

**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. 13350  
ORDER NO. R-12228**

**APPLICATION OF MARBOB ENERGY CORPORATION FOR STATUTORY  
UNITIZATION OF THE DODD FEDERAL UNIT AREA, EDDY COUNTY, NEW  
MEXICO**

**ORDER OF THE DIVISION**

**BY THE DIVISION:**

This case came on for hearing at 8:15 a.m. on October 7, 2004, at Santa Fe, New Mexico before Examiner David R. Catanach.

NOW, on this 1<sup>st</sup> day of November, 2004, 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. 13349 and 13350 were consolidated at the hearing for the purpose of testimony.

(3) The applicant, **Marbob** Energy Corporation ("**Marbob**"), seeks: (i) the statutory unitization, pursuant to the **Statutory Unitization Act**, Sections 70-7-1 through 70-7-21, **NMSA 1978**, of 2,400 acres, more or less, of all mineral interests in the Seven Rivers, Queen, Grayburg and San Andres formations, **Grayburg-Jackson (Seven Rivers-Queen-Grayburg-San Andres) Pool**, and the **Glorieta** and **Yeso/Paddock** formations, East Empire-Yeso Pool, Eddy County, New Mexico, and to be known as the Dodd Federal Unit, hereinafter sometimes referred to as the "Unit Area"; and (ii) approval of the Unit Agreement and the Unit Operating Agreement, which were submitted in evidence as applicant's Exhibits No. 4 and 5, respectively, in this case.

(4) The proposed Dodd Federal Unit consists of four Federal oil and gas leases located in Eddy County, New Mexico, and comprises 2,400 acres, more or less, described as follows:

**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, S/2 NE/4, NE/4 NE/4

(5) Portions of the proposed Unit Area have previously been approved by the Division for secondary recovery operations within the **Grayburg-Jackson (Seven Rivers-Queen-Grayburg-San Andres)** Pool. The initial order authorizing **waterflood** operations was Division Order No. **R-3013** issued in Case No. 3343 on December 3, 1965. Subsequent to that time, expanded waterflood operations have been authorized by Division Orders No. **WFX-254** dated February 2, 1967, **WFX-258** dated March 25, 1967, **WFX-268** dated August 14, 1967, **WFX-288** dated April 25, 1968, **WFX-298** dated October 2, 1968 and **WFX-307** dated March 7, 1969.

(6) Division records show that Marbob currently operates twelve (12) active water injection wells within the proposed Unit Area.

(7) Marbob plans to continue implementing secondary recovery operations within the Dodd Federal Unit and also plans to expand these operations by converting additional wells to injection and expanding the injection interval.

(8) The proposed Unitized Formation is that interval underlying the Unit Area, the vertical limits of which extend from the top of the Seven Rivers formation to the base of the **Yeso/Paddock** formation or 5,000 feet beneath the surface, whichever is less, as reflected on the Spectral Density Dual Spaced Neutron Log for the Marbob Energy Corporation's Mary Dodd "B" Deep Federal Well No. 2 (API No. 30-015-31041) located 1980 feet from the North line and 1295 feet from the East line (Unit H) of Section 14, Township 17 South, Range 29 East, NMPM.

(9) The **Grayburg-Jackson (Seven Rivers-Queen-Grayburg-San Andres)** Pool encompasses the entire Unit Area with the exception of the NE/4 of Section 11.

(10) The East **Empire-Yeso** Pool currently encompasses only that portion of the Unit Area comprising the SE/4 and SE/4 SW/4 of Section 22.

(11) The **Grayburg-Jackson** (Seven Rivers-Queen-Grayburg-San Andres) Pool underlying the Unit Area has been reasonably defined by development and has been **subject** to secondary recovery operations for more than thirty (30) years. According to applicant's testimony, the East **Empire-Yeso** Pool is potentially productive throughout the entire Unit Area.

(12) The proposed Unit Area contains five separate tracts of land owned by thirty-four (34) different working interest owners and approximately thirty-six (36) different overriding royalty interest owners. Royalty interest within the Unit Area is owned entirely by the United States government.

(13) As of the hearing date, 96.6655% of the working interest and 77.0653% of the overriding royalty interest have ratified the unit.

(14) The United States Bureau of Land Management ("**BLM**") has approved **Marbob's** plan for unit operations.

(15) The applicant has made a good faith effort to secure the voluntary participation of all interest owners in the Unit Area.

(16) Notice of this application was provided to all affected interest owners in the Unit Area. No interest owner appeared at the hearing in opposition to the application.

(17) Marbob plans to drill an additional 30-35 wells within the next five years to further develop the **Grayburg-Jackson** (Seven Rivers-Queen-Grayburg-San Andres) Pool and the East **Empire-Yeso** Pool.

(18) The continued implementation and expansion of secondary recovery operations within the Unit Area under a unitization plan will enable Marbob to efficiently and effectively recover additional oil and gas reserves from the Unit Area.

(19) The applicant projects that the **unitized** management, operation and further development of the Unitized Formation within the Unit Area will result in the recovery of an additional 13.7 million barrels of secondary reserves which would otherwise not be recovered, thereby preventing waste.

(20) The applicant further projects that the cost to implement operations within the Unit Area over the life of the project are anticipated to be approximately \$86.5 million dollars.

(21) The statutory unitization of the Unitized Formation within the Unit Area in accordance with the plan embodied in the Unit Agreement and Unit Operating Agreement will prevent waste and protect correlative rights and is upon terms and conditions that are fair, reasonable, equitable and in accordance with the Statutory Unitization Act, including all of the elements necessary for the entry of an order.

(22) The proposed unitized method of secondary recovery operations within the Unit Area is feasible and will result with reasonable probability in the recovery of substantially more oil and gas from the unitized portion of the pool than would otherwise be recovered.

(23) The estimated additional costs of such operations will not exceed the estimated value of the additional oil recovered plus a reasonable profit.

(24) Statutory unitization and adoption of applicant's proposed unitized method of operation will benefit the working interest and royalty interest owners within the proposed secondary recovery project area.

(25) The Unit Agreement and Unit Operating Agreement, applicant's Exhibits No. 4 and 5 in this case, should be incorporated by reference into this order.

(26) The Dodd Federal Unit Agreement and the Dodd Federal Unit Operating Agreement provide for unitization and unit operation upon terms and conditions that are fair, reasonable and equitable, and include:

- (a) an allocation to the separately owned tracts in the Unit Area of all oil and gas that is produced from the Unit Area and that is saved, being the production that is not used in the conduct of unit operations or not unavoidably lost;

- (b) a provision for the credits and charges to be made in the adjustment among the owners in the Unit Area for their respective investments in wells, tanks, pumps, machinery, materials and equipment contributed to the unit operations;
- (c) a provision governing how the costs of unit operations including capital investments shall be determined and charged to the separately owned tracts and how such costs shall be paid, including a provision specifying when, how and by whom such costs shall be charged to the owners, or the interests of such owners, and how their interests may be sold and the proceeds applied to the payment of their costs;
- (d) a provision for carrying any working interest owner on a limited, carried or net-profits basis, payable out of production, upon terms and conditions that are just and reasonable and that allow an appropriate charge for interest for such service payable out of production, upon such terms and conditions determined by the Division to be just and reasonable;
- (e) a provision designating a Unit Operator and providing for supervision and conduct of unit operations, including the selection, removal and substitution of an operator from among the working interest owners to conduct unit operations;
- (f) a voting procedure for matters to be decided by the working interest owners under which each working interest owner shall have a voting interest equal to its participation; and
- (g) a provision specifying the time when the unit operation shall commence and the manner in which, and the circumstances under which, the operations shall terminate and provision for the settlement of accounts upon such termination.

(27) The statutory unitization of the Dodd Federal Unit Area is in conformity with the above findings, and will prevent waste and protect correlative rights of all interest owners within the proposed Unit Area, and should be approved.

(28) In order to facilitate the orderly development of the **Grayburg-Jackson** (Seven Rivers-Queen-Grayburg-San Andres) and East **Empire-Yeso** Pools within the Unit Area, the applicant should be required to file additional applications to:

- (a) expand the pool boundary for the **Grayburg-Jackson** (Seven Rivers-Queen-Grayburg-San Andres) Pool to include the NE/4 of Section 11, Township 17 South, Range 29 East, NMPM;
- (b) expand the vertical limits of the **Grayburg-Jackson** (Seven Rivers-Queen-Grayburg-San Andres) Pool within the Unit Area to include the **Glorieta** and **Yeso** formations; and
- (c) authorize expanded waterflood operations to be conducted within the Seven Rivers, Queen, Grayburg, San Andres, **Glorieta** and **Yeso** formations within the Unit Area.

**IT IS THEREFORE ORDERED:**

(1) The application of Marbob Energy Corporation for the statutory unitization of 2,400 acres, more or less, being a portion of the **Grayburg-Jackson** (Seven Rivers-Queen-Grayburg-San Andres) and East **Empire-Yeso** Pools, Eddy County, New Mexico, to be known as the Dodd Federal Unit, is hereby approved pursuant to the Statutory Unitization Act, Sections 70-7-1 through 70-7-21, NMSA 1978.

(2) The Dodd Federal Unit shall comprise the following-described 2,400 acres, more or less, of Federal lands 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, S/2 NE/4, NE/4 NE/4

(3) The "Unitized Formation" shall comprise that interval underlying the Unit Area the vertical limits of which extend from the top of the Seven Rivers formation to the base of the **Yeso/Paddock** formation or 5,000 feet beneath the surface, whichever is less, as reflected on the Spectral Density Dual Spaced Neutron Log for the Marbob Energy Corporation's Mary Dodd "**B**" Deep Federal Well No. 2 (API No. 30-015-31041) located 1980 feet from the North line and 1295 feet from the East line (Unit H) of Section 14, Township 17 South, Range 29 East, NMPM.

(4) The Dodd Federal Unit Agreement and Dodd Federal Unit Operating Agreement, which were submitted to the Division at the time of the hearing as Exhibits No. 4 and 5, respectively, are hereby incorporated by reference into this order.

(5) The applicant shall continue with its current waterflood activities and expand such operations for the secondary recovery of oil and associated gas, condensate, and all associated **liquefiable** hydrocarbons within and produced from the Unit Area.

(6) In order to facilitate the orderly development of the **Grayburg-Jackson** (Seven Rivers-Queen-Grayburg-San Andres) and East **Empire-Yeso** Pools within the Unit Area, the applicant shall file additional applications to:

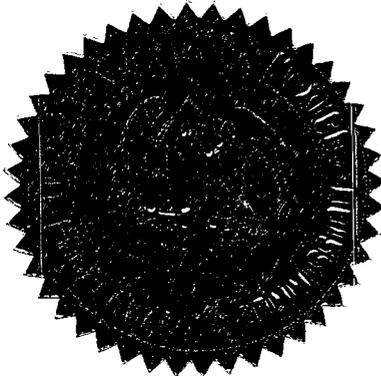
- (a) expand the pool boundary for the **Grayburg-Jackson** (Seven Rivers-Queen-Grayburg-San Andres) Pool to include the NE/4 of Section 11, Township 17 South, Range 29 East, NMPM;
- (b) expand the vertical limits of the **Grayburg-Jackson** (Seven Rivers-Queen-Grayburg-San Andres) Pool within the Unit Area to include the Glorieta and Yeso formations; and
- (c) authorize expanded waterflood operations to be conducted within the Seven Rivers, Queen, Grayburg, San Andres, Glorieta and Yeso formations within the Unit Area.

(7) Since the persons owning the required statutory minimum percentage of interest in the Unit Area have approved or ratified the Unit Agreement and the Unit Operating Agreement, the interests of all persons within the Unit Area are hereby unitized whether or not such persons have approved the Unit Agreement or the Unit Operating Agreement.

(8) The applicant shall notify the Division Director in writing of any removal or substitution of the applicant as unit operator by any other working interest owner within the Unit Area.

(9) Jurisdiction of this cause is retained for the entry of such further orders as the Division may deem necessary.

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



S E A L

STATE OF NEW MEXICO  
OIL CONSERVATION DIVISION

Handwritten signature of Mark E. Fesmire

MARK E. FESMIRE, P.E.  
Director