

Entered August 5, 1980
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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. 6930
Order No. R-6415

APPLICATION OF AMOCO PRODUCTION
COMPANY FOR AN UNORTHODOX GAS
WELL LOCATION, EDDY COUNTY,
NEW MEXICO.

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 9 a.m. on June 25, 1980, at Santa Fe, New Mexico, before Examiner Richard L. Stamets.

NOW, on this 5th day of August, 1980, 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, Amoco Production Company, seeks approval of an unorthodox well location for its Empire South Deep Unit Well No. 21 to be drilled 660 feet from the North line and 660 feet from the East line of Section 36, Township 17 South, Range 28 East, NMPM, to test the Morrow formation, Eddy County, New Mexico.

(3) That the E/2 of said Section 36 is to be dedicated to the well.

(4) That a well at said unorthodox location will better enable applicant to produce the gas underlying the proration unit.

(5) That the offset operator, ARCO Oil and Gas Company, has objected to the proposed location relative to one zone of

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the Morrow formation identified as the "BV" Channel zone found at a depth of from 10,660 feet to 10,780 feet in its State "BV" Well No. 1 located in Unit J of Section 25, Township 17 South, Range 28 East, NMPM, Eddy County, New Mexico.

(6) That said offset operator presented evidence tending to demonstrate that there are no more than approximately 54 productive acres in said "BV" channel sand under the E/2 of said Section 36.

(7) That the applicant presented evidence tending to demonstrate that there are as many as 195 productive acres in said "BV" channel sand under the E/2 of said Section 36.

(8) That all of the geologic evidence presented was interpretive, subjective, speculative and not subject to significant proof even if the well should be drilled as proposed.

(9) That to offset such advantage gained over the protesting offset operator, production from the well at the proposed unorthodox location should be limited from the "BV" Channel zone of the Morrow formation.

(10) That the unreliable estimates of productive acreage presented in this case should not be used as a tool to attempt to offset such advantage.

(11) That in the absence of reliable data on productive acreage such limitation should be based upon the well location as it relates to a standard well location for the affected zone.

(12) That the proposed unorthodox well location would be a standard location for a well in a 160-acre spaced gas reservoir.

(13) That the well should be assigned an allowable limitation factor based upon a 160-acre spaced location or 50 percent (160 acres divided by 320 acres) in the Morrow "BV" channel sand only.

(14) That no allowable limitation factor should be applied in any other zone of the Wolfcamp or Pennsylvanian formations.

(15) That in the absence of any special rules and regulations for the prorationing of production from said Morrow "BV" channel sand, the aforesaid production limitation factor should be applied against said well's ability to produce into the pipeline as determined by periodic well tests.

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(16) That the minimum calculated allowable for the subject well should be reasonable, and 1,000,000 cubic feet of gas per day is a reasonable figure for such minimum allowable.

(17) 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 reservoir or other productive zones found, 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 well location for the Wolfcamp and Pennsylvanian formations is hereby approved for the Amoco Production Company Empire South Deep Unit Well No. 21 to be located at a point 660 feet from the North line and 660 feet from the East line of Section 36, Township 17 South, Range 28 East, NMPM, Eddy County, New Mexico.

(2) That the E/2 of said Section 36 shall be dedicated to the above-described well.

(3) That said well is hereby assigned a Production Limitation Factor of 0.50 in the "BV" channel sand of the Morrow formation as described in Finding No. (5) of this order.

(4) That in the absence of any Special Rules and Regulations prorating gas production in said Morrow "BV" channel sand, the Special rules hereinafter promulgated shall apply.

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

SPECIAL RULES AND REGULATIONS
FOR THE
APPLICATION OF A "PRODUCTION LIMITATION FACTOR"
TO A NON-PRORATED GAS WELL

APPLICATION OF RULES

RULE 1. These rules shall apply to the Amoco Production Company South Empire Deep Unit Well No. 21, located 660 feet from the North line and 660 feet from the East line of Section

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36, Township 17 South, Range 28 East, NMPM, Eddy County, New Mexico, which well's Production Limitation Factor of 0.50 shall be applied to the well's deliverability (as determined by the hereinafter set forth procedure) to determine its maximum allowable rate of production.

ALLOWABLE PERIOD

RULE 2. The allowable period for the subject well 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 well the operator shall determine the open flow capacity of the well in accordance with the Division "Manual for Back-Pressure Testing of Natural Gas Wells" then current, and the well's initial deliverability shall be calculated against average pipeline pressure.

RULE 5. The well's "subsequent deliverability" shall be determined twice a year, and shall be equal to its 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 has 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 well's allowable shall commence upon the date of connection to a pipeline and when the operator has complied

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with all appropriate filing requirements of the Rules and Regulations and any special rules and regulations.

RULE 9. The well's allowable during its first allowable period shall be determined by multiplying its initial deliverability by its production limitation factor.

RULE 10. The well'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 well shall not have been producing 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.

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 well 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 well 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 well shall be applied against the underproduction carried into the period in determining the amount of allowable, if any, to be cancelled.

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RULE 17. If the well 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 well 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 well, 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 well 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.

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 well. No further allowable shall be assigned to the well until all rules and regulations are complied with. The Division shall notify the operator of the well 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.

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION


JOE D. RAMEY
Director

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