Entered November 4, 1971

# 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. 4605 Order No. R-1670-J

NOMENCLATURE

APPLICATION OF ELK OIL COMPANY FOR SPECIAL POOL RULES AND A NON-STANDARD GAS PRORATION UNIT, CHAVES COUNTY, NEW MEXICO.

#### ORDER OF THE COMMISSION

### BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on October 13, 1971, at Roswell, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this 4th day of November, 1971, the Commission, a quorum being present, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises,

### FINDS:

- (1) That due public notice having been given as required by law, the Commission has jurisdiction of this cause and the subject matter thereof.
- (2) That the applicant, Elk Oil Company, seeks the promulgation of special rules and regulations for the Round Tank-Queen Pool, Chaves County, New Mexico, including provisions for the classification of oil and gas wells, 40-acre spacing for oil wells, 160-acre spacing for gas wells, and a limiting gas-oil ratio of 6,000 to 1.
- (3) That while the Round Tank-Queen Pool is presently classified as an oil pool, the evidence adduced indicates that it is in fact an "associated" reservoir.

-2-CASE NO. 4605 Order No. R-1670-J

- (4) That the reservoir characteristics of the subject pool indicate that the gas area can be efficiently and economically drained and developed on 160-acre spacing, and that the oil area can be efficiently and economically drained and developed on 40-acre spacing.
- (5) That the reservoir characteristics of the subject pool presently available justify the definition of a gas well as a well producing with a gas-liquid ratio of 30,000 or more cubic feet of gas per barrel of liquid hydrocarbons.
- (6) That the reservoir characteristics of the subject pool presently available justify the establishment of a gasliquid ratio limitation of 6,000 cubic feet of gas per barrel of liquid hydrocarbons.
- (7) That special rules and regulations providing for 160-acre gas well spacing and 40-acre oil well spacing should be promulgated for the subject pool in order to prevent the economic loss caused by the drilling of unnecessary wells, avoid the augmentation of risk arising from the drilling of an excessive number of wells, prevent reduced recovery which might result from the drilling of too few wells, and otherwise prevent waste and protect correlative rights.
- (8) That the special rules and regulations should provide for the classification of a gas well as a well producing with a gas-liquid ratio of 30,000 or more cubic feet of gas per barrel of liquid hydrocarbons and should provide for a gas-liquid ratio of 6,000 cubic feet of gas per barrel of liquid hydrocarbons in order to afford to the owner of each property in the pool the opportunity to produce his just and equitable share of the oil or gas, or both, and for this purpose to use his just and equitable share of the reservoir energy.
- (9) That the special rules and regulations should establish proration rules for gas wells in order to prevent waste and protect correlative rights.
- (10) That the applicant further seeks approval of a 120-acre non-standard gas spacing unit in the Round Tank-Queen Pool comprising the W/2 SW/4 and SE/4 SW/4 of Section 30, Township 15 South, Range 29 East, NMPM, Chaves County, New Mexico, to be dedicated to its JW Well No. 2, located in Unit L of said Section 30.

-3-CASE NO. 4605 Order No. R-1670-J

(11) That the proposed non-standard gas spacing unit should be approved.

## IT IS THEREFORE ORDERED:

(1) That, effective November 1, 1971, the horizontal limits of the Round Tank-Queen Pool, Chaves County, New Mexico, are hereby established as follows:

# ROUND TANK-QUEEN POOL CHAVES COUNTY, NEW MEXICO

TOWNSHIP 15 SOUTH, RANGE 28 EAST, NMPM Section 25: E/2

## TOWNSHIP 15 SOUTH, RANGE 29 EAST, NMPM Section 30: W/2

(2) That, effective November 1, 1971, Special Rules and Regulations for the Round Tank-Queen Pool, Chaves County, New Mexico, are hereby promulgated as follows:

## SPECIAL RULES AND REGULATIONS FOR THE ROUND TANK-QUEEN POOL

- RULE 1. Each well completed or recompleted in the Round Tank-Queen Pool or in the Queen formation within one mile thereof, and not nearer to or within the limits of another designated Queen pool, shall be spaced, drilled, operated, and produced in accordance with the Special Rules and Regulations hereinafter set forth.
- RULE 2. (a) Each gas well shall be located on a standard unit containing 160 acres, more or less, substantially in the form of a square, which is a quarter section being a legal subdivision of the United States Public Land Surveys.
- RULE 2. (b) Each oil well shall be located on a standard unit containing 40 acres, more or less, consisting of a governmental quarter-quarter section.
- RULE 3. The Secretary-Director of the Commission may grant an exception to the requirements of Rule 2 (a) without notice and hearing when an application has been filed for a non-standard unit and the unorthodox size or shape of the unit is necessitated

-4-CASE NO. 4605 Order No. R-1670-J

by a variation in the legal subdivision of the United States Public Land Surveys, or the following facts exist and the following provisions are complied with:

- (a) The non-standard unit consists of quarter-quarter sections or lots that are contiguous by a common bordering side.
- (b) The non-standard unit lies wholly within a governmental quarter section and contains less acreage than a standard unit.
- (c) The applicant presents written consent in the form of waivers from all offset operators and from all operators owning interests in the quarter section in which the non-standard unit is situated and which acreage is not included in said non-standard unit.
- (d) In lieu of paragraph (c) of this rule, the applicant may furnish proof of the fact that all of the aforesaid operators were notified by registered or certified mail of his intent to form such nonstandard unit. The Secretary-Director may approve the application if no such operator has entered an objection to the formation of such non-standard unit within 30 days after the Secretary-Director has received the application.
- RULE 4. Each well, oil or gas, shall be located no nearer than 330 feet to any quarter-quarter section line, except that any well drilled in a known gas productive area shall be located within 150 feet of the center of a quarter-quarter section.
- RULE 5. A well shall be classified as a gas well if it has a gas-liquid ratio of 30,000 or more cubic feet of gas per barrel of liquid hydrocarbons. A well shall be classified as an oil well if it has a gas-liquid ratio of less than 30,000 cubic feet of gas per barrel of liquid hydrocarbons. The simultaneous dedication of any acreage to an oil well and a gas well is prohibited.
- RULE 6. That the limiting gas-oil ratio shall be 6,000 cubic feet of gas for each barrel of oil produced.

-5-CASE NO. 4605 Order No. R-1670-J

RULE 7. An oil well which has 40 acres dedicated to it shall be permitted to produce an amount of gas determined by multiplying the top unit oil allowable for the pool by the limiting gas-liquid ratio for the pool. In the event there is more than one oil well on a 40-acre oil proration unit, the operator may produce the allowable assigned to the 40-acre unit from the wells on the unit in any proportion.

A gas well shall be permitted to produce that amount of gas obtained by multiplying the top unit oil allowable for the pool by the limiting gas-liquid ratio for the pool and by a fraction, the numerator of which is the number of acres dedicated to the particular gas well and the denominator of which is 40. In the event there is more than one gas well on a 160-acre gas proration unit, the operator may produce the amount of gas assigned to the unit from the wells on the unit in any proportion.

RULE 8. The operator of each newly completed well shall cause a gas-liquid ratio test to be taken on the well upon recovery of all load oil from the well, provided however, that in no event shall the test be commenced later than 30 days from the date of first production unless the well is connected to a gas-gathering facility and is producing under a temporary gas allowable assigned in accordance with Rule 11. Any well which is shut in shall be exempted from the gas-liquid ratio test requirement so long as it remains shut in. The initial gas-liquid ratio test shall be taken in the manner prescribed by Rule 9. If the gas-liquid ratio is 30,000 cubic feet of gas per barrel of liquid hydrocarbons, or more, the operator shall not produce the well until beneficial use can be made of the gas.

RULE 9. Gas-liquid ratio tests shall be taken on all wells during the months of January and July of each year. The initial gas-liquid ratio test shall suffice as the first semi-annual test. Tests shall be 24-hour tests, being the final 24 hours of a 72-hour period during which the well shall be produced at a constant normal rate of production. Results of such tests shall be filed on Commission Form C-116 on or before the 10th day of the following month. At least 72 hours prior to commencement of any such gas-liquid ratio tests, each operator shall file with the Artesia Office of the Commission a test schedule for its wells specifying the time each of its wells is to be

-6-CASE NO. 4605 Order No. R-1670-J

tested. Copies of the test schedule shall also be furnished to all offset operators.

Special tests shall also be taken at the request of the Secretary-Director and may also be taken at the option of the operator. Such special tests shall be taken in accordance with the procedures outlined hereinabove, including notification to the Commission and offset operators.

- RULE 10. An initial shut-in pressure test shall be taken on each gas well and shall be reported to the Commission on Form C-125.
- RULE 11. Any well completed after the effective date of these rules shall receive an allowable only upon receipt by the Commission's Artesia Office of Commission Forms C-104 and C-116, properly executed. The District Supervisor of the Commission's Artesia Office is hereby authorized to assign a temporary gas allowable to wells connected to a gas transportation facility during the recovery of load oil, which allowable shall not exceed the number of cubic feet of gas obtained by multiplying the daily top unit allowable for the pool by the limiting gasliquid ratio for the pool.
- RULE 12. Balancing dates shall be 7 o'clock a.m. January the first and 7 o'clock a.m. July the first, and the periods of time bounded by these dates shall be gas proration periods.
- RULE 13. Any gas well which has an underproduced status as of the end of a gas proration period shall be allowed to carry such underproduction forward into the next gas proration period and may produce such underproduction in addition to the allowable assigned during such succeeding period. Any allowable carried forward into a gas proration period and remaining unproduced at the end of such gas proration period shall be cancelled.
- RULE 14. 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 underproduction carried into such period in determining the amount of allowable, if any, to be cancelled.
- RULE 15. Any well which has an overproduced status as of the end of a gas proration period shall carry such overproduction

-7-CASE NO. 4605 Order No. R-1670-J

forward into the next gas proration period, provided that such overproduction shall be compensated for during such succeeding period. Any well which has not compensated for the overproduction carried into a gas proration period by the end of such proration period shall be shut in until such overproduction is compensated for. If, at any time, a well is overproduced an amount equalling three times its current monthly allowable, it shall be shut in during that month and each succeeding month until the well is overproduced less than three times its current monthly allowable.

- RULE 16. The allowable assigned to a well during any one month of a gas proration period in excess of the production for the same month shall be applied against the overproduction carried into such period in determining the amount of overproduction, if any, which has not been compensated for.
- RULE 17. The Commission may allow overproduction to be compensated for at a lesser rate than would be the case if the well were completely shut in upon a showing after notice and hearing that complete shut in of the well would result in material damage to the well or reservoir.
- RULE 18. The monthly gas production from each gas well shall be metered separately and the gas production therefrom shall be reported to the Commission on Form C-115 so as to reach the Commission on or before the 24th day of the month next succeeding the month in which the gas was produced. The operator shall show on such report what disposition has been made of the produced gas.
- RULE 19. Each purchaser or taker of gas shall submit a report to the Commission so as to reach the Commission on or before the 15th day of the month next succeeding the month in which the gas was purchased or taken. Such report shall be filed on Form C-111 with the wells being listed in the same order as they are listed on the oil proration schedule.
- RULE 20. Failure to comply with any provision of these rules shall result in the immediate cancellation of allowable assigned to the affected well. No further allowable shall be assigned until all rules and regulations have been complied with. The Secretary-Director shall notify the operator of the well and purchaser in writing of the date of allowable cancellation and the reason therefor.

-8-CASE NO. 4605 Order No. R-1670-J

- RULE 21. All transporters or users of gas shall file gas well-connection notices with the Commission as soon as possible after the date of connection.
- RULE 22. Allowables to wells whose classification has changed from oil to gas or from gas to oil as the result of a gas-liquid ratio test shall commence on the first day of the month following the month in which such test was reported, provided that a plat (Form C-102) showing the acreage dedicated to the well and the location of all wells on the dedicated acreage has been filed.

### IT IS FURTHER ORDERED:

- (1) That a 120-acre non-standard gas spacing unit comprising the W/2 SW/4 and SE/4 SW/4 of Section 30, Township 15 South, Range 29 East, NMPM, Round Tank-Queen Pool, Chaves County, New Mexico, is hereby approved and dedicated to its JW Well No. 2 located in Unit L of said Section 30.
- (2) That the locations of all wells presently drilling to or completed in the Round Tank-Queen Pool or in the Queen formation within one mile thereof are hereby approved; that the operator of any well having an unorthodox location shall notify the Artesia District Office of the Commission in writing of the name and location of the well on or before November 15, 1971.
- (3) That all operators shall, prior to November 15, 1971, file with the Commission Form C-102 for each well showing the acreage dedicated to the well.
- (4) That all operators shall take new gas-oil ratio tests on all wells and file the results thereof with the Commission on Form C-ll6 prior to December 1, 1971; that the daily tolerance provision of Commission Rule 502 I is hereby waived for the purpose of testing wells at the allowable rate authorized by these rules.
- (5) That jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

-9-CASE NO. 4605 Order No. R-1670-J

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

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

BRUCE KING, Chairman

ALEX J. ARMIJO, Member

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

SEAL