## 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. 13385 ORDER NO. R-12255

APPLICATION OF MARBOB ENERGY CORPORATION FOR AUTHORIZATION TO CONDUCT WATERFLOOD OPERATIONS IN THE DODD FEDERAL UNIT AREA THROUGH EXISTING AND FUTURE INJECTION WELLS, EDDY COUNTY, NEW MEXICO.

## **ORDER OF THE DIVISION**

#### **BY THE DIVISION:**

This case came on for hearing at 8:15 a.m. on November 18, 2004, at Santa Fe, New Mexico, before Examiner David R. Catanach.

NOW, on this 3<sup>rd</sup> day of January, 2005, 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) Division Cases No. 13385 and 13386 were consolidated at the hearing for the purpose of testimony.
- (3) The applicant, Marbob Energy Corporation ("Marbob") seeks authority to conduct secondary recovery operations in the Grayburg-Jackson (Seven Rivers-Queen-Grayburg-San Andres) Pool ("Grayburg-Jackson Pool") and the East Empire-Yeso Pool within its Dodd Federal Unit Area, described as follows, located in Eddy County, New Mexico:

## **TOWNSHIP 17 SOUTH, RANGE 29 EAST, NMPM**

Section 10: E/2, E/2 W/2

Section 11: All

Section 14: All

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Section 15:

E/2

Section 22:

SE/4, SE/4 SW/4, E/2 NE/4, SW/4 NE/4

- (4) The Seven Rivers, Queen, Grayburg and San Andres formations within the Dodd Federal Unit Area are contained within the Grayburg-Jackson Pool. The Yeso/Paddock interval within the Dodd Federal Unit Area is contained within the East Empire-Yeso Pool. In companion Case No. 13386, Marbob seeks an order that would combine the Grayburg-Jackson and East Empire-Yeso Pools within the Dodd Federal Unit Area for the purpose of conducting secondary recovery operations in these zones.
- (5) By Order No. R-12228 issued in Case No. 13350 on November 1, 2004, the Division approved Marbob's application to statutorily unitize 2,400 acres, more or less, of Federal lands, this area to be known as the Dodd Federal Unit Area ("Unit Area"). The Unit Area was unitized for the purpose of conducting secondary recovery operations within the Grayburg-Jackson and East Empire-Yeso Pools.
- (6) Waterflood operations in the Grayburg-Jackson Pool within a portion of the Unit Area have previously been authorized by Division Order No. R-3013 dated December 3, 1965. Subsequent to that time, waterflood operations in the Grayburg-Jackson Pool have been expanded within the Unit Area by Division Orders No. WFX-254, WFX-258, WFX-268, WFX-268-A, WFX-288 and WFX-298.
- (7) Waterflood operations in the Yeso/Paddock interval have not previously been authorized by the Division within the Unit Area.
  - (8) The evidence presented by Marbob demonstrates that:
    - (a) the Grayburg-Jackson Pool is productive throughout the Unit Area and has been reasonably defined by development;
    - (b) there are currently fourteen injection wells in the Grayburg-Jackson Pool within the Unit Area. Expansion of waterflood operations in the Grayburg-Jackson Pool within the Unit Area will result in the recovery of additional secondary oil reserves that may otherwise not be recovered;

- (c) development of the Yeso/Paddock interval within the Unit Area is currently limited to a small area in Section 22; however, the Yeso/Paddock interval is potentially productive within a large portion of the Unit Area;
- (d) within the next several years, Marbob plans to drill an additional 80-120 wells to fully develop the Grayburg-Jackson Pool. Within those areas where the Yeso/Paddock interval is potentially productive, Marbob plans to drill its wells to a depth sufficient to test this interval; and
- (e) the feasibility of conducting secondary recovery operations within the Yeso/Paddock interval will be evaluated, tested and implemented on an ongoing basis as development occurs in this interval within the Unit Area.
- (9) Approval of the **subject** application will provide Marbob the opportunity to recover additional secondary oil reserves from the Grayburg-Jackson Pool within the Unit Area, will provide Marbob the opportunity to economically recover additional primary and secondary oil reserves from the **Yeso/Paddock** interval within the Unit Area, thereby preventing waste, and will not violate correlative rights.
- (10) The applicant should be required to file a Division Form C-108 (Application for Authorization to Inject) in the event the injection interval in the existing injection wells within the Unit Area is to be expanded to include the Yeso/Paddock interval.

### IT IS THEREFORE ORDERED THAT;

(1) The applicant, Marbob Energy Corporation, is hereby authorized to conduct secondary recovery operations in the Seven Rivers, Queen, Grayburg, San Andres and Yeso/Paddock intervals within its Dodd Federal Unit Area, described as follows, in Eddy County, New Mexico:

## TOWNSHIP 17 SOUTH, RANGE 29 EAST, NMPM

Section 10: E/2, E/2 W/2

Section 11: All Section 14: All Section 15: E/2

Section 22: SE/4, SE/4 SW/4, E/2 NE/4, SW/4 NE/4

- (2) The waterflood project is hereby designated the Dodd Federal Unit Waterflood Project, and the applicant shall conduct injection operations in accordance with Division Rules No. 701 through 708, and shall submit monthly progress reports in accordance with Division Rules No. 706 and 1115.
- (3) All provisions of Division Order No. **R-3013**, and Division Administrative Orders No. WFX-254, WFX-258, WFX-268, WFX-268-A, WFX-288 and WFX-298 shall remain in full force and effect.
- (4) The applicant shall file a Division Form C-108 (Application for Authorization to Inject) in the event the injection interval in the existing injection wells within the Unit Area is to be expanded to include the Yeso/Paddock interval.
- (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.

SEAL

MARK E. FESMIRE, PE

STATE OF NEW MEXICO

OIL CONSERVATION DIVISION

Director