

New Mexico
OIL CONSERVATION COMMISSION



GOVERNOR EDWIN L. MECHEM
CHAIRMAN
LAND COMMISSIONER E.S. WALKER
MEMBER
STATE GEOLOGIST W.B. MACEY
SECRETARY AND DIRECTOR

P. O. Box 871
Santa Fe, New Mexico

NOTE: OCC EXHIBIT 1 FROM OCTOBER 14 1954 HEARING
(Elvis Utz has this exhibit in his map rack)

EL PASO NATURAL GAS COMPANY

PROPOSED RULES AND REGULATIONS FOR
THE PICTURED CLIFFS GAS POOL
SAN JUAN COUNTY, NEW MEXICO

WELL SPACING AND ACREAGE REQUIREMENTS FOR DRILLING TRACTS.

RULE 1. Any well drilled a distance of one mile or more from the outer boundary of the Pictured Cliffs Gas Pool shall be classified as a wildcat well. Any well drilled less than one mile from the outer boundary of the Pictured Cliffs Gas Pool shall be spaced, drilled, operated and prorated in accordance with the Regulations in effect in the Pictured Cliffs Gas Pool.

RULE 2. Each well drilled or recompleted within the Pictured Cliffs Gas Pool shall be located on a tract consisting of not less than a quarter section of approximately 160 surface contiguous acres substantially in the form of a square which shall be a legal subdivision (quarter section) of the U. S. Public Land Surveys.

RULE 3. Each well drilled within the Pictured Cliffs Gas Pool shall not be drilled closer than 660 feet to any outer boundary line of such quarter section nor closer than 330 feet to a quarter-quarter section or subdivision inner boundary nor closer than 1320 feet to a well drilling to or capable of producing from the same pool.

RULE 4. The Secretary of the Commission shall have authority to grant exception to the requirements of Rules 2 and 3 where application has been filed in due form and such exception is required because of conditions resulting from previously drilled wells in the area or, in the case of Rule 3, the necessity of exception is based on topographic conditions.

Applicants shall furnish all operators of leases offsetting the lease containing subject well a copy of the application to the Commission, and applicant shall include with his application a list of names and addresses of all such operators, together with a written stipulation that all such operators have been properly notified. The Secretary of the Commission shall wait at least 20 days before approving any such exception and shall approve such exception only in the absence of objection of any offset operators. In the event an operator objects to the exception the Commission shall consider the matter only after proper notice and hearing.

RULE 5. The provision of Statewide Rule 104 Paragraph (k), shall not apply to the Pictured Cliffs Gas Pool.

GAS PRORATION

RULE 6. The Commission after notice and hearing, shall consider the nominations of gas purchasers from the Pictured Cliffs Gas Pool and other relevant data and shall fix

the allowable production in the Pictured Cliffs Gas Pool, and shall allocate production among the gas wells in the Pictured Cliffs Gas Pool delivering to a gas transportation facility upon a reasonable basis and recognizing correlative rights, and shall include in the proration of such pool 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 well.

PRORATION UNITS

RULE 7. A. For the purpose of gas allocation in the Pictured Cliffs Gas Pool a standard proration unit shall consist of approximately 320 contiguous surface acres consisting of the North, South, East or West half of a section and being a legal subdivision of the U. S. Public Land Surveys; provided, however, that a gas proration unit other than a legal half section may be formed after notice and hearing by the Commission, or as outlined in paragraph B. Any standard proration unit consisting of between 315 and 325 contiguous surface acres shall be considered as containing 320 acres for the purpose of gas allocation.

B. The Secretary of the Commission shall have authority to grant an exception to Rule 7 A without notice and hearing:

1. Where the unorthodox size or shape of the tract is due to a variation in legal subdivision of the U. S. Public Land Surveys; or

2. Where application has been filed in due form and where the following facts exist and the following provisions are complied with:

a. The acreage assigned the non-standard unit lies wholly within a legal section.

b. The acreage assigned the non-standard unit is adjacent to or contiguous with the acreage containing said well.

c. The operator making application for such exception to Rule 7 A includes with such application:

(1) waivers from (a) all operators owning interests in the half 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 proration unit; or

(2) a list of names and addresses of all operators outlined in paragraph (1), together with a stipulation that proper notice has been given said operators at the addresses given and no objection is received by the Commission from such operators within 20 days after the Commission receives such application.

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

e. The length or width of the non-standard gas proration unit does not exceed 5280 feet.

C. The Secretary of the Commission shall have authority to grant an exception to Rule 7 A after notice and hearing, when the operator is unable to comply with the provisions of Rule 7 B.

GAS ALLOCATION

RULE 8. At least 30 days prior to the beginning of each gas proration period the Commission shall hold a hearing after due notice has been given. The Commission shall cause to be submitted by each gas purchaser its nominations of the amount of gas which each in good faith actually desires to purchase within the ensuing proration period, by months, from the Pictured Cliffs Gas Pool.

When a purchaser of gas, after filing its nominations for the proration period shall find that its requirements for gas have increased or decreased from the amount nominated for any month during the proration period, such purchaser shall indicate its revised estimated requirements during such month by filing supplemental nominations with the Commission at least three days prior to the regular hearing of the Commission for the month preceding such changed requirements.

COMMISSION FORM C-121-A.

All nominations shall be filed on ~~the form~~ prescribed by the Commission.

RULE 9. The Commission shall hold a public hearing at least thirty (30) days prior to each gas proration period to determine the reasonable market demand for gas produced from the Pictured Cliffs Gas Pool and shall issue a proration schedule for that proration period.

Also, the Commission shall hold a public hearing between the 15th and 20th days of each month to determine the reasonable market demand for gas produced from the Pictured Cliffs Gas Pool for the ensuing proration month and shall issue a proration schedule for that pool allocating the amount of gas which each well may produce during the ensuing proration month.

The monthly proration schedule shall include a tabulation of allowable and production for the second preceding month, together with an adjusted allowable computation for the second preceding month, said adjusted allowable shall be computed by comparing the total pool allowable assigned with the total pool production. In the event the total pool allowable assigned is greater than the total pool production, the allowable assigned the non-marginal and non-limited wells shall be reduced proportionately; and in the event such allowable assigned is less than such production, then the allowable assigned the non-marginal and non-limited wells shall be increased proportionately.

The Commission shall include in each proration schedule each well in said pool delivering to a gas transportation facility or lease gathering system and 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 well. The total allowable to be allocated to said pool for each proration period and each month shall be equal to the sum of the purchasers' nominations with any adjustment which the Commission may make. The Commission first shall determine and classify the marginal wells in said pool.

A well in either of the following categories shall be classified as marginal:

Class A. Any well whose producing capacity into existing gas transportation facilities is less than 100 MCF per day. Such a well shall be permitted to produce all its producing capacity into existing gas transportation facilities.

Class B. Any well which the Commission finds has an actual producing capacity less than its assigned allowable. Such a well shall be permitted to produce all its producing capacity into existing gas transportation facilities, restricted only by the allowable it would have been assigned under application of the proration formula.

A well classified in either of the marginal categories shall accrue neither underproduction nor overproduction.

The allocation to said pool shall be divided and allocated among the wells appearing on each proration schedule in the following manner: (1) the sum of the allowables for all marginal wells ~~and of wells found by the Commission to have an actual producing capacity less than the assigned allowable~~ shall be subtracted from the total pool allowable, (2) a tentative allocation to the non-marginal wells shall be made by dividing the remaining pool allowable among the remaining wells in said pool in the proportion that the product of each well's calculated deliverability multiplied by the acreage attributable to that well bears to the sum of such product for all such remaining wells to be prorated, (3) when the tentative allowable received by a well is in excess of its known producing ability, that well shall be classified as a limited well and shall have its allowable limited to its producing ability for the period of time covered by that proration schedule, (4) the allowable for the pool remaining after subtracting the sum of the limited allowables of all limited wells shall be reallocated to the remaining wells by application of the same formula, and (5) if such reallocation shall result in placing any other well within the limited classification, the allowable for the pool remaining after subtracting the limited allowables of all such additional limited wells shall be allocated among the remaining wells by application of the same formula until no well has received an allowable in excess of its known producing ability.

The calculated deliverability mentioned in the preceding paragraph shall be that deliverability as determined by a test taken in accordance with the provisions of ~~Order No. R-333 or~~ Order No. R-333A of the New Mexico Oil Conservation Commission or any amendments thereof. At the time of institution of proration, a connected well having no deliverability tests shall have its deliverability estimated as _____ per cent (____ %) of its three hour initial potential pending completion of its deliverability test. A temporary allowable shall be assigned such well using the estimated deliverability in the allocation formula until the deliverability test is taken, at which time those previous allowables granted the well by use of the estimated deliverability shall be revised by use of the actual calculated deliverability. In like manner the estimated deliverability for a well that is connected during the period between the end of one annual deliverability test and the beginning of the next annual deliverability test shall be determined and used for proration purposes pending the completion of the deliverability test for such a well. After the well is connected, the operator may elect to test the well in accordance with the procedure prescribed in

AZTEC = 14%
F-K = 13
So. Plains = 14.7

Order No. ~~R-333~~ or in Order No. R-333A for the annual deliverability test or to postpone such test until the next annual deliverability test period.

BALANCING OF PRODUCTION

RULE 10. Underproduction: The dates 7:00 A. M. , March 1, and 7:00 A. M. , September 1, shall be known as balancing dates and the periods of time bounded by these dates shall be known as gas proration periods. 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 first succeeding proration period in addition to the normal gas allowable for such succeeding period. That portion of such cumulative underproduction carried forward into the first succeeding proration period, which is not made up during said period shall be deducted from the total underproduction at the end of the period, resulting in only that volume of underproduction accrued during said period being carried forward as cumulative underproduction into the next succeeding proration period.

If it appears that such continued underproduction has resulted from inability of the well to produce its allowable, it may be classified as a Class B marginal well as defined in Rule 9 and its allowable reduced to the well's ability to produce into existing gas transportation facilities. All underproduction accumulated to a well classified as marginal shall be added to the allocation for non-marginal wells and distributed thereto.

RULE 11. Overproduction: An operator will be allowed to overproduce a well during a proration period and to accumulate and carry over such overproduction into the first succeeding proration period in an amount not in excess of the total allowable assignable to the well based on nominations for the first succeeding proration period. Should the allowable so calculated be less than the accumulated overproduction at the beginning of the first succeeding proration period, the well must be shut-in until the overproduction has been reduced to such allowable. Should the well's cumulative status not be brought in balance during the first succeeding proration period, that overproduction accumulated at the end of the first succeeding proration period must be brought in balance during the second succeeding proration period or the well must be shut-in at the end of the second succeeding proration period until its cumulative status is in balance.

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 12. 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 13. 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 Form C-104 and Form C-110 and the plat described above, whichever date is the later.

REPORTING OF PRODUCTION

RULE 14. The monthly gas production from each gas proration unit shall be metered separately and the gas production therefrom shall be reported to the Commission by the operator so as to reach the Commission on or before the twentieth 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. 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 on the lease for consumption in lease houses, heaters, treaters, combustion engines and other similar lease equipment and that gas vented in testing or as required to maintain production shall not be charged against the well's allowable.

Copies of Form C-115, Monthly Production Report, submitted in compliance with Rule 14, shall be distributed by the operator as follows: Original to Oil Conservation Commission, Box 871, Santa Fe; two copies to Oil Conservation Commission, Box 697, Aztec, New Mexico.

El Paso Natural Gas Company
MAIN OFFICE 000
TENTH FLOOR BASSETT TOWER

Case 729

RECEIVED AT 8:42 El Paso, Texas

October 28, 1954

ADDRESS REPLY TO:
1006 MAIN ST., ROOM 1901
HOUSTON 2, TEXAS

Mr. William B. Macey, Secretary Director
New Mexico Oil Conservation Commission
Post Office Box 871
Santa Fe, New Mexico

In re: Case 729 - Concerning Proration Rules for
the Aztec, Fulcher-Kutz and South Blanco
Pictured Cliffs Gas Pools in San Juan
Basin, New Mexico.

It is the desire of the El Paso Natural Gas Company to make slight amendments in the rules presented by this Company at the August 18, 1954, hearing on the above mentioned matter.

It is considered appropriate to revise RULE 7. A. of the rules submitted so as to permit an operator to assign a legal quarter section of approximately 160 acres as the proration unit for his well without having a hearing or obtaining waivers. Attached hereto is a copy of the amended RULE 7. A. proposed by this Company; also attached hereto is a copy of page four of the recommended rules on which is indicated in red a portion of the wording of RULE 9 which should be omitted. The omitted portion is not necessary since the wells referred to in said portion are those wells defined elsewhere in RULE 9 as Class B marginal wells, and, therefore, are considered when providing for marginal wells in the rule as amended.

It is believed that this manner of classifying marginal wells and providing for the handling of same when calculating allowables is superior to the manner proposed in the rules submitted by this Company for the West Kutz Pictured Cliffs Pool and it is recommended that this be considered when preparing rules for that pool.

Respectfully submitted,

EL PASO NATURAL GAS COMPANY

F. Norman Woodruff

F. Norman Woodruff

Attach.
FNW;d

El Paso Natural Gas Company

MAIN OFFICE 2002

TENTH FLOOR BASSETT TOWER

El Paso, Texas

W. Woodruff

ADDRESS REPLY TO:
1006 MAIN ST., ROOM 1901
HOUSTON 2, TEXAS

October 29, 1954

Mr. William B. Macey, Secretary Director
New Mexico Oil Conservation Commission
Post Office Box 871
Santa Fe, New Mexico

In re: Case 729

Dear Mr. Macey:

We enclose the two attachments, amended RULE 7
and page four of the recommended rules, referred
to in Mr. F. N. Woodruff's letter to you dated
October 28, 1954. We omitted these in mailing.

Very truly yours,

Virian Rahlgvist
Secretary

Attachments:
RULE 7
page 4

PRORATION UNITS

RULE 7. A. For the purpose of gas allocation in the Pictured Cliffs Gas Pool a standard proration unit shall consist of approximately 320 contiguous surface acres consisting of the North, South, East or West half of a section and being a legal subdivision of the U. S. Public Land Surveys; provided, however, that an operator may elect to assign to his well one half a standard proration unit consisting of a quarter section of approximately 160 acres and being a legal subdivision of the U. S. Public Land Surveys. A gas proration unit other than a legal half or quarter section may be formed after notice and hearing by the Commission, or as outlined in paragraph B. Any standard proration unit consisting of between 315 and 325 contiguous surface acres shall be considered as containing 320 acres for the purpose of gas allocation and any legal quarter section consisting of between 158 and 162 contiguous surface acres assigned as a proration unit shall be considered as containing 160 acres for the purpose of gas allocation.

which is reasonably capable of handling the type of gas produced by such well. The total allowable to be allocated to said pool for each proration period and each month shall be equal to the sum of the purchasers' nominations with any adjustment which the Commission may make. The Commission first shall determine and classify the marginal wells in said pool.

A well in either of the following categories shall be classified as marginal:

Class A. Any well whose producing capacity into existing gas transportation facilities is less than 100 MCF per day. Such a well shall be permitted to produce all its producing capacity into existing gas transportation facilities.

Class B. Any well which the Commission finds has an actual producing capacity less than its assigned allowable. Such a well shall be permitted to produce all its producing capacity into existing gas transportation facilities, restricted only by the allowable it would have been assigned under application of the proration formula.

A well classified in either of the marginal categories shall accrue neither underproduction nor overproduction.

The allocation to said pool shall be divided and allocated among the wells appearing on each proration schedule in the following manner: (1) the sum of the allowables for all marginal wells ~~and of wells found by the Commission to have an actual producing capacity less than the assigned allowable~~ shall be subtracted from the total pool allowable, (2) a tentative allocation to the non-marginal wells shall be made by dividing the remaining pool allowable among the remaining wells in said pool in the proportion that the product of each well's calculated deliverability multiplied by the acreage attributable to that well bears to the sum of such product for all such remaining wells to be prorated, (3) when the tentative allowable received by a well is in excess of its known producing ability, that well shall be classified as a limited well and shall have its allowable limited to its producing ability for the period of time covered by that proration schedule, (4) the allowable for the pool remaining after subtracting the sum of the limited allowables of all limited wells shall be reallocated to the remaining wells by application of the same formula, and (5) if such reallocation shall result in placing any other well within the limited classification, the allowable for the pool remaining after subtracting the limited allowables of all such additional limited wells shall be allocated among the remaining wells by application of the same formula until no well has received an allowable in excess of its known producing ability.

The calculated deliverability mentioned in the preceding paragraph shall be that deliverability as determined by a test taken in accordance with the provisions of Order No. R-333 or Order No. R-333A of the New Mexico Oil Conservation Commission or any amendments thereof. At the time of institution of proration, a connected well having no deliverability tests shall have its deliverability estimated as _____ per cent (%) of its three hour initial potential pending completion of its deliverability test. A temporary allowable shall be assigned such well using the estimated deliverability in the allocation formula until the deliverability test is taken, at which time those previous allowables granted the well by use of the estimated deliverability shall be revised by use of the actual calculated deliverability. In like manner the estimated deliverability for a well that is connected during the period between the end of one annual deliverability test and the beginning of the next annual deliverability test shall be determined and used for proration purposes pending the completion of the deliverability test for such a well. After the well is connected, the operator may elect to test the well in accordance with the procedure prescribed in

NEW MEXICO WESTERN OIL AND GAS COMPANY

Case 729
MAIL OFFICE 300
1501 MERCANTILE BANK BUILDING
DALLAS 1, TEXAS

October 29, 1954

Mr. William Macey, Secretary,
Oil Conservation Commission,
State of New Mexico,
Santa Fe, New Mexico.

Re: Case Number 729
Fulcher-Kutz, Aztec and South Blanco
Pictured Cliffs Gas Proration
San Juan and Rio Arriba Counties,
New Mexico.

Gentlemen:

New Mexico Western Oil and Gas Company is the owner of a substantial interest in at least five Pictured Cliffs Formation gas wells lying within the presently delineated or proposed delineations of the captioned Pictured Cliffs Gas Pools, and in addition, is the owner of approximately twenty-five thousand acres of Oil and Gas Leases considered potentially productive from the Pictured Cliffs Formation within such Gas Pools, and has actively participated in the hearings of the Oil Conservation Commission held in Case Number 729, on August 18 and 19, and October 14, 1954.

Based upon New Mexico Western Oil and Gas Company's participation in the subject hearing, it is such company's observation that the testimony introduced by the various witnesses therein is essentially deficient in substantiated evidence of drainage by the wells presently producing from the Pictured Cliffs Formation within these Gas Pools. It has likewise been the observation of New Mexico Western Oil and Gas Company that no accurate reserve data has been introduced upon which a precise determination of economically recoverable reserves underlying these pools may be based. The failure of the various witnesses to introduce such testimony is apparently based, not upon any intent to conceal information from the Commission, but rather upon the non-uniformity of completion techniques used over a number of years in completing wells in these Gas Pools, and due to the wide variance of the producing life of the wells situated therein. It is apparent that as of the present date, sufficient time has not elapsed to secure sufficient production history to permit the accurate completion of pressure decline curves, and to thereby determine the contemplated productive life of the reservoirs. However, it is apparent to the undersigned,

New Mexico Western Oil and Gas Company, that the calculated deliverability of each well situated within these fields is susceptible of accurate and precise determination, and that the deliverability, as so calculated, takes into consideration and gives the proper weight to porosity, permeability, net pay thickness, reservoir pressure and open flow capacity. all of which factors, together with a consideration of acreage, are considered by the majority of the witnesses testifying before the Commission as essential in determining the recoverable reserves.

We believe that a proper proration formula should be adopted by the Commission that will enable each well to produce currently its assigned allowable, and to ultimately produce the gas underlying the lease upon which it is situated, and thereby prevent the waste of the natural gas resources of the State of New Mexico, and at the same time, foster the economic progress of the region under discussion. While New Mexico Western Oil and Gas Company has not been operating in the area under consideration for an extended length of time, it nevertheless believes that based upon its experience, and based upon the experience of other operators in the field, that the most fair and equitable proration formula is one which allocates to all non-marginal wells an allowable in the proportion that the product of each individual well's calculated deliverability and acreage bears to the sum of such product for all non-marginal wells in the field. We believe that a well which is not capable of producing its assigned allowable should be classified as a marginal well, and same should be allowed to produce all gas which it is capable of producing into existing pipeline facilities.

New Mexico Western Oil and Gas Company desires to endorse the proposed rules and regulations for the allocation and production of gas from the various Pictured Cliffs Pools under consideration which have been advocated by El Paso Natural Gas Company, with the exception that the historic spacing unit for Pictured Cliffs gas production in the subject pools of one hundred sixty contiguous surface acres should be adopted as the standard proration unit. It is the belief of New Mexico Western Oil and Gas Company that the testimony presented to the Commission at its recent hearings relevant to a larger allocation unit has been singularly inconclusive and has not demonstrated any necessity

STANOLIND OIL AND GAS COMPANY

OIL AND GAS BUILDING

FORT WORTH, TEXASJAMES K. SMITH
DIVISION ATTORNEY

October 26, 1954

Statement of Stanolind Oil and Gas Company
 In re: Gas Proration - Fulcher-Kutz (Pictured
 Cliffs) Pool - Case No. 729.

Oil Conservation Commission
 of the State of New Mexico
 Santa Fe, New Mexico

Attention: Mr. W. B. Macey, Secretary and Director

Gentlemen:

In accordance with the suggestion of the Commission, we are submitting here-
 in a written statement with reference to the proration of gas and the allocation fac-
 tors to be used in the Fulcher-Kutz (Pictured Cliffs) Pool.

Having in mind the mandates of Section 13b of the Conservation Act, as
 amended, the testimony presented by Stanolind Oil and Gas Company showed that the
 Fulcher-Kutz (Pictured Cliffs) Pool is one common source of supply and that communi-
 cation exists throughout the field. Our data reveal that one well will efficiently
 and economically drain 320 acres and that there would be no significant difference
 in ultimate recovery from a lease or tract drilled to a density of one well to each
 320 acres compared to that which would be obtained if drilled to a density of one
 well to each 160 acres. We have demonstrated, in light of this fact, that the drill-
 of an additional well on a 320-acre tract is unsound economically and that, there-
 fore, the optimum proration unit should be 320 acres. Moreover, a 320-acre proration
 unit, as we conceive it, would provide for those areas in the field which are already
 developed on a spacing pattern of less than 320 acres and would also provide an in-
 centive for future exploitation in the undeveloped portions of the field where re-
 coverable reserves are indicated to be relatively low.

In recommending a proration formula, Stanolind has considered the provisions of Sections 13a and 12c of the Conservation Act as amended. We have presented evidence to show that a definite relationship does exist between the ability of a well to produce and the recoverable reserves. This was shown by a series of maps and graphs relating to the various factors which combine to determine the recoverable reserves and those factors which affect the ability of a well to produce. Our evidence showed that variations in these factors exist and that these variations affect both the recoverable reserves and the deliverability of the wells in the field. Our testimony indicated that greater reserves lie near the center of the field where the most productive wells are also located. The evidence showed that there is a decrease in recoverable reserves and in deliverability of the wells as you proceed from the center toward the periphery of the field. While there is a definite relationship between recoverable reserves and the ability of a well to produce, there is some evidence to indicate that it is not a perfect straight-line relationship.

We have, therefore, recommended a formula of 75 per cent acreage x deliverability / 25 per cent acreage, with the additive acreage factor included to compensate for these observed deviations. The acreage factor will also give additional consideration to those operators who have previously drilled wells in the field on a spacing pattern of 160 acres or less. We submit that this formula is a reasonable one and will result in the most equitable distribution of the allowable among the wells in this field.

We have recommended a minimum allowable for this pool of 100 MCF per well per day, which is calculated to be the ability of the well to produce at a line pressure equivalent to one-half of the average field shut-in casing pressure determined from the last preceding annual deliverability tests. Without such a defined basis, the

October 26, 1954

mere provision of a minimum allowable has little or no meaning.

We, therefore, urge the Commission to adopt the rules as proposed by Stanolind Oil and Gas Company, a copy of which rules is a part of the record of this case.

Respectfully submitted,



JAMES K. SMITH
Division Attorney
STANOLIND OIL AND GAS COMPANY

JRT:ch

MAIN OFFICE OGC

RECEIVED
OCT 30 1954

PUBCO DEVELOPMENT, INC.

BOX 1360

ALBUQUERQUE, NEW MEXICO

October 29, 1954

Re: Case No. 729
Fulcher-Kutz, Aztec and
South Blanco Pictured
Cliffs Gas Proration -
San Juan and Rio Arriba
Counties, New Mexico

Mr. William Macey, Secretary
Oil Conservation Commission
State of New Mexico
Santa Fe, New Mexico

Gentlemen:

Pubco Development, Inc., is the operator or has a working interest in seven (7) Pictured Cliffs formation gas wells lying within the presently delineated boundaries of the captioned Pictured Cliffs gas pools, and, in addition, is the owner of a substantial amount of acreage considered potentially productive from the Pictured Cliffs formation. Our company has actively participated in the hearings of the Oil Conservation Commission held in Case No. 729 on August 18 and 19 and October 14, 1954.

It is the opinion of Pubco Development, Inc., that initial potential or deliverability is the only factor known for every well completed in the subject fields which is directly related to the recoverable gas reserves. All subsurface geological and engineering information developed by Pubco Development, Inc., has shown a direct relation between well deliverability and reserves situated under the well. Core analyses taken by the company in the Pictured Cliffs formation in several wells have shown varied amounts of connate water, total effective net sand, porosity, and permeability, all of which are integral parts of reserve evaluation. Deliverabilities have been estimated by the company with extreme accuracy where the recoverable reserve components, such as total effective net sand and porosity, have been determined by use of cores and/or electric logs. The deliverability of each well situated within these fields, as calculated under the present formula of the Commission, adequately takes into consideration and gives proper weight to reservoir pressure, open flow capacity, porosity, permeability and net pay thickness, all of which are considered essential in determining recoverable reserves under a particular tract of land.

In the interest of avoiding waste and protecting the rights of all interested operators, and to protect the incentive and investment of those who through careful selection and operation have obtained better than average recoverable reserves, Pubco Development, Inc., submits the following individual well

October 29, 1954

formula for consideration and adoption by the Commission:

Well Allowable = Deliverability X Acreage Factor X Proration Factor

Where: Deliverability is determined under rules promulgated by
the Oil Conservation Commission

Acreage Factor = $\frac{\text{Acres in well site}}{160}$

Proration Factor = $\frac{\text{Market in MCF}}{\text{Sum of deliverability of all wells}}$

With the exception of Rule No. 7, discussed below, Pubco wishes to concur with and endorse the rules and regulations proposed by El Paso Natural Gas Company for the allocation and production of gas from the various Pictured Cliffs pools described above.

Rule No. 7 of the proposed rules of El Paso Natural Gas Company advocates a standard proration unit of 320 contiguous surface acres with an allowance of five contiguous surface acres, plus or minus. It is our company's position that the historic spacing unit of 160 contiguous surface acres should be adopted as the standard proration unit for Pictured Cliffs gas production in the subject pools.

The testimony presented at recent hearings of the Commission to the effect that a well will drain any more than 160 surface acres has been so inconclusive that a standard proration unit based upon any other unit than 160 acres would be arbitrary and capricious.

Until sufficient data or controlled interference or pressure decline tests have been conducted in the subject pools, it is our belief that the 160-acre spacing unit should be adopted as the standard proration unit.

With the exception noted above, Pubco Development, Inc., concurs in the recommendation of El Paso Natural Gas Company that the rules and regulations heretofore presented by that company be adopted by the Oil Conservation Commission.

Yours very truly,

PUBCO DEVELOPMENT, INC.

By


D. W. Reeves, President

DWR:ml



SKELLY OIL COMPANY

PRODUCTION DEPARTMENT

J. S. FREEMAN
VICE PRESIDENT

TULSA 2, OKLAHOMA

October 22, 1954

W. P. WHITMORE
CHIEF PETROLEUM ENGINEER

G. W. SELINGER
PRORATION ATTORNEY

J. H. McCULLOCH
CHIEF CLERK

✓
Governor Edwin L. Mechem, Chairman
Executive Office, Capitol Building
Santa Fe, New Mexico

Land Commissioner E. S. Walker
P. O. Box 791
Santa Fe, New Mexico

Mr. W. B. Macey
Oil Conservation Commission
P. O. Box 871
Santa Fe, New Mexico

*Is W.B. Macey
has he had the
information
yet?*

RECEIVED
OFFICE OF THE GOVERNOR
SANTA FE, N.M.
OCT 25 8 44 AM '54

Re: Case No. 729
Gas Proration
Pictured Cliffs Formation
San Juan Basin

Gentlemen:

Operators at their election have been given until November 1 to file written statements, briefs, or otherwise with the New Mexico Oil Conservation Commission in Case No. 729 involving proration of gas in the Pictured Cliffs Formation of three fields in the San Juan Basin; namely, Aztec, Fulcher Kutz, and South Blanco.

We desire to avail ourselves of this opportunity, and are herewith attaching statement on behalf of Skelly Oil Company which is in opposition to the use of deliverability in the allocation formula and advocating the establishment of allowables on a unit basis, or in the alternative for a formula of acreage times pressure. We believe, however, that the Commission should provide for an allocation formula of unit allowable based on the size of units established for the field.

Yours very truly,

George W. Selinger
George W. Selinger

GWS:dd

cc: Mr. J. N. Dunlavey

CASE NO. 729
STATEMENT ON BEHALF OF
SKELLY OIL COMPANY

At the outset we have stated our position as being that the Commission should continue its time honored practice of prorating oil and gas, or both, on the basis of unit allowables; that is, establish the size of the units and allocate on the basis of 100% surface acreage. As an alternative, however, should the Commission change from such a policy, we suggested the use of pressure in the formula as acreage times pressure.

The Commission has patiently sat through several days of testimony and we have come to the conclusion that no one has presented sufficient reasons to the Commission for changing its policy and prorate gas on the basis of deliverability. In fact, anyone that has recommended deliverability in the formula were quick to say in the same breath that it should be modified by surface acreage.

It constantly has been brought to the Commission's attention that the more you get away from the 100% acreage unit basis, which is beyond any shadow of a doubt the easiest and most practicable and what is more important the only formula that can be put into operation immediately, the more complicated becomes the administration.

What are the objections to deliverability? Well, the record speaks for itself:

1. On page 12 of transcript El Paso's witness stated that "deliverability tests on some wells are made after several months production and some with several years production."

2. On page 19 of transcript El Paso's witness stated that "where no actual deliverability test was taken on a well, then an estimated one would be used."

3. On page 37 the witness stated that "in Aztec Pool only 51% of wells have had actual deliverability tests." In Fulcher Kutz only 20% of wells and in South Blanco only 40% of wells have had actual deliverabilities.

4. On page 42 the witness testified as to impossibility of establishing immediate proration using deliverability in the formula.

5. On pages 56-57 the witness admitted that the basis of deliverability is dependent on the line pressure of each purchaser, which pressure varies.

6. Complications of a deliverability formula is immediately noted by the requirement that a minimum must be established and in the recommendation of El Paso two different minimums (page 49 and pages 69-72 of transcript.)

7. The time of 28 days required to take a deliverability test for each of the wells involved indicates quite a lengthy period for the large number of wells to be tested.

What are the advantages of 100% acreage unit basis:

1. Simplicity in administration on the part of the state.
2. Simplicity in the understanding on the part of the operator without the use of experts with their slide rules.
3. Such proration formulae can be put into effect immediately.
4. No minimum need be established.

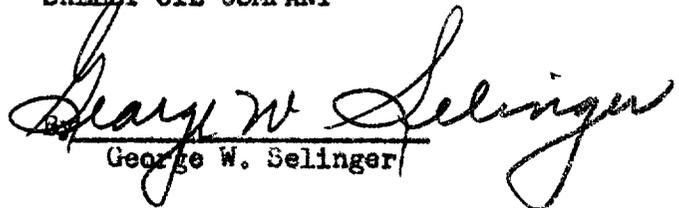
As an alternative, should the Commission desire to change into a formula other than 100% acreage unit basis, then what are the advantages of pressure alone over deliverability?

1. El Paso in Exhibit #2, page 4 of transcript, and the Commission's own witness on the last day of hearing October 14, used pressures to define the various fields.
2. Pressure is a step precedent to determining deliverability; that is, in calculating deliverability, pressure must be used (page 37 of transcript.)
3. On page 71, Southern Union questioned accuracy of pressure - query? How can you criticize pressure and at the same time uphold accuracy of deliverability. See Stanolind's answer on page 108.
4. Stanolind, on pages 82-85 and pages 92-93 of Exhibit #6, thoroughly explained pressures throughout the area and the information it gives on the reservoir.
5. Annual pressures are required; however, it is for a seven day period as compared to an additional 21 days required for deliverabilities (total of 28 days.)

Our conclusion is, therefore, that the 100% acreage unit basis for proration should be adopted and continued by the Commission as the way to prorate gas in the San Juan Basin, and more particularly the Pictured Cliffs formation.

Respectfully submitted,

SKELLY OIL COMPANY


George W. Selinger

BEFORE THE OIL CONSERVATION COMMISSION OF

THE STATE OF NEW MEXICO

IN THE MATTER OF THE APPLICATION OF
THE OIL CONSERVATION COMMISSION ON
ITS OWN MOTION FOR AN ORDER PROVIDING
FOR PRORATION OF GAS IN THE FULCHER-
KUTZ (PICTURED CLIFFS) POOL, SAN JUAN
COUNTY, NEW MEXICO

BEFORE THE
OIL CONSERVATION COMMISSION
SANTA FE, NEW MEXICO

Blawie EXHIBIT No. 8
CASE 739

ORDER OF THE COMMISSION

BY THE COMMISSION:

This case came on for hearing at _____ o'clock a.m., on
_____, at Santa Fe, New Mexico, before the Oil Con-
servation Commission of New Mexico, hereinafter referred to as the
"Commission".

NOW, on this _____ day of _____, 19____, the Commission, a
quorum being present, having considered the testimony adduced, the
exhibits received, the statements of interested parties, the official
records of this Commission, and other pertinent data, and being fully
advised in the premises,

FINDS:

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

(2) That the Commission, for the purpose of preventing waste
and for the protection of correlative rights, should issue an order
to provide for a definite method of allocating gas between proration
units in the Fulcher-Kutz (Pictured Cliffs) Pool.

IT IS THEREFORE ORDERED:

That special pool rules applicable to the Fulcher-Kutz (Pictured
Cliffs) Gas Pool, be, and the same hereby are, promulgated as follows:

RULE 1 -- PRORATION UNITS

A. For the purpose of gas allocation in the Fulcher-Kutz (Pic-
tured Cliffs) Gas Pool, a standard proration unit shall consist of between
315 and 325 contiguous surface acres substantially in the form of a rectangle,
which shall be a legal subdivision of the U. S. Public Land Surveys; pro-
vided, however, that a proration unit not conforming to the above requirements

may be formed after notice and hearing by the Commission or as outlined in paragraphs B or C Below. Any proration unit containing less than 315 acres or more than 325 acres shall be a non-standard unit and its allowable shall be decreased or increased in accordance with the allocation formula. Any standard proration unit consisting of between 315 and 325 contiguous surface acres shall be considered as containing 320 acres for the purpose of gas allocation.

B. Upon compliance with Rule 6 below, an operator may, without notice and hearing:

(1) Drill and/or produce wells on a standard proration unit in conformance with applicable spacing rules for the Fulcher-Kutz (Pictured Cliffs) Pool; or

(2) Drill and/or produce a well on a legal quarter section consisting of 158 to 162 acres in conformance with applicable spacing rules for the Fulcher-Kutz (Pictured Cliffs) Pool; or

(3) Produce all wells existing as of the date of this order on a standard proration unit; or

(4) Produce all wells existing as of the date of this order on less than a standard proration unit, provided there is insufficient acreage available to be attributed to the well or wells to form a standard proration unit;

PROVIDED, HOWEVER, that in each of the four cases mentioned above, the allowable for each well shall be decreased proportionately in accordance with the allocation formula applicable to this pool.

C. The secretary of the Commission shall have authority to grant an exception to Paragraph A without notice and hearing where application has been filed in due form and the following facts exist and the following provisions are complied with:

(1) The unorthodox size or shape of the tract is due to a variation in legal subdivision of the U. S. Public Land Surveys; or

(2) Application has been filed in due form and the following facts exist and the following provisions are complied with:

(a) The acreage assigned the non-standard unit lies wholly within a legal section.

(b) The acreage assigned the non-standard unit is adjacent to or contiguous with the acreage containing said well.

(c) The operator making application for such exception to Rule 1A includes with such application:

1. waivers from (a) all operators owning interests in the half 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 proration unit; or

2. a list of names and addresses of all operators outlined in paragraph 1, together with a stipulation that proper notice has been given said operators at the addresses given and no objection is received by the Commission from such operators within 20 days after the Commission receives such application.

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

RULE 2 At least 30 days prior to the beginning of each gas proration period, 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 Fulcher-Kutz (Pictured Cliffs) 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 within the ensuing proration period. "Preliminary Nominations" shall be submitted on a form prescribed by the Commission.

RULE 3

Each month, the Commission shall cause to be submitted by each gas purchaser its "Supplemental Nominations" of the amount of gas which each in good faith actually desires to purchase within the ensuing proration month from the Fulcher-Kutz Gas Pool. The Commission shall hold a public hearing between the 15th 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. Included in the monthly proration schedule shall be a tabulation of allowable and production for the second preceding month together with an adjusted allowable computation for the second preceding month. Said adjusted allowable shall be computed by comparing the actual allowable assigned with the actual production. In the event the allowable assigned is greater than the actual production, the allowables assigned the top allowable units shall be reduced proportionately, and in the event the allowable assigned is less than the production, then the allowables assigned the top allowable units shall be increased proportionately. "Supplemental Nominations" shall be submitted on a form prescribed by the Commission.

The Commission shall include in the proration schedule the gas wells in the Fulcher-Kutz Gas Pool delivering to a gas transportation facility or lease gathering system, and shall include in the proration schedule of this gas pool 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 well. The total allowable to be allocated to the pool each month shall be equal to the sum of the supplemental nominations together with any adjustment which the Commission deems advisable.

Marginal wells are defined as wells not capable of producing in excess of 100 MCF per day. In calculating the capacity of a well to produce, the average shut in pressure of all of the wells in the pool, as determined by the preceding years' deliverability test, shall be divided by two, and each well's ability to produce against such pressure shall establish its capacity to produce. All wells capable of producing in excess of 100 MCF per day shall receive an allowable of at least 100 MCF per day.

The allocation to a pool remaining after subtracting the capacity of marginal wells and assigned minimum allowables shall be divided and allocated ratably among the non-marginal units in the pool on the following basis:

A. Seventy-five (75) per cent of such remaining allowable shall be divided and allocated ratably among the non-marginal wells in the proportion that the product of the deliverability and acreage assigned each well for proration purposes bears to the summation of the products of these factors for all such non-marginal wells in the pool.

B. Twenty-five (25) per cent of such remaining allowable shall be divided and allocated ratably among the non-marginal wells in the proportion that the acreage assigned each such well for proration purposes bears to the summation of acreage assigned all such non-marginal wells in the field.

RULE 4

Underproduction: The dates 7:00 a.m., January 1, and 7:00 a.m., July 1, shall be known as balancing dates, and the periods of time bounded by these dates shall be known as gas proration periods. 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 at the end of the first succeeding proration period, a greater amount of allowable remains unproduced than was carried forward as underproduction, the amount carried forward to the second succeeding period shall be the total underproduction less the amount carried forward to the first succeeding period.

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.

RULE 5

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 the end of the first succeeding proration period, the well is still overproduced, it shall be shut in and its current monthly allowable charged against said overproduction until the well is in balance. If, at any time, a well is overproduced an amount equaling six times its current monthly allowable, it shall be shut in until it is in balance.

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.

RULE 6

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 7

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 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.

RULE 8

The monthly gas production from each gas well shall be metered separately and the gas production therefrom shall be submitted to the Commission on Form C-115 so as to reach the Commission on or before the twentieth 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. 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 on the lease for consumption in lease houses, treaters, combustion engines and other similar lease equipment shall not be charged against the well's allowable.

RULE 9

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.

DONE at Santa Fe, New Mexico, on 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



Worm Case 729
E.A.K.

MAIN OFFICE 300
SKELLY OIL COMPANY

TELEPHONE 4-0144

PRODUCTION DEPARTMENT
J. S. FREEMAN
VICE PRESIDENT

TULSA 2, OKLAHOMA

W. P. WHITMORE
CHIEF PETROLEUM ENGINEER
G. W. SELINGER
PRORATION ATTORNEY
J. H. McCULLOCH
CHIEF CLERK

October 22, 1954

Governor Edwin L. McChes, Chairman
Executive Office, Capitol Building
Santa Fe, New Mexico

Land Commissioner E. S. Walker
P. O. Box 791
Santa Fe, New Mexico

✓ Mr. W. B. Macey
Oil Conservation Commission
P. O. Box 871
Santa Fe, New Mexico

Re: Case No. 729
Gas Proration
Pictured Cliffs Formation
San Juan Basin

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4. On page 42 the witness testified as to impossibility of establishing immediate proration using deliverability in the formula. *delivered by 1954*

5. On pages 56-57 the witness admitted that the basis of deliverability is dependent on the line pressure of each purchaser, which pressure varies. *will vary month*

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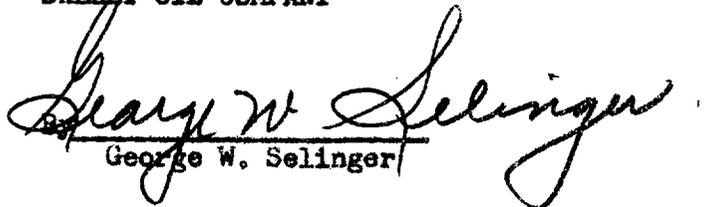

George W. Selinger

Exhibit # 2

GAS POOL DELINEATION RECOMMENDATIONS FOR PICTURED CLIFFS
POOLS, CASE NO. 729

South Blanco Pictured Cliffs

Township 25North, Range 6 West

E/2 Sec. 5.

Township 26N, Range 5 W.

S/2 Sec. 19.

Township 26N, Range 6 W.

S/2 Sec. 2; All Secs. 3 through 11; SW/4 Sec. 12; W/2 Sec. 13; All Secs. 14 through 24; N/2 Sec. 25; NE/4 Sec. 26; All Sec. 29; N/2 Sec. 30; All Sec. 32.

Township 26N, Range 7W.

All Sec. 1 through 16; N/2 Sec. 17; N/2 Sec. 21; N/2 Sec. 22; N/2 Sec. 23; All Sec. 24.

Township 26N, Range 8W.

All Sec. 1.

Township 27N, Range 6 W.

All Secs. 29 through 32; S/2 Sec. 33; S/2 Sec. 34.

Township 27N, Range 7 W.

S/2 Sec. 6; All Sec. 7; S/2 Sec. 13; All Secs. 18 & 19; S/2 Sec. 20; All Secs. 23 through 36.

Township 27N, Range 8 W.

All Sec. 5; All Secs. 7 & 8; All Secs. 17 through 30; All Secs. 35 & 36.

Township 27N, Range 9 W.

S/2 Sec. 1; SW/4 Sec. 3; SE/4 Sec. 9; All Secs. 10 through 14; All Secs. 24 & 25; NE/4 Sec. 26.

Aztec Pictured Cliffs

Township 28N, Range 9W

All Partial Sec. 7; All Secs. 18 & 19; W/2 & NE/4 Sec. 20; W/2 Sec. 29; All Sec. 30; NE/4 Sec. 31; W/2 Sec. 32.

Township 28N, Range 10 W

E/2 Partial Sec. 12; NE/4 Sec. 13;

Township 29N, Range 10W

All Secs. 3 through 10; SW/4 Sec. 13; S/2 Sec. 14; All Secs. 15 through 18; E/2 Sec. 19; All Secs. 20 & 21; S/2 Sec. 25; W/2 & SE/4 Sec. 26; All Secs. 27 & 28; N/2 Sec. 29; NE/4 Sec. 34; N/2 Sec. 35; All Sec. 36.

Township 29N, Range 11W

All Secs. 1 through 4; N/2 Sec. 5; N/2 Sec. 11; All Sec. 12; E/2 Sec. 13.

Township 30N, Range 10W

All Secs. 17 through 20; W/2 Sec. 28; All Secs. 29 through 33.

Aztec Pictured Cliffs (Continued)

Township 30N, Range 11W.

W/2 Sec. 2; All Secs. 3 & 4; E/2 Sec. 5; All Secs. 7 through 10; W/2 Sec. 11;
All Secs. 13 through 18; N/2 Sec. 19; All Secs. 20 through 29; SE/4 Sec. 30;
All Secs. 32 through 36.

Township 30N, Range 12 W

SE/4 Sec. 12; E/2 Sec. 13; NE/4 Sec. 24.

Township 31N, Range 11W

SE/4 Sec. 33.

Fulcher-Kutz Pictured Cliffs

Township 27N, Range 9W

NW/4 Sec. 6; S/2 Sec. 7; W/2 & SE/4 Sec. 17; All Secs. 18 & 19; W/2 Sec. 20;
NW/4 Sec. 28; W/2 & NE/4 Sec. 29; N/2 Sec. 30.

Township 27N, Range 10W

All Secs. 1 through 17; E/2 Sec. 18; E/2 Sec. 19; All Sec. 20 through 24;
N/2 Sec. 25; All Sec. 26 through 28.

Township 27N, Range 11W

E/2 Sec. 1; E/2 Sec. 12.

Township 28N Range 10W

S/2 Sec. 17; All Secs. 18 through 22; All Secs. 26 through 35.

Township 28N, Range 11W.

All Partial Secs. 11 & 12; All Secs. 13 & 14; NE/4 Sec. 23; All Sec. 24;
E/2 Sec. 25; E/2 Sec. 36.

Township 29N, Range 11W.

SW/4 Sec. 7; SW/4 Sec. 17; W/2 & SE/4 Sec. 18; All Secs. 19 & 20; SW/4 Sec. 21;
SW/4 Sec. 27; All Secs. 28 through 30; NE/4 Sec. 31; N/2 Sec. 32; N/2 Sec. 33;
All Sec 34, SW/4 Sec. 35.

Township 29N, Range 12W

All Sec. 2; E/2 & NW/4 Sec. 3; N/2 Sec. 4; N/2 Sec. 5; N/2 Sec. 6; E/2 Sec. 10;
All Secs. 11 through 13.

Township 29N, Range 13W.

NE/4 Sec. 1.

Township 30N, Range 12W.

E/2 Sec. 19; SW/4 Sec. 27; All Secs. 28 & 29; E/2 Sec. 30; All Secs.
32 through 34.

NEW POOLS

Fulcher-Kutz 25-7

Township 25N, Range 6W

S/2 Sec. 7.

Township 25N, Range 7W.

W/2 Sec. 2; All Secs. 3 & 4; All Sec. 11; S/2 Sec. 12; All Sec. 13; N/2 Sec. 24.

Township 26N, Range 7W.

SE/4 Sec. 32; S/2 Sec. 33; SW/4 Sec. 34.

Fulcher-Kutz 26-9

Township 25N, Range 8W.

SW/4 Sec. 1; W/2 & SE/4 Sec. 2; E/2 & NW/4 Sec. 3; N/2 Sec. 4; NE/4 Sec. 5;
N/2 Sec. 11; All Sec. 12.

Township 26N, Range 8W.

All Sec. 19; S/2 Sec. 29; All Sec. 30; N/2 Sec. 31; All Sec. 32; S/2 Sec. 33;
S/2 Sec. 34.

Township 26N, Range 9W.

S/2 Sec. 10; S/2 Sec. 11; S/2 Sec. 13; All Secs. 14 & 15; NE/4 Sec. 16;
NE/4 Sec. 23; All Sec. 24.

Rule 9
~~Section 4.~~ Allocation:

Skelly
Case 729
8-18-54

(a) The reasonable lawful required production from the Blanco ~~Mesaverde~~ Pool, San Juan and Rio Arriba Counties, New Mexico, shall be determined by nominations for the production from gas wells produced therein submitted to the Commission in a required affidavit form, but the Commission in considering such nominations shall not necessarily be bound thereby; however, the Commission will adjust the allowed production as determined by this method to the actual production from the pool as determined from its records.

dictated by
(b) The daily allowable production of gas from individual wells completed in the Blanco ~~Mesaverde~~ Pool of San Juan and Rio Arriba Counties, New Mexico, shall be determined by allocating the allowable production among the individual wells completed in the ~~Mesaverde~~ horizon in the proportion that the product that the datum reservoir pressure and the acreage containing such well bears to the summation of this product with respect to each well producing from said pool.

(c) Datum reservoir pressure for each well shall be determined either by the bomb method or by an approved calculation method.

(d) Datum reservoir pressure is defined as the pressure in pounds (p.s.i.) determined either by the bomb method or by an approved calculation method at a datum of _____.

(e) Reservoir pressure whether determined either by the bomb method or by an approved calculation method shall be made after a shut in period of not more than 8 nor less than 7 continuous days.

(f) Prior to the shutting in of any well, in order to determine the reservoir pressure as set out herein, any such well shall have been produced at a stabilized rate of flow for a 72 hour period and shall have produced as a minimum that volume of gas assigned to the well as its daily average allowable on the Commission's schedule for the current period, or that volume of gas which would be assigned to such well in accordance with the allocation formula as provided herein.

(g) Reservoir pressure determination on all such wells, as required by the provisions of this order, shall be submitted to the Commission on forms provided by the Commission, which forms must be submitted to the Commission by the _____ day of _____, 1954, and semi-annual reservoir pressure determinations are to be submitted on all wells in such pool thereafter with the filing of such information as required by the Commission on such forms.

Section 5. Underproduction and Overproduction:

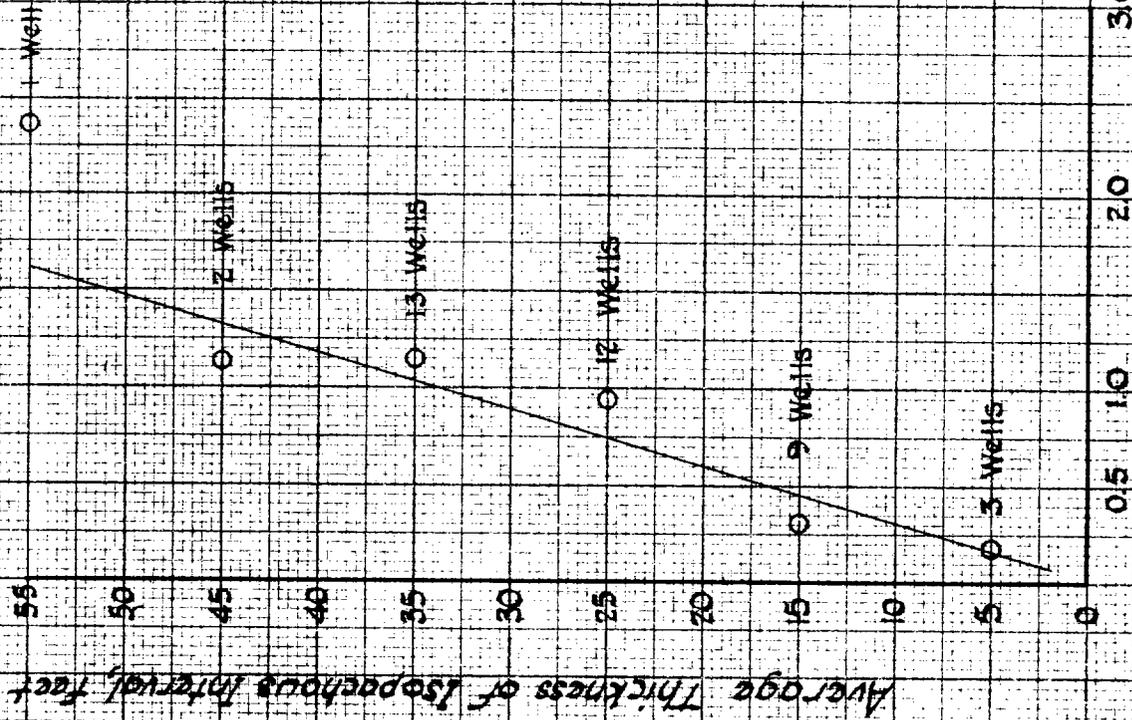
(a) For the purpose of computing and balancing overproduction and underproduction in the Blanco Mesaverde Pool, San Juan and Rio Arriba Counties, New Mexico, the dates 7 o'clock a.m., March 1, and 7 o'clock a.m., September 1, are to be known as balancing dates; and the six months period beginning 7 o'clock a.m., March 1, and ending 7 o'clock a.m., September 1, and beginning 7 o'clock a.m., September 1, and ending 7 o'clock a.m., March 1, will be considered as separate entities and will be known as balancing periods.

EL PASO NATURAL GAS COMPANY

AZTEC PICTURED CLIFFS RESERVOIR SAN JUAN BASIN
 AVERAGE ORIGINAL 3 HOUR POTENTIAL WITHIN 10 FEET ISOPACHOUS
 INTERVALS VS THE AVERAGE THICKNESS OF THE INTERVAL

BEFORE THIS ISOPACHOUS

INTERVAL



Average Original 3-Hour Potential M³ CF/Day

Case 729
 8-18-54

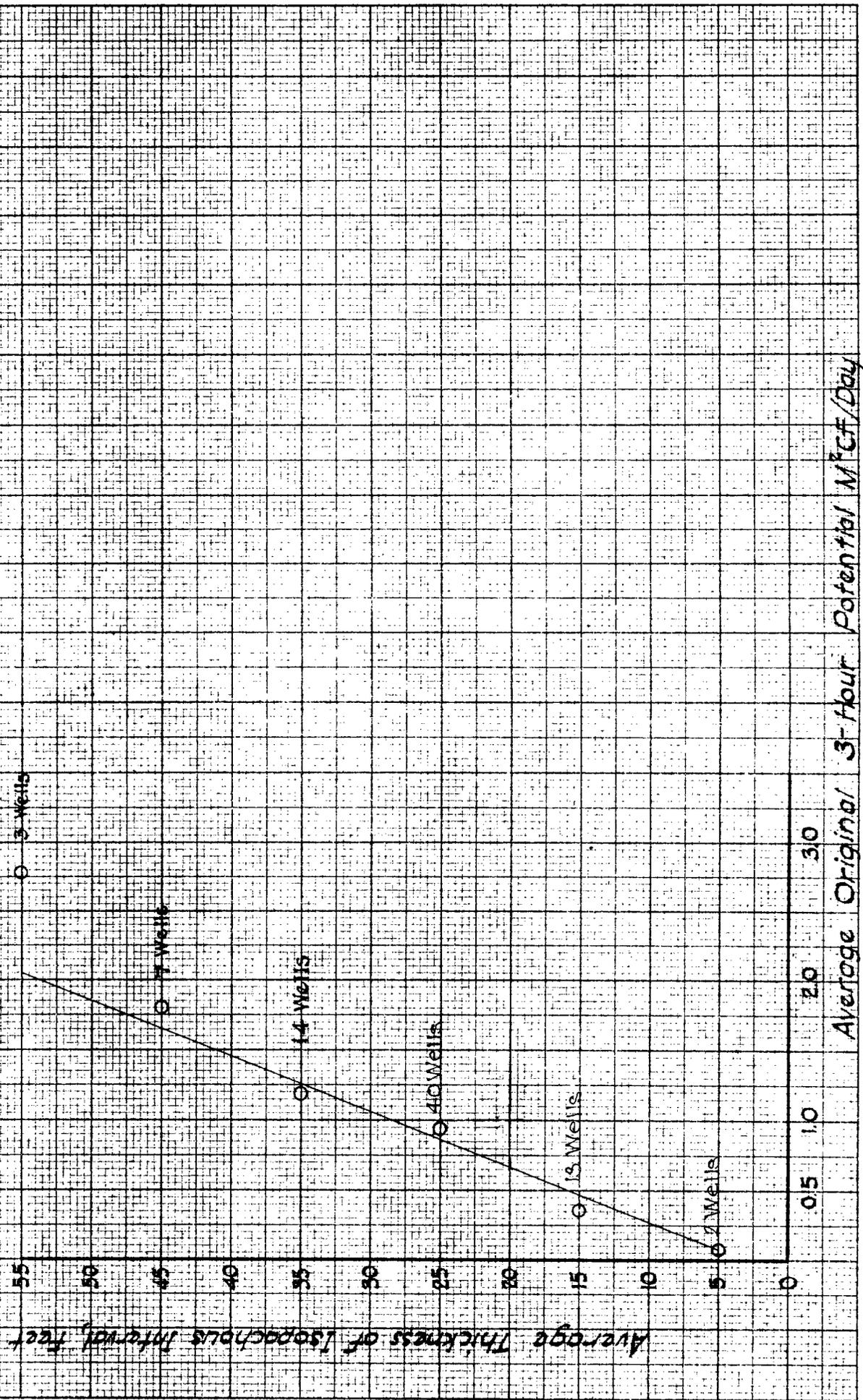
EXHIBIT No 3

SANTA FE, NEW MEXICO

Oil Conservation Commission

EL PASO NATURAL GAS COMPANY

FULCHER-KUTZ PICTURED CLIFFS RESERVOIR, SAN JUAN BASIN
 AVERAGE ORIGINAL 3 HOUR POTENTIAL WITHIN 10 FEET ISOPACHOLS
 INTERVALS VS THE AVERAGE THICKNESS OF THE INTERVAL

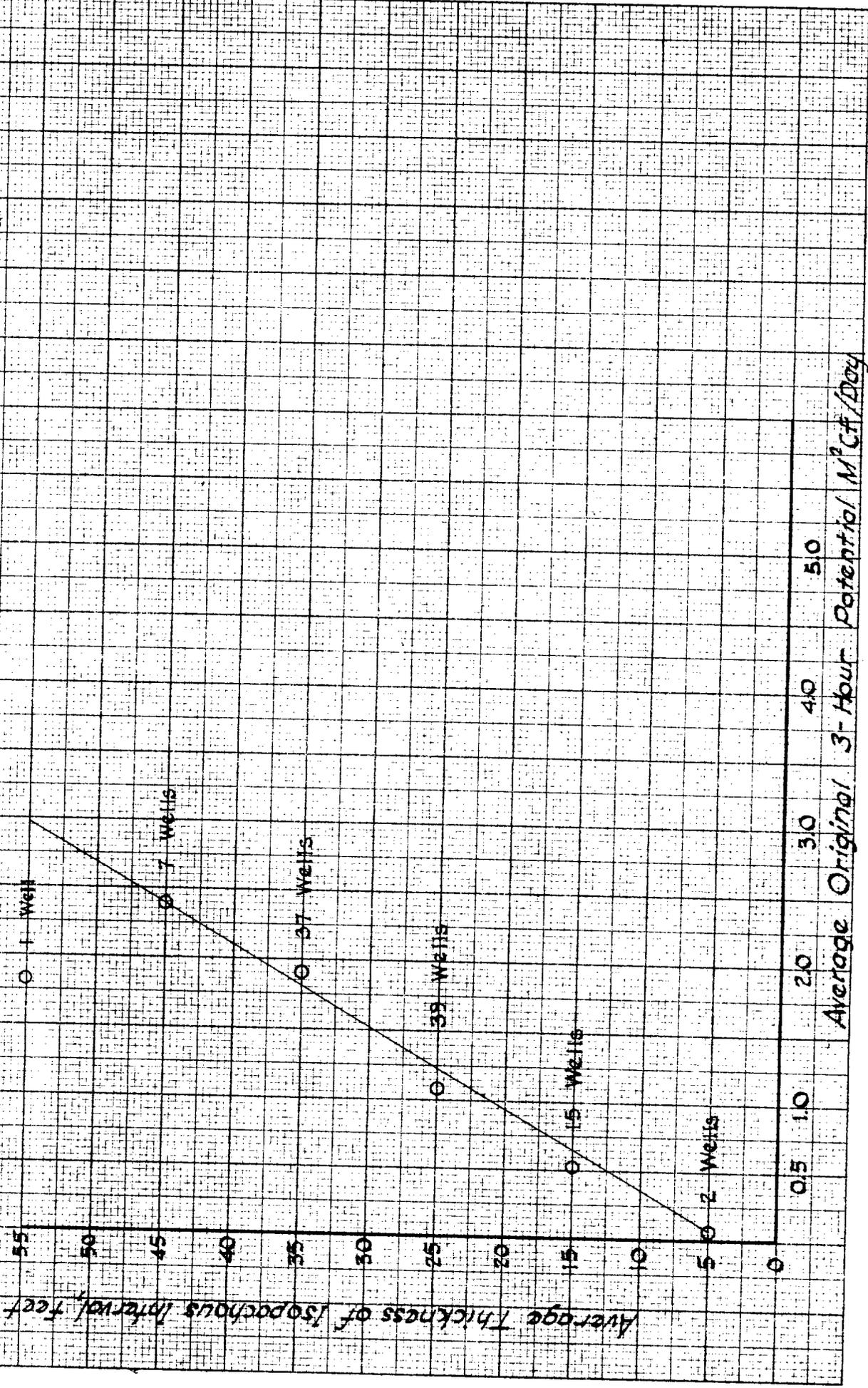


Average Original 3-Hour Potential M³CF/Day

BEFORE THE
OIL CCNS (N.V.) COMMISSION
SANTA FE, NEW MEXICO
EPNG EXHIBIT No. 5
CASE 129 8-18-51

EL PASO NATURAL GAS COMPANY

SOUTH BLANCO PICTURED CLIFFS RESERVOIR, SAN JUAN BASIN
AVERAGE ORIGINAL 3 HOUR POTENTIAL WITHIN 10 FEET ISOPACHOUS
INTERVALS VS THE AVERAGE THICKNESS OF THE INTERVAL



EPNG
EX 6
Case 729
8-18-54

EL PASO NATURAL GAS COMPANY

PROPOSED RULES AND REGULATIONS FOR
THE PICTURED CLIFFS GAS POOL
SAN JUAN COUNTY, NEW MEXICO

WELL SPACING AND ACREAGE REQUIREMENTS FOR DRILLING TRACTS.

RULE 1. Any well drilled a distance of one mile or more from the outer boundary of the Pictured Cliffs Gas Pool shall be classified as a wildcat well. Any well drilled less than one mile from the outer boundary of the Pictured Cliffs Gas Pool shall be spaced, drilled, operated and prorated in accordance with the Regulations in effect in the Pictured Cliffs Gas Pool.

RULE 2. Each well drilled or recompleted within the Pictured Cliffs Gas Pool shall be located on a tract consisting of not less than a quarter section of approximately 160 surface contiguous acres substantially in the form of a square which shall be a legal subdivision (quarter section) of the U. S. Public Land Surveys.

RULE 3. Each well drilled within the Pictured Cliffs Gas Pool shall not be drilled closer than 660 feet to any outer boundary line of such quarter section nor closer than 330 feet to a quarter-quarter section or subdivision inner boundary nor closer than 1320 feet to a well drilling to or capable of producing from the same pool.

RULE 4. The Secretary of the Commission shall have authority to grant exception to the requirements of Rules 2 and 3 where application has been filed in due form and such exception is required because of conditions resulting from previously drilled wells in the area or, in the case of Rule 3, the necessity of exception is based on topographic conditions.

Applicants shall furnish all operators of leases offsetting the lease containing subject well a copy of the application to the Commission, and applicant shall include with his application a list of names and addresses of all such operators, together with a written stipulation that all such operators have been properly notified. The Secretary of the Commission shall wait at least 20 days before approving any such exception and shall approve such exception only in the absence of objection of any offset operators. In the event an operator objects to the exception the Commission shall consider the matter only after proper notice and hearing.

RULE 5. The provision of Statewide Rule 104 Paragraph (k), shall not apply to the Pictured Cliffs Gas Pool.

GAS PRORATION

RULE 6. The Commission after notice and hearing, shall consider the nominations of gas purchasers from the Pictured Cliffs Gas Pool and other relevant data and shall fix

the allowable production in the Pictured Cliffs Gas Pool, and shall allocate production among the gas wells in the Pictured Cliffs Gas Pool delivering to a gas transportation facility upon a reasonable basis and recognizing correlative rights, and shall include in the proration of such pool 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 well.

PRORATION UNITS

RULE 7. A. For the purpose of gas allocation in the Pictured Cliffs Gas Pool a standard proration unit shall consist of approximately 320 contiguous surface acres consisting of the North, South, East or West half of a section and being a legal subdivision of the U. S. Public Land Surveys; provided, however, that a gas proration unit other than a legal half section may be formed after notice and hearing by the Commission, or as outlined in paragraph B. Any standard proration unit consisting of between 315 and 325 contiguous surface acres shall be considered as containing 320 acres for the purpose of gas allocation.

B. The Secretary of the Commission shall have authority to grant an exception to Rule 7 A without notice and hearing:

1. Where the unorthodox size or shape of the tract is due to a variation in legal subdivision of the U. S. Public Land Surveys; or

2. Where application has been filed in due form and where the following facts exist and the following provisions are complied with:

a. The acreage assigned the non-standard unit lies wholly within a legal section.

b. The acreage assigned the non-standard unit is adjacent to or contiguous with the acreage containing said well.

c. The operator making application for such exception to Rule 7 A includes with such application:

(1) waivers from (a) all operators owning interests in the half 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 proration unit; or

(2) a list of names and addresses of all operators outlined in paragraph (1), together with a stipulation that proper notice has been given said operators at the addresses given and no objection is received by the Commission from such operators within 20 days after the Commission receives such application.

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

e. The length or width of the non-standard gas proration unit does not exceed 5280 feet.

C. The Secretary of the Commission shall have authority to grant an exception to Rule 7 A after notice and hearing, when the operator is unable to comply with the provisions of Rule 7 B.

GAS ALLOCATION

RULE 8. At least 30 days prior to the beginning of each gas proration period the Commission shall hold a hearing after due notice has been given. The Commission shall cause to be submitted by each gas purchaser its nominations of the amount of gas which each in good faith actually desires to purchase within the ensuing proration period, by months, from the Pictured Cliffs Gas Pool.

When a purchaser of gas, after filing its nominations for the proration period shall find that its requirements for gas have increased or decreased from the amount nominated for any month during the proration period, such purchaser shall indicate its revised estimated requirements during such month by filing supplemental nominations with the Commission at least three days prior to the regular hearing of the Commission for the month preceding such changed requirements.

All nominations shall be filed on a form prescribed by the Commission.

RULE 9. The Commission shall hold a public hearing at least thirty (30) days prior to each gas proration period to determine the reasonable market demand for gas produced from the Pictured Cliffs Gas Pool and shall issue a proration schedule for that proration period.

Also, the Commission shall hold a public hearing between the 15th and 20th days of each month to determine the reasonable market demand for gas produced from the Pictured Cliffs Gas Pool for the ensuing proration month and shall issue a proration schedule for that pool allocating the amount of gas which each well may produce during the ensuing proration month.

The monthly proration schedule shall include a tabulation of allowable and production for the second preceding month, together with an adjusted allowable computation for the second preceding month, said adjusted allowable shall be computed by comparing the total pool allowable assigned with the total pool production. In the event the total pool allowable assigned is greater than the total pool production, the allowable assigned the non-marginal and non-limited wells shall be reduced proportionately; and in the event such allowable assigned is less than such production, then the allowable assigned the non-marginal and non-limited wells shall be increased proportionately.

The Commission shall include in each proration schedule each well in said pool delivering to a gas transportation facility or lease gathering system and 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 well. The total allowable to be allocated to said pool for each proration period and each month shall be equal to the sum of the purchasers' nominations with any adjustment which the Commission may make. The Commission first shall determine and classify the marginal wells in said pool.

A well in either of the following categories shall be classified as marginal:

Class A. Any well whose producing capacity into existing gas transportation facilities is less than 100 MCF per day. Such a well shall be permitted to produce all its producing capacity into existing gas transportation facilities.

Class B. Any well which the Commission finds has an actual producing capacity less than its assigned allowable. Such a well shall be permitted to produce all its producing capacity into existing gas transportation facilities, restricted only by the allowable it would have been assigned under application of the proration formula.

A well classified in either of the marginal categories shall accrue neither underproduction nor overproduction.

The allocation to said pool shall be divided and allocated among the wells appearing on each proration schedule in the following manner: (1) the sum of the allowables for all marginal wells and of wells found by the Commission to have an actual producing capacity less than the assigned allowable shall be subtracted from the total pool allowable, (2) a tentative allocation to the non-marginal wells shall be made by dividing the remaining pool allowable among the remaining wells in said pool in the proportion that the product of each well's calculated deliverability multiplied by the acreage attributable to that well bears to the sum of such product for all such remaining wells to be prorated, (3) when the tentative allowable received by a well is in excess of its known producing ability, that well shall be classified as a limited well and shall have its allowable limited to its producing ability for the period of time covered by that proration schedule, (4) the allowable for the pool remaining after subtracting the sum of the limited allowables of all limited wells shall be reallocated to the remaining wells by application of the same formula, and (5) if such reallocation shall result in placing any other well within the limited classification, the allowable for the pool remaining after subtracting the limited allowables of all such additional limited wells shall be allocated among the remaining wells by application of the same formula until no well has received an allowable in excess of its known producing ability.

The calculated deliverability mentioned in the preceding paragraph shall be that deliverability as determined by a test taken in accordance with the provisions of Order No. R-333 or Order No. R-333A of the New Mexico Oil Conservation Commission or any amendments thereof. At the time of institution of proration, a connected well having no deliverability tests shall have its deliverability estimated as _____ per cent (%) of its three hour initial potential pending completion of its deliverability test. A temporary allowable shall be assigned such well using the estimated deliverability in the allocation formula until the deliverability test is taken, at which time those previous allowables granted the well by use of the estimated deliverability shall be revised by use of the actual calculated deliverability. In like manner the estimated deliverability for a well that is connected during the period between the end of one annual deliverability test and the beginning of the next annual deliverability test shall be determined and used for proration purposes pending the completion of the deliverability test for such a well. After the well is connected, the operator may elect to test the well in accordance with the procedure prescribed in

Order No. R-333 or in Order No. R-333A for the annual deliverability test or to postpone such test until the next annual deliverability test period.

BALANCING OF PRODUCTION

RULE 10. Underproduction: The dates 7:00 A. M. , March 1, and 7:00 A. M. , September 1, shall be known as balancing dates and the periods of time bounded by these dates shall be known as gas proration periods. 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 first succeeding proration period in addition to the normal gas allowable for such succeeding period. That portion of such cumulative underproduction carried forward into the first succeeding proration period, which is not made up during said period shall be deducted from the total underproduction at the end of the period, resulting in only that volume of underproduction accrued during said period being carried forward as cumulative underproduction into the next succeeding proration period.

If it appears that such continued underproduction has resulted from inability of the well to produce its allowable, it may be classified as a Class B marginal well as defined in Rule 9 and its allowable reduced to the well's ability to produce into existing gas transportation facilities. All underproduction accumulated to a well classified as marginal shall be added to the allocation for non-marginal wells and distributed thereto.

RULE 11. Overproduction: An operator will be allowed to overproduce a well during a proration period and to accumulate and carry over such overproduction into the first succeeding proration period in an amount not in excess of the total allowable assignable to the well based on nominations for the first succeeding proration period. Should the allowable so calculated be less than the accumulated overproduction at the beginning of the first succeeding proration period, the well must be shut-in until the overproduction has been reduced to such allowable. Should the well's cumulative status not be brought in balance during the first succeeding proration period, that overproduction accumulated at the end of the first succeeding proration period must be brought in balance during the second succeeding proration period or the well must be shut-in at the end of the second succeeding proration period until its cumulative status is in balance.

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 12. 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 13. 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 Form C-104 and Form C-110 and the plat described above, whichever date is the later.

REPORTING OF PRODUCTION

RULE 14. The monthly gas production from each gas proration unit shall be metered separately and the gas production therefrom shall be reported to the Commission by the operator so as to reach the Commission on or before the twentieth 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. 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 on the lease for consumption in lease houses, heaters, treaters, combustion engines and other similar lease equipment and that gas vented in testing or as required to maintain production shall not be charged against the well's allowable.

Copies of Form C-115, Monthly Production Report, submitted in compliance with Rule 14, shall be distributed by the operator as follows: Original to Oil Conservation Commission, Box 871, Santa Fe; two copies to Oil Conservation Commission, Box 697, Aztec, New Mexico.

AZTEC OIL & GAS COMPANY
Wells Operated By AZTEC
Which Are In An
Unorthodox Proration Unit

BEFORE THE
OIL CONSERVATION COMMISSION
SANTA FE, NEW MEXICO
AZTEC EXHIBIT No. 1
CASE _____

August 12, 1954

<u>Well Name and No.</u>	<u>Proration Unit</u>	<u>Aztec's Working Interest</u>
Aztec No. 3	<u>Sec. 14-28N-11W</u> N/2 SW/4 W/2 NW/4	100%
Aztec No. 5	<u>Sec. 14-28N-11W</u> N/2 SE/4 E/2 NE/4	100%
Aztec No. 6	<u>Sec. 14-28N-11W</u> S/2 SE/4 S/2 SW/4	100%
Barnhart No. 1	<u>Sec. 17-29N-11W</u> S/2 NW/4 N/2 SW/4	L. G. Stearns 50% 50%
Browning & Stewart No. 4	<u>Sec. 11-28N-11W</u> S/2 SE/4 S/2 SW/4	100%
Cooper No. 1-S	<u>Sec. 29-29N-11W</u> SW/4 NW/4 NW/4 SW/4 NE/4 SW/4 SE/4 NW/4	L. G. Stearns 25% 50% Summit Oil 25%
Cornell No. 3	<u>Sec. 12-29N-12W</u> SE/4 SW/4 - 40 Ac.	100%
Cornell No. 4	<u>Sec. 12-29N-12W</u> NE/4 SW/4 - 40 Ac.	100%
Cozzens No. 2	<u>Sec. 19-29N-11W</u> W/2 NE/4 E/2 NW/4	100%
Cozzens No. 3	<u>Sec. 20-29N-11W</u> W/2 NE/4 - 80 Ac.	100%
Cozzens No. 4	<u>Sec. 20-29N-11W</u> S/2 NW/4 NE/4 NW/4 - 120 Ac.	100%

<u>Well Name and No.</u>	<u>Proration Unit</u>	<u>Aztec's Working Interest</u>
Cozzens No. 5	<u>Sec. 19-29N-11W</u> NW/4 SE/4 N/2 SW/4 SW/4 NW/4	100%
Dallabetta No. 1	<u>Sec. 20-29N-11W</u> S/2 SW/4 <u>Sec. 29-29N-11W</u> N/2 NW/4	100%
Faverino No. 1	<u>Sec. 20-29N-11W</u> SW/4 SE/4 SE/4 SE/4 <u>Sec. 29-29N-11W</u> NE/4 NE/4 NW/4 NE/4	Summit Oil 75% 25%
Hart No. 1	<u>Sec. 11-29N-12W</u> NW/4 SW/4 - 40 Ac.	100%
Holder No. 1	<u>Sec. 29-30N-12W</u> SE/4 NW/4 - 40 Ac.	100%
Hudson No. 2	<u>Sec. 34-30N-12W</u> E/2 SE/4 <u>Sec. 35-30N-12W</u> W/2 SW/4	100%
McCarty No. 1	<u>Sec. 29-30N-12W</u> E/2 SE/4 - 80 Ac.	100%
McDaniel No. 1	<u>Sec. 17-29N-11W</u> SW/4 SW/4 <u>Sec. 18-29N-11W</u> SE/4 SE/4 <u>Sec. 19-29N-11W</u> NE/4 NE/4 <u>Sec. 20-29N-11W</u> NW/4 NW/4	100%
McGrath No. 2	<u>Sec. 34-30N-12W</u> W/2 NE/4 E/2 SW/4	100%

<u>Well Name and No.</u>	<u>Proration Unit</u>		<u>Aztec's Working Interest</u>
Mangum No. 1	<u>Sec. 29-29N-11W</u> S/2 NE/4 N/2 SE/4	Summit Oil	75% 25%
Reid No. 2	<u>Sec. 13-29N-12W</u> S/2 NE/4 N/2 SE/4		100%
Sammons No. 1	<u>Sec. 32-30N-12W</u> S/2 SE/4 NW/4 SE/4 SW/4 NE/4		100%
Summit-Viles No. 6-B	<u>Sec. 29-29N-11W</u> S/2 SE/4		25%
	<u>Sec. 32-29N-11W</u> N/2 NE/4	Summit Oil L. G. Stearns	25% 50%

Case 729

KING-LOC PETROLEUM COMPANY

MAIN OFFICE ARIZONA CORPORATION

Arizona Office
1400 LUHRS TOWER
PHOENIX, ARIZONA

1954 JUL 14
Producers of Petroleum Products
July 12, 1954

New Mexico Office
AZTEC, NEW MEXICO

Mr. Richard R. Spurrier
Secretary and Director
Oil Conservation Commission
P. O. Box 871
Santa Fe, New Mexico

My dear Mr. Spurrier:

This letter is directed to you in accordance with our telephone conversation of this morning.

Due to the fact that Mr. Locke is in the East and will be unable to attend the Pictured Cliff Proration Hearing, No. 729, scheduled for 10:00 A.M., July 16, in Santa Fe, it is requested that, if at all possible, this hearing be continued for one month.

Thanking you for your attention to this matter, and awaiting your advice as to the requested continuance, I remain

Yours very truly,

Dorothy H. Eggert (Miss)

Secretary to GEORGE D. LOCKE

dhe

Cases 729

MAIN OFFICE **NEAL & NEAL**

ATTORNEYS AT LAW

SHORT BUILDING POST OFFICE BOX 709

CARLSBAD, NEW MEXICO

1954 OCT 6 AM 9:03

October 4, 1954

CASWELL S. NEAL
CASWELL F. NEAL

TELEPHONE
5-2445

Oil and Gas Conservation Commission,
Santa Fe, New Mexico.

Re: Cases 696 and 729.

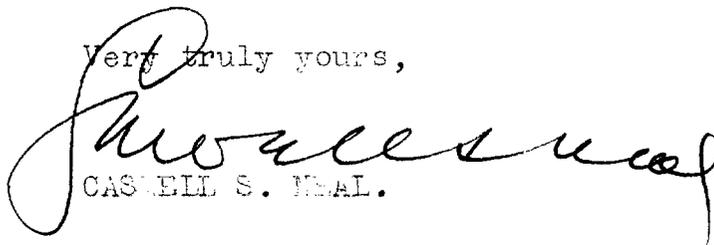
Gentlemen:

It is my understanding that the above cases involved an attempt to secure an Order changing the 160 acre spacing on Pictured Cliff wells in the San Juan area to 320 acre spacing.

As a citizen of New Mexico interested in the orderly development of the oil and gas reserves in the San Juan Basin, and as the owner of various royalty and leasehold interests therein, I wish to express my opposition to the proposal to change the spacing on Pictured Cliff wells from 160 acres to 320 acres. In my opinion, this would be ruinous to the operators and to the industry, and would result in extreme waste. I do not believe under any circumstances that the Pictured Cliff formation can be drained by one well to 320 acres, adequately, and they can be operated economically at 160 acre spacing. This enables more recovery in the long run of the natural resources, and in my opinion, great economical injury would be done to the state, by changing the spacing as requested.

I hope the Commission will not make any such Order, but will leave in effect the spacing of 160 acres under which the basin has been developed.

Very truly yours,


CASWELL S. NEAL.

CSN:hmj

SPECIAL RULES AND REGULATIONS
FOR THE FULCHER KUTZ-PICTURED CLIFFS
GAS POOL

Well Spacing and Acreage Requirements for Drilling Tracts:

RULE 1: Any well drilled a distance of one mile or more from the outer boundary of the Fulcher Kutz-Pictured Cliffs Gas Pool shall be classified as a wildcat well. Any well drilled less than one mile from the outer boundary of said pool shall be spaced, drilled, operated and prorated in accordance with the regulations in effect in the Fulcher Kutz -Pictured Cliffs Gas Pool.

RULE 2: Each well drilled or recompleted within the Fulcher Kutz-Pictured Cliffs Gas Pool shall be located on a tract consisting of not less than a quarter section of approximately 160 surface contiguous acres substantially in the form of a square which shall be a legal subdivision (quarter section) of the U. S. Public Land Surveys.

RULE 3: Each well drilled within the Fulcher Kutz-Pictured Cliffs Gas Pool shall not be drilled closer than 660 feet to any outer boundary line of such quarter section, nor closer than 330 feet to a quarter-quarter section or subdivision inner boundary, nor closer than 1320 feet to a well drilling to or capable of producing from the same pool.

RULE 4: The Secretary-Director of the Commission shall have authority to grant exception to the requirements of Rules 2 and 3 where application has been filed in due form and such exception is required because of conditions resulting from previously drilled wells in the area or, in the case of Rule 3, the necessity for exception is based upon topographic conditions.

Applicants shall furnish all operators of leases offsetting the lease containing subject well a copy of the application to the Commission, and applicant shall include with his application a list of names and addresses of all such operators, together with a written stipulation that all such operators have been properly notified by registered mail. The Secretary-Director of the Commission shall wait at least 20 days before approving any such exception, and shall approve such exception only in the absence of objection

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of any offset operators. In the event an operator objects to the exception, the Commission shall consider the matter only after proper notice and hearing.

RULE 5.: The provision of Statewide Rule 104, Paragraph (k), shall not apply to the Fulcher Kutz-Pictured Cliffs gas pool.

GAs Proration and Allocation:

RULE 6: (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 Fulcher Kutz-Pictured Cliffs gas pool, a standard proration unit shall consist of approximately 160 surface contiguous acres substantially in the form of a square which shall be a legal subdivision (quarter-section) of the U. S. Public Land Survey; provided, however, that a non-standard proration unit may be formed after notice and hearing by the Commission or under the provisions of Paragraph (B) of this Rule.

The allowable production from any non-standard gas proration unit as compared with the allowable production therefrom if such tract were a standard unit shall be in the ratio which the area of the non-standard proration unit bears to a standard proration unit of 160 acres. Any gas proration unit containing between 158 and 162 acres shall be considered to contain 160 acres for the purpose of computing allowables.

(B) The Secretary-Director of the Commission shall have authority to grant an exception to Rule 6 (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. Where the proposed non-standard proration unit consists of less than 158 acres.

2. Where the unorthodox size or shape of the tract is due to a variation in legal subdivision of the U. S. Public Land Surveys; or

3. Where application has been filed in due form and where the following facts exist and the following provisions are complied with:

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(a) The acreage assigned the non-standard unit lies wholly within a legal section.

(b) The acreage assigned the non-standard unit is contiguous with the acreage containing said well.

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

(d) The length or width of the non-standard gas proration unit does not exceed 2640 feet.

(e) The operator making application for such exception to Rule 6 (a) includes with such application:

(1) Waivers from (a) all operators owning interests in the quarter sections 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 units; and (b) all operators owning interests in acreage offsetting the non-standard proration unit; or

(2) A list of names and mailing addresses of all operators outlined in paragraph (1), together with proof of the fact that said operators were notified by registered mail of the intent of the applicant to form such non-standard gas proration unit. The Secretary of the Commission may approve such application if, after a period of 20 days following the mailing of said notice, no operator as outlined in paragraph (1) above has entered an objection to the formation of such non-standard gas proration unit.

RULE 7: At least 30 days prior to the beginning of each gas proration period, the Commission shall hold a hearing after due notice has been given. The Commission shall cause to be submitted by each gas purchaser "Preliminary Nominations" of that quantity of gas which each purchaser in good faith actually desires to purchase within the ensuing proration period,

by months, from the Fulcher Kutz-Pictured Cliffs 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 said pool within the ensuing proration period. "Preliminary Nominations" shall be submitted on Form C-121-A as prescribed by the Commission.

RULE 8: In the event a gas purchaser's market shall have increased or decreased, purchaser may file with the Commission prior to the 10th day of the month a "Supplemental Nomination" showing the amount of gas the purchaser actually in good faith desires to purchase during the ensuing proration month from the Fulcher Kutz-Pictured Cliffs 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 from said pool 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 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 allowables 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 its proration schedule the gas wells in the Fulcher Kutz-Pictured Cliffs pool delivering to a gas transportation facility, or lease gathering system and shall include in the proration schedule of said pool any well which the Commission 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 well. The total allowable to be allocated to said 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 Secretary-Director in writing of such increase. The increased allowable assigned the gas proration unit for the well shall become effective on the first day of the month following receipt of the notification by the Director. All communications shall be mailed to the Director, at Box 871, Santa Fe, New Mexico.

RULE 9: The monthly gas allocation to the Fulcher Kutz-Pictured Cliffs 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 160. The "AD" factor shall be computed to the nearest whole unit.

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 the "AD" factors of all wells in the pool.

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

Case No. 729

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 10: 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 employed herein, shall be equal to fifty percent, (50%) of the seven (7) day shut-in pressure of each respective well.

Balancing of Production:

RULE 11: Underproduction: The hours of 7 o'clock a. m. , M. S. T. February 1, and 7 o'clock a. m. , M. S. T. , August 1, shall be known as balancing dates and the periods of time bound by these dates shall be known as gas proration periods. In order to effectively administer the prorationing of gas in the Fulcher Kutz-Pictured Cliffs 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 on March 1, 1955, and shall continue for a period of eleven months until February 1, 1956. Future proration periods shall commence on the dates set out 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; provided, however, that 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 level of 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, such 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 re-completed in such a manner that its productive capacity is increased to an extent that said well 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 Secretary-Director may reclassify a well at any time if production data or deliverability tests reflect the need for such reclassification.

RULE 12: 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 equivalent to six times its current monthly allowable, said well 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 if, upon public hearing after due notice, it is shown that complete shut in of the well would result in material damage to said well.

Granting of Allowables:

RULE 13: 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 14: Allowables to newly completed gas wells shall commence on the date of connection to a gas transportation facility, such date to be determined from an affidavit furnished to the Commission by the purchaser, or the filing date of Form C-104 and Form C-110 and the above-described plat, whichever date is the later. Affidavits of connection will be submitted to the District Office of the Commission, Box 697, Astec, New Mexico.

No well shall be assigned an allowable unless a deliverability test, or a potential test taken in conformance with the provisions of Order R-3330A has been submitted.

In the absence of deliverability test data on newly completed wells, the open-flow potential taken in conformance with Order R-333-A may be used in approximating the well's deliverability. In this instance, an assumed deliverability equal to 15% of the volume of gas produced in the initial potential test will be used. The allowable thus established using an estimated deliverability shall be a tentative allowable and such allowable will be re-calculated using the deliverability test data upon the submission of such data to the Commission.

Deliverability tests shall be taken and calculated in conformance with Order R-333-A, the provisions of Rule 10 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 15: The monthly gas production from each well shall be metered separately and the production therefrom shall be reported to the Commission on Form C-115, // such form to reach the Commission on or before the 24th day of the month immediately following the month in which the gas reported was produced. The operator shall show on such report the disposition of the gas produced.

Each purchaser or taker of gas in the Fulcher Kutz-Pictured Cliffs gas pool shall submit a report to the Commission, such report to reach the Commission on or before the 24th day of the month immediately following 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, and the wells shall be listed in approximately the same order as they are found listed on the proration schedule.

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

Forms 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 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.

RULE 16: 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 to facilitate the transportation or utilization of gas. It shall be the responsibility of said "taker" to submit a nomination in accordance with Rules 7 and 8 of this order.