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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. 1641 Order No. R-1410-C

APPLICATION OF W. R. WEAVER FOR THE PROMULGATION OF SPECIAL RULES AND REGULATIONS GOVERNING THE DRILLING, SPACING, AND PRO-DUCTION OF WELLS IN THE ANGELS PEAK-GALLUP OIL POOL, SAN JUAN COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 o'clock a.m. on July 13, 1960, at Santa Fe, New Mexico, before the Oil Conservation Commission of New Mexico, hereinafter referred to as the "Commission."

NOW, on this 16th day of September, 1960, the Commission, a quorum being present, having considered the testimony presented and the exhibits received at said hearing, 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 by Order No. R-1410-A, temporary Rules and Regulations were promulgated governing the Angels Peak-Gallup Oil Pool in San Juan County, New Mexico, which Order provided for 80-acre proration units for all wells in said pool, with a limiting gas-oil ratio of 4,000 to 1.
- (3) That said Order No. R-1410-A provided that this Case (No. 1641) be reopened in July of 1960 for further consideration of the temporary Special Rules and Regulations set forth in said Order, and for consideration of any other rules and regulations which might be necessary for the efficient operation of the pool.
- (4) That while the said Angels Peak-Gallup Pool is presently classified as an oil pool, the evidence adduced at this hearing as well as at previous hearings clearly indicates that it is in fact an "associated" reservoir, producing oil from

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an oil-saturated sand overlain by a gas-cap being contained in common and contiguous gas-saturated sand.

- (5) That the parties appearing at the hearing on July 13, 1960, proposed that 80-acre proration units be established for wells in the pool which would be classified as oil wells, and that operators be permitted to assign up to 320 acres to wells which would be classified as gas wells. Further, the parties proposed that the limiting gas-liquid ratio for the pool be set at 4,000 to 1.
- (6) That the parties also proposed that any well in the pool producing with a gas-liquid ratio of 30,000 cubic feet of gas per barrel of liquid hydrocarbons, or more, be classified as a gas well, and that any well producing with a gas-liquid ratio of less than 30,000 cubic feet of gas per barrel of liquid hydrocarbons be classified as an oil well.
- (7) That the applicants further proposed that the gas allocation formula be based on 75 per cent acreage times deliverability plus 25 per cent acreage.
- (8) That the parties failed to prove that there is a general correlation between the deliverabilities of the gas wells in the Angels Peak-Gallup Oil Pool and the recoverable gas in place under the tracts dedicated to such gas wells.
- (9) That the evidence establishes that the gas area in the pool can be efficiently and economically drained and developed on 320-acre proration units, and it further establishes that the oil area in the pool can be efficiently and economically drained and developed on 80-acre proration units.
- (10) That neither from an engineering nor an economic standpoint did the parties establish any necessity for a limiting gasoil ratio in excess of the Statewide provision of 2,000 to 1.
- (11) That the parties also proposed that at any time a gas well is overproduced six times its current allowable, it should be shut-in until it is overproduced less than six times its current allowable.
- (12) That permitting a gas well to become overproduced in an amount equal to six times its current allowable prior to shutting the well in might cause oil to migrate up-structure, thereby causing physical waste.

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IT IS FURTHER ORDERED:

- (1) That Commission Order No. R-1410-A be and the same is hereby superseded, effective October 1, 1960.
- (2) That Special Rules and Regulations for the Angels Peak-Gallup Oil Pool be and the same are hereby promulgated as hereinafter set forth, effective October 1, 1960.
- (3) That all operators having wells classified as gas wells pursuant to these rules shall file new acreage dedication plats (Commission Form C-128) with the Aztec District Office of the Commission prior to November 1, 1960.
- (4) That a Case is hereby docketed for the Regular Commission Hearing in April, 1962, in order that the Commission can, at that time, determine whether the Special Rules and Regulations hereinafter set forth have been effective in preventing significant movement of the gas-oil contact. Should conditions warrant such action, the Commission might decide to re-examine these Special Rules and Regulations prior to April, 1962.

SPECIAL RULES AND REGULATIONS FOR THE ANGELS PEAK-GALLUP OIL POOL

- RULE 1. Each well completed or recompleted in the Gallup formation within the boundary of the Angels Peak-Gallup Oil Pool or within one mile thereof, and not nearer to nor within the boundaries of another designated Gallup pool, shall be drilled, spaced, and produced in accordance with the Special Rules and Regulations hereinafter set forth.
- RULE 2. (a) Each gas well completed or recompleted in the Angels Peak-Gallup Oil Pool shall be located on a tract consisting of approximately 320 acres which may reasonably be presumed to be productive of gas from said pool, and which shall comprise any two contiguous quarter sections of a single governmental section, being a legal subdivision (half section) of the United States Public Lands Survey. For purposes of these Rules, a unit consisting of between 316 and 324 surface contiguous acres shall be considered a standard gas unit. Nothing contained herein shall be construed as prohibiting the drilling of a gas well on each quarter section in the 320-acre unit.
- RULE 2. (b) For good cause shown, the Secretary-Director may grant an exception to the requirements of Rule 2(a) without notice and hearing where an application has been filed in due form, and where the unorthodox size or shape of the tract is due to a variation in the legal subdivision of the United States

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Public Lands Survey, or where the following facts exist and the following provisions are complied with:

- (1) The non-standard unit consists of contiguous quarter-quarter sections or lots.
- (2) The non-standard unit consists of not more than 324 acres and lies wholly within a single governmental section.
- (3) The entire non-standard unit may reasonably be presumed to be productive of gas from said pool.
- (4) The applicant presents written consent in the form of waivers from all offset operators, and from all operators owning interests in the section in which any part of the non-standard unit is situated and which acreage is not included in the non-standard unit.
- (5) In lieu of Paragraph 4 of this Rule, the applicant may furnish proof of the fact that all of the aforesaid operators were notified by registered mail of his intent to form such non-standard unit. The Secretary-Director may approve the application if, after a period of 30 days, no such operator has entered an objection to the formation of the non-standard unit.
- RULE 2. (c) The District Supervisor shall have authority to approve non-standard gas proration units without notice and hearing and without administrative approval by the Secretary-Director if such unit consists of less than 316 surface contiguous acres and the non-standard unit is necessitated by a variation in the United States Public Lands Survey.
- RULE 2. (d) The allowable assigned to any such non-standard gas proration unit shall bear the same ratio to a standard allowable in said pool as the acreage in the unit bears to 320 acres.
- RULE 3. (a) Each oil well completed or recompleted in the Angels Peak-Gallup Oil Pool shall be located on a unit containing approximately 80 acres, which may reasonably be presumed to be productive of oil from said pool, and which consists of the N/2, S/2, E/2 or W/2 of a single governmental quarter section. For purposes of these Rules, a unit consisting of between 79 and 81 surface contiguous acres shall be considered a standard unit. Nothing contained herein shall be construed as prohibiting the drilling of an oil well on each of the quarter-quarter sections in the 80-acre unit.
- RULE 3. (b) For good cause shown, the Secretary-Director may grant an exception to the requirements of Rule 3(a) without notice and hearing where an application has been filed in due form, and where the unorthodox size or shape of the tract is due

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to a variation in the legal subdivision of the United States Public Lands Survey, or where the following facts exist and the following provisions are complied with:

- (1) The non-standard unit is to consist of a single quarter-quarter section or lot.
- (2) The non-standard unit consists of not more than 81 acres.
- (3) The entire non-standard unit may reasonably be presumed to be productive of oil from said pool.
- (4) The applicant presents written consent in the form of waivers from all offset operators.
- (5) In lieu of Paragraph 4 of this Rule, the applicant may furnish proof of the fact that all of the offset operators were notified by registered mail of his intent to form such nonstandard unit. The Secretary-Director may approve the application if, after a period of 30 days, no operator has entered an objection to the formation of such non-standard unit.
- RULE 3. (c) The District Supervisor shall have authority to approve non-standard oil proration units without notice and hearing and without administrative approval by the Secretary-Director if such unit consists of two contiguous quarter-quarter sections or lots comprising less than 79 acres lying within a single governmental quarter section and the non-standard unit is necessitated by a variation in the United States Public Lands Survey.
- RULE 3. (d) The allowable assigned to any such non-standard oil proration unit shall bear the same ratio to a standard allowable in said pool as the acreage in the unit bears to 80 acres.
- RULE 4. (a) Each well, oil or gas, completed or recompleted in the Angels Peak-Gallup Oil Pool shall be located no nearer than 790 feet to any quarter section line and each such well shall be located no nearer than 330 feet to a governmental quarter-quarter section line or subdivision inner boundary line. Any well drilled to and producing from the Angels Peak-Gallup Pool prior to the effective date of this Order at a location conforming to the well location requirements in effect at the time the well was drilled shall be considered to be located in conformance with this Rule.
- RULE 4. (b) The Secretary-Director shall have authority to grant an exception to Rule 4 (a) without notice and hearing when the application has been filed in due form and the Secretary-Director determines that good cause exists for granting such exception. However, such an unorthodox location, if approved, may necessitate an allowable adjustment.

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Applicants shall furnish all offset operators and all operators within the section in which the subject well is located, a copy of the application to the Commission, and the applicant shall include with his application a list of the names and addresses of all such operators together with a stipulation that proper notice has been given said operators at the addresses listed. The Secretary-Director of the Commission shall wait at least 20 days before approving any such unorthodox location, and only in the absence of objection from an offset operator may such application be approved.

RULE 5. A well in the Angels Peak-Gallup Oil Pool shall be classified as a gas well if it has a gas-liquid ratio of 30,000 cubic feet of gas per barrel of liquid hydrocarbons, or more. A well in said pool 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 both an oil well and a gas well is strictly prohibited.

RULE 6. The gas-liquid ratio limitation for the Angels Peak-Gallup Oil Pool shall be 2,000 cubic feet of gas per barrel of liquid hydrocarbons produced.

RULE 7. Any oil well in the Angels Peak-Gallup Oil Pool which has 80 acres dedicated to it shall be permitted to produce an amount of gas determined by multiplying the top unit oil allowable for said pool by the limiting gas-liquid ratio for the pool, (2,000). In the event there is more than one oil well on an 80-acre oil proration unit, the operator may produce the allowable assigned to the 80-acre unit from said wells in any proportion.

Any gas well in the Angels Peak-Gallup Oil Pool shall be permitted to produce that amount of gas obtained by multiplying the top unit oil allowable for the pool by 2,000 by a fraction, the numerator of which is the number of acres dedicated to the particular gas well and the denominator of which is 80. In the event there is more than one gas well on a 320-acre gas proration unit, the operator may produce the amount of gas assigned to the unit from said wells in any proportion.

RULE 8. The operator of each newly completed well in the Angels Peak-Gallup Oil Pool shall cause a gas-liquid ratio test to be taken on said 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. Provided further, that any well which is shut-in shall be exempted from the aforesaid 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

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liquid hydrocarbons, or more, the operator shall not produce the well until beneficial use can be made of the gas.

No gas shall be flared or vented from any well classified as an oil well more than 60 days after the well begins to produce. Any operator that desires to obtain an exception to the foregoing provisions for a well classified as an oil well shall submit to the Secretary-Director of the Commission an application for such exception with a statement setting forth the facts and circumstances justifying it. The Secretary-Director is hereby authorized to grant such an exception if he determines that the granting of it is reasonably necessary. If the Secretary-Director declines to grant administrative approval of the requested exception, the matter shall be set for hearing if the operator so requests.

RULE 9. Gas-liquid ratio tests shall be taken on all wells in the Angels Peak-Gallup Oil Pool, and on all wells producing from the Gallup formation within one mile of the boundaries of the Angels Peak-Gallup Oil Pool which are not within another designated Gallup oil pool, during the months of January, April, July, and October of each year. The initial gas-liquid ratio test shall suffice as the first quarterly 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 Aztec office of the Commission a test schedule for its wells, specifying the time each of its wells is to be 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 in the Angels Peak-Gallup Oil Pool after the effective date of this Order shall receive an allowable only upon receipt by the Commission's Aztec Office of Commission Forms C-104, C-110, and C-116, all properly executed. The District Supervisor of the Commission's Aztec 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 Angels Peak-Gallup Oil Pool by 2,000.

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- RULE 12. The initial gas proration period shall be from 7 o'clock a.m. on October 1, 1960, to 7 o'clock a.m. on February 1, 1961. Subsequently, the dates 7 o'clock a.m. February the first and 7 o'clock a.m. August the first shall be known as balancing dates, and the periods of time bounded by these dates shall be known as the gas proration periods for the Angels Peak-Gallup Oil Pool.
- 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 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 and/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

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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 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 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 oil proration schedule.

RULE 20. Failure to comply with any provision of this Order or the Rules contained herein 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 District Supervisor shall notify the operator of the well and the purchaser in writing of the date of allowable cancellation and the reason therefor.

<u>RULE 21</u>. 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-128) showing the acreage dedicated to the well and the location of all wells on the dedicated acreage have been filed.

 $\underline{\text{RULE }23}$. The vertical limits of the Angels Peak-Gallup Oil Pool shall be the Gallup formation.

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

STATE OF NEW MEXICO OIL CONSERVATION COMMISSION

HN BURROUGHS. Chairman

MURRAY E. MORGAN, Member

SEAL

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

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