

Entered May 14, 1984
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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. 8016
Order No. R-7524

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

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 8 a.m. on December 15, 1983, at Santa Fe, New Mexico, before Examiner Michael E. Stogner.

NOW, on this 21st day of May, 1984, 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 gas well location for its State "LK" Well No. 1 to be drilled at a location 660 feet from the South line and 990 feet from the West line of Section 13, Township 20 South, Range 35 East, NMPM, to test the Wolfcamp and Morrow formations, West Osudo Morrow Gas Pool, Lea County, New Mexico.

(3) That the S/2 of said Section 13 is to be dedicated to the well.

(4) That Superior Oil Company appeared at the hearing and objected only to the unorthodox Wolfcamp location on the grounds that said unorthodox location would cause drainage of hydrocarbons from under the E/2 of Section 23, Township 20 South, Range 35 East, NMPM, Lea County, New Mexico, being a standard 320-acre Undesignated Wolfcamp gas spacing and proration unit currently dedicated to the Amoco Production Company Best Gas Com Well No. 1, located 1980 feet from the

North line and 1780 feet from the East line of said Section 23, thereby impairing correlative rights for Superior Oil Company who has a 36.58 percent working interest in said Amoco Production Company Best Gas Com Well No. 1.

(5) That no offset operator objected to the proposed unorthodox Morrow location.

(6) That the unorthodox location of the subject well should be approved to prevent the economic waste which would occur if the applicant were required to drill separate wells to the Wolfcamp and Morrow formations in the S/2 of said Section 13, but an allowable penalty, for Wolfcamp production only, should be imposed on the well to protect the correlative rights of other operators in the area.

(7) That the most southwesterly well site in the S/2 of said Section 13 which would constitute a legal Wolfcamp location would be 660 feet from the South line and 1980 feet from the West line of the section.

(8) That the subject well is 990 feet (50 percent) closer to the West line of said Section 13 and is the required distance from the South line as permitted under Rule 104 of the New Mexico Oil Conservation Division General Rules and Regulations.

(9) That assuming 320 acre radial drainage, the well has an area of drainage of approximately 37 acres outside its proration unit more than would a well located at the most southwesterly standard Wolfcamp location on the spacing and proration unit.

(10) That having 37 acres more drainage outside its proration unit than permitted, the well has 283 acres (88.4 percent) of its drainage within the area permitted.

(11) That the penalty imposed for Wolfcamp production upon the subject well should be based upon the footage variation of the unorthodox Wolfcamp location from a standard Wolfcamp location as described in Finding No. (7) above and on the drainage encroachment described in Finding No. (10) above, and the allowable factor should be calculated as being equal to: (1.000 South footage factor + 0.500 West footage factor + 0.884 acreage encroachment factor, divided by 3) times 100, or 79.5 percent.

(12) That an allowable factor for Wolfcamp production of 0.795 for the subject well (a penalty of 20.5 percent) will prevent waste and protect the correlative rights of the

applicant as well as other operators in the pool, and should be approved.

(13) That in the absence of any special rules and regulations for the prorationing of production from the Wolfcamp formation in which the subject well is completed, the aforesaid production limitation factor should be applied against said well's ability to produce into the pipeline as determined by periodic well tests.

(14) That the minimum calculated allowable for the subject well should be reasonable, and 500,000 cubic feet of gas per day is a reasonable figure for such minimum allowable.

(15) 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 Wolfcamp reservoir, 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 the application of Amoco Production Company for an unorthodox gas well location for its State "LK" Well No. 1 to be located at a point 660 feet from the South line and 990 feet from the West line of Section 13, Township 20 South, Range 35 East, NMPM, Lea County, New Mexico, is hereby approved to test the Wolfcamp and West Osudo Morrow Gas Pool.

(2) That the S/2 of said Section 13 being a standard 320-acre Undesignated Wolfcamp and West Osudo Morrow Gas Pool spacing and proration unit shall be dedicated to the above-described well.

(3) That said well is hereby assigned a Production Limitation Factor of 0.795 in the Wolfcamp formation only.

(4) That in the absence of any Special Rules and Regulations prorating gas production in said Wolfcamp formation in which applicant's well is completed, 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 Wolfcamp formation gas well to be located 660 feet from the South line and 990 feet from the West line of Section 13, Township 20 South, Range 35 East, NMPM, Lea County, New Mexico, which well's Production Limitation Factor of 0.795 shall be applied to the well's Wolfcamp 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 Wolfcamp production 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 in the manner described in the last paragraph on Page I-6 of said test manual.

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 Wolfcamp allowable shall commence upon the date of connection to a pipeline 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 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 Wolfcamp 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 500,000 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 allowables. Any underproduction carried forward into

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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.

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 or 18 above upon a showing 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.

IT IS FURTHER ORDERED:

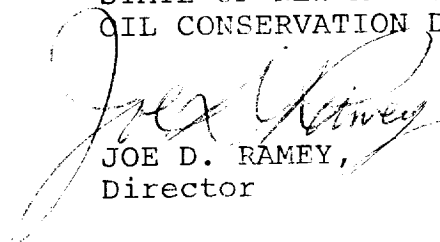
(6) That jurisdiction of this cause is retained for the entry of such further orders as the Division may deem necessary.

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

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION

A handwritten signature in dark ink, appearing to read "Joe D. Ramey", is written over the typed name and title.

JOE D. RAMEY,
Director

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