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. 9802 ORDER NO. R-9050

APPLICATION OF MARATHON OIL COMPANY FOR AN UNORTHODOX GAS WELL LOCATION AND SIMULTANEOUS DEDICATION, EDDY COUNTY, NEW MEXICO

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 8:15 a.m. on November 1, 1989, at Santa Fe, New Mexico, before Examiner Victor T. Lyon.

NOW, on this 21st day of November, 1989, 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, Marathon Oil Company, seeks approval of an unorthodox gas well location 330 feet from the South line and 1650 feet from the West line (Unit N) of Section 9, Township 21 South, Range 23 East, NMPM, to produce from the Indian Basin-Upper Pennsylvanian Gas Pool, Eddy County, New Mexico.
- (3) All of said Section 9 is proposed to be dedicated to said well replacing the existing North Indian Basin Unit Well No. 5 located at a standard gas well location 1815 feet from the South line and 1752.3 feet from the East line (Unit J) of said Section 9 forming a 640-acre gas spacing and proration unit for said pool.
- (4) The case was advertised for simultaneous dedication of the spacing and proration unit as well as an unorthodox location, but applicant indicated its intent to plug the existing well upon completion of the replacement well and therefore does not seek simultaneous dedication.

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- (5) Oryx Energy Company (Oryx) appeared in protest of the application and presented evidence designed to show the unorthodox location was contrary to the rules and would adversely affect Oryx's correlative rights.
- (6) Applicant's testimony showed that its North Indian Basin Well No. 5 ceased to flow because of mechanical conditions in the well and needed to be replaced to permit the owners under the gas proration unit (GPU) to recover their just and equitable share of gas from the reservoir.
- (7) The testimony showed that the Indian Basin-Upper Pennsylvanian Gas Pool is a water drive reservoir and it is logical and prudent in such a reservoir to locate wells as high as possible on the structure to maximize recovery of gas from the GPU.
- (8) The Indian Basin-Upper Pennsylvanian Gas Pool is prorated under the provisions of Order No. R-8170, and its special pool rules are designed to place wells reasonably in the center of the dedicated acreage or GPU.
- (9) Both applicant and Oryx presented geologic testimony which, though differing in some details, generally agreed the proposed location for the replacement well was up-dip from the present well and closer to Oryx's GPU located in Section 17 than a standard location. The expert witnesses did not agree on whether a well at the proposed location would more adversely affect Oryx's gas recovery from their GPU than a well at a standard location.
- (10) Testimony and geologic exhibits from both parties demonstrated that a standard location could be drilled that would adequately replace the damaged well on this GPU.
- (11) The Division has found it necessary and advisable in some instances to approve unorthodox locations in exception to the pool rules in order for a GPU operator to have a reasonable chance to recover the gas underlying his acreage because of close proximity to the gas-water contact or some other limitation to the productivity of his GPU. In such cases, it is customary for the Division to penalize the well's allowable.
- (12) Applicant has failed to show necessity for an unorthodox location because of structural or other problems.
- (13) If the well is drilled at the proposed location a sizable penalty should be applied to the well's allowable based on the distance the well is moved from a standard location toward the GPU boundary.

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(14) Approval of the subject application 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.

IT IS THEREFORE ORDERED THAT:

- (1) The application of Marathon Oil Company for an unorthodox gas well location is hereby approved for a well to be located at a point 330 feet from the South line and 1650 feet from the West line of Section 9, Township 21 South, Range 23 East, NMPM, Indian Basin-Upper Pennsylvanian Gas Pool, Eddy County, New Mexico.
- (2) All of said Section 9 shall be simultaneously dedicated to the above-described well and the existing North Indian Basin Unit Well No. 5 located at a standard gas well location 1815 feet from the South line and 1752.3 feet from the East line (Unit J) forming a 640-acre gas spacing and proration unit for said pool.
- (3) In order to protect correlative rights and promote orderly development and well spacing, the allowable assigned the above-described gas proration unit shall be penalized in the proportion of distance the well is moved from a standard location toward the unit boundary, 1320/1650 or 80%, and the allowable should therefore be 20% of the normal allowable for a standard unit.
- (4) 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