

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. 10344
Order No. R-9583

APPLICATION OF COLLINS & WARE,
INC. FOR AN UNORTHODOX GAS WELL
LOCATION, CHAVES COUNTY, NEW
MEXICO.

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 8:15 a.m. on August 8, 1991, at Santa Fe, New Mexico, before Examiner David R. Catanach.

NOW, on this 16th day of September, 1991, 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, Collins & Ware, Inc., seeks approval of an unorthodox gas well location 330 feet from the South line and 990 feet from the East line (Unit P) of Section 14, Township 8 South, Range 27 East, NMPM, Chaves County, New Mexico, to test the Montoya formation.

(3) The S/2 of said Section 14 is to be dedicated to the well forming a standard 320-acre gas spacing and proration unit.

(4) BHP Petroleum (Americas) Inc. (BHP), the offset operator to the south and southeast of the proposed location, appeared at the hearing in opposition to the application.

(5) On March 5, 1991, BHP completed its Puffer State Well No. 1 located 660 feet from the North line and 990 feet from the West line (Unit D) of Section 24, Township 8 South, Range 27 East, NMPM, in the Montoya formation through perforations from 6371 feet to 6452 feet. The Puffer State Well No. 1 has potential for 7.9 MMCFG per day.

(6) According to evidence presented, the applicant, for geologic reasons, originally intended to drill the proposed well at an unorthodox gas well location 660 feet from the South line and 990 feet from the East line (Unit P) of said Section 14. Said unorthodox gas well location was approved by the Division on April 24, 1991 by Order No. NSL-3003.

(7) Further evidence presented indicates that BHP waived objection to the unorthodox location described above.

(8) According to evidence and testimony presented by the applicant, the newly proposed unorthodox location is based upon both topographic and geologic considerations, namely the presence of a stock watering pond and the presence of a northwest-southeast trending fault.

(9) The applicant presented geologic evidence and testimony in this case which indicates the following:

- 1) The subject reservoir is limited in size and encompasses only portions of Sections 14, 23 and 24;
- 2) A well at the newly proposed unorthodox location should penetrate the Montoya formation at the most favorable structural position within the S/2 of Section 14 and;
- 3) Approximately 50% of the S/2 of Section 14 or 160 acres should be productive of gas from the Montoya formation, said productive acreage being bounded by a northwest-southeast trending fault, a west-southwest-east-northeast trending fault, and a gas water contact estimated to be at a subsea depth of approximately -2550 feet;

(10) BHP also presented geologic evidence and testimony which indicates the following:

- 1) The subject reservoir is limited in size and encompasses only portions of Sections 13, 14, 23 and 24 and;

- 2) Approximately 20 acres within Section 14 should be productive of gas from the Montoya formation.

(11) The applicant's geologic interpretation is likely more accurate than that of BHP inasmuch as it is based upon additional geophysical evidence unavailable to BHP.

(12) The applicant should be allowed to drill a well at the proposed location in order to recover its equitable share of gas underlying the S/2 of Section 14, provided however, in order to protect the correlative rights of BHP, the subject well should be assigned a production penalty.

(13) Utilizing the previously approved unorthodox location and the newly proposed unorthodox location, the applicant has calculated the additional drainage encroachment onto BHP's acreage in Sections 23 and 24. Based upon such calculations (31.05 acres/320 acres) the applicant proposes that the subject well be assessed a production penalty of 9.70%.

(14) Utilizing several methods including the distance the proposed location varies from a standard location, ratio of productive acres underlying Sections 14 and 23, and ratio of productive acres underlying Section 14 to total reservoir productive acres, BHP has proposed various production penalties which range from 70% to 94%.

(15) None of the production penalties proposed by either party represents a fair and equitable solution.

(16) Inasmuch as the applicant currently has authority to drill a well at an unorthodox location 660 feet from the South line and 990 feet from the East line (Unit P) of Section 14 (approved by Division Order No. NSL-3003), any production penalty assessed against the subject well should be based upon encroachment towards BHP's acreage in Section 23 from this point.

(17) BHP's acreage in Section 24 should be adequately protected from drainage from the proposed well by the existence of the Puffer State Well No. 1 as described in Finding No. (5) above.

(18) The production penalty imposed on the subject well should be 50% (330 ft./660 ft.).

(19) An allowable factor of 50% for Montoya production will prevent waste and protect the correlative rights of the applicant as well as BHP and should, therefore, be adopted.

(20) In the absence of any special rules and regulations for the proration of production from the Montoya 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 annual deliverability tests.

(21) The applicant should be required to notify BHP and the Division of the date and time such annual deliverability tests are to be conducted in order that said tests may be witnessed.

(22) 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 Montoya formation, 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, Collins & Ware, Inc., is hereby authorized to drill a well at an unorthodox gas well location 330 feet from the South line and 990 feet from the East line (Unit P) of Section 14, Township 8 South, Range 27 East, NMPM, Chaves County, New Mexico, to test the Montoya formation.

(2) The S/2 of said Section 14 shall be dedicated to the well forming a standard 320-acre gas spacing and proration unit.

(3) Upon completion of the subject well and annually thereafter, the applicant shall conduct a deliverability test to determine the well's ability to produce into the pipeline.

(4) The applicant shall be required to notify BHP and the Division of the date and time such annual deliverability tests are to be conducted in order that said tests may be witnessed.

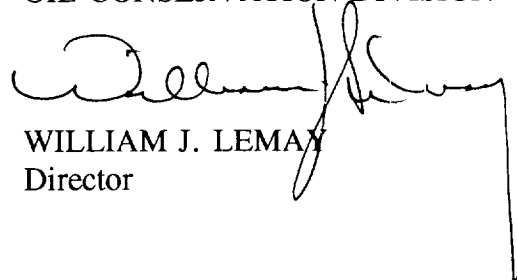
(5) The subject well is hereby assigned a production limitation factor of 50%. The well's daily production shall be limited to 50% of the rate it is capable of producing into the pipeline as determined by the above-described annual deliverability tests.

(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 order or reduced rates as required by the supervisor of the Artesia district office of the Division.

(7) 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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