# 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. 13109 ORDER NO. R-12017

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

# **ORDER OF THE DIVISION**

### **BY THE DIVISION:**

This case came on for hearing at 8:15 a.m. on July 24, 2003 at Santa Fe, New Mexico, before Examiner Michael E. Stogner.

NOW, on this 29<sup>th</sup> day of August, **2003**, 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 authorization to drill the Zarafa "FF" Federal Well No. 2 to the Morrow formation, which is the primary zone of interest, at a location considered to be unorthodox for all formations and pools to be encountered 1650 feet from the South line and 2550 feet from the West line (Unit K) of Section 12, Township 21 South, Range 24 East, NMPM, Eddy County, New Mexico. This well is to be dedicated to the following acreage in the following manner:
  - (a) pursuant to Division Rule 104.C (2) (a), the W/2 of Section 12 to form a standard 320-acre stand-up deep gas spacing unit for any and all formations and/or pools developed on 320-acre spacing within that vertical extent, which presently include but are not necessarily limited to the Undesignated Indian Basin-Strawn Gas Pool (79035), Undesignated Seven Rivers Hills-Atoka Gas Pool (97196), and Undesignated Southeast Cemetery-Morrow Gas Pool;

- (b) pursuant to Division Rule 104.C (3), the SW/4 of Section 12 to form a standard 160-acre shallow gas spacing unit for any and all formations developed on statewide 160-acre spacing within that vertical extent; and
- (c) pursuant to Division Rule 104.B (1), the NE/4 SW/4 of Section 12 to form a standard 40-acre oil spacing and proration unit for any and all formations and/or pools developed on 40-acre spacing within that vertical extent.
- (3) Marbob originally sought administrative authorization of this location by application (*Division administrative application reference No. pKRV0-315428161*) dated May 27, 2003; however, this application lacking just cause and containing insufficient information was denied. Division Rule 104.F (2), revised by Division Order No. R-l 1231, issued by the New Mexico Oil Conservation Commission in Case No. 12119 on August 12, 1999, 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."
- (4) In reviewing Marbob's application in this case, the Division considered the following factors, which should also 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 that necessitates granting the exception to Division Rule 104, or, if surface features necessitate the proposed location, whether the proposed location is in a geologically inferior position compared 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
- 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. 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 from a neighboring property, it is highly unlikely that an exception will be granted.
- (5) In support of **Marbob**'s contention that the well location exception sought by its application in this case is necessary to prevent waste or protect correlative rights, Marbob presented evidence supporting the above points:
  - (a) Marbob cannot drill its proposed well within the standard window in the W/2 of Section 12. Marbob presented evidence indicating that the proposed location is necessitated by a United States Department of the Interior, Bureau of Land Management ("BLM") requirement that the proposed well be located at the subject location. Marbob originally proposed the subject well at a standard location 1980 feet from the North and West lines (Unit K) of Section 12. However, due to archeological, biological, topographical, cave-karst, drainage, and other considerations the BLM recommended that this original location be moved.

- (b) In addition to surface constraints, Marbob presented geologic evidence indicating that the proposed unorthodox deep Morrow gas well location will be at a more favorable geologic position within the upper Morrow **Zarafa** sand interval underlying the W/2 of Section 12.
- (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 would be wasted.
- (d) All of Section 12 comprises a single federal lease (U.S. Government lease No. NM-10709) with common mineral interests.
- (6) No interested party appeared at the hearing in opposition to this application.
- (7) As to the surface features necessitating the well location exception sought in this case, the Division notes that Marbob conducted negotiations with representatives of several divisions of the BLM in an attempt to locate the subject well within a 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.
- (8) 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 exceptions to Division Rules 104.B (1), 104.C (2) (a), and 104.C (3) to drill its **Zarafa** "FF" Federal Well No. 2 to the Morrow formation at a location considered to be unorthodox for all formations and pools to be encountered 1650 feet from the South line and 2550 feet from the West line (Unit K) of Section 12, Township 21 South, Range 24 East, NMPM, Eddy County, New Mexico, is hereby approved.
  - (2) The following spacing units are to be dedicated to this well:
    - (a) the W/2 of Section 12 to form a standard 320-acre stand-up deep gas spacing unit for any and all formations and/or pools developed on 320-acre spacing within that vertical extent, which presently include but are not necessarily limited to the Undesignated Indian Basin-Strawn Gas Pool (79035), Undesignated Seven Rivers Hills-Atoka Gas Pool (96714), Undesignated East Seven Rivers Hills-Atoka Gas Pool (97196), and Undesignated Southeast Cemetery-Morrow Gas Pool;
    - (b) the SW/4 of Section 12 to form a standard 160-acre shallow gas spacing unit for any and all formations developed on statewide 160-acre spacing within that vertical extent; and
    - (c) the NE/4 SW/4 of Section 12 to form a standard 40-acre oil spacing and proration unit for any and all formations and/or pools developed on 40-acre spacing within that vertical extent.
- (3) Jurisdiction of this case is retained for the entry of such further orders as the Division may deem necessary.

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DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

STATE OF NEW MEXICO OIL CONSERVATION DIVISION

LORI WROTENBERY

Director