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. 11514
Order No. R-10622

APPLICATION OF READ & STEVENS INC.
FOR AN UNORTHODOX INFILL GAS WELL
LOCATION AND SIMULTANEOUS DEDICATION,
CHAVES COUNTY, NEW MEXICO.

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 8:15 a.m. on May 16, 1996, at Santa Fe, New Mexico, before Examiner David R. Catanach.

NOW, on this 12th day of July, 1996, 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 to drill its Harris Federal Well No. 11 at an unorthodox gas well location 990 feet from the South line and 1980 feet from the West line (Unit N) of Section 26, Township 15 South, Range 27 East, NMPM, to test the Pennsylvanian formation, Buffalo Valley-Pennsylvanian Gas Pool, Chaves County, New Mexico.

(3) The applicant further proposes to simultaneously dedicate the proposed Harris Federal Well No. 11 and its existing Harris Federal Well No. 4, located at a standard gas well location 990 feet from the South and East lines (Unit P) of Section 26, to a standard 320-acre gas spacing and proration unit in the Buffalo Valley-Pennsylvanian Gas Pool comprising the S/2 of Section 26.

(4) Matador Petroleum Company, an offset operator, appeared at the hearing in support of Read & Stevens, Inc.'s application.

(5) UMC Petroleum Corporation (UMC), operator of the following described Diamond Mound-Morrow Gas Pool producing wells in Section 35, Township 15 South, Range 27 East, appeared at the hearing as an affected offset operator in opposition to the application:

> White State Well No. 1, located 660 feet from the South line and 1980 feet from the East line (Unit O), said well currently dedicated to the S/2 of Section 35; and,
>
> White State Well No. 2, located 1980 feet from the North and West lines (Unit F), said well currently dedicated to the N/2 of Section 35.

(6) The proposed Harris Federal Well No. 11 is located within the Buffalo Valley-Pennsylvanian Gas Pool which is a prorated gas pool currently governed by the General Rules for the Prorated Gas Pools of New Mexico/Special Rules and Regulations for the Buffalo Valley-Pennsylvanian Gas Pool as contained within Division Order No. R-8170, as amended, which require standard 320-acre gas spacing and proration units with wells to be located in the NW/4 or SE/4 of a standard section no closer than 990 feet from the outer boundary of the quarter section nor closer than 330 feet from any governmental quarter-quarter section line or subdivision inner boundary.

(7) The proposed Harris Federal Well No. 11 is standard with respect to the setback requirements but is unorthodox with respect to the quarter section location requirement.

(8) In addition to the Harris Federal Well No. 4, applicant currently operates the Harris Federal Well No. 8, located at a standard gas well location in Unit F of Section 26. The N/2 of Section 26 is currently dedicated to this well.

(9) Both the applicant and UMC presented geologic evidence and testimony in support of their respective positions. This geologic evidence and testimony is generally in agreement that:

a) the Buffalo Valley-Pennsylvanian and Diamond Mound-Morrow Gas Pools, at least in the area of Sections 26 and 35, represent a single common source of supply in the Pennsylvanian formation;

b) the Lower Pennsylvanian interval being produced in the Harris Federal Well Nos. 4 and 8 and the White State Well Nos. 1 and 2 is a correlatable channel sand which traverses Sections 26 and 35 in a north-south direction;

c) the reservoir sand generally thickens within the W/2 and thins within the E/2 of both Sections 26 and 35;

d) applicant's Harris Federal Well No. 8, which encountered approximately 30 feet of net sand, and UMC's White State Well No. 2, which encountered approximately 22 feet of net sand within the reservoir, are the best producing wells within Sections 26 and 35, respectively;

e) applicant's Harris State Well No. 4 and UMC's White State Well No. 1 encountered approximately 5 and 10 feet of net sand, respectively, within the reservoir;

f) the Harris Federal Well No. 11, which will be completed in the Lower Pennsylvanian interval, is projected to encounter between 22-30 feet of net sand in the reservoir.

(10) Both parties presented engineering evidence and testimony with regards to estimated ultimate recoveries and drainage areas for the wells in Sections 26 and 35. The engineering evidence is generally in agreement with the exception of ultimate gas recovery estimates for the White State Well Nos. 1 and 2. This evidence is summarized as follows:

READ & STEVENS, INC.

WELL NAME	ESTIMATED ULTIMATE RECOVERY	DRAINAGE AREA
Harris Fed. No. 8	9.4 BCFG	347 acres
Harris Fed. No. 4	0.6 BCFG	80 acres
White State No. 1	4.1 BCFG	—
White State No. 2	6.9 BCFG	400 acres

UMC PETROLEUM CORPORATION

WELL NAME	ESTIMATED ULTIMATE RECOVERY	DRAINAGE AREA
Harris Fed. No. 8	9.6 BCFG	360 acres
Harris Fed. No. 4	0.6 BCFG	—
White State No. 1	5.1 BCFG	—
White State No. 2	8.4 BCFG	420 acres

(11) Applicant seeks authority to drill the Harris Federal Well No. 11 at the proposed unorthodox location for the following reasons:

a) the existing Harris Federal Well No. 4, located at a standard gas well location within the SE/4 of Section 26, encountered the thinner and less productive portion of the reservoir and as a result, will be unable to adequately drain and develop its proration unit;

b) a well located within the SW/4 of Section 26 should penetrate the Lower Pennsylvanian formation in a thicker and better producing portion of the reservoir; and,

c) applicant's engineering data indicates that there is an area of approximately 94 acres within the SW/4 of Section 26 which will ultimately not be drained by the existing Harris Federal Well Nos. 4 and 8.

(12) UMC presented engineering evidence and testimony which indicates that:

a) the Harris Federal Well Nos. 4 and 8 are currently producing at a combined daily rate of approximately 1,077 MCFG. The White State Well Nos. 1 & 2 are currently producing at a combined daily rate of approximately 1,075 MCFG;

b) at the current rate of production, the Harris Federal wells will recover an additional 4.0 BCF of gas from Section 26. At the current rate of production, the White State wells will recover an additional 4.3 BCF of gas from Section 35;

c) with the addition of the proposed Harris Federal Well No. 11, the combined daily producing rate from the Harris Federal wells in Section 26 is projected to be approximately 1,977 MCFG.

(13) UMC's objection to the proposed unorthodox location is based upon its engineering calculations which show that as a result of drilling the Harris Federal Well No. 11, its ultimate recovery of gas from the White State wells in Section 35 will be reduced by approximately 1.39 BCF.

(14) UMC further contends that the Harris Federal Well No. 8 has already drained an extensive portion of the SW/4 of Section 26.

(15) UMC proposed that the Harris Federal Well No. 11, if allowed to be drilled at the proposed unorthodox location, should be assessed a production penalty of 65 percent or, in the alternative, should be assigned an allowable of 350 MCF gas per day. UMC's proposed allowable is based upon the fact that the proposed Harris Federal Well No. 11 will be located 50 percent closer to the common lease line than its White State Well No. 2, and therefore, should be allowed to produce 50 percent of the White State Well No. 2's current rate of production of 700 MCFGD.

(16) The evidence and testimony presented in this case indicates that:

a) the Harris Federal Well No. 4, which will ultimately recover only 0.6 BCF of gas, will not adequately drain and develop the S/2 of Section 26;

b) it is highly likely that the Harris Federal Well No. 8 has drained a portion of the SW/4 of Section 26, however, the engineering evidence presented is not sufficient to determine whether this well can ultimately recover all of the remaining gas reserves within this quarter section;

c) drainage of the SW/4 of Section 26 from the White State Well No. 2 is likely occurring;

d) the correlative rights of the applicant may be impaired if it is not allowed to drill a well within the SW/4 of Section 26 to recover gas reserves which may ultimately not be recovered by its existing wells; and,

e) by locating the Harris Federal Well No. 11 990 feet off the common lease line, the applicant will be gaining an advantage over UMC, whose White State Well No. 2 is located 1980 feet off the common lease line.

(17) The applicant should be authorized to drill the Harris Federal Well No. 11 at the proposed unorthodox location, however, in order to protect the correlative rights of UMC, the well should be assessed a production penalty.

(18) Applicant testified that it expects the Harris Federal Well No. 11 to initially produce at a rate of approximately 1,500 MCF gas per day.

(19) A production penalty of 50 percent, which is based upon the well's distance from the common lease line relative to the White State Well No. 2's distance from the common lease line, is fair and reasonable and should be adopted in this case.

(20) Approval of the subject application with a 50 percent production penalty will afford the applicant the opportunity to produce its just and equitable share of the gas in the affected 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.

(21) The production penalty should be applied towards the Harris Federal Well No. 11's ability to produce into a pipeline as determined from a deliverability test to be conducted on the well on a semi-annual basis.

(22) The applicant should advise the supervisor of the Artesia district office of the Division of the date and time of conductance of the above-described production test(s) in order that they may be witnessed.

IT IS THEREFORE ORDERED THAT:

(1) The applicant, Read & Stevens, Inc., is hereby authorized to drill its Harris Federal Well No. 11 at an unorthodox gas well location 990 feet from the South line and 1980 feet from the West line (Unit N) of Section 26, Township 15 South, Range 27 East, NMPM, to test the Pennsylvanian formation, Buffalo Valley-Pennsylvanian Gas Pool, Chaves County, New Mexico.

(2) The S/2 of Section 26 shall be simultaneously dedicated to the aforesaid Harris Federal Well No. 11 and to the existing Harris Federal Well No. 4, located at a standard gas well location 990 feet from the South and East lines (Unit P) of Section 26 in the Buffalo Valley-Pennsylvanian Gas Pool.

(3) The Harris Federal Well No. 11 is hereby assessed a production penalty of 50 percent. The production penalty shall be applied towards the well's ability to produce into a pipeline as determined from a deliverability test to be conducted on the well on a semi-annual basis.

(4) The applicant shall advise the supervisor of the Artesia district office of the Division of the date and time of conductance of the above-described production test(s) in order that they may be witnessed.

(5) Jurisdiction is hereby 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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