

**BEFORE THE OIL CONSERVATION COMMISSION
OF THE STATE OF NEW MEXICO**

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

**CASE NO. 861
Order No. R-639-A**

**APPLICATION OF EL PASO NATURAL
GAS COMPANY FOR AN ORDER PROMULGATING
POOL RULES AND INSTITUTING GAS PRO-
RATIONING FOR THE CROSBY DEVONIAN
GAS POOL IN LEA COUNTY, NEW MEXICO.**

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 o'clock a.m. on November 13, 1956, at Santa Fe, New Mexico, before the Oil Conservation Commission, hereinafter referred to as the "Commission".

NOW, on this 28th day of December, 1956, the Commission, a quorum being present, having considered the record and testimony adduced, and being fully advised in the premises,

FINDS:

- (1) That due notice of the time and place of hearing having been given as required by law, the Commission has jurisdiction of this case and the subject matter thereof.
- (2) That Anderson-Prichard Oil Corporation did complete its American Republics-Federal No. 1 discovery well in the NE/4 SW/4 of Section 28, Township 25 South, Range 37 East, NMPM, Lea County, New Mexico on or about January 18, 1955.
- (3) That said well potentialed 30,000 MCF of gas per day on an absolute open flow test from the Devonian formation in the depth interval of 8270 to 8390 feet.
- (4) That said well discovered a new common source of supply in this area.
- (5) That under date of May 27, 1955, the Commission issued its Order No. R-639 creating the Crosby-Devonian Pool. That Order R-789 and R-914 has extended the horizontal limits of the Crosby-Devonian gas pool.
- (6) That the pool has already been developed to the extent that a 640-acre drilling and proration unit could not now be formed within the probable productive limits of the pool as evidenced by seismic surveys and geological information taken from existing wells.

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(7) That the probable areal extent of the common source of supply is limited, and as a result thereof a proration unit of more than 160 acres could cause the inclusion in units of acreage that cannot reasonably be assumed to be productive of gas.

(8) That one well will efficiently and economically drain 160 acres of the said common source of supply.

(9) That in order to provide for the orderly development of the common source of supply, and to prevent waste, drilling units of 160 acres, well-spacing regulations, a casing program and the allocation and proration of gas production should be established for said common source of supply.

(10) That the producing capacity of the gas wells in the Crosby-Devonian Gas Pool is greater than the market demand for gas from such pool and the pool should therefore be prorated.

(11) That a proration formula based on 100% acreage would provide a just and equitable allocation of the gas from the Crosby Devonian gas pool, and that nothing further would be accomplished by the incorporation of a pressure factor in the proration formula.

(12) That for the prevention of waste a "no-flare" rule should be adopted to prohibit the flaring, venting, or wasting of casinghead gas or any other type of gas in any of the gas or oil pools referred to and affected by this order.

IT IS THEREFORE ORDERED:

(1) That Order R-639, Order 787 and R-914 be and the same are hereby superseded.

(2) That the horizontal limits of the Crosby-Devonian Gas Pool shall be the area as described in Exhibit "A" attached hereto and made a part hereof. That the vertical limits shall include all the formations that can reasonably be considered to be of Devonian age.

(3) That no gas, either dry gas or casinghead gas shall be flared or vented in the Crosby-Devonian gas pool unless specifically authorized by order of the Commission after notice and hearing.

(4) That within 15 days after the date of this order, operators of all wells in the Crosby-Devonian gas pool shall comply with the provisions of Rule 1107, pertaining to Form C-104; Rule 1109, pertaining to Form C-110; and Rule 1127, pertaining to Form C-128; of the Commission Rules and Regulations.

CASING PROGRAM REQUIREMENTS:

RULE 1. The casing program for the field shall include three strings of casing set in accordance with the following plan:

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(a) The surface string shall be new or reconditioned pipe with a mill test of not less than two thousand (2,000) pounds per square inch and shall be set and cemented at a depth of approximately five hundred (500) feet, such depth being sufficient to protect the fresh water bearing sands of the Santa Rosa formation.

Cementing shall be by the pump-and-plug method, and sufficient cement shall be used to fill the annular space back of the pipe to the surface of the ground or the bottom of the cellar. Cement shall stand a minimum of sixteen (16) hours under pressure and a total of twenty-four (24) hours before drilling the plug or initiating pressure tests. Before drilling the plug, this string shall be tested by the application of at least one thousand (1,000) pounds per square inch and, if at the end of thirty (30) minutes the pressure shows a drop of one hundred fifty (150) pounds per square inch or more, the cementing job shall be condemned. After corrective measures have been taken, the pipe shall again be tested in the same manner.

(b) The intermediate string shall consist of new or reconditioned pipe that has been tested to two thousand (2,000) pounds per square inch and shall be set at approximately thirty-six hundred (3,600) feet. Cementing shall be by the pump-and-plug method, and sufficient cement shall be used to fill the calculated annular space back of the pipe to a point one hundred (100) feet above the top of the Salado formation. The cement shall stand a minimum of twenty-four (24) hours under pressure and a total of thirty (30) hours before drilling plug or initiating tests. Casing shall be tested by the application of at least twelve hundred (1200) pounds per square inch pump pressure. If, at the end of thirty (30) minutes, the pump pressure shows a drop of one hundred (100) pounds per square inch or more, the cementing job shall be condemned. After corrective measures have been taken, the pipe shall again be tested in the same manner.

(c) The producing or oil string shall be new or reconditioned casing that has been tested to four thousand (4,000) pounds per square inch and shall be set at a depth not less than the top of the Devonian formation. Cementing shall be with a minimum of three hundred fifty (350) sacks of cement applied by the pump and plug method and shall stand a minimum of twenty four (24) hours

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under pressure and a total of forty eight (48) hours before drilling the plug or initiating tests. After cementing, the casing shall be tested by pump pressure of at least fifteen hundred (1,500) pounds per square inch for a period of at least thirty (30) minutes. If, at the end of 30 minutes the pressure shows a drop of one hundred (100) pounds per square inch or more, the cementing job shall be condemned. After corrective measures have been taken, the pipe shall again be tested in the same manner.

WELL SPACING AND ACREAGE REQUIREMENTS FOR DRILLING AND PRODUCTION UNITS.

RULE 2. Any gas well drilled to the Devonian formation within one mile of the horizontal limits of the Crosby-Devonian Gas Pool shall be spaced, drilled, operated, and pro-rated in accordance with the rules and regulations in effect in the said Crosby-Devonian Gas Pool.

RULE 3. No well shall be drilled, 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 160 acres of land, more or less, said acreage to be substantially in the form of a square conforming to a legal sub-division (quarter-section) of the U. S. Public Lands Survey, in which unit all the interests are consolidated by pooling agreement or otherwise, and on which unit no other well is completed or approved for completion in the pool.

(b) Such well shall be located not closer than 660 feet from any outer boundary line of the tract, nor closer than 330 feet from any quarter-quarter section or sub-division inner boundary, nor closer than 1320 feet from a well drilling to or capable of producing from the pool.

(c) The Secretary of the Commission shall have authority to grant an exception to the well location requirements of sub-paragraph (b) above without notice and hearing where application has been filed in due form and

1. The necessity for the unorthodox location is based on topographical conditions, and

2. (a) The ownership of all oil and gas leases within a radius of 660 feet of the proposed location is common with the ownership of the oil and gas leases under the proposed location, or

(b) All owners of oil and gas leases within such radius consent in writing to the proposed location.

(c) In lieu of sub-paragraph 2 (a) and (b) of this rule the applicant may furnish proof of the fact that said offset operators were notified by registered mail of his intent to drill an unorthodox location. The Secretary-Director of the Commission may approve the application if, after a period of twenty days following the mailing of said notice, no operator has made objection to the drilling of the unorthodox location.

RULE 4. The provisions of Paragraph (k) of Commission Rule 164 shall not apply to the Crosby-Devonian Gas Pool located in Lea County, New Mexico.

RULE 5. 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 Crosby-Devonian Gas Pool, a standard proration unit shall consist of between 158 and 162 contiguous surface acres substantially in the form of a square which shall be a legal subdivision (quarter-section) of the U. S. Public Land Surveys with a well located at least 660 feet from the nearest property lines.

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 that the area of such non-standard proration unit bears to 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.

If during a proration month the acreage assigned a well is increased the operator shall notify the Proration Manager in writing (Box 2045, Hobbs, New Mexico) of such increase. The increased allowable assigned the gas proration unit for the well shall be effective on the first day of the month following receipt of the notification by the Proration Manager.

DETERMINING POOL ALLOWABLE.

RULE 6. 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 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 Crosby-Devonian 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 Commission Form C-121-A.

RULE 7. In the event a gas purchaser's market shall have increased or decreased, he may file with the Commission prior to the 10th day of the month a "Supplemental Nomination," showing the amount of gas he actually in good faith desires to purchase during the ensuing proration month from the Crosby-Devonian Gas Pool. The Commission shall hold a public hearing between the 13th and 20th days of each month to determine the reasonable market demand for gas for the ensuing proration month. "Supplemental Nominations" shall be submitted on a form prescribed by the Commission.

The total allowable to be allocated to the pool each month shall be equal to the preliminary or supplemental nominations (whichever is applicable) together with any adjustments which the Commission deems advisable.

DETERMINING WELL ALLOWABLES.

RULE 8. The Commission after determining the market demand for the pool, as set out in Rules 6 and 7, above, shall determine a monthly allowable for each well in the pool which is entitled to an allowable in accordance with the following procedure:

(a) Each well shall be assigned an acreage factor determined by dividing the acreage assigned to the well by 160 acres.

(b) The allowable to be assigned to each marginal well shall be equal to the maximum production during any month of the preceding 6 months gas proration period.

(c) The pool allowable remaining each month after deducting the total allowable assigned to marginal wells shall be allocated among the non-marginal wells entitled to an allowable in the proportion that each well's acreage factor bears to the total of the acreage factors for all non-marginal wells in the pool.

(d) The Commission may assign minimum allowables to prevent the premature abandonment of wells.

CLASSIFICATION OF WELLS.

RULE 9. (a) Effective January 1, 1958, and at the beginning of each subsequent gas proration period, any well which had an underproduced status at the beginning of the preceding gas proration period and which did not produce its allowable during at least one month of such preceding gas proration period may be classified as a marginal well unless prior to the end of said preceding gas proration period, the operator or other interested party presents satisfactory evidence to the Commission showing that the well should not be so classified.

However, a well which in any month of said proration period has demonstrated its ability to produce its allowable for said proration period shall not be classified as a marginal well.

(b) A well which has been reworked or recompleted shall be classified as a non-marginal well as of the day of re-connection to a pipeline until such time as production data, deliverability data, or other evidence as to producing ability indicates that the well is improperly classified.

(c) A marginal well shall not be permitted to accumulate underproduction, and any underproduction accrued to a well prior to its classification as a marginal well shall be cancelled.

(d) The director may reclassify a marginal or non-marginal well at any time the wells production data, deliverability data, or other evidence as to the wells producing ability justify such re-classification.

(e) 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, the marginal well shall be reclassified as a non-marginal well and its allowable adjusted accordingly.

(f) All wells not classified as marginal wells shall be non-marginal wells.

BALANCING OF PRODUCTION.

RULE 10. 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 between these dates shall be known as gas proration periods.

However, the first proration period for the Crosby-Devonian gas pool shall begin April 1, 1957 at 7:00 a.m., and shall continue until January 1, 1958 at 7:00 a.m.

RULE 11. Underproduction: Any non-marginal well which has an underproduced status at the end of a gas proration period shall be allowed to carry such underproduction forward into the next gas proration period and may produce such underproduction in addition to the allowable assigned during such succeeding period. Any allowable carried forward into a gas proration period and remaining unproduced at the end of such gas proration period shall be cancelled.

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Production during any one month of a gas proration period in excess of the allowable assigned to a well for such month shall be applied against the under-production carried into such period in determining the amount of allowable, if any, to be cancelled.

RULE 12. Overproduction: Any well which has an overproduced status at the end of a gas proration period shall carry such overproduction forward into the next gas proration period, provided that such overproduction shall be made up during such succeeding period. Any well which has not made up the overproduction carried into a gas proration period by the end of such gas proration period shall be shut-in until such overproduction is made up. If, at any time, a well is overproduced an amount equaling six times its current monthly allowable it shall be shut-in during the current month.

Allowable assigned to a well during any one month of a gas proration period in excess of the production for such month shall be applied against any overproduction carried into such period in determining the amount of overproduction, if any, which has not been made up.

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 13. Any allowable accrued to a well at the end of a proration period due to the cancellation of underage and re-distribution thereof, shall be applied against the overproduction carried into said proration period.

CONTENTS OF GAS PRORATION SCHEDULE.

RULE 14. (a) The Commission shall issue a proration schedule setting out the amount of gas which each well may produce during the ensuing proration month along with such other information as is necessary to show the allowable-production status of each non-marginal well on the schedule.

(b) The Commission shall include in the proration schedule the gas wells in the Crosby-Devonian Gas Pool delivering to a gas transportation facility, or lease gathering system, and shall include in the proration schedule of the said 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.

GRANTING OF ALLOWABLES.

RULE 15. No gas well shall be given an allowable until Form C-104 and Form C-110 have been filed together with Form C-128 showing acreage attributed to said well and the locations of all wells on the lease.

RULE 16. 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 2045, Hobbs, New Mexico) by the purchaser, or the date of filing of Form C-104, Form C-110 and Form C-128 or the approval of a non-standard proration unit or filing of an affidavit of communitization, whichever date is the later.

The date of first allowable for all gas wells which are within the Crosby-Devonian Gas Pool or within one mile thereof shall be April 1, 1957, provided the provisions of this rule and Rule 11 have been complied with.

RULE 17. The allowable revision for a well after workover or recompletion shall become effective:

(a) On the date of reconnection after workover, such date to be determined from Form C-104 as filed by the operators, or

(b) A date 15 days prior to the approval of Form C-104 by the Commission's office, (Box 2045, Hobbs, New Mexico); (Form C-104 shall specify the exact nature of the workover or remedial work; if the nature of the work cannot be explained on Form C-104, in that event, Form C-103 shall be also filed in accordance with Rule 1106 of the Commission's Statewide Rules and Regulations).

Whichever date is later.

REPORTING OF PRODUCTION.

RULE 18. The monthly gas production from each well shall be metered separately and the gas production therefrom shall be reported to the Commission on Form C-115 so as to reach the Commission on or before the 20th day of the month next succeeding the month in which the gas was produced. The operator shall show on such report what disposition has been made of the gas produced.

Each purchaser or taker of gas in the Crosby-Devonian Gas Pool shall submit a report to the Commission so as to reach the Commission on or before the 20th day of the month next succeeding the month in which the gas was purchased or taken.

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

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

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

The full production of gas from each well shall be charged against the well's allowable regardless of what disposition has been made of the gas; provided, however, that gas used on the lease for consumption in lease houses, treaters, compressors, combustion engines and other similar lease equipment shall not be charged against the well's allowable.

DEFINITIONS.

PROVIDED FURTHER, After the effective date of this order no well shall be completed or recompleted in such a manner that the producing zone of the overlying gas pool and the producing zone of the underlying oil pool are both open in the same well bore unless specifically authorized by order of the Commission after notice and hearing. Dual completions may be effected in accordance with the provisions of Rule 112-A of the Commission's Rules and Regulations.

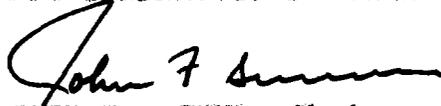
PROVIDED FURTHER, Gas-liquid ratio tests shall be taken in accordance with the provisions of Rule 301 of the Commission Rules and Regulations. Said tests shall be taken on all oil and gas wells within the Crosby-Devonian Gas Pool or within one mile thereof during the month of March, 1957, and annually, thereafter as scheduled by the Commission.

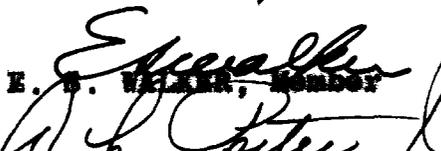
PROVIDED FURTHER, That in filing Form C-101 "Notice of Intention to Drill or Recomplete" all operators shall strictly comply with the provisions of Paragraph (e) of Rule 104.

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

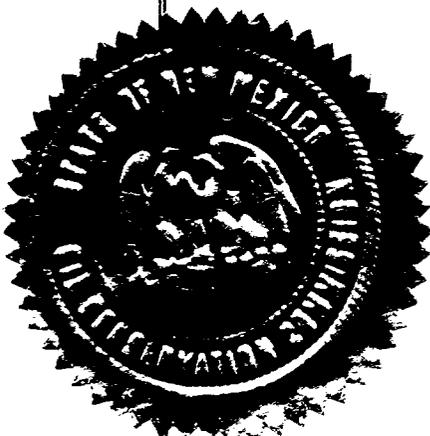
DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION


JOHN F. SIMMS, Chairman


E. S. WALKER, Member


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



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EXHIBIT "A"

The horizontal limits of the Crosby-Devonian shall be as follows:

TOWNSHIP 25 SOUTH, RANGE 37 EAST, NMPH
Section 28: All (from R-639)
Section 29: E/2 (from R-787)
Section 33: N/2 (from R-914)