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

IN THE MATTER OF THE HEARINGS HELD JOINTLY BY THE NEW MEXICO OIL CONSERVATION COMMISSION AND THE RAILROAD COMMISSION OF TEXAS FOR THE PURPOSE OF CONSIDERING:

> CASE NO. 672 Order No. R-510

THE MATTER OF PRORATION METHODS,
MAXIMUM EFFICIENT RATE OF PRODUCTION,
AND SPECIAL POOL RULES FOR OIL AND GAS
POOLS EMBRACING LANDS WITHIN THE STATES
OF TEXAS AND NEW MEXICO: NAMELY, THE
BRONCO-SILURO-DEVONIAN POOL IN LEA
COUNTY, NEW MEXICO (THE TEXAS PORTION
OF WHICH LIES IN YOAKUM COUNTY AND IS
TERMED THE BRONCO POOL.)

## ORDER OF THE COMMISSION

## BY THE COMMISSION:

WHEREAS, After due notice, the Railroad Commission of Texas and the New Mexico Oil Conservation Commission held a joint hearing in Santa Fe, New Mexico, on February 26, 1954, to consider the adoption of rules and regulations to govern the drilling, completion and operation of wells in the Bronco-Siluro-Devonian Pool, Lea County, New Mexico, and Yoakum County, Texas; and

WHEREAS, After due notice, the Railroad Commission of Texas and the New Mexico Oil Conservation Commission held a joint hearing in Austin, Texas, on April 2, 1954, to consider the adoption of rules and regulations to govern the drilling, completion and operation of wells in the Bronco-Siluro-Devonian Pool, Lea County, New Mexico, and Yoakum County, Texas; and

NOW, on this 15th day of July, 1954, the Oil Conservation Commission of New Mexico, a quorum being present, having considered the records and testimony adduced, and being fully advised in the premises,

## FINDS:

- (1) That due notice of the time and place of hearing and the purpose thereof having been given as required by law, it has jurisdiction of this case and the subject matter thereof.
- (2) That waste will take place in said pool unless rules are adopted by the Commission for the prevention thereof, and that the rules and regulations hereinafter set forth are necessary to prevent such waste and to provide for a more orderly development and operation of said field.

Entered 7-26-54-9 p987

IT IS THEREFORE ORDERED, by the Oil Conservation Commission of New Mexico that the following rules, in addition to such of the Commission's general rules and regulations as are not in conflict herewith, be and the same are hereby adopted to govern the drilling, completion and operation of wells in the Bronco-Siluro-Devonian Pool, Lea County, New Mexico.

RULE 1. The permitted gas-oil ratio for all wells shall be two thousand (2,000) cubic feet of gas per barrel of oil produced. Any oil well producing with a gas-oil ratio in excess of two thousand (2,000) cubic feet of gas per barrel of oil shall be allowed to produce daily only that volume of gas obtained by multiplying the daily oil allowable of such well as determined by the applicable rules of the Commission by two thousand (2,000) cubic feet. The gas volume thus obtained shall be known as the daily gas limit of such well. The daily oil allowable therefor shall then be determined and assigned by dividing the daily gas limit by its producing gas-oil ratio.

RULE 2. The acreage assigned to the individual oil well for the purpose of allocating allowable oil production thereto shall be known as a proration unit. No proration unit shall comist of more than forty (40) acres except as hereinafter provided, and the two farthermost points in any proration unit shall not be in excess of twenty-one hundred (2100) feet removed from each other; provided, however, that in the case of long and narrow leases or in cases where, because of the shape of the lease, such is necessary to permit the utilization of tolerance acreage, the Commission may, after proper showing, grant exceptions to the limitations as to the shape of proration units as herein contained. All proration units, however, shall consist of continuous and contiguous acreage which can reasonably be considered to be productive of oil.

If after the drilling of the last well on any lease and the assignment of acreage to each well thereon in accordance with the regulations of the Commission, there remains an additional unassigned lease acreage of less than forty (40) acres, then and in such event the remaining unassigned lease acreage up to and including a total of twenty (20) acres may be assigned to the last well drilled on such lease or may be distributed among any group of wells located thereon so long as the proration units resulting from the inclusion of such additional acreage meet the limitations prescribed by the Commission.

Operators shall file certified plats of their properties in the pool, which plats show all those things pertinent to the determination of the acreage claimed for each well hereunder.

RULE 3: The casing program of all wells hereafter drilled in said pool shall include at least three (3) strings of pipe set in accordance with the following program:

(a) The surface casing shall consist of new or reconditioned pipe with an original mill test of not less than one thousand (1000) pounds per square inch, and shall be set and cemented below the top of the red beds; provided, however, that not less than three hundred (300) feet of surface string shall be set. Cement 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 be allowed to stand a minimum of twelve (12) hours under pressure and a total of twenty-four (24) hours before drilling the plug. The casing shall be tested by pump pressure

of at least five hundred (500) pounds per square inch applied at the well head. If at the end of thirty (30) minutes the pressure shows a drop of one hundred and fifty (150) pounds per square inch, or more, the casing shall be condemned. After the corrective operations, the casing 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 (2000) pounds per square inch, and shall be set no higher than the top of the San Andres formation at an approximate depth of forty-five hundred (4500) feet. Sufficient cement shall be used to fill the calculated annular space back of the pipe to at least as high as the bottom of the surface pipe. Cement shall be by the pump and plug method, and the cement shall be allowed to stand a minimum of twelve (12) hours under pressure and a total of twenty-four (24) hours before initiating tests or drilling the plug. The casing shall be tested by pump pressure of at least one thousand (1000) pounds per square inch applied at the well head. If at the end of thirty (30) minutes the pressure shows a drop of one hundred and fifty (150) pounds per square inch, or more, the casing shall be condemned. After the corrective operations, the casing shall again be tested in the same manner.
- (c) The producing or oil string shall be new or reconditioned pipe that has been tested to three thousand (3000) pounds per square inch, and shall be set no higher than the top of the producing formation. Cement shall be by the pump and plug method, and sufficient cement shall be used to fill the calculated annular space behind the pipe to a point at least thirty-three hundred (3300) feet above the shoe. Cement shall be allowed to stand a minimum of twelve (12) hours under pressure and a total of twenty-four (24) hours before drilling the plug or initiating tests. The casing shall be tested by pump pressure of at least fifteen hundred (1500) pounds per square inch applied at the well head. If at the end of thirty (30) minutes the pressure shows a drop of two hundred (200) pounds per square inch, or more, the casing shall be condemned. After the corrective operations, the casing shall again be tested in the same manner.

At the option of the operator, a liner may be run in lieu of a full length producing or oil string, such liner to extend not less than 200 feet above the shoe of the next larger casing string. The liner shall be secured to the next larger casing string in a manner approved by the New Mexico Oil Conservation Commission through a duly authorized representative or the District I Oil and Gas Inspector. Such liner shall be tested in the manner prescribed above for the testing of producing or oil strings.

RULE 4: The production allowable for said pool within New Mexico shall be, and the same hereby is fixed at 227 barrels of oil per day beginning at 7 o'clock a.m., M.S.T. on June 1, 1954, and continuing until further order.

RULE 5: The datum reservoir pressure of all wells in the pool shall be determined annually and the testing period shall be during the months of October and November; the results thereof to be reported to the Commission on or before the fifteenth (15th) of December of each year. All pressure determinations shall be reported at a datum of eight thousand (8000) feet below sea level. Prior to testing, all wells

shall be shut in for a period of not less than forty-eight (48) hours or more than seventy-two (72) hours. All offset operators shall be notified at least forty-eight (48) hours before such test is made on any well, and any operator in the pool shall have the privilege of witnessing such pressure determinations. Said pressures shall be taken on all flowing wells with subsurface pressure gauge or other method of equal accuracy and may be taken on pumping wells with sonic devices or other method of equal accuracy.

RULE 6: All operators shall take a GOR test not sooner than 30 days nor later than 60 days following the completion or recompletion of an oil well. A GOR test shall be made annually on all oil wells producing from the Bronco-Siluro-Devonian reservoir pool. Such tests shall be made in accordance with Commission Rule 301, and shall be taken during the months of April and May of each calendar year. Results of such tests shall be reported on Commission Form C-116 not later than June 15 of the year in which the test was made.

IT IS FURTHER ORDERED, That this cause be held open on the docket for such other and further orders as may be necessary.

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

R. R. SPURRIER, Secretary and Member

SEAL