Entered November 9, 1978

STATE OF NEW MEXICO ENERGY AND MINERALS DEPARTMENT OIL CONSERVATION DIVISION

IN THE MATTER OF THE HEARING CALLED BY THE OIL CONSERVATION DIVISION FOR THE PURPOSE OF CONSIDERING:

CASE NO. 6213 Order No. R-5856

APPLICATION OF MORRIS R. ANTWEIL FOR AN UNORTHODOX GAS WELL LOCATION AND SIMULTANEOUS DEDICATION, EDDY COUNTY, NEW MEXICO.

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 9 a.m. on May 17, 1978, at Santa Fe, New Mexico, before Examiner Richard L. Stamets.

NOW, on this 9th day of November, 1978, the Division Director, 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 Division has jurisdiction of this cause and the subject matter thereof.
- (2) That the applicant, Morris R. Antweil, seeks approval of an unorthodox gas well location for his Rio Well No. 2 to be located 660 feet from the North line and 660 feet from the West line of Section 29, Township 18 South, Range 25 East, NMPM, to test the Morrow formation, Undesignated Morrow Gas Pool, Eddy County, New Mexico.
- (3) That the N/2 of said Section 29 is to be dedicated to the well.
- (4) That said Rio Well No. 2 would be the second well drilled on the N/2 of said Section 29, applicant's Rio Well No. 1, located in Unit G of Section 29, having been completed for Morrow formation gas production on August 23, 1977.
- (5) That the Morrow interval encountered in said Rio Well No. 1 is less productive than said interval in offsetting wells.

-2-Case No. 6213 Order No. R-5856

- (6) That the applicant seeks to drill a second well on the proration unit (Rio Well No. 2) to permit better drainage of said unit and to protect his correlative rights.
- (7) That a well at said unorthodox location will better enable applicant to produce the gas underlying the proration unit.
- (8) That the offset operators have objected to the proposed location.
- (9) That a well at the proposed location is at a standard location relative to the North and South lines of said Section 29.
- (10) That a well at the proposed location is 67 percent closer to the West line of said Section 29 than permitted by Division Rules and Regulations.
- (11) That a well at the proposed location will have an area of drainage in the Morrow formation which extends 67.2 net acres outside Section 29, an amount of acreage equivalent to 21 percent of a standard proration unit in said pool.
- (12) That if both said Rio Well No. 1 and Rio Well No. 2 are permitted to produce, it will result in the proration unit having an additional net 192.8 drainage acres' advantage over offsetting proration units, an amount of acres equivalent to 60 percent of a standard proration unit.
- (13) That to offset the advantage gained over the protesting offset operators resulting from the drilling of a well at the proposed unorthodox location, and the production of two wells on the proration unit, production from the N/2 of said Section 29 should be limited from the Morrow formation.
- (14) That in the case where only said Rio Well No. 2 is produced, such limitation should be based upon the variation of the location from a standard location and the 67.2 net-acre encroachment described in Finding No. (10) above, and may best be accomplished by assigning the proration unit an allowable limitation factor of 0.71 (100 percent North/South factor plus 33 percent East/West factor plus 79 percent net-acre factor, divided by 3).
- (15) That in the case where both said Rio Well No. 1 and Rio Well No. 2 are produced, such limitation should be based upon all the factors set out in Finding No. (14) above plus the 192.8 net additional drainage acres described in Finding No. (12) above, and may best be accomplished by assigning the

-3-Case No. 6213 Order No. R-5856

proration unit an allowable limitation factor of 0.63 (100 percent North/South factor plus 33 percent East/West factor plus 79 percent net-acre factor plus 40 percent net additional drainage factor, divided by 4).

- (16) That in the absence of any special rules and regulations for the prorationing of production from said undesignated Morrow Gas Pool, the aforesaid production limitation factor should be applied against said well's or wells' ability to produce into the pipeline as determined by periodic well tests.
- (17) That the minimum calculated allowable for the subject proration unit should be reasonable, and 1,000,000 cubic feet of gas per day is a reasonable figure for such minimum allowable.
- (18) That approval of the subject application subject to the above provisions and limitations will afford the applicant the opportunity to produce its just and equitable share of the gas in the subject pool, will 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, and will otherwise prevent waste and protect correlative rights.

IT IS THEREFORE ORDERED:

- (1) That an unorthodox gas well location for the Morrow formation is hereby approved for the Morris R. Antweil Rio Well No. 2 to be located at a point 660 feet from the North line and 660 feet from the West line of Section 29, Township 18 South, Range 25 East, NMPM, Undesignated Morrow Gas Pool, Eddy County, New Mexico.
- (2) That a 320-acre proration unit consisting of the N/2 of said Section 29 shall be simultaneously dedicated to the above-described well and to the Rio Well No. 1 located in Unit G of said Section 29.
- (3) That said proration unit is hereby assigned a Production Limitation Factor in the Morrow Formation of 0.71 if only said Rio Well No. 2 is produced, and 0.63 if both said Rio Well No. 2 and applicant's Rio Well No. 1 located in Unit G of said Section 29 are produced.
- (4) That in the absence of any Special Rules and Regulations prorating gas production in said undesignated Morrow Gas Pool, the Special rules hereinafter promulgated shall apply.

-4-Case No. 6213 Order No. R-5856

(5) That the following Special Rules and Regulations for a non-prorated gas well at an unorthodox location shall apply to the subject well or wells:

SPECIAL RULES AND REGULATIONS FOR THE

APPLICATION OF A "PRODUCTION LIMITATION FACTOR" TO A NON-PRORATED GAS WELL OR WELLS

APPLICATION OF RULES

- RULE 1.(A) These rules shall apply to the proration unit consisting of the N/2 of Section 29, Township 18 South, Range 25 East, Eddy County, New Mexico, upon completion and connection as a Morrow formation producing well of the Morris R. Antweil Rio Well No. 2 located 660 feet from the North line and 660 feet from the West line of said Section 29.
- RULE 1.(B) A Production Limitation Factor of 0.71 shall be applied to the proration unit's deliverability (as determined by the hereinafter set forth procedure) to determine its maximum allowable rate of production if said Rio Well No. 2 only is to be produced, and a Production Limitation Factor of 0.63 shall be applied if both the Rio Well No. 2 and the Rio Well No. 1 located in Unit G of said Section 29 are to be produced.
- RULE 1.(C) Any deliverability determined by any of the here-inafter described procedures shall be the total deliverability of any Morrow producing wells on such proration unit as determined by adding such deliverabilities.

ALLOWABLE PERIOD

- RULE 2. The allowable period for the subject unit shall be six months.
- RULE 3. The year shall be divided into two allowable periods commencing at 7:00 o'clock a.m. on January 1 and July 1.

DETERMINATION OF DELIVERY CAPACITY

RULE 4. Immediately upon connection of the Rio Well No. 2 the operator shall determine the open flow capacity of producing wells on the proration unit in accordance with the Division "Manual for Back-Pressure Testing of Natural Gas Wells" then current, and the well's or wells' initial deliverability shall be calculated against average pipeline pressure.

-5-Case No. 6213 Order No. R-5856

- RULE 5. The well's or wells' "subsequent deliverability" shall be determined twice a year, and shall be equal to its or their highest single day's production during the months of April and May or October and November, whichever is applicable. Said subsequent deliverability, certified by the pipeline, shall be submitted to the appropriate District Office of the Division not later than June 15 and December 15 of each year.
- RULE 6. The Division Director may authorize special deliverability tests to be conducted upon a showing that the well or wells have been worked over or that the subsequent deliverability determined under Rule 5 above is erroneous. Any such special test shall be conducted in accordance with Rule 4 above.
- RULE 7. The operator shall notify the appropriate district office of the Division and all offset operators of the date and time of initial or special deliverability tests in order that the Division or any such operator may at their option witness such tests.

CALCULATION AND ASSIGNMENT OF ALLOWABLES

- RULE 8. The unit's allowable as determined by these rules shall commence upon the date of connection to a pipeline of said Rio Well No. 2 and when the operator has complied with all appropriate filing requirements of the Rules and Regulations and any special rules and regulations.
- RULE 9. The unit's allowable during its first allowable period \overline{shall} be determined by multiplying its initial deliverability by its production limitation factor.
- RULE 10. The unit's allowable during all ensuing allowable periods shall be determined by multiplying its latest subsequent deliverability, as determined under provisions of Rule 5, by its production limitation factor. If the unit shall not have been producing under these rules for at least 60 days prior to the end of its first allowable period, the allowable for the second allowable period shall be determined in accordance with Rule 9.
- RULE 11. Revision of allowable based upon special well tests shall become effective upon the date of such test provided the results of such test are filed with the Division's district office within 30 days after the date of the test; otherwise the date shall be the date the test report is received in said office.

-6-Case No. 6213 Order No. R-5856

- RULE 12. Revised allowables based on special well tests shall remain effective until the beginning of the next allowable period.
- RULE 13. In no event shall the unit receive an allowable of less than one million cubic feet of gas per day.

BALANCING OF PRODUCTION

- RULE 14. January 1 and July 1 of each year shall be known as the balancing dates.
- RULE 15. If the unit has an underproduced status at the end of a six-month allowable period, it shall be allowed to carry such underproduction forward into the next period and may produce such underproduction in addition to its regularly assigned allowable. Any underproduction carried forward into any allowable period which remains unproduced at the end of the period shall be cancelled.
- RULE 16. Production during any one month of an allowable period in excess of the monthly allowable assigned to the unit shall be applied against the underproduction carried into the period in determining the amount of allowable, if any, to be cancelled.
- RULE 17. If the unit has an overproduced status at the end of a six-month allowable period, it shall be shut in until such overproduction is made up.
- RULE 18. If, during any month, it is discovered that the unit is overproduced in an amount exceeding three times its average monthly allowable, it shall be shut in during that month and during each succeeding month until it is overproduced in an amount three times or less its monthly allowable, as determined hereinabove.
- RULE 19. The Director of the Division shall have authority to permit the unit, if it is subject to shut-in pursuant to Rules 17 and 18 above, to produce up to 500 MCF of gas per month upon proper showing to the Director that complete shut-in would cause undue hardship, provided however, such permission shall be rescinded for the unit if it has produced in excess of the monthly rate authorized by the Director.
- RULE 20. The Division may allow overproduction to be made up at a lesser rate than permitted under Rules 17, 18, or 19 above upon a showing at public hearing that the same is necessary to avoid material damage to the well or wells.

-7-Case No. 6213 Order No. R-5856

GENERAL

- RULE 21. Failure to comply with the provisions of this order or the rules contained herein or the Rules and Regulations of the Division shall result in the cancellation of allowable assigned to the unit. No further allowable shall be assigned to the unit until all rules and regulations are complied with. The Division shall notify the operator of the unit and the purchaser, in writing, of the date of allowable cancellation and the reason therefor.
- (6) That jurisdiction of this cause is retained for the entry of such further orders as the Division may deem necessary.

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

OIL CONSERVATION DIVISION

STATE OF NEW MEXICO

JOE D. RAMEY

Director

SEAL