

MAIN OFFICE OCC
SOUTHERN UNION GAS COMPANY
BURT BUILDING
DALLAS 1, TEXAS

1034 JUL 12 AM 9:35

Case 330A

July 9, 1954

New Mexico Oil Conservation Commission
Santa Fe, New Mexico

Gentlemen:

Forwarded herewith, for consideration by the Commission in Cases No. 330 and 330-A, are three copies of proposed rules and regulations for the Blanco-Mesaverde Gas Pool. Particular attention is called to the following recommendations of Southern Union Gas Company, as reflected in such proposed rules:

1. A proration formula (which we believe to be the fairest for everyone concerned in the light of all the evidence adduced at the hearing) as set forth in our proposed Rule 5(b), involving

- (a) the allocation of 50% of allowable on the basis of acreage and 50% of allowable on the basis of acreage times deliverability,
- (b) a minimum allowable of 350 MCF per day, to encourage the ultimate recovery of greater quantities of gas from the Pool, and
- (c) a maximum allowable of 2,500 MCF per day, in order to minimize probable drainage.

2. Balancing dates of February 1 and August 1, which will put some warm and some cold months into each balancing period without coinciding with the January 1--July 1 balancing dates in effect in Lea County. See our proposed Rule 6.

3. Making the use of supplemental nominations optional rather than mandatory. See our proposed Rule 5(a).

Our proposed Rules 11-19 generally conform to those currently in effect for the Pool. We have, however, suggested several amendments to the present text of a clarifying nature, and have suggested one change of substance in Rule 11(a), i.e., lowering the pressure for the testing of surface casing from 1,000 psi. to 500 psi., in keeping with what we believe to be adequate good field practice.

Respectfully submitted,

SOUTHERN UNION GAS COMPANY

By

A. S. Grenier
A. S. Grenier,
Attorney

ASG:FG
Encl.

RULES FOR BLANCO-MESAVERDE GAS POOL,
SAN JUAN AND RIO ARriba COUNTIES, NEW MEXICO,
PROPOSED BY SOUTHERN UNION GAS COMPANY
IN CASE NO. 330-A

APPLICABILITY OF RULES

RULE 1. (a) The following special rules and regulations for the Blanco-Mesaverde Gas Pool (herein referred to as the "Pool") shall be limited in their application to the productive sands which are contained between the top of the Cliff House Sand and the base of the Point Lookout Sand of the Mesaverde Formation.

(b) All additional lands located within one mile of any land in the Pool, as currently defined or as it may be hereafter extended, shall conform to these rules and regulations; and by order of this Commission the Pool may be redesignated from time to time so as to embrace other lands in the vicinity which are believed, on the basis of additional developments, to be capable of producing gas from the Mesaverde Formation, whether or not such other lands shall have been at one time included in another designated field or pool producing from such formation.

WELL SPACING AND ACREAGE REQUIREMENTS FOR DRILLING TRACTS

RULE 2. No well shall be drilled or completed or recompleted and no Notice of Intention to drill or Drilling Permit shall be approved, unless:

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

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

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

PRORATION UNITS

RULE 3. (a) For the purpose of gas allocation in the 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 (half section) 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) of this Rule. Any allocation

unit containing less than 315 acres or more than 325 acres shall be a non-standard unit. 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 3 (a) without notice and hearing where application has been filed in due form and where the following facts exist and the following provisions are complied with:

1. The nonstandard unit consists of less acreage than a standard proration unit.

2. The acreage assigned to the nonstandard unit lies wholly within a legal section and contains a well capable of producing gas into a gas transportation facility on the date of this order.

3. The operator notifies in writing the Commission and all operators in the adjoining 320 acre proration units of the operator's intention to apply for an exception to Rule 3 (a), and no objections are voiced to the Commission by any of said operators within a period of fifteen (15) days after the copies of such notice are mailed.

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

(d) The pooling of properties or parts thereof shall be permitted, and if not agreed upon may be required in any case when and to the extent that the smallness or shape of a separately owned tract would, under the enforcement of the uniform spacing plan of proration units, otherwise deprive or tend to deprive the owner of such tract of the opportunity to recover his just and equitable share of the crude petroleum oil and natural gas in the Pool; provided, that the owner of any tract which is smaller than a standard proration unit shall not be deprived of the right to drill on and produce from such tract if same can be done without waste, but in such case the allowable production from such tract shall be reduced in accordance with the allocation formula hereinafter set out in Rule 5 (b).

GAS ALLOCATION

RULE 4. 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 Pool. The Commission shall consider the nominations of purchasers, actual production, and

such other factors as may be deemed applicable in determining the amount of gas that may be produced without waste from the Pool within the ensuing proration period. Nominations shall be submitted on a form prescribed by the Commission.

RULE 5. (a) Whenever a gas purchaser, after filing its nominations for a proration period, shall find that its requirements for gas have increased from the amount nominated for any month during the proration period, such gas purchaser shall file with the Commission, not later than the 10th day of the preceding month, a supplemental nomination indicating its revised estimated requirements during such month. Supplemental nominations, if submitted, shall be on a form prescribed by the Commission. The Commission shall hold a public hearing between the 15th and 20th days of each month to determine the reasonable market demand for gas from the 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. 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 total allowable assigned to wells in the Pool with the total actual production of gas therefrom, and by reapplying, on the basis of such total actual production, the allocation formula set out in Rule 5 (b).

(b) The Commission shall include in the proration schedule all gas wells in the Pool delivering to a gas transportation facility or lease gathering system, and shall also include in the proration schedule any well which it finds is being unreasonably discriminated against through denial of access to a gas transportation facility which is reasonably capable of handling the type of gas produced by such well. The total allowable to be allocated to the Pool each month shall be equal to the sum of the nominations, together with any adjustment which the Commission deems advisable. The allocation of gas to wells in the Pool remaining after subtracting the capacities of marginal wells shall be divided and allocated ratably among the nonmarginal wells as follows:

(1) 50% shall be allocated to each well in the ratio that (a) the acreage allocated to such well as its proration unit bears to (b) the total acreage allocated to all nonmarginal wells in the Pool entitled to receive an allowable;

(2) 50% shall be allocated to each well in the ratio that (a) the product of multiplying such well's deliverability in M.C.F. per day (determined as provided in the Commission's Order No. R-333-A) by the number of acres allocated to such well as its proration unit (as provided in Rule 3 above) bears to (b) the total of the products of similar multiplications of such factors for all nonmarginal wells in the Pool entitled to receive an allowable; and

(3) In no event, however, shall any well be given an allowable (or an adjusted allowable as provided for in Paragraph (a) of this Rule) of less than 350 M.C.F. per day or more than 2,500 M.C.F. per day.

BALANCING OF PRODUCTION

RULE 6. Underproduction: (a) The dates 7:00 A.M., February 1, and 7:00 A.M., August 1, shall be known as balancing dates and the periods of time bounded by these dates shall be known as gas proration periods. 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 addi-

tion 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.

(b) 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 7. Overproduction: (a) 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 and has been overproduced throughout such proration period, it shall be shut in and its current monthly allowable charged against its overproduction at the end of such period 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.

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

GRANTING OF ALLOWABLES

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

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

REPORTING OF PRODUCTION

RULE 10. 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, other than gas used on the lease for consumption in lease houses, treaters, combustion engines and other similar lease equipment, shall be charged against the well's allowable.

CASING AND CEMENTING PROGRAM

RULE 11. (a) Surface Pipe: The surface pipe shall be set to a minimum depth of 100 feet, and where shallow potable water-bearing beds are present, the surface pipe shall be set to such shallow potable water-bearing beds and a sufficient amount of cement shall be used to circulate the cement behind the pipe to the bottom of the cellar. This surface casing shall stand cemented for at least 24 hours before drill-

ling plug or initiating tests. The surface casing shall be tested after drilling plug by bailing the hole dry. The hole shall remain dry for one hour to constitute satisfactory proof of a water shut-off. In lieu of the foregoing test the cement job may be tested by building up a pressure of 500 p.s.i., closing the valves and allowing to stand thirty minutes. If the pressure does not drop more than 100 pounds during that period, the test shall be considered satisfactory. This test shall be made both before and after drilling the plug. In this regard all fresh waters and waters of present or probable future value for domestic, commercial or stock purposes shall be confined to their respective strata and shall be adequately protected by methods approved by the Commission. Special precaution shall be taken in drilling and abandoning wells to guard against any loss of artesian potable water from the strata in which it occurs and the contamination of artesian potable water by objectionable water, oil or gas. The Commission shall be notified at least 24 hours prior to the conducting of any test.

(b) Production String: The production string shall be set using a minimum of 100 sacks of cement and shall stand cemented not less than 36 hours before testing the casing. This test shall be made by building up a pressure of 1,000 p.s.i., closing the valves and allowing to stand thirty minutes. If the pressure does not drop more than 100 pounds during that period, the test shall be considered satisfactory.

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

TUBING

RULE 12. Any completed well which produces any oil shall be tubed. This tubing shall be set as near the bottom of the hole as practicable, but in no case shall tubing perforations be more than 250 feet from the bottom. The bottom of the tubing shall be restricted to an opening of less than 1 inch or bullplugged in order to prevent the loss of pressure bombs or other measuring devices.

SPECIAL EQUIPMENT

RULE 13. Wellhead equipment for all wells shall be installed and maintained in first class condition, so that static bottom hole pressures and surface pressures may be obtained at any time by a duly authorized agent of the Commission. Valves shall be installed so that pressures may be readily obtained on the casing and also on the tubing, wherever tubing is installed. All connections subject to well pressure and all wellhead fittings shall be of first class material, rated at 2,000 p.s.i. working pressure and maintained in gas-tight condition. Bradenheads rated at 2,000 p.s.i. shall be installed on all production strings and Bradenhead connections maintained in gas-tight condition. There shall be at least one valve on each Bradenhead. Operators shall be responsible for maintaining all equipment in first class condition and shall repair or replace equipment where gas leakage occurs.

SAFETY REQUIREMENTS

RULE 14. Drilling boilers shall not be set closer than 200 feet to any well or tank battery. All electrical equipment shall be in first class condition and properly installed.

SHOOTING OF WELLS

RULE 15. Wells shall not be shot or chemically treated until the permission of the Commission is obtained. Each well shall be shot or treated in such manner as will not cause injury to the sand or result in water entering the oil or gas sand, and necessary precautions shall be taken to prevent injury to the casing. If shooting or chemical treatment results in irreparable injury to the well or to the oil or gas sand, the well shall be properly plugged and abandoned.

INITIAL POTENTIAL TEST

RULE 16. (a) The initial potential test in the Mesaverde Formation shall be made after a minimum shut in time of seven (7) days. The shut in pressure will be measured by the use of a dead-weight gauge. The open flow shall be determined by a pitot tube measurement after unrestricted flowing of the gas to the air for a period of three (3) hours; the flow nipple shall be at least eight (8) diameters long. The pitot tube shall be constructed of one-eighth (1/8) inch pipe (nominal diameter). Standard tables (Reid's) will be provided by the Commission.

(b) This test shall be reported on Commission Form C-122-B.

PROTECTION OF MINERAL DEPOSITS

RULE 17. Since the Menefee coal beds bear some gas and since these coal beds are of noncommercial value, Rule 20, Order Number 4 of the Commission dated August 12, 1935, shall not apply to this field.

GAS WASTAGE

RULE 18. Mesaverde gas shall not be flared since this is principally a gas reservoir and any well not connected to the lines of a gas purchaser shall be shut in until such market is obtained. Wells in this field shall be permitted to produce and market gas, as long as such can be done without waste, equitably between proration units for the field.

BRADENHEAD GAS

RULE 19. Bradenhead gas shall not be used in torches or expansively in engines or pumps, or be otherwise wasted. It may be used for lease and development purposes and for the development of nearby leases, except as prohibited above. Wells shall not be completed as Bradenhead gas wells unless special permission is obtained from the Commission.

SPECIAL DEFINITIONS

RULE 20. The term "marginal well", as used in these Rules, shall mean a well not capable of producing its allowable, as calculated by means of the allocation formula set forth in Rule 5 (b) above. The term "nonmarginal well", as used in these Rules, shall mean any well, other than a marginal well, which is entitled to an allowable.

RULE 21. 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 nominations as provided in Rules 4 and 5 above.