

STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION

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

CASE NO. 9500
Order No. R-8804

APPLICATION OF READ & STEVENS,
INC. FOR AN UNORTHODOX GAS WELL
LOCATION, EDDY COUNTY, NEW MEXICO.

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 8:15 a.m. on October 12, 1988, at Santa Fe, New Mexico, before Examiner David R. Catanach.

NOW, on this 8th day of December, 1988, the Division Director, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises,

FINDS THAT:

(1) Due public notice having been given as required by law, the Division has jurisdiction of this cause and the subject matter thereof.

(2) The applicant, Read & Stevens, Inc., seeks approval of an unorthodox gas well location 660 feet from the North and East lines (Unit A) of Section 19, Township 19 South, Range 29 East, NMPM, Undesignated Turkey Track-Morrow Gas Pool or Undesignated West Parkway-Morrow Gas Pool, Eddy County, New Mexico.

(3) The applicant further proposes to dedicate a standard 320-acre gas spacing and proration unit consisting of the E/2 of said Section 19 to the subject well.

(4) Exxon Company, USA, (Exxon) who currently operates an Upper Pennsylvanian producing well in the NE/4 of Section 18, Township 19 South, Range 29 East, NMPM, and Hondo Drilling Company, (Hondo) who currently operates a Morrow producing well in the SW/4 of Section 17, Township 19 South, Range 29 East, NMPM,

both appeared at the hearing in opposition to the application.

(5) The applicant presented geologic evidence which indicates that the C, E, G, and F sand members of the Morrow formation are the prospective producing intervals underlying the proposed proration unit.

(6) The applicant further presented net sand isopach maps of the respective C, E, G, and F sand members which further indicate that a well at the proposed location should encounter a greater amount of net sand within the middle Morrow than a well drilled at a standard location in the NE/4 of said Section 19.

(7) The applicant seeks authority to drill the subject well at the proposed location in order to increase the chance of obtaining commercial production and further testified that denial of the application will likely result in a well not being drilled in the E/2 of said Section 19.

(8) Exxon also presented geologic evidence and testimony which varies significantly from the applicant's interpretation and which indicates that a well drilled at the proposed location is less likely to encounter a greater amount of net sand within the middle Morrow than a well drilled at a standard location in the NE/4 of said Section 19.

(9) Both geologic interpretations indicate that the NE/4 of said Section 19 is likely to contain commercial quantities of gas within the Morrow formation.

(10) Although the presence, extent, and the trending of the sand members within the Morrow formation underlying the E/2 of said Section 19 are highly subject to interpretation as demonstrated by both parties' geologic presentations, the evidence in this case generally favors the applicant's geologic interpretation.

(11) Approval of the subject application will better enable the applicant to produce the gas underlying the proration unit and will protect correlative rights provided that a production penalty be imposed on the subject well.

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(12) The closest standard Morrow well location in the NE/4 of said Section 19 would be 1980 feet from the North line and 660 feet from the East line.

(13) The proposed well location is 1320 feet (67%) closer to the northern end boundary than permitted by Division Rules and Regulations and is standard relative to the eastern side boundary of the proration unit.

(14) The applicant proposed that a production penalty of 33% (production factor of 0.67) be imposed on the subject well and applied against a 7-day deliverability test, said penalty based upon the proposed well location's average north-south and east-west variance from a standard well location.

(15) The applicant further proposed that the subject well be allowed to produce a minimum of 500 MCF gas per day, said minimum allowable based upon economic parameters which would allow the applicant to obtain a suitable rate of return on its investment.

(16) Exxon proposed that a production penalty of 67% (production factor of 0.33) be imposed on the subject well and applied against the average deliverability of Morrow producing wells in this area, said penalty based upon the proposed well location's north-south variance from a standard well location.

(17) The penalty imposed on the subject well should be based upon the proposed well location's north-south variance from a standard well location inasmuch as the opponents' affected acreage lies to the north and northeast of the proposed well location.

(18) An allowable factor for Morrow production of 0.33 for the subject well (a penalty of 67%) will prevent waste and protect the correlative rights of the applicant as well as other operators in the Morrow formation and should, therefore, be approved.

(19) In the absence of any special rules and regulations for the proration of production from the Morrow formation in which the subject well will be completed, the aforesaid production limitation factor should be applied against said well's ability to produce into the pipeline as determined by back pressure test and data extracted from Division records.

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(20) The evidence presented indicates that the proposed minimum allowable of 500 MCF gas per day is fair and reasonable and should therefore be approved.

(21) The evidence presented further indicates that there are numerous Morrow producing wells in this area, some producing from the Turkey Track-Morrow Gas Pool and some producing from the West Parkway-Morrow Gas Pool.

(22) Well test and production data obtained from Division records indicate that the average calculated absolute open flow (CAOF) of Morrow producing wells located within a two-mile radius of the proposed well location is approximately 3236 MCFD. The average deliverability of these wells (determined from best month's production) is approximately 1367 MCFD, or 42.24% of CAOF.

(23) The applicant should be limited each month to 33% of the reasonably expected maximum flow rate, or 33% of 42.24% of the CAOF, but such limit should not be less than 500 MCF per day.

(24) In the event the subject well is completed in another formation and/or pool developed on 320-acre spacing, the Director of the Division should have the authority to reopen this case to determine an appropriate production penalty for said formation.

(25) 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 Morrow 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 THAT:

(1) The applicant, Read & Stevens, Inc., is hereby authorized to drill a well at an unorthodox gas well location 660 feet from the North and East lines (Unit A) of Section 19, Township 19 South, Range 29 East, NMPM, Undesignated Turkey Track-Morrow Gas Pool or Undesignated West Parkway-Morrow Gas Pool, Eddy County, New Mexico.

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(2) The E/2 of said Section 19 shall be dedicated to the above described well.

(3) The subject well is hereby assigned a production limitation factor of 0.33 for Morrow gas production.

(4) In the absence of any special rules and regulations prorating gas production in the subject Morrow Pool(s), the well's production each day of the first year's production shall be limited to 33% of 42.24% of the CAOF established by test as required by Rule 401 of the General Rules and Regulations, or to 500 MCF gas per day, whichever is greater.

(5) Before October 1st each year following the well's completion, the shut-in pressure shall be measured and reported as required by General Rule 402, and a new CAOF shall be calculated based on the revised shut-in pressure so as to establish a revised maximum flow rate as described in Ordering Paragraph No. (4) above until such penalized flow rate becomes less than 500 MCF gas per day. The revised penalized flow rate shall become effective November 1. In the event of failure to establish a satisfactory slope of the 4-point test required in Ordering Paragraph No. (4) above, a slope of 0.730 shall be used in calculating CAOF.

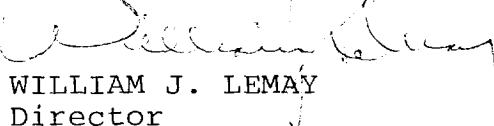
(6) Production during any month at a rate less than the limitation described above shall not be carried forward as underproduction into succeeding months, but overproduction of such limitation during any month shall be made up in the next succeeding month or months by shut-in or reduced rates as required by the District Supervisor of the Division.

(7) In the event the subject well is completed in another formation and/or pool developed on 320-acre spacing, the Director of the Division shall have the authority to reopen this case to determine an appropriate production penalty for said formation.

(8) 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


WILLIAM J. LEMAY
Director

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