

Entered September 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. 8204  
Order No. R-7666

APPLICATION OF COSTA RESOURCES,  
INC. FOR AN UNORTHODOX WELL  
LOCATION, EDDY COUNTY, NEW MEXICO.

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 8 a.m. on August 15, 1984, at Santa Fe, New Mexico, before Examiner Gilbert P. Quintana. Stamets.

NOW, on this 14th day of September, 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, Costa Resources, Inc., seeks approval of an unorthodox gas well location 1600 feet from the South line and 660 feet from the East line of Section 2, Township 18 South, Range 28 East, NMPM, to test the Morrow formation, Eddy County, New Mexico.

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

(4) That Amoco Production Company, the offset operator to the east in Section 1, Township 18 South, Range 28 East, NMPM, appeared and objected to the proposed unorthodox location.

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

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(6) That a well at the proposed location is at a standard location relative to the north and south lines of said Section 2.

(7) That the well at the proposed location is 67% closer to the east line of said Section 2 than permitted by Division Rules and Regulations.

(8) That there is adequate well control to determine the probable width and orientation of two lower Morrow channel sands in said Sections 1 and 2.

(9) That geological data and testimony established that productive zones in the Morrow Sands within said Sections 1 and 2 were deposited as Deltaic distributory channel sands oriented northwest to southeast and that the applicant presented evidence attempting to show that said Morrow channel sands were not in communication.

(10) That the geologic deposition of Morrow channel sands is very complex and subject to interpretation and that insufficient or inconclusive geologic and engineering data was presented to establish that said Morrow channel sands are not in communication with one another between said Sections 1 and 2.

(11) That a well at the proposed unorthodox location will result in drainage across lease lines to the east.

(12) That a well at the proposed unorthodox location will have a calculated area of drainage in the Morrow formation which extends an additional 80 acres into Section 1, an amount of acreage equivalent to 25 percent of a standard proration unit in said Morrow formation.

(13) That to offset any advantage gained over the protesting offset operators, production from the subject well at the proposed unorthodox location should be limited from the Morrow formation.

(14) That such limitation should be based upon the variation of the location from a standard location and the net acre encroachment described in Finding (12) and may best be accomplished by assigning a well at the proposed location an allowable limitation factor of 0.54 (67% location factor plus a 25% net acre encroachment factor divided by 2 subtracted from a 100% production factor).

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(15) That the minimum calculated allowable for the subject well should be reasonable, and 800,000 cubic feet of gas per day is a reasonable figure for such a minimum allowable.

(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 ability to produce into the pipeline as determined by periodic well tests.

(17) That approval of this application, subject to the above provisions and limitations, will afford the applicant the opportunity to produce its just and equitable share of gas from the subject formation, will 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 a Costa Resources Inc. well to be located at a point 1600 feet from the South line and 660 feet from the East line of Section 2, Township 18 South, Range 28 East, NMPM, to test the Morrow formation, Eddy County, New Mexico.

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

(3) That said well is hereby assigned a Production Limitation Factor of 0.54 in the Morrow formation.

(4) That said well is hereby assigned a minimum allowable of 800,000 cubic feet per day.

(5) 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.

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

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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 Costa Resources Inc. Morrow Formation Test Well, located 1600 feet from the South line and 660 feet from the East line of Section 2, Township 18 South, Range 28 East, NMPM, Eddy County, New Mexico, which well's Production Limitation Factor of 0.54 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 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.

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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, 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.

(7) 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

by *P. H. Starn*  
*acting Director*  
JOE D. RAMEY,  
Director

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