressure applied to each well and used in the process of comparing the abilities of wells in a pool to produce at static wellhead working pressures equal to a percentage of the seven-day shut-in pressure of the respective individual wells. Such percentage shall be determined and announced periodically by the Division based on the relationship of the average static wellhead working pressures (P_w) divided by the average seven-day shut-in pressure (Pc) of the pool. [5-30-98]

(22) The deliverability of gas at the deliverability pressure of any well under test shall be calculated from the test data derived from the tests above required by use of the following deliverability formula:

$$D = Q\left[\frac{(P_c^2 - P_d^2)}{(P_c^2 - P_w^2)}\right]^n$$

Where:

D = Deliverability Mcf/d at the deliverability pressure, (P_d), (at Standard Conditions of 15.025 psia, 60°F. and 0.60 sp. gr.).

Q = Daily flow rate in Mcf/d, at wellhead pressure (P_w).

P_c = Seven-day shut-in wellhead pressure, psia.

P_d = Deliverability pressure, psia, as defined above.

P_w = Average static wellhead working pressure, as determined from seven-day or eight-day flow period, psia, and calculated from tables in the Manual entitled "Pressure Loss Due to Friction Tables for Northwest New Mexico".

n = Average pool slope of back pressure curves as follows:

For Pictured Cliffs and shallower formations, 0.85

For formations deeper than Pictured Cliffs, 0.75

(Note: Special rules for any specific pool or formation may supersede the above values. Check special rules if in doubt.)

[5-30-98]

(23) The value of the multiplier in the above formula (ratio factor after the application of the pool slope) by which Q is multiplied shall not exceed a limiting value to be determined and announced periodically by the Division. Such determination shall be made after a study of the test data of the pool obtained during the previous testing season. [5-30-98]

(24) Downhole commingled wells are to be tested in the test year for the pool of the lowermost prorated completion of the well and shall use pool slope (n), and deliverability pressure of the lowermost pool. The total flow rate from the downhole commingled well will be used to calculate a value of deliverability. For each prorated gas zone of a downhole commingled well, a Form C-122A is required to be filed. Also, in the Summary portion of that form all zones will indicate the same data for line h, P_c, Q, P_w, and P_d. The value shown for Deliverability (D) will be that percentage of the total deliverability of the well that is applicable to this zone. A note shall be placed in the remarks column that indicates the percentage of deliverability to be allocated to this zone of the well. [5-30-98]

(25) Any test prescribed herein will be considered acceptable if the average flow rate for the final seven-day or eight-day deliverability test is not more than ten percent in excess of any consecutive seven-day or eight-day average of the preceding two weeks. A deliverability test not meeting this requirement may be declared invalid, requiring the well to be re-tested. [5-30-98]

(26) All charts relative to deliverability tests or copies thereof shall be made available to the Division upon its request. [5-30-98]

(27) Operators shall use only testing agencies, whether individuals, companies, pipeline companies, or operators, that maintain a log of all tests accomplished by them including all field test data. The operator shall maintain the above data for a period of not less than two years plus the current test year. [5-30-98]

(28) All forms heretofore mentioned are hereby adopted for use in the northwest New Mexico area in open form subject to such modification as experience may indicate desirable or necessary. [5-30-98]

(29) Deliverability tests for gas wells in all formations shall be conducted and reported in accordance with these Rules. Provided, however, these Rules shall be subject to any specific modification or change contained in Special Pool Rules adopted for any pool after notice and hearing. [5-30-98]

606.C. INFORMATIONAL TESTS

(1) One-Point Back Pressure Test: A one-point back pressure test may be taken on newly completed wells before their connection or reconnection to a gas transportation facility. This test shall not be a required official test, but may be taken for informational purposes at the option of the operator. When taken, this test must be taken and reported as prescribed below. [5-30-98]

(2) Test Procedure

(a) This test shall be accomplished after a minimum shut-in of seven days. The shut-in pressure shall be measured with a deadweight gauge or other method approved by the Division. [5-30-98]

(b) The flow rate shall be that rate in Mcf/d measured at the end of a three hour test flow period. The flow from the well shall be for three hours through a positive choke, which has a 3/4 inch orifice. [5-30-98]

(c) A 2-inch nipple which provides a mechanical means of accurately measuring the pressure and temperature of the flowing gas shall be installed immediately upstream from the positive choke. [5-30-98]

(d) The absolute open flow shall be calculated using the conventional back pressure formula as shown in the Manual or the Division's "Back Pressure Test Manual." [5-30-98]

(e) The observed data and flow calculations shall be reported in duplicate on Form C-122, "Multi-Point Back Pressure Test for Gas Wells." [5-30-98]

(f) Non-critical flow shall be considered to exist when the choke pressure is 13 psig or less. When this condition exists the flow rate shall be measured with a pitot tube and nipple as specified in the Manual or in the Division's Manual of "Tables and Procedure for Pitot Tests." The pitot test nipple shall be installed immediately downstream from the 3/4-inch positive choke. [5-30-98]

(g) Any well completed with 2-inch nominal size tubing (1.995-inch ID) or larger shall be tested through the tubing. [5-30-98]

(3) Other tests for informational purposes may be conducted prior to obtaining a pipeline connection for a newly completed well upon receiving specific approval therefore from the Aztec District Office. Approval of these tests shall be based primarily upon the volume of gas to be vented. [5-30-98]

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JASON KELLAHIN (RETIRED 1991)

August 25, 1998

HAND DELIVERED

Mr. Michael E. Stogner
Mr. David R. Catanach
Rand Carroll, Esq.
Oil Conservation Division
2040 South Pacheco
Santa Fe, New Mexico 87505

Re: Blanco Mesaverde Gas Pool
proposed rules changes to provide for
additional optional infill wells.

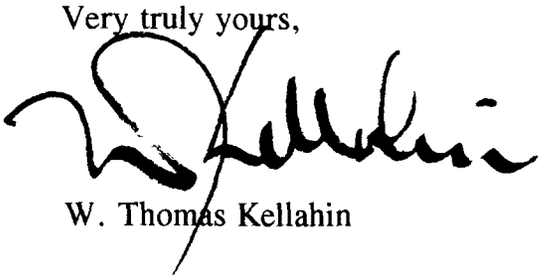
Gentlemen:

Burlington Resources Oil & Gas Company has requested my assistance in drafting a proposed Blanco Mesaverde Pool rule change to be circulated for comment among the operators in the pool. However, before circulating this proposed rule change, it would be most helpful to me to have the benefit of your comments and suggestions. I have enclosed a copy of my August 25, 1998 draft.

The premise is that the Blanco Mesaverde Pool contains areas of differing drainage sizes such that the current 4 wells per section may be sufficient in some areas ("Special Qualifying Areas") while the balance of the pool may require up to 8 wells per section in order to adequately drain the pool. These special qualifying areas are located such that the current pool could not be conveniently divided geographically into two new pools.

I am not asking you to make any judgment about the merits of the case and I do not intend to show you any of the data involved. What I am requesting is that, assuming the rules are changed, do you see any flaws in the procedure and process I have suggested in this draft? Do you have any suggestions for improving the rule as I have currently drafted it?

Very truly yours,



W. Thomas Kellahin

cc: Burlington Resources Oil & Gas Company
Attn: Alan Alexander

8/25/98 draft

CURRENT RULES FOR BLANCO MESAVERDE POOL

"A. WELL ACREAGE AND LOCATION REQUIREMENTS

RULE 2(a). **Standard GPU (gas proration unit)** in the Blanco-Mesaverde Gas Pool shall be 320 acres.

RULE 2(b) **Well Location:**

(1) THE INITIAL WELL drilled on a GPU shall be located not closer than 790 feet to any outer boundary of the quarter section on which the well is located and not closer than 130 feet to any quarter-quarter section line or subdivision inner boundary.

(2) THE INFILL WELL drilled on a GPU shall be located in the quarter section of the GPU not containing a Mesaverde well, and shall be located with respect to the GPU boundaries as described in the preceding paragraph."

PROPOSED RULE CHANGES

Burlington proposes that the Division amend the Special Rules and Regulations for the Blanco Mesaverde Gas Pool to allow a maximum of four (4) wells per GPU ("80-acre infill") in this pool as follows:

"A. WELL ACREAGE AND LOCATION REQUIREMENTS

RULE 2(a). **Standard GPU (Gas proration Unit)** in the Blanco-Mesaverde Gas Pool shall be 320 acres.

RULE 2(b) **Well locations and well density in Special Qualifying Area:**

Within the Special Qualifying Area of the Pool, a second and third optional "infill" wells may be drilled within a GPU in accordance with Rule 2(c) pursuant to the following procedures:

1. Operators of an existing GPU which contains both an original well and a first infill well and who desire to drill a second or third optional infill wells shall send a copy of its Application for Permit to Drill ("APD") to adjacent operators by certified mail-return receipt requested on or before the date the APD is filed with the Division's District Supervisor.

2. An adjacent operator shall be any operator of a Mesaverde GPU which contains any quarter-quarter section whose side boundary or corner adjoins the side boundary or corner of the quarter-quarter section in which the proposed optional infill well is to be located.

3. The Division's District Supervisor may approve the application for permit to drill ("APD") upon receipt of the APD and certification by the applicant that all adjacent operators have received notification and no objections have been received within a twenty (20) day notice period.

4. Well locations for approved second or third optional infill wells in the Special Qualifying Area shall not be closer than permitted by Rule 2(b)(1).

5. In the event an objection is timely received, or the District Supervisor upon its own initiative, the application shall be set for a hearing before a Division Examiner.

In the event the Division desires to adopt criteria for approval of an infill well even in the absence of objection, the following is suggested:

5. Any APD requesting approval of an additional optional infill well shall include a map of the GPU showing the location of all existing Mesaverde wells, and any two (2) of the following:

(a) showing original pressure, current pressure, cumulative recovery and current rate for each Mesaverde well within the GPU and calculations of the pressure drop per year for each year that the first infill well was produced in comparison to the original well on that GPU;

(b) volumetric estimates of drainage areas for the original and first infill well in the GPU;

(c) reservoir simulations of drainage areas for the original and first infill wells in the GPU.

6. The District Supervisor, in the absence of objection, shall approve the APD provided that the drop in pressure per year is not greater than 20 psi or that the drainage areas estimated by volumetrics or simulation are not greater than 80-acre per well.

RULE 2(c) **Well locations and well density for all acreage in the pool outside any special qualifying area:**

Within any area of the Pool outside any special qualifying area, up to three (3) optional "infill" wells may be drilled within a GPU, subject to the following restrictions:

(1) Well Locations:

(i) wells drilled on a GPU shall be located not closer than 660 feet to the South and North lines nor closer than 330 feet to the East and West lines of a GPU and not closer than 10 feet to any interior quarter or quarter-quarter section line or subdivision inner boundary.

(ii) no well shall be located closer than 990 feet to any existing Mesaverde well located in an adjacent GPU;

(iii) wells located within federal exploratory units shall not be closer than 10 feet to any section, quarter section or interior quarter-quarter section line or subdivision inner boundary except that wells located within one-half mile of the outer boundary of any such unit, shall not be closer than permitted by Rule 2(b)(1)(i) above.

(2) Well Density:

(i) the FIRST INFILL WELL drilled on a GPU shall be located in the quarter section of the GPU not containing a Mesaverde well;

(ii) the SECOND INFILL WELL drilled on a GPU shall be located in a quarter-quarter section of the GPU not containing a Mesaverde well and within a quarter section of the GPU not containing more than one (1) Mesaverde well;

(iii) the THIRD INFILL WELL drilled on a GPU shall be located in a quarter-quarter section of the GPU not containing a Mesaverde well and within a quarter section of the GPU not containing more than one (1) Mesaverde well.

RULE 3. **Administrative Exceptions**

The Division Director, in accordance with the applicable provisions of General Rule 104, may grant an exception to Rule 2 when an application has been submitted to the Division including notification to the affected parties.

Rule 104: Current as of June 5, 1997

104 WELL SPACING:
ACREAGE REQUIREMENTS FOR DRILLING TRACTS

104.A. CLASSIFICATION OF WELLS: WILDCAT WELLS AND DEVELOPMENT WELLS

(1) San Juan, Rio Arriba, Sandoval, and McKinley Counties

(a) Any well which is to be drilled the spacing unit of which is a distance of 2 miles or more from:

(i) the outer boundary of any defined pool which has produced oil or gas from the formation to which the well is projected; and

(ii) any other well which has produced oil or gas from the formation to which the proposed well is projected, shall be classified as a wildcat well. [12-29-52...2-1-96]

(2) All Counties Except San Juan, Rio Arriba, Sandoval, and McKinley

(a) Any well which is to be drilled the spacing unit of which is a distance of one mile or more from:

(i) the outer boundary of any defined pool which has produced oil or gas from the formation to which the well is projected; and

(ii) any other well which has produced oil or gas from the formation to which the proposed well is projected, shall be classified as a wildcat well. [12-29-52...2-1-96]

(3) Any well which is not a wildcat well as defined above shall be classified as a development well for the nearest pool which has produced oil or gas from the formation to which the well is projected. Any such development well shall be spaced, drilled, operated, and produced in accordance with the rules and regulations in effect in such nearest pool, provided the well is completed in the formation to which it was projected. [5-25-64...2-1-96]

(4) Any well classified as a development well for a given pool but which is completed in a producing horizon not included in the vertical limits of said pool shall be operated and produced in accordance with the rules and regulations in effect in the nearest pool within the 2 mile limit in San Juan, Rio Arriba, Sandoval, and McKinley Counties or within one mile everywhere else which is producing from that horizon. If there is no designated pool for said producing horizon within the 2 mile limit in San Juan, Rio Arriba, Sandoval, and McKinley Counties or within one mile everywhere else, the well shall be re-classified as a wildcat well. [5-25-64...2-1-96]

104.B. ACREAGE AND WELL LOCATION REQUIREMENTS FOR WILDCATS

(1) Lea, Chaves, Eddy and Roosevelt Counties

(a) Wildcat Gas Wells. In Lea, Chaves, Eddy and Roosevelt Counties, a wildcat well which is projected as a gas well to a formation and in an area which, in the opinion of the engineer or supervisor approving the application to drill, may reasonably be presumed to be productive of gas rather than oil shall be located on a drilling tract consisting of 160 surface contiguous acres, more or less, substantially in the form of a square which is a quarter section, being a legal subdivision of the U.S. Public Land Surveys, and shall be located not closer than 660 feet to any outer boundary of

such tract nor closer than 330 feet to any quarter-quarter section or subdivision inner boundary. Provided, however, that any such wildcat gas well which is projected to the Wolfcamp or older formations shall be located on a drilling tract consisting of 320 surface contiguous acres, more or less, comprising any two contiguous quarter sections of a single governmental section, being a legal subdivision of the U.S. Public Land Surveys. Any such "deep" wildcat gas well to which is dedicated more than 160 acres shall be located not closer than 660 feet to the nearest side boundary of the dedicated tract nor closer than 1650 feet to the nearest end boundary, nor closer than 330 feet to any quarter-quarter section or subdivision inner boundary. (For the purpose of this rule, "side" boundary is defined as one of the outer boundaries running lengthwise to the tract's greatest overall dimensions; "end" boundary is defined as one of the outer boundaries perpendicular to a side boundary and closing the tract across its least overall dimension.) [5-25-64...2-1-96]

(b) Wildcat Oil Wells. In Lea, Chaves, Eddy, and Roosevelt Counties, a wildcat well which is not a wildcat gas well as defined above shall be located on a tract consisting of approximately 40 surface contiguous acres substantially in the form of a square which is a legal subdivision of the U.S. Public Land Surveys, or on a governmental quarter-quarter section or lot, and shall be located not closer than 330 feet to any boundary of such tract. [5-25-64...2-1-96]

(c) In the event gas production is encountered in a well which was projected as an oil well and which is located accordingly but does not conform to the above gas well location rule, it shall be necessary for the operator to bring the matter to a hearing before approval for the production of gas can be given. [5-25-64...2-1-96]

(2) San Juan, Rio Arriba, Sandoval and McKinley Counties

(a) Shallow Wildcat Gas Wells. In San Juan, Rio Arriba, Sandoval and McKinley Counties, a wildcat well which is projected to a gas-producing horizon in a formation younger than the Dakota formation, or in the Dakota formation, which was created and defined by the Division after March 1, 1997, shall be located on a designated drilling tract consisting of 160 contiguous surface acres, more or less, substantially in the form of a square which is a quarter section, being a legal subdivision of the U.S. Public Land Survey, and shall be located not closer than 790 feet to any outer boundary of the tract nor closer than 130 feet to any quarter-quarter section line or subdivision inner boundary. [5-25-64...2-1-96; 6-30-97]

(b) Deep Wildcat Gas Wells. In San Juan, Rio Arriba, Sandoval and McKinley Counties, a wildcat well which is projected to a gas-producing formation in a formation older than the Dakota formation (below the base of the Cretaceous period) and

(i) located within the surface outcrop of the Pictured Cliffs formations (i.e., the "San Juan Basin") shall be located on a designated drilling tract consisting of 640 contiguous surface acres, more or less, substantially in the form of a square which is a section, being a legal subdivision of the U.S. Public Land Survey, and shall be located not closer than 1200 feet to any outer boundary of the tract nor closer than 130 feet to any quarter section line nor closer than 10 feet to any quarter- quarter section line or subdivision inner boundary; or

(ii) located outside the surface outcrop of the Pictured

Cliffs formations (i.e., the "San Juan Basin") shall be located on a designated drilling tract consisting of 160 contiguous surface acres, more or less, substantially in the form of a square which is a section, being a legal subdivision of the U.S. Public Land Survey, and shall be located not closer than 790 feet to any outer boundary of the tract nor closer than 130 feet to any quarter section line, quarter-quarter section line or subdivision inner boundary. [5-25-64...2-1-96; 6-30-97]

(c) Wildcat Oil Wells. A wildcat well which is projected to an oil-producing horizon as recognized by the Division shall be located on a tract consisting of approximately 40 surface contiguous acres substantially in the form of a square which is a legal subdivision of the U.S. Public Land Surveys, or on a governmental quarter-quarter section or lot, and shall be located not closer than 330 feet to any boundary of such tract. [5-25-64...2-1-96]

(d) In the event a well drilled as an oil well is completed as a gas well and is located accordingly but does not conform to the above gas well location rules, it shall be necessary for the operator to apply for administrative approval for a non-standard location before the well can produce. An application may be set for hearing by the Director. If the operator is uncertain as to whether a proposed wildcat well will be an oil well or a gas well, the well should be staked so that it is in a standard location for both oil and gas production. [5-25-64...2-1-96]

(3) All Counties except Lea, Chaves, Eddy, Roosevelt, San Juan, Rio Arriba, Sandoval, and McKinley.

(a) Any wildcat well which is projected as an oil well in any county other than Lea, Chaves, Eddy, Roosevelt, San Juan, Rio Arriba, Sandoval, and McKinley Counties shall be located on a tract consisting of approximately 40 surface contiguous acres substantially in the form of a square which is a legal subdivision of the U.S. Public Land Surveys, or on a governmental quarter-quarter section or lot and shall be located not closer than 330 feet to any boundary of such tract. [1-1-50...2-1-96]

(b) Any wildcat well which is projected as a gas well to a formation and in an area which, in the opinion of the Division representative approving the application to drill, may reasonably be presumed to be productive of gas rather than oil shall be located on a drilling tract consisting of 160 surface contiguous acres, more or less, substantially in the form of a square which is a quarter section, being a legal subdivision of the U.S. Public Land Surveys, and shall be located not closer than 660 feet to any outer boundary of such tract nor closer than 330 feet to any quarter-quarter section or subdivision inner boundary. [1-1-50...2-1-96]

104.C. ACREAGE AND WELL LOCATION REQUIREMENTS FOR DEVELOPMENT WELLS

(1) Oil Wells, All Counties.

(a) Unless otherwise provided in special pool rules, each development well for a defined oil pool shall be located on a tract consisting of approximately 40 surface contiguous acres substantially in the form of a square which is a legal subdivision of the U.S. Public Land Surveys, or on a governmental quarter-quarter section or lot, and shall be located not closer than 330 feet to any boundary of such tract nor closer than 330 feet to the nearest well drilling to or capable of producing from the same pool, provided however, only tracts committed to active secondary recovery projects shall be permitted more than four wells. [5-25-64...2-1-96]

(2) Lea, Chaves, Eddy and Roosevelt Counties.

(a) Gas Wells. Unless otherwise provided in special pool rules, each development well for a defined gas pool in a formation younger than the Wolfcamp formation, or in the Wolfcamp formation which was created and defined by the Division prior to November 1, 1975, or in a Pennsylvanian age or older formation which was created and defined by the Division prior to June 1, 1964, shall be located on a designated drilling tract consisting of 160 surface contiguous acres, more or less, substantially in the form of a square which is a quarter section being a legal subdivision of the U.S. Public Land Surveys, and shall be located not closer than 660 feet to any outer boundary of such tract nor closer than 330 feet to any quarter-quarter section or subdivision inner boundary nor closer than 1320 feet to the nearest well drilling to or capable of producing from the same pool. [5-25-64...2-1-96]

(b) Unless otherwise provided in the special pool rules, each development well for a defined gas pool in the Wolfcamp formation which was created and defined by the Division after November 1, 1975, or of Pennsylvanian age or older which was created and defined by the Division after June 1, 1964, shall be located on a designated drilling tract consisting of 320 surface contiguous acres, more or less, comprising any two contiguous quarter sections of a single governmental section, being a legal subdivision of the U.S. Public Land Surveys. Any such well having more than 160 acres dedicated to it shall be located not closer than 660 feet to the nearest side boundary of the dedicated tract nor closer than 1650 feet to the nearest end boundary, nor closer than 330 feet to any quarter-quarter section or subdivision inner boundary. (For the purpose of this rule, "side" boundary and "end" boundary are as defined in Rule 104.B(1)(a), above.) [5-25-64...2-1-96]

(3) San Juan, Rio Arriba, Sandoval and McKinley Counties:

(a) Shallow Gas Wells. Unless otherwise provided in special pool rules, each development well for a defined gas pool in a formation younger than the Dakota formation, or in the Dakota formation, which was created and defined by the Division after March 1, 1997, shall be located on a designated drilling tract consisting of 160 contiguous surface acres, more or less, substantially in the form of a square which is a quarter section, being a legal subdivision of the U.S. Public Land Survey, and shall be located not closer than 790 feet to any outer boundary of the tract nor closer than 130 feet to any quarter-quarter section line or subdivision inner boundary. [5-25-64...2-1-96; 6-30-97]

(b) Deep Gas Wells. Unless otherwise provided in special pool rules, each development well for a defined gas pool in a formation older than the Dakota formation (below the base of the Cretaceous period) and

(i) is located within the surface outcrop of the Pictured Cliffs formations (i.e., the "San Juan Basin") which pool was created and defined by the Division after June 1, 1997, shall be located on a designated drilling tract consisting of 640 contiguous surface acres, more or less, substantially in the form of a square which is a section, being a legal subdivision of the U.S. Public Land Survey, and shall be located not closer than 1200 feet to any outer boundary of the tract nor closer than 130 feet to any quarter section line nor closer than 10 feet to any quarter-quarter section line or subdivision inner boundary; or

(ii) is located outside the surface outcrop of the Pictured Cliffs formations (i.e., the "San Juan Basin") which

pool was created and defined by the Division after June 1, 1997, shall be located on a designated drilling tract consisting of 160 contiguous surface acres, more or less, substantially in the form of a square which is a section, being a legal subdivision of the U.S. Public Land Survey, and shall be located not closer than 790 feet to any outer boundary of the tract nor closer than 130 feet to and quarter section line, quarter-quarter section line or subdivision inner boundary. [5-25-64...2-1-96; 6-30-97]

(4) All Counties except Lea, Chaves, Eddy, Roosevelt, San Juan, Rio Arriba, Sandoval, and McKinley.

(a) Gas Wells. Unless otherwise provided in special pool rules, each development well for a defined gas pool shall be located on a designated drilling tract consisting of 160 surface contiguous acres, more or less, substantially in the form of a square which is a quarter section, being a legal subdivision of the U.S. Public Land Surveys, and shall be located not closer than 660 feet to any outer boundary of such tract nor closer than 330 feet to any quarter-quarter section or subdivision inner boundary nor closer than 1320 feet to the nearest well drilling to or capable of producing from the same pool. [5-25-64...2-1-96]

104.D. ACREAGE ASSIGNMENT

(1) Well Tests and Classification. It shall be the responsibility of the operator of any wildcat gas well or development gas well to which more than 40 acres has been dedicated to conduct a potential test within 30 days following completion of the well and to file the same with the Division within 10 days following completion of the tests. (See Rule 401.) [5-25-64...2-1-96]

(a) Date of completion for a gas well shall be the date a wellhead is installed or 30 days following conclusion of active completion work on the well, whichever date comes first. [5-25-64...2-1-96]

(b) Upon making a determination that the well should not properly be classified as a gas well, the Division will reduce the acreage dedicated to the well. [5-25-64...2-1-96]

(c) Failure of the operator to file the aforesaid tests within the specified time will also subject the well to such acreage reduction. [5-25-64...2-1-96]

(2) Non-Standard Spacing Units. Any well which does not have the required amount of acreage dedicated to it for the pool or formation in which it is completed may not be produced until a standard spacing unit for the well has been formed and dedicated or until a non-standard spacing unit has been approved. [5-25-64...2-1-96]

(a) The supervisor of the appropriate District Office of the Division shall have the authority to approve non-standard spacing units without notice when the unorthodox size and shape is necessitated by a variation in the legal subdivision of the United States Public Land Surveys and/or consists of an entire governmental section and the non-standard spacing unit is not less than 70% nor more than 130% of a standard spacing unit. Such approval shall consist of acceptance of Division Form C-102 showing the proposed non-standard spacing unit and the acreage contained therein. [5-25-64...2-1-96]

(b) The Division Director may grant administrative approval to non-standard spacing units without notice and hearing when an application has been filed for a non-standard spacing unit and the unorthodox size or shape of the dedicated tract is necessitated by a variation in the legal subdivision of the U.S. Public Land Surveys, or the following facts exist and the following provisions are complied with:

(i) The non-standard spacing unit consists of a single quarter-quarter section or lot or the non-standard spacing unit consists of quarter-quarter sections or lots that are contiguous by a common bordering side; and

(ii) The non-standard spacing unit lies wholly within a single governmental quarter section if the well is completed in a pool or formation for which 40, 80, or 160 acres is the standard spacing unit size, wholly within a single governmental half section if the well is completed in a pool or formation for which 320 acres is the standard spacing unit size, or wholly within a single governmental section if the well is completed in a pool or formation for which 640 acres is the standard spacing unit size. [5-25-64...2-1-96]

(c) Applications for administrative approval of non-standard spacing units, pursuant to Section D(2) above, shall be accompanied by a plat showing the subject spacing unit and an applicable standard spacing unit for the applicable pool or formation, its proposed well dedications, all adjoining spacing units and/or leases (whichever is applicable), and a list of affected parties. Also to be included is a statement that discusses the necessity for the formation of the subject non-standard spacing unit and the reasons why a standard sized spacing unit is not feasible. [5-25-64...2-1-96]

(i) Affected parties in this instance shall be defined as those parties who own interests in the applicable half quarter section (80-acre spacing), quarter section (160-acre spacing), half section (320-acre spacing), or section (640-acre spacing) in which the non-standard spacing unit is situated and which acreage is not included in said non-standard spacing unit;

(ii) the designated operator of any adjoining or diagonal spacing unit producing from the same pool(s) as the proposed non-standard spacing unit;

(iii) in the absence of an operator, all lessees of record of any diagonal or adjoining lease owning interests in the same pool(s) as the proposed non-standard spacing unit; and

(iv) in the absence of an operator or lessee, then to all owners of record of unleased mineral interests.[5-25-64...2-1-96]

(d) The applicant shall submit a statement attesting that applicant, on or before the same date the application was submitted to the Division, has sent notification to the affected parties by submitting a copy of the application, including a copy of the plat described in Subpart (c) above by certified or registered mail-return receipt in accordance with Rule 1207(6)(a) advising them that if they have an objection it must be filed in writing within twenty days from the date notice was sent. The Division Director may approve the non-standard spacing unit upon receipt of waivers from all said parties or if no said party has entered an objection to the non-standard spacing unit within 20 days after the Director has received the application. [5-25-64...2-1-96]

(e) The Division Director may set any application for administrative approval for a non-standard spacing unit for public hearing. [5-25-64...2-1-96]

(3) Number of Wells Per Spacing Unit in Non-Prorated Gas Pools: Unless otherwise permitted by special pool rules or authorized after notice and

hearing, only one (1) well per spacing unit is permitted in non-prorated pools. [5-25-64...2-1-96]

104.E. Form C-102, "Well Location and Acreage Dedication Plat", for any well shall designate the exact legal subdivision allotted to the well and Form C-101, "Application for Permit to Drill, Deepen, or Plug Back", will not be approved by the Division without such proper designation of acreage. [12-29-52...2-1-96]

104.F. UNORTHODOX LOCATIONS

(1) Well locations for producing wells and/or injection wells which are unorthodox based on the well location requirements of Rule 104.C(1)(a) above and which are necessary to permit the completion of an efficient production and injection pattern within a secondary recovery, tertiary recovery, or pressure maintenance project are hereby authorized, provided that any such unorthodox location within such project is no closer than the required minimum orthodox distance to the outer boundary of the lease or the unitized area, nor closer than 10 feet to any quarter-quarter section line or subdivision inner boundary. Such locations shall only require such prior approval as is necessary for an orthodox location. [1-1-50...2-1-96]

(2) The Division Director shall have authority to grant an exception to the well location requirements of Sections 104.B and 104.C above or to the well location requirements of special pool rules without notice and hearing when the necessity for such unorthodox location is based upon geologic conditions, archaeological conditions, topographical conditions, or the recompletion of a well previously drilled to a deeper horizon provided said well was drilled at an orthodox or approved unorthodox location for such original horizon. [1-1-82...2-1-96]

(3) Applications for administrative approval of unorthodox locations pursuant to Rule 104.F(2), above, shall be accompanied by a plat showing the subject spacing unit, its proposed unorthodox well location, the diagonal and adjoining spacing units and/or leases (whichever is applicable) and wells, and a list of affected parties. If the proposed unorthodox location is based upon topography or archaeology, the plat shall also show and describe the existent topographical or archaeological conditions. If the proposed unorthodox location is based upon geology, the application shall include appropriate geologic exhibits and a discussion of the geologic conditions which result in the necessity for the unorthodox location. [2-9-66...2-1-96]

(a) Adjoining and diagonal spacing units shall be defined as those immediately adjacent existing spacing units in the same pool(s) as the proposed unorthodox well and towards which the unorthodox well location encroaches. [2-9-66...2-1-96]

(b) Affected parties shall be defined as those parties who own interests in leases or operate wells on adjoining or diagonal spacing units and include:

(i) the designated operator of any adjoining or diagonal spacing unit producing from the same pool(s) as the proposed well;

(ii) in the absence of an operator, all lessees of record of any diagonal or adjoining lease owning interests in the same pool(s) as the proposed well; and

(iii) in the absence of an operator or lessee, all owners of record of unleased mineral interests in the same pool(s) as the proposed well. [2-9-66...2-1-96]

(4) The applicant shall submit a statement attesting that applicant, on or before the same date the application was submitted to the Division, has sent notification to the affected parties by submitting a copy of the application, including a copy of the plat described in Rule 104.F(3) above by certified or registered mail-return receipt in accordance with Rule 1207(A)(5) advising them that if they have an objection it must be filed in writing within twenty days from the date notice was sent. The Division Director may approve the unorthodox location upon receipt of waivers from all said parties or if no said party has entered an objection to the unorthodox location within 20 days after the Director has received the application. [2-9-66...2-1-96]

(5) The Division Director may set any application for administrative

approval of an unorthodox location for public hearing, and may require that a directional survey be run in the unorthodox well to establish the actual location of the producing interval(s). [1-1-82...2-1-96]

104.G. Whenever an exception is granted, the Division may take such action as will offset any advantage which the person securing the exception may obtain over other producers by reason of the unorthodox location. [1-1-50...2-1-96]

104.H. If the drilling tract is within an allocated oil pool or is placed within such allocated pool at any time after completion of the well and the drilling tract consists of less than 39 1/2 acres or more than 40 1/2 acres, the top unit allowable for such well shall be increased or decreased in the proportion that the number of acres in the drilling tract bears to 40. [1-1-50...2-1-96]

104.I. If the drilling tract is within an allocated gas pool or is subsequently placed within an allocated gas pool, and the drilling tract consists of less than 158 acres or more than 162 acres in 160-acre pools, or less than 316 acres or more than 324 acres in 320-acre pools, the top allowable for such well shall be decreased or increased in the proportion that the number of acres in the drilling tract bears to a standard spacing unit for the pool. [1-1-50...2-1-96]

104.J. In computing acreage under Rules 104.H and 104.I above, minor fractions of an acre shall not be counted but 1/2 acre or more shall count as 1 acre. [1-1-50...2-1-96]

104.K. The provisions of Rules 104.H and 104.I above shall apply only to wells completed after January 1, 1950. Nothing herein contained shall affect in any manner any well completed prior to the effective date of this rule and no adjustments shall be made in the allowable production for any such wells by reason of these rules. [1-1-50...2-1-96]

104.L. In order to prevent waste the Division may, after notice and hearing, fix different spacing requirements and require greater acreage for drilling tracts in any defined oil pool or in any defined gas pool notwithstanding the provisions of Rules 104.B and 104.C above. [1-1-50...2-1-96]

104.M. The Division may approve the pooling or communitization of fractional lots of 20.49 acres or less with another oil spacing unit when:

(1) The tracts involved are contiguous;

(2) They are part of the same basic lease, carrying the same royalty interest; and

(3) The ownership of the tracts involved is common. [6-19-52...2-1-96]

104.N. Application to the Division for pooling shall be accompanied by three (3) copies of a certified plat showing the dimensions and acreage involved in the pooling, the ownership of all leases and royalty interests involved, and the location of any proposed wells. [6-19-52...2-1-96]

104.O. The Division shall wait at least ten days before approving any such pooling, and shall approve such pooling only in the absence of objection from any party entitled to notice. In the event that a party entitled to notice objects to the pooling, the Division shall consider the matter only after proper notice and hearing. [6-19-52...2-1-96]

104.P. The Division may waive the ten-day waiting period requirement if the applicant furnishes the Division with the written consent to the pooling by all offset operators involved. [6-19-52...2-1-96]

104.Q. The Division may consider that the requirements of Rules 104.M(2) and (3) have been fulfilled if the applicant furnishes with each copy of each application to the Division a copy of executed pooling agreement communitizing the tracts involved. [6-19-52...2-1-96]

104.R. REPEALED [2-1-96]

Special Qualifying Areas

(21) Burlington's evidence demonstrates that the current 2 well per GPU density is adequate for only approximately 9% of the pool and to increase well density in these limited areas of the pool, as indicated on Burlington's Exhibit Tab 13 drainage map with the black color drainage code, will largely accelerate the rate of recovery of existing reserves by the drilling of unnecessary wells thereby causing waste as defined by Section 70-2-17.B NMSA 1979.

(22) Many of these black areas are isolated and scattered throughout the pool and represent the localized drainage areas of not more than 1-3 wells.

(23) It is not necessary to limit every area indicated in black of Burlington's drainage map to the current well density because only six areas have a sufficient concentrations of wells capable of draining 160 acres in order to pose a potential risk of impairing correlative rights by either (i) draining offsetting GPUs with additional wells or (ii) by requiring owners within existing GPU's to pay for additional wells which are not necessary and which will only increase the rate of recovery of existing reserves.

(24) Burlington has identified six general areas of the pool which have a sufficient concentration of GPUs where 2 wells per GPU are adequate and has proposed to characterize these as "Special Qualifying Areas" ("SQA") in which any increased density well may be approved only after notice and in the absence of objection.

(25) Amoco has objected on the grounds that these SQA are arbitrary because they also include some areas in which the blue color drainage code on Burlington's drainage map indicates 40-acre or less will be drained.

( ) IPAANM, Cinco Partnership, Turner Production Co. and Schultz Management Co. object to the Special Qualifying Areas as unnecessary and probably administratively unworkable.

(26) Burlington contends that:

(a) it is not necessary to precisely determine the high drainage areas within the SQA because operators can still drill increased density wells in the SQA upon notice and in the absence of objection; if an objection is made then the issues of rate acceleration and drainage can be addressed at a hearing so that correlative rights can be protected and waste prevented;

(b) the inclusion of some 40-acre drainage areas within the proposed SQA (indicated on Burlington's Exhibit Tab 13 with the blue drainage color code) does not violate correlative rights because those areas cannot drain more than 40-acres and therefore do not pose a risk of drainage to the offsetting GPUs.

(27) The Division finds that:

(a) in order to comply with Section 70-2-17.B NMSA 1979, the Division needs to provide a procedure to protect those six areas of the pool which are being adequately drained by the current 2 well per GPU density from having an excessive number of wells drilled.

(b) Burlington's proposed procedure for these six Special Qualifying Areas ~~is~~ appears to be reasonable and necessary in order to comply with Section 70-2-17.B NMSA 1979)

( ) a two year period of time appears reasonable in which to determine the feasibility of the procedure proposed by Burlington and whether or not there is any merit to the objections of Amoco and others.

(c) In addition to notice to offsetting operators, notice should also be provided to the owners within the subject GPU so that they will have an opportunity to object to being required to pay for increased density wells which may only accelerate the recovery of existing reserves.

(d) ~~Amoco's objection is without merit and~~ Burlington's proposal, as modified by this order, for establishing Special Qualifying Areas as set forth on Exhibit "B" to this order should be adopted in order to prevent the drilling of unnecessary wells, prevent waste and protect correlative rights.

(38) The Special Qualifying Areas as proposed by Burlington and as set forth in Exhibit "B" to this order should be adopted for a temporary period of two years in order to determine if such a procedure is necessary to prevent waste and protect correlative rights.

IT IS THEREFORE ORDERED THAT:

(1) Effective on the first day of the month following the issuance of this order, the Rules and Regulations of the Blanco-Mesaverde Gas Pool are hereby amended to conform to the rule changes as set forth in Exhibit "A" attached hereto and made part of this order.

(2) The vertical limits of this pool shall be amended as follows:

> The vertical limit for the pool are described in relation to the Chacra line and to the Huerfanito Bentonite Marker such that southwest of the Charca line the pool limits shall be defined as follows: the top of the pool shall be a point 750 feet below the Huerfanito Bentonite Marker down to the base of the pool which shall be a point 500 feet below the top of the Point Lookout Sandstone and Northeast of the line the top of the pool shall be defined as a point 300 feet above the Huerfanito Bentonite Marker down to the base of the pool which shall be a point 500 feet below the top of the Point Lookout Sandstone.

(3) Special Qualifying Areas for this Pool are hereby adopted and described as set forth on Exhibit "B" attached hereto and made part of this order and shall remain in full force and effect for a period of two years following the entry of this order at which time they shall automatically terminate unless extended by an order of the Division issued after notice and hearing.

(4) Any second infill well drilled to or completed in this pool prior to the effective date of an order approving this application shall be deemed to have also approved these existing second infill wells.

(5) In the event that an application to drill a third well on a GPU has been approved by the Division but the drilling of said well has not actually commenced, said approval is void and must be resubmitted in accordance with the amendment of the rules for this pool as made by this order.

(6) A procedure is hereby adopted that future changes in the rules and regulations for the pool, excluding Rule 2(a), may be made based upon notice **only** to operators and not to all interest owners in the pool.

(7) 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 hereinafter designated.

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. 11879
ORDER NO. R-10936

APPLICATION OF BURLINGTON RESOURCES OIL & GAS COMPANY FOR APPROVAL OF A PILOT PROJECT INCLUDING AN EXCEPTION FROM RULE 2(b) OF THE SPECIAL RULES AND REGULATIONS FOR THE BLANCO-MESAVERDE GAS POOL FOR PURPOSES OF ESTABLISHING A PILOT INFILL DRILLING PROGRAM WITHIN ITS SAN JUAN 27-5 UNIT WHEREBY UP TO FOUR WELLS MAY BE DRILLED ON A STANDARD GAS PRORATION UNIT TO DETERMINE PROPER WELL DENSITY AND WELL LOCATION REQUIREMENTS FOR MESAVERDE WELLS, RIO ARRIBA COUNTY, NEW MEXICO.

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 8:15 a.m. on November 6, 1997, at Santa Fe, New Mexico, before Examiner David R. Catanach.

NOW, on this 8th day of January, 1998, 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 Blanco-Mesaverde Gas Pool is currently governed by the General Rules for the Prorated Gas Pools of New Mexico/Special Rules and Regulations for the Blanco-Mesaverde Gas Pool as contained within Division Order No. R-8170, as amended. Rule Nos. 2(a) and 2(b) of the Special Rules and Regulations for the Blanco-Mesaverde Gas Pool require that a standard gas proration unit (GPU) comprise 320 acres, that the initial well on a GPU be located no closer than 790 feet from the outer boundary of the quarter section on which the well is located nor closer than 130 feet to any quarter-quarter section line or subdivision inner boundary, and that the infill well within a standard GPU be located in the quarter section not containing a Mesaverde well at a location which conforms to the setback requirements described above.

(3) The applicant, Burlington Resources Oil & Gas Company (Burlington), seeks authority to institute a pilot infill drilling program within its San Juan 27-5 Unit whereby up to four wells may be drilled on a standard 320-acre gas proration unit. The applicant further seeks:

a) to establish a ½ mile buffer zone within the outer boundary of the San Juan 27-5 Unit in which area standard well density for the Blanco-Mesaverde Gas Pool shall apply in order to protect the correlative rights of offset operators;

b) an exception to Rule No. 2(b) of the Special Rules and Regulations for the Blanco-Mesaverde Gas Pool whereby it may locate the proposed infill wells anywhere within the proration unit provided that such wells are located no closer than 10 feet from any section, quarter-section or quarter-quarter section line;

c) no increase in the gas allowable or in the method of calculating gas allowables in the Blanco-Mesaverde Gas Pool for any of the standard gas proration units targeted for the proposed infill drilling.

(4) The applicant is the current operator of the San Juan 27-5 Unit, a Federal exploratory unit comprising some 23,043.99 acres and encompassing Sections 1 through 36, Township 27 North, Range 5 West, NMPM, Rio Arriba County, New Mexico.

(5) According to applicant's testimony, the San Juan 27-5 Unit is not fully developed in the Blanco-Mesaverde Gas Pool at this time (160-acre infill wells).

(6) Applicant testified that the Mesaverde Participating Area (PA) and consequently the Mesaverde interest ownership within the San Juan 27-5 Unit has been fixed since 1981 and is not subject to further revisions.

(7) The evidence and testimony presented indicates that the applicant has undertaken a study to analyze the drainage efficiency of Mesaverde gas wells in the San Juan Basin. As part of this study, the applicant has examined various geologic and engineering factors which may affect ultimate gas recoveries.

(8) In its investigation, the applicant gathered initial shut-in wellhead pressure data from both the initial and infill wells on approximately 1,200 standard gas proration units within the San Juan Basin. Applicant then utilized this data to construct pressure drop maps.

(9) Applicant's data indicates that there are considerable pressure drop differences between areas in the San Juan Basin. Pressure drops range from greater than 30 psi/year to less than 5 psi/year.

(10) The pressure drop within the San Juan 27-5 Unit is relatively low ranging from approximately 5-15 psi/year.

(11) Applicant, utilizing core data from the Mesaverde formation taken from wells in both the high and low pressure drop areas of the basin, as well as other geologic data, has reached the following geologic conclusions:

a) the calculated pressure drops are a good indication of effective permeability in the Mesaverde reservoir;

b) areas with low pressure drops are most likely not being efficiently and effectively drained by existing well density;

c) the difference between areas of high and low pressure drop cannot be attributed to differences in matrix porosity and permeability, reservoir structure or reservoir thickness;

d) the presence and density of natural fractures in the Mesaverde reservoir appear to account for the differences between areas of high and low pressure drop, and resulting differences in drainage efficiency;

e) data from applicant's Mesaverde Strat Test Well No. 2, a pressure observation well, indicates that the Menefee interval, one of the primary producing intervals in the Mesaverde formation, exhibits near virgin reservoir pressure even though this interval has been produced in offset wells for a considerable period of time; and,

f) the Menefee, Cliffhouse and Point Lookout to a lesser extent, can be laterally discontinuous from one well location to another.

(12) Applicant testified that in its reservoir modeling for the proposed pilot project, it will utilize geostatistics and stochastic modeling to input geologic parameters. According to applicant's evidence and testimony, this method of analyzing geologic data allows you to capture and quantify the correlatability and directionality of existing data, and distribute this data in a non-averaging method between data points.

(13) Utilizing geostatistics and stochastic modeling allows the input of more realistic geologic data which should ultimately result in a much more accurate and realistic flow simulation within the Mesaverde reservoir.

(14) Applicant presented engineering evidence and testimony which indicates that:

a) in high pressure drop areas, (i.e. those areas containing natural fractures in the Mesaverde formation), the recovery rates of gas, based upon volumetrics and decline curve analysis, range from approximately 60-80 percent of the original gas in place. Correspondingly, those areas of low pressure drop typically exhibit low recovery rates of gas in the range of approximately 20-50 percent of original gas in place;

b) the recovery rate of gas from the San Juan 27-5 Unit, subsequent to the completion of 160-acre infill drilling, will be approximately 31 percent of the original gas in place.

(15) Due to the low recovery rates within the San Juan 27-5 Unit, applicant has determined this to be an ideal location to conduct the pilot infill drilling study.

(16) The applicant presented the results of a reservoir simulation study conducted on that portion of the San Juan 27-5 Unit comprising Sections 3, 4, 9 and 10. The simulation was conducted using runs which assume 1, 2, 3 and 4 additional wells are drilled per section. The results indicate that significant increases in ultimate gas recovery are achieved by drilling additional infill wells per section.

(17) Applicant estimates that by drilling an additional two wells per section within the San Juan 27-5 Unit, ultimate gas recovery from the unit will increase from approximately 37.3 BCFG to approximately 50.7 BCFG.

(18) Applicant has notified all interest owners in the San Juan 27-5 Unit of its application in this case.

(19) No offset operator and/or interest owner appeared at the hearing in opposition to the application.

(20) Preliminary geologic and engineering data indicate that the proposed pilot infill drilling program within the San Juan 27-5 Unit will allow the applicant the opportunity to test the effectiveness of its geostatistics and stochastic modeling, will allow the applicant the opportunity to gather additional geologic and engineering data to determine proper well density in this portion of the Blanco-Mesaverde Gas Pool, will allow the recovery of additional gas reserves from the San Juan 27-5 Unit which may otherwise not be recovered, thereby preventing waste, and will not violate correlative rights.

(21) The applicant should be authorized to conduct its pilot infill drilling program within its entire San Juan 27-5 Unit area with the exception of the following described "buffer zone":

TOWNSHIP 27 NORTH, RANGE 5 WEST, NMPM
Section 1: N/2, SE/4
Sections 2 through 5: N/2
Section 6: N/2, SW/4
Sections 7, 18, 19, 30: W/2
Sections 12, 13, 24, 25: E/2
Section 31: W/2, SE/4
Sections 32 through 35: S/2
Section 36: S/2, NE/4

IT IS THEREFORE ORDERED THAT:

(1) The applicant, Burlington Resources Oil & Gas Company, is hereby authorized to conduct a pilot infill drilling program within its San Juan 27-5 Unit whereby up to four wells may be drilled on a standard gas proration unit in the Blanco-Mesaverde Gas Pool.

(2) The pilot project area shall comprise applicant's entire San Juan 27-5 Unit area with the exception of the following described "buffer zone", in which area standard well density for the Blanco-Mesaverde Gas Pool shall apply:

TOWNSHIP 27 NORTH, RANGE 5 WEST, NMPM
Section 1: N/2, SE/4
Sections 2 through 5: N/2
Section 6: N/2, SW/4
Sections 7, 18, 19, 30: W/2
Sections 12, 13, 24, 25: E/2
Section 31: W/2, SE/4
Sections 32 through 35: S/2
Section 36: S/2, NE/4

(3) As an exception to Rule No. 2(b) of the Special Rules and Regulations for the Blanco-Mesaverde Gas Pool, the applicant is hereby authorized to drill the infill wells within the pilot project area anywhere within a standard gas proration unit provided that such wells are located no closer than 10 feet from any section, quarter-section or quarter-quarter section line.

(4) The wells and/or standard gas proration units within the pilot project area shall not receive a gas allowable greater than that which would normally be assigned a proration unit containing two wells in the Blanco-Mesaverde Gas Pool.

(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

KATHLEEN A. GARLAND
Acting Director

S E A L

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. 11880
ORDER NO. R-10949

APPLICATION OF BURLINGTON RESOURCES OIL & GAS COMPANY FOR APPROVAL OF A PILOT PROJECT INCLUDING AN EXCEPTION FROM RULE 2(b) OF THE SPECIAL RULES AND REGULATIONS FOR THE BLANCO-MESAVERDE GAS POOL TO INSTITUTE A PILOT INFILL DRILLING PROGRAM WITHIN A FOUR SECTION AREA INCLUDING SIX UNORTHODOX GAS WELL LOCATIONS FOR PURPOSES OF ESTABLISHING A PROGRAM TO DETERMINE PROPER WELL DENSITY AND WELL LOCATION REQUIREMENTS FOR MESAVERDE WELLS, SAN JUAN COUNTY, NEW MEXICO.

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 8:15 a.m. on November 6, 1997, at Santa Fe, New Mexico, before Examiner David R. Catanach.

NOW, on this 3rd day of February, 1998, 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 Blanco-Mesaverde Gas Pool is currently governed by the General Rules for the Prorated Gas Pools of New Mexico/Special Rules and Regulations for the Blanco-Mesaverde Gas Pool as contained within Division Order No. R-8170, as amended. Rule Nos. 2(a) and 2(b) of the Special Rules and Regulations for the Blanco-Mesaverde Gas Pool require that a standard gas proration unit (GPU) comprise 320 acres, that the initial well on a GPU be located no closer than 790 feet from the outer boundary of the quarter section on which the well is located nor closer than 130 feet from any quarter-quarter section line or subdivision inner boundary, and that the infill well within a standard GPU be located in the quarter section not containing a Mesaverde well at a location which conforms to the setback requirements described above.

(3) The applicant, Burlington Resources Oil & Gas Company (Burlington), seeks authority to institute a pilot infill drilling program within a four section area, described as follows, whereby up to four wells may be drilled on a standard 320-acre gas proration unit:

INFILL PILOT PROJECT AREA

Section 1, Township 30 North, Range 11 West, NMPM
Section 36, Township 31 North, Range 11 West, NMPM
Section 31, Township 31 North, Range 10 West, NMPM
Section 6, Township 30 North, Range 10 West, NMPM

(4) The applicant further seeks:

a) to establish a ½ mile buffer zone within the outer boundary of the four section pilot project area in which area standard well density for the Blanco-Mesaverde Gas Pool shall apply in order to protect the correlative rights of offset operators;

b) an exception to Rule No. 2(b) of the Special Rules and Regulations for the Blanco-Mesaverde Gas Pool whereby it may locate and drill six infill wells at the proposed unorthodox gas well locations described as follows:

Well Name & Number	Well Location
Pubco State Com No. 1B	325' FSL & 2510' FEL, Unit O, 36-31N-11W
Atlantic "C" No. 4C	1385' FSL & 445' FWL, Unit L, 31-31N-10W
Atlantic "C" No. 6B	380' FNL & 2190' FWL, Unit C, 6-30N-10W
Atlantic "C" No. 6C	2240' FNL & 2005' FWL, Unit F, 6-30N-10W
Sunray "C" No. 1B	2135' FNL & 395' FEL, Unit H, 1-30N-11W
Sunray "C" No. 1C	2220' FNL & 2520' FEL, Unit G, 1-30N-11W

c) no increase in the gas allowable or in the method of calculating gas allowables in the Blanco-Mesaverde Gas Pool for any of the standard gas proration units targeted for the proposed infill drilling.

(5) The applicant proposes to locate its six infill wells on the following described Blanco-Mesaverde Gas Pool proration units within the subject four section area:

Gas Proration Unit	Infill Wells	Current Operator
W/2 Section 31, T-31N, R-10W	Atlantic "C" No. 4C	Burlington
W/2 Section 6, T-30N, R-10W	Atlantic "C" No. 6B Atlantic "C" No. 6C	Burlington
N/2 Section 1, T-30N, R-11W	Sunray "C" No. 1B Sunray "C" No. 1C	Burlington
S/2 Section 36, T-31N, R-11W	Pubco State Com No. 1	Great Western Drilling Company

(6) According to applicant's evidence and testimony, the working interest ownership within the W/2 of Section 31, the W/2 of Section 6 and the N/2 of Section 1 is owned 100% by Burlington. There are, however, additional various royalty and overriding royalty interest owners within these subject proration units.

(7) Further testimony indicates that the working interest ownership within the S/2 of Section 36 is owned by Great Western Drilling Company, Davoil Inc., Taurus Exploration and Conoco Inc..

(8) At the time of the hearing, the applicant testified that it has made arrangements with the working interest owners in the S/2 of Section 36 whereby it will drill the proposed Pubco State Com No. 1B and will operate the well for a period of approximately six months at which time it will turn over operations of the well to Great Western Drilling Company.

(9) Due to current Division policy which prohibits having two operators within a single proration unit, the applicant, subsequent to the hearing, advised the Division that it will drill and complete the Pubco State Com Well No. 1B, and will subsequently turn over operations of the well to Great Western Drilling Company.

(10) Applicant testified that it has notified all interest owners, including working, royalty and overriding royalty interest owners within the four section pilot project area of its application in this case. In addition, applicant has notified the only affected offset operator, Amoco Production Company.

(11) The evidence and testimony presented indicates that the applicant has undertaken a study to analyze the drainage efficiency of Mesaverde gas wells in the San Juan Basin. As part of this study, the applicant has examined various geologic and engineering factors which may affect ultimate gas recoveries.

(12) In its investigation, the applicant gathered initial shut-in wellhead pressure data from both the initial and infill wells on approximately 1,200 standard gas proration units within the San Juan Basin. Applicant then utilized this data to construct pressure drop maps.

(13) Applicant's data indicates that there are considerable pressure drop differences between areas in the San Juan Basin. Pressure drops range from greater than 30 psi/year to less than 5 psi/year.

(14) The pressure drop within the four section pilot project area is relatively low ranging from approximately 5-15 psi/year.

(15) Applicant, utilizing core data from the Mesaverde formation taken from wells in both the high and low pressure drop areas of the basin, as well as other geologic data, has reached the following geologic conclusions:

a) the calculated pressure drops are a good indication of effective permeability in the Mesaverde reservoir;

b) areas with low pressure drops are most likely not being efficiently and effectively drained by existing well density;

c) the difference between areas of high and low pressure drop cannot be attributed to differences in matrix porosity and permeability, reservoir structure or reservoir thickness;

d) the presence and density of natural fractures in the Mesaverde reservoir appear to account for the differences between areas of high and low pressure drop, and resulting differences in drainage efficiency;

e) data from applicant's Mesaverde Strat Test Well No. 2, a pressure observation well, indicates that the Menefee interval, one of the primary producing intervals in the Mesaverde formation, exhibits near virgin reservoir pressure even though this interval has been produced in offset wells for a considerable period of time; and,

f) the Menefee, Cliffhouse and Point Lookout to a lesser extent, can be laterally discontinuous from one well location to another.

(16) Applicant testified that in its reservoir modeling for the proposed pilot project, it will utilize geostatistics and stochastic modeling to input geologic parameters. According to applicant's evidence and testimony, this method of analyzing geologic data allows you to capture and quantify the correlatability and directionality of existing data, and distribute this data in a non-averaging method between data points.

(17) Utilizing geostatistics and stochastic modeling allows the input of more realistic geologic data which should ultimately result in a much more accurate and realistic flow simulation within the Mesaverde reservoir.

(18) Applicant presented engineering evidence and testimony which indicates that:

a) in high pressure drop areas, (i.e. those areas containing natural fractures in the Mesaverde formation), the recovery rates of gas, based upon volumetric and decline curve analysis, range from approximately 60-80 percent of the original gas in place. Correspondingly, those areas of low pressure drop typically exhibit low recovery rates of gas in the range of approximately 20-50 percent of original gas in place;

b) given the current well density, the recovery rate of gas from the four section pilot project area will be approximately 31 percent of the original gas in place.

(19) Due to the low recovery rates within the four section pilot project area, applicant has determined this to be an ideal location to conduct the pilot infill drilling study.

(20) The applicant presented the results of a reservoir simulation study conducted on the four section pilot project area. The simulation was conducted using runs which assume 1, 2, 3 and 4 additional wells are drilled per section. The results indicate that significant increases in ultimate gas recovery are achieved by drilling additional infill wells per section.

(21) Applicant estimates that by drilling an additional two wells per section within the four section pilot project area, ultimate gas recovery from the project area will increase from approximately 42.0 BCFG to approximately 61.4 BCFG.

(22) No offset operator and/or interest owner appeared at the hearing in opposition to the application.

(23) Preliminary geologic and engineering data indicates that the proposed infill drilling program within the four section pilot project area will allow the applicant the opportunity to test the effectiveness of its geostatistics and stochastic modeling, will allow the applicant the opportunity to gather additional geologic and engineering data to determine proper well density in this portion of the Blanco-Mesaverde Gas Pool, will allow the recovery of additional gas reserves from the pilot project area which may otherwise not be recovered, thereby preventing waste, and will not violate correlative rights.

(24) The applicant should be authorized to drill infill wells within the four section pilot project area with the exception of the following described "buffer zone":

Township 31 North, Range 10 West, NMPM
Section 31: E/2, NW/4

Township 31 North, Range 11 West, NMPM
Section 36: W/2, NE/4

Township 30 North, Range 11 West, NMPM
Section 1: W/2, SE/4

Township 30 North, Range 10 West, NMPM
Section 6: E/2, SW/4

IT IS THEREFORE ORDERED THAT:

(1) The applicant, Burlington Resources Oil & Gas Company, is hereby authorized to conduct a pilot infill drilling program within a four section area, described as follows, whereby up to four wells may be drilled on a standard 320-acre gas proration unit:

INFILL PILOT PROJECT AREA

Section 1, Township 30 North, Range 11 West, NMPM
Section 36, Township 31 North, Range 11 West, NMPM
Section 31, Township 31 North, Range 10 West, NMPM
Section 6, Township 30 North, Range 10 West, NMPM

(2) The pilot project area shall comprise the entire four section area as described above with the exception of the following described "buffer zone", in which area standard well density for the Blanco-Mesaverde Gas Pool shall apply:

Township 31 North, Range 10 West, NMPM
Section 31: E/2, NW/4

Township 31 North, Range 11 West, NMPM
Section 36: W/2, NE/4

Township 30 North, Range 11 West, NMPM
Section 1: W/2, SE/4

Township 30 North, Range 10 West, NMPM
Section 6: E/2, SW/4

(3) As an exception to Rule No. 2(b) of the Special Rules and Regulations for the Blanco-Mesaverde Gas Pool, the applicant is hereby authorized to drill the following described six infill wells within the pilot project area, all of which are located at unorthodox gas well locations, also hereby approved.

Well Name & Number	Well Location
Pubco State Com No. 1B	325' FSL & 2510' FEL, Unit O, 36-31N-11W
Atlantic "C" No. 4C	1385' FSL & 445' FWL, Unit L, 31-31N-10W
Atlantic "C" No. 6B	380' FNL & 2190' FWL, Unit C, 6-30N-10W
Atlantic "C" No. 6C	2240' FNL & 2005' FWL, Unit F, 6-30N-10W
Sunray "C" No. 1B	2135' FNL & 395' FEL, Unit H, 1-30N-11W
Sunray "C" No. 1C	2220' FNL & 2520' FEL, Unit G, 1-30N-11W

(4) The wells and/or standard gas proration units within the pilot project area shall not receive a gas allowable greater than that which would normally be assigned a proration unit containing two wells in the Blanco-Mesaverde Gas Pool.

(5) As per the agreement with the various working interest owners within Section 36, including Great Western Drilling Company, the applicant is hereby authorized to drill and complete its Pubco State Com No. 1B, as described above. Subsequent to the completion of drilling and completion operations, the applicant shall turn over operations of the Pubco State Com No. 1B to Great Western Drilling Company.

(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

KATHLEEN A. GARLAND
Acting Director

S E A L

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. 11625
ORDER NO. R-10720

APPLICATION OF BURLINGTON RESOURCES OIL & GAS COMPANY FOR APPROVAL OF A PILOT PROJECT INCLUDING AN EXCEPTION FROM RULE 2(b) OF THE SPECIAL RULES AND REGULATIONS FOR THE BLANCO-MESAVERDE GAS POOL FOR PURPOSES OF ESTABLISHING A PROGRAM IN ITS SAN JUAN 29-7 UNIT TO DETERMINE PROPER WELL DENSITY AND WELL LOCATION REQUIREMENTS IN MESAVERDE WELLS, RIO ARRIBA COUNTY, NEW MEXICO.

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 8:15 a.m. on October 17, 1996, at Santa Fe, New Mexico, before Examiner David R. Catanach.

NOW, on this 9th day of January, 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 Blanco-Mesaverde Gas Pool is currently governed by the General Rules for the Prorated Gas Pools of New Mexico/Special Rules and Regulations for the Blanco-Mesaverde Gas Pool as contained within Division Order No. R-8170, as amended. Rule Nos. 2(a) and 2(b) of the Special Rules and Regulations for the Blanco-Mesaverde Gas Pool require that a standard gas proration unit (GPU) comprise 320 acres, that the initial well on a GPU be located no closer than 790 feet from the outer boundary of the quarter section on which the well is located nor closer than 130 feet from any quarter-quarter section line or subdivision inner boundary, and that the infill well within a standard GPU be located in the quarter section not containing a Mesaverde well at a location which conforms to the setback requirements described above.

(3) The applicant, Burlington Resources Oil & Gas Company (Burlington), seeks authority to institute a pilot infill drilling program within its San Juan 29-7 Unit whereby up to four wells may be drilled on a standard gas proration unit. The applicant further seeks:

a) to establish a ½ mile buffer zone within the outer boundary of the San Juan 29-7 Unit in which area standard well density for the Blanco-Mesaverde Gas Pool shall apply in order to protect the correlative rights of offset operators;

b) an exception to Rule No. 2(b) of the Special Rules and Regulations for the Blanco-Mesaverde Gas Pool whereby the applicant may locate the proposed infill wells anywhere within the proration unit provided that such wells are located no closer than 10 feet from any section, quarter-section or quarter-quarter section line;

c) authority to commence drilling the following described eight wells within Phase I of its proposed infill drilling program:

WELL NAME	WELL LOCATION
SJ 29-7 Unit No. 37B	2370' FNL & 805' FWL (E) 12-29N-7W
SJ 29-7 Unit No. 37C	2630' FNL & 2630' FWL (F) 12-29N-7W
SJ 29-7 Unit No. 47B	2610' FSL & 2200' FEL (J) 2-29N-7W
SJ 29-7 Unit No. 57B	(Surf.) 1500' FSL & 1660' FEL (J) 11-29N-7W (BH) 465' FSL & 2340' FWL (N) 11-29N-7W
SJ 29-7 Unit No. 64B	(Surf.) 1510' FSL & 1640' FEL (J) 11-29N-7W (BH) 820' FSL & 150' FEL (P) 11-29N-7W
SJ 29-7 Unit No. 64C	225' FNL & 1995' FEL (B) 11-29N-7W
SJ 29-7 Unit No. 85B	(Surf.) 1795' FSL & 1510' FWL (K) 1-29N-7W (BH) 285' FSL & 245' FWL (M) 1-29N-7W
SJ 29-7 Unit No. 85C	(Surf.) 1820' FSL & 1520' FWL (K) 1-29N-7W (BH) 2630' FNL & 300' FWL (E) 1-29N-7W

d) no increase in the gas allowable or in the method of calculating gas allowables in the Blanco-Mesaverde Gas Pool for any of the standard gas proration units targeted for the proposed infill drilling.

(4) The applicant is the current operator of the San Juan 29-7 Unit, a Federal exploratory unit comprising some 22,500 acres and encompassing Sections 1 through 36, Township 29 North, Range 7 West, NMPM, Rio Arriba County, New Mexico.

(5) According to applicant's testimony, its plan of development for the San Juan 29-7 Unit includes drilling fourteen (14) 160-acre infill Mesaverde wells in 1997, at which point the unit will be fully developed in the Blanco-Mesaverde Gas Pool.

(6) Applicant testified that the Mesaverde Participating Area (PA) and consequently the Mesaverde interest ownership within the San Juan 29-7 Unit has been fixed since 1959 and is not subject to further revisions.

(7) The evidence and testimony presented indicates that the applicant has undertaken a study to analyze the drainage efficiency of Mesaverde gas wells in the San Juan Basin. As part of this study, the applicant has examined various geologic and engineering factors which may affect ultimate gas recoveries.

(8) In its investigation, the applicant gathered initial shut-in wellhead pressure data from both the initial and infill wells on approximately 1,200 standard gas proration units within the San Juan Basin. Applicant then utilized this data to construct pressure drop maps.

(9) Applicant's data indicates that there are considerable pressure drop differences between areas in the San Juan Basin. Pressure drops range from greater than 30 psi/year to less than 5 psi/year.

(10) The pressure drop within the San Juan 29-7 Unit is relatively low ranging from approximately 5-15 psi/year.

(11) Applicant, utilizing core data from the Mesaverde formation taken from wells in both the high and low pressure drop areas of the basin, as well as other geologic data, has reached the following geologic conclusions:

a) the calculated pressure drops are a good indication of effective permeability in the Mesaverde reservoir;

b) areas with low pressure drops are most likely not being efficiently and effectively drained by existing well density;

c) the difference between areas of high and low pressure drop cannot be attributed to differences in matrix porosity and permeability, reservoir structure or reservoir thickness;

d) the presence and density of natural fractures in the Mesaverde reservoir appear to account for the differences between areas of high and low pressure drop, and resulting differences in drainage efficiency;

e) data from applicant's Mesaverde Strat Test Well No. 2, a pressure observation well, indicates that the Menefee interval, one of the primary producing intervals in the Mesaverde formation, exhibits near virgin reservoir pressure even though this interval has been produced in offset wells for a considerable period of time; and,

f) the Menefee, Cliffhouse and Point Lookout to a lesser extent, can be laterally discontinuous from one well location to another.

(12) Applicant testified that in its reservoir modeling for the proposed pilot project, it will utilize geostatistics and stochastic modeling to input geologic parameters. According to applicant's evidence and testimony, this method of analyzing geologic data allows you to capture and quantify the correlatability and directionality of existing data, and distribute this data in a non-averaging method between data points.

(13) Utilizing geostatistics and stochastic modeling allows the input of more realistic geologic data which should ultimately result in a much more accurate and realistic flow simulation within the Mesaverde reservoir.

(14) Applicant presented engineering evidence and testimony which indicates that:

a) in high pressure drop areas, (i.e. those areas containing natural fractures in the Mesaverde formation), the recovery rates of gas, based upon volumetrics and decline curve analysis, range from approximately 60-80 percent of the original gas in place. Correspondingly, those areas of low pressure drop typically exhibit low recovery rates of gas in the range of approximately 20-50 percent of original gas in place;

b) the recovery rate of gas from the San Juan 29-7 Unit, subsequent to the completion of 160-acre infill drilling, will be approximately 51 percent of the original gas in place.

(15) Due to the low recovery rates within the San Juan 29-7 Unit, applicant has determined this to be an ideal location to conduct the pilot infill drilling study.

(16) The applicant presented the results of a reservoir simulation study conducted on that portion of the San Juan 29-7 Unit comprising Sections 1, 2, 11 and 12. The simulation was conducted using runs which assume 1, 2, 3 and 4 additional wells are drilled per section. The results indicate that significant increases in ultimate gas recovery are achieved by drilling one and two additional wells per section, and that lesser increases in ultimate gas recovery are achieved by drilling more than two additional wells per section.

(17) Applicant estimates that by drilling an additional two wells per section within the San Juan 29-7 Unit, ultimate gas recovery from the unit will increase from approximately 63 BCFG to approximately 74 BCFG.

(18) Applicant has notified all interest owners in the San Juan 29-7 Unit as well as all operators in the Blanco-Mesaverde Gas Pool of its application in this case.

(19) No offset operator and/or interest owner appeared at the hearing in opposition to the application.

(20) Preliminary geologic and engineering data indicate that the proposed pilot infill drilling program within the San Juan 29-7 Unit will allow the applicant the opportunity to test the effectiveness of its geostatistics and stochastic modeling, will allow the applicant the opportunity to gather additional geologic and engineering data to determine proper well density in this portion of the Blanco-Mesaverde Gas Pool, will allow the recovery of additional gas reserves from the San Juan 29-7 Unit which may otherwise not be recovered, thereby preventing waste, and will not violate correlative rights.

(21) The applicant should be authorized to conduct its pilot infill drilling program within its entire San Juan 29-7 Unit area with the exception of the following described "buffer zone":

TOWNSHIP 29 NORTH, RANGE 7 WEST, NMPM
Section 1: N/2, SE/4
Sections 2 through 5: N/2
Section 6: N/2, SW/4
Sections 7, 18, 19, 30: W/2
Section 31: W/2, SE/4
Sections 32 through 35: S/2
Section 36: S/2, NE/4
Sections 12, 13, 24, 25: E/2

IT IS THEREFORE ORDERED THAT:

(1) The applicant, Burlington Resources Oil & Gas Company, is hereby authorized to conduct a pilot infill drilling program within its San Juan 29-7 Unit whereby up to four wells may be drilled on a standard gas proration unit in the Blanco-Mesaverde Gas Pool.

(2) The pilot project area shall comprise applicant's entire San Juan 29-7 Unit area with the exception of the following described "buffer zone", in which area standard well density for the Blanco-Mesaverde Gas Pool shall apply:

TOWNSHIP 29 NORTH, RANGE 7 WEST, NMPM
Section 1: N/2, SE/4
Sections 2 through 5: N/2
Section 6: N/2, SW/4
Sections 7, 18, 19, 30: W/2
Section 31: W/2, SE/4
Sections 32 through 35: S/2
Section 36: S/2, NE/4
Sections 12, 13, 24, 25: E/2

(3) As an exception to Rule No. 2(b) of the Special Rules and Regulations for the Blanco-Mesaverde Gas Pool, the applicant is hereby authorized to drill the infill wells within the pilot project area anywhere within a standard gas proration unit provided that such wells are located no closer than 10 feet from any section, quarter-section or quarter-quarter section line.

(4) The applicant is hereby further authorized to commence drilling the following described infill wells within Phase I of its pilot project, provided however, that such wells shall be located at a location in conformance with the setback requirements described above:

WELL NAME	WELL LOCATION
SJ 29-7 Unit No. 37B	2370' FNL & 805' FWL (E) 12-29N-7W
SJ 29-7 Unit No. 37C	2630' FNL & 2630' FWL (F) 12-29N-7W
SJ 29-7 Unit No. 47B	2610' FSL & 2200' FEL (J) 2-29N-7W
SJ 29-7 Unit No. 57B	(Surf.) 1500' FSL & 1660' FEL (J) 11-29N-7W (BH) 465' FSL & 2340' FWL (N) 11-29N-7W
SJ 29-7 Unit No. 64B	(Surf.) 1510' FSL & 1640' FEL (J) 11-29N-7W (BH) 820' FSL & 150' FEL (P) 11-29N-7W
SJ 29-7 Unit No. 64C	225' FNL & 1995' FEL (B) 11-29N-7W
SJ 29-7 Unit No. 85B	(Surf.) 1795' FSL & 1510' FWL (K) 1-29N-7W (BH) 285' FSL & 245' FWL (M) 1-29N-7W
SJ 29-7 Unit No. 85C	(Surf.) 1820' FSL & 1520' FWL (K) 1-29N-7W (BH) 2630' FNL & 300' FWL (E) 1-29N-7W

(5) The wells and/or standard gas proration units within the pilot project area shall not receive a gas allowable greater than that which would normally be assiged a proration unit containing two wells in the Blanco-Mesaverde Gas Pool.

(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

S E A L

BLANCO-MESAVERDE GAS POOL
Rio Arriba and San Juan Counties, New Mexico

Order No. R-799, February 25, 1949, Readopted by Order No. 850, January 1, 1950, Redefining Blanco Area; Order No. R-13, March 15, 1950, Establishing LaPlata (Mesaverde) Pool; Order No. R-16, April 27, 1950, Establishing Largo (Mesaverde) Pool; Order No. R-42, December 22, 1950, Establishing South La Plata (Mesaverde) Pool; as Amended by Order No. R-13, March 15, 1950; Order No. R-31, September 29, 1950; Order No. R-42, December 22, 1950; Order No. R-67, April 20, 1951; Order No. R-89, September 20, 1951; Order No. R-129, March 26, 1952; Order No. R-156, May 20, 1952; Order No. R-166, June 19, 1952; Order No. R-185, August 28, 1952; Order No. R-208, October 20, 1952; Order No. R-220, December 4, 1952; Order No. R-237, December 24, 1952; Order No. R-262, February 10, 1953; Order No. R-311, April 10, 1953; Order No. R-321, May 21, 1953; Order No. R-331, June 10, 1953; Order No. R-335, June 23, 1953; Order No. R-366, September 17, 1953; Order No. R-383, October 21, 1953; Order No. R-387, November 10, 1953; Order No. R-394, November 24, 1953; Order No. R-399, January 20, 1954; Order No. R-406, February 26, 1954; Order No. R-409, March 31, 1954; Order No. R-459, April 15, 1954; Order No. R-570, January 13, 1955; Order No. R-739, January 9, 1956; Order No. R-764, March 14, 1956; Order No. R-813, June 8, 1956; Order No. R-913, November 13, 1956; Order No. R-934, December 28, 1956; Order No. R-949, January 30, 1957; Order No. R-959, March 8, 1957; Order No. R-983, April 23, 1957; Order No. R-987, April 29, 1957; Order No. R-1018, June 28, 1957; Order No. R-1043, August 29, 1957; Order No. R-1060, September 30, 1957; Order No. R-1090, November 27, 1957; Order No. R-1106, December 30, 1957; Order No. R-1119, January 28, 1958; Order No. R-1141, March 25, 1958; Order No. R-1167, April 25, 1958; Order No. R-1211, June 26, 1958; Order No. R-1222, July 21, 1958; Order No. R-1239, August 14, 1958; Order No. R-1249, September 29, 1958; Order No. R-1261, October 21, 1958; Order No. R-1313, December 24, 1958; Order No. R-1325, January 21, 1959; Order No. R-1341, February 23, 1959; Order No. R-1373, April 21, 1959; Order No. R-1442, July 21, 1959; Order No. R-1489, September 22, 1959; Order No. R-1531, November 23, 1959; Order No. R-1578, January 18, 1960; Order No. R-1634, March 18, 1960; Order No. R-1653, April 19, 1960; Order No. R-1682, May 20, 1960; Order No. R-1721, July 15, 1960; Order No. R-1798, October 14, 1960; Order No. R-1858, February 1, 1961; Order No. R-1879, March 1, 1961; Order No. R-2048, September 1, 1961; Order No. R-2063, October 1, 1961; Order No. R-2102, November 1, 1961; Order No. R-2140, January 1, 1962; Order No. R-2188, March 1, 1962; Order No. R-2265, July 1, 1962; Order No. R-2293, August 1, 1962; Order No. R-2340, November 1, 1962; Order No. R-2428, March 1, 1963; Order No. R-2486, June 1, 1963; Order No. R-2626, January 1, 1964; Order No. R-2743, August 1, 1964; Order No. R-2858, February 1, 1965; Order No. R-2896, May 1, 1965; Order No. R-2986, November 1, 1965; Order No. R-3057, May 1, 1966; Order No. R-3167, January 1, 1967; Order No. R-3403, May 1, 1968; Order No. R-3856, November 1, 1969; Order No. R-4260, March 1, 1972; Order No. R-4292, May 1, 1972; Order No. R-4690, December 1, 1973; Order No. R-4888, November 1, 1974; Order No. R-4963, March 1, 1975; Order No. R-5129, January 1, 1976; Order No. R-5339, February 1, 1977; Order No. R-5596, January 1, 1978; Order No. R-5772, July 1, 1978; Order No. R-5779, August 1, 1978; Order No. R-5843, December 1, 1978; Order No. R-6056, August 1, 1979; Order No. R-6180, November 1, 1979; Order No. R-6327, May 1, 1980; Order No. R-6421, August 1, 1980; Order No. R-6886, January 1, 1982; Order No. R-7046, August 1, 1982; Order No. R-7185; January 1, 1983; Order No. R-7277, May 1, 1983; Order No. R-7420, January 1, 1984; Order No. R-7764, January 1, 1985; Order No. R-7957, July 1, 1985; Order No. R-8180, April 1, 1986; Order No. R-8273, August 1, 1986; Order No. R-8640, April 1, 1988; Order No. R-8713, September 1, 1988; Order No. R-9101, February 1, 1990; Order No. R-9801, January 1, 1993; Order No. R-10178, September 1, 1994; Order No. R-10194, October 1, 1994, Order No. R-10290, January 1, 1995; Order No. R-10357, June 1, 1995; Order No. R-10464, October 1, 1995; Order No. R-10610, July 1, 1996; Order No. R-10676, October 1, 1996; Order No. R-10719, January 1, 1997; Order No. R-10761, March 1, 1997; Order No. R-10902, November 1, 1997.

T-25-N, R-2-W Secs. 2 through 11, 14 through 23.
T-25-N, R-3-W Secs. 1 through 24; W/2 Sec. 29.
T-25-N, R-4-W Secs. 1 through 4, 9 through 15; N/2 Sec. 16.
T-25-N, R-5-W Secs. 1 through 10.
T-25-N, R-6-W Secs. 1, 2, 3, 12.
T-26-N, R-2-W Secs. 4, 5; (Partial) Sec. 6; Secs. 7, 8, 9; W/2 Sec. 10; Secs. 16 through 21; Secs. 28, 29; (Partial) Sec. 30; (Partial) Sec. 31; Secs 32 through 35.
T-26-N, R-3-W Secs. 1 through 36.
T-26-N, R-4-W Secs. 1 through 29, 33 through 36.
T-26-N, R-5-W Secs. 1 through 23; W/2 Sec. 24; Secs. 25 through 36.
T-26-N, R-6-W Secs. 1 through 29, 32, 33 through 36.
T-26-N, R-7-W Secs. 1 through 15; N/2 Sec. 22; N/2 Sec. 24.
T-26-N, R-8-W Sec. 1; N/2 Sec. 4; N/2 Sec. 5; Sec. 6; E/2 Sec. 7; Sec. 12.
T-26-N, R-9-W Sec. 1; E/2 Sec. 2.
T-27-N, R-2-W W/2 Sec. 16; E/2 Sec. 17; E/2 Sec. 20; S/2, NW/4 Sec. 21; W/2 Sec. 28; N/2, S/2 (Partial) Sec. 29; N/2, S/2 (Partial) Sec. 30.
T-27-N, R-3-W Secs. 7 through 36.
T-27-N, R-4-W Secs. 1 through 36.
T-27-N, R-5-W Secs. 1 through 36.
T-27-N, R-6-W Secs. 1 through 36.
T-27-N, R-7-W Secs. 1 through 36.
T-27-N, R-8-W Secs. 1 through 36.
T-27-N, R-9-W Secs. 1 through 4; E/2 Sec. 6; E/2 Sec. 9; Secs. 10 through 14; N/2 Sec. 15; Secs. 23 through 26, 34, 35, 36.
T-28-N, R-3-W Secs. 4 through 9, 15 through 23; W/2 Sec. 24; W/2 Sec. 25; Secs. 26 through 35; W/2 Sec. 36.
T-28-N, R-4-W Secs. 7 through 36.
T-28-N, R-5-W Secs. 7 through 36.
T-28-N, R-6-W Secs. 7 through 36.
T-28-N, R-7-W Secs. 7 through 36.
T-28-N, R-8-W Secs. 7 through 36.
T-28-N, R-9-W (Partial) Sec. 7; Secs. 8 through 36.
T-28-N, R-10-W Secs. 10 through 14; N/2 Sec. 23; Sec. 24; N/2 Sec. 25.
T-29-N, R-3-W Secs. 19, 20, 21, 28 through 33.
T-29-N, R-4-W Secs. 4 through 9, 16 through 36.
T-29-N, R-5-W Secs. 1 through 36.
T-29-N, R-6-W Secs. 1 through 36.
T-29-N, R-7-W Secs. 1 through 36.
T-29-N, R-8-W Secs. 1 through 36.
T-29-N, R-9-W Secs. 1 through 36.
T-29-N, R-10-W Secs. 1 through 30, 33 through 36.
T-29-N, R-11-W Secs. 1, 12, 13, 24, 25, 26.
T-30-N, R-4-W W/2 Sec. 7; W/2 Sec. 18; Secs. 19 through 21; Secs. 28 through 33.
T-30-N, R-5-W W/2 Sec. 1; Secs. 2 through 36.
T-30-N, R-6-W Secs. 1 through 36.
T-30-N, R-7-W Secs. 1 through 36.
T-30-N, R-8-W Secs. 1 through 36.
T-30-N, R-9-W Secs. 1 through 36.
T-30-N, R-10-W Secs. 1 through 36.
T-30-N, R-11-W Secs. 1 through 16; E/2 Sec. 17; E/2 Sec. 20; Secs. 21 through 28; E/2 Sec. 29; E/2 Sec. 32; Secs. 33 through 36.
T-30-N, R-12-W Secs. 1, 2, 3, 4; N/2 Sec. 11; Sec. 12.
T-31-N, R-5-W Secs. 5 through 9, 16 through 21, 28 through 33.
T-31-N, R-6-W Secs. 1 through 36.
T-31-N, R-7-W Secs. 1 through 36.
T-31-N, R-8-W Secs. 1 through 36.
T-31-N, R-9-W Secs. 1 through 36.
T-31-N, R-10-W Secs. 1 through 36.
T-31-N, R-11-W Secs. 1 through 36.
T-31-N, R-12-W Secs. 1 through 36.
T-31-N, R-13-W Secs. 1, 2, 3; E/2 Sec. 4; E/2 Sec. 9; Secs. 10 through 15, 23, 24, 25.
T-32-N, R-5-W (Partial) Secs. 18, 19; W/2 Sec. 20; Secs. 30 through 33.
T-32-N, R-6-W Secs. 7, 8, 16 through 36.
T-32-N, R-7-W Secs. 7 through 36.
T-32-N, R-8-W Secs. 7 through 36.
T-32-N, R-9-W Secs. 7 through 36.
T-32-N, R-10-W Secs. 7 through 36.
T-32-N, R-11-W Secs. 7 through 36.
T-32-N, R-12-W Secs. 7 through 36.
T-32-N, R-13-W Secs. 24, 25, 26, 34, 35, 36.