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. 12370 ORDER NO. R-11364

APPLICATION OF MARBOB ENERGY CORPORATION FOR AN UNORTHODOX GAS WELL LOCATION, EDDY COUNTY, NEW MEXICO.

ORDER OF THE DIVISION

BY THE DIVISION:

This case came on for hearing at 8:15 a.m. on April 6, 2000 at Santa Fe, New Mexico, before Examiner Michael E. Stogner.

NOW, on this 28th day of April, 2000, the Division Director, having considered the testimony, the record and the recommendations of the Examiner,

FINDS THAT:

- (1) Due public notice has been given and the Division has jurisdiction of this case and its subject matter.
- (2) The applicant, Marbob Energy Corporation ("Marbob"), seeks to drill its Primero Federal Well No. 2 (API No. 30-015-30990) to the Morrow formation at an unorthodox gas well location 2116 feet from the South line and 542 feet from the West line (Unit L) of Section 23, Township 26 South, Range 24 East, NMPM, Eddy County, New Mexico. The S/2 of Section 23 is to be dedicated to this well in order to form a standard 320-acre gas spacing and proration unit for the Undesignated South Washington Ranch-Morrow Gas Pool.
- (3) Well location and acreage requirements for the Morrow formation within the limits of the South Washington Ranch-Morrow Gas Pool and one mile beyond fall under Division Rule 104.C, revised by Division Order No. R-11231, issued by the New Mexico Oil Conservation Commission in Case No. 12119 on August 12, 1999, which requires:

- (a) standard 320-acre, more or less, gas spacing and proration units comprising any two contiguous quarter sections of a single section that is a legal subdivision of the U. S. Public Land Surveys; and
- (b) the initial well on a 320-acre unit to be located no closer than 660 feet to any outer boundary of the quarter section on which the well is located and no closer than 10 feet to any quarter-quarter section line or subdivision inner boundary.
- (4) Marbob originally sought administrative approval of this location by application dated March 6, 2000. However, following discussions with the Division the application was set for hearing to enable Marbob to present additional evidence and respond to questions concerning the proposed well location. At the April 6, 2000 hearing in this matter, Marbob presented letters from all "affected parties," as defined by Division Rule 1207A.2, waiving objection to the location sought by Marbob in this case
 - (5) No interested party appeared at the hearing in opposition to this application.
- (6) Prior to the revisions to Division Rule 104 on August 12, 1999, deep gas wells in southeast New Mexico on 320-acre spacing were limited to one well per unit no closer than 1650 feet from the end boundaries of the unit nor closer than 660 feet from the side boundaries of the unit nor closer than 330 feet to any quarter-quarter section or subdivision inner boundary.
- (7) Division Rule 104.F (2), as revised, allows the Division Director to grant exceptions to the well location requirements contained in Division Rule 104.B. and 104.C., "after notice and opportunity for hearing when the exception is necessary to prevent waste or protect correlative rights." By Notice dated October 25, 1999, the Division Director explained the August 12, 1999 amendments, including the effect of those amendments. That notice specified that "[s]ince the primary objectives of the rule changes were to grant operators increased flexibility in locating wells and decrease the number of applications for unorthodox locations, all future location exceptions will require substantial justification, *i.e.*, unusual circumstances."
- (8) In considering Marbob's application in this case, the Division considered the following factors, which should be considered by any operator seeking any exception to the well location requirements in Division Rules 104.B. and 104.C.:

- (a) whether all locations for the proposed well within the standard window set by Division Rule 104 have been eliminated;
- (b) whether there is geological justification for the proposed location which necessitates granting the exception to Division Rule 104, or, if the proposed location is necessitated by surface features, whether the proposed location is in a geologically inferior position to a location within the standard window;
- (c) if the proposed location is necessitated by surface features, whether the operator has justified why it cannot directionally drill from the proposed unorthodox surface location to a bottomhole location within the standard window established by Division rules; and
- (d) whether the operator seeking the well location exception contemplates developing shallower zones, and whether the proposed well location is within the standard window for those shallower zones. As the Division's October 25, 1999 notice observed, "...the well location requirement for oil wells on 40-acre spacing has not changed and remains 330 feet from the quarter-quarter section. Operators need to be wary if a well's main objective is a deeper gas producing interval but there is the possibility of oil production and the location is closer to an interior quarter-quarter section line than 330 feet. In order to complete the well in a shallower oil producing horizon, the operator will be required to obtain an exception for the unorthodox oil well location. Location exceptions in this situation will not be granted unless unusual circumstances justify the location, and the closer a well is to the neighboring property, the harder it will be to obtain an exception. For example, if the well is only 10 feet of a neighboring property, it is highly unlikely that an exception will be granted."

- (9) In support of Marbob's contention that the well location exception sought by its application in this case was necessary to prevent waste or protect correlative rights, Marbob presented evidence supporting the above points:
 - Marbob cannot drill its proposed well within the (a) standard window in the S/2 of Section 23. Marbob presented evidence indicating that the proposed location is necessitated by the United States Department of the Interior, Bureau of Land Management's ("BLM") requirement that the proposed well be located at the subject location. Marbob originally proposed the subject well at a standard location in the S/2 of Section 26. However, due to the existence of three "special management areas," defined and identified by the BLM as (i) sensitive soils; (ii) cave-karst; and (iii) visual resources, the BLM required Marbob to drill at the proposed location. The BLM refuses to allow Marbob to drill a well at any standard well location in the S/2 of Section 23.
 - **(b)** Although geologic considerations are not the basis for Marbob's request for a well location exception, Marbob presented geologic evidence indicating that the Morrow sand, which is the primary objective of the proposed well, trends north to south under the western half of the acreage to be dedicated to this well. Marbob is the operator of the Primero Federal Well No. 1, which is located in the NW/4 of Section 23, 850 feet from the North line and 847 feet from the West line of Section 23. That well is successfully producing from the same sand that is the object of the well at issue in this case. In contrast, Marbob's Primero White 14 Federal Well No. 1 and Primero White 14-A Well No. 2, both located in the SW/4 of Section 14, Township 26 South, Range 24 East, NMPM, Eddy County, New Mexico, sought the same sand, but were dry holes and did not discover hydrocarbons capable of production in paying

quantities in that acreage. Marbob's interpretation of the structure of the Morrow formation underlying the acreage to be dedicated to the subject well indicates the proposed location is not geologically inferior to a location within the standard window in the S/2 of Section 23.

- (c) Marbob presented evidence establishing that directionally drilling this well from the proposed unorthodox surface location to a standard bottom hole location would increase the cost of drilling the well by approximately \$100,000.00. If Marbob did not drill the well, the hydrocarbons underlying the subject location will be wasted.
- (d) Although Marbob's primary objective for the subject well is the Morrow formation and Marbob does not plan to encounter or produce oil from a shallow formation from the subject well, the proposed well location is a standard location for an oil well on 40-acre spacing.
- (10) As to the surface features necessitating the well location exception sought in this case, the Division notes that Marbob conducted extensive negotiations with representatives of several divisions of the BLM in an attempt to locate the subject well within the standard window for well locations under Division Rule 104. Several meetings with BLM representatives were conducted on the acreage to be dedicated to the well. Because of the increased flexibility in well location requirements provided by the August 31, 1999 amendments to Division Rule 104, the Division will only grant exceptions to its well location requirements that are supported by "substantial justification, *i.e.*, unusual circumstances." (Division Notice dated October 25, 1999). The Division strongly encourages the BLM and operators to examine all possible locations within a standard window before concluding that the only acceptable location is a location requiring an exception to Division Rule 104.
- (11) Approval of this application will afford the applicant the opportunity to produce its just and equitable share of the gas in the affected pool, will result in the recovery of hydrocarbons that would otherwise be left in the ground and wasted, and will otherwise be in the best interest of conservation and the protection of correlative rights.

IT IS THEREFORE ORDERED THAT:

- (1) The application of Marbob Energy Corporation ("Marbob") for an exception to Division Rule 104.C (2) (a), revised by Division Order No. R-11231 issued by the New Mexico Oil Conservation Commission in Case No. 12119 on August 12, 1999, to drill its Primero Federal Well No. 2 (API No. 30-015-30990) to the Morrow formation at an unorthodox gas well location 2116 feet from the South line and 542 feet from the West line (Unit L) of Section 23, Township 26 South, Range 24 East, NMPM, Eddy County, New Mexico, is hereby approved.
- (2) The S/2 of Section 23 is to be dedicated to this well in order to form a standard 320-acre gas spacing and proration unit for the Undesignated South Washington Ranch-Morrow Gas Pool.
- (3) Jurisdiction of this case 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.

SEAL

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION

Spri Wrotenberg LORI WROTENBERY

Director