## STATE OF NEW MEXICO DEPARTMENT OF ENERGY AND MINERALS OIL CONSERVATION DIVISON

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APPLICATION OF GULF OIL CORPORATION FOR EXTENSION OF THE VERTICAL LIMITS OF THE EUNICE-MONUMENT OIL POOL UNDERLYING THE EUNICE MONUMENT SOUTH UNIT LEA COUNTY, NEW MEXICO.

OIL CONSERVATION DIVISION

Case No. 8399

## APPLICATION

Gulf Oil Corporation hereby applies to the New Mexico Oil Conservation Commission for an order providing for the extension of the vertical limits of the Eunice-Monument Oil Pool under the Eunice Monument South Unit, Lea County, New Mexico, and in support of its application states:

- 1. Gulf Oil Corporation (Gulf) is a Pennsylvania corporation authorized to transact business in the State of New Mexico, and is engaged in the business of, among other things, producing and selling oil and gas.
- 2. The proposed area (the "Unit Area") for which application is made is known as the Eunice Monument South Unit and consists of 14,189.84 acres, more or less, in Lea County, New Mexico and is more particularly shown in <a href="Exhibit No. 1">Exhibit No. 1</a> attached hereto and incorporated herein by reference.
- 3. The southern portion of the Eunice-Monument Oil Pool was formerly designated the Eunice (Penrose, Grayburg, San Andres) Pool. The Eunice Pool was discovered March 21, 1929 upon completion of the Continental Oil Company's Lockhart B-31 Well No. 1 in Section 31, Township 21 South, Range 36 East, Lea County, New Mexico. All oil

wells within the Unit Area were classified as Eunice oil wells until the New Mexico Oil Conservation Division created the Eumont Gas Pool overlying the Eunice and Monument Oil Pools by Order No. R-264, effective February 17, 1953. The Eumont Gas Pool vertical limits were then defined as extending from the top of the Yates formation to a point 200 feet below the top of the Queen formation thereby including all of the Seven Rivers formation. Order No. R-264-A, effective November 10, 1953, and Order No. R-1670, effective May 20, 1960, both amend the vertical limits of the Eumont Gas Pool to "extend from the top of the Yates formation to the top of the Grayburg formation, thereby including all of the Yates, Seven Rivers and Queen formations". This contracted the vertical limits of the Eunice and Monument oil pools to contain only the Grayburg and San Andres formations. This created a situation in which wells within the Unit Area had completion intervals overlapping the two pools.

- 4. To rectify the aforesaid would require workover operations on the subject wells within the Unit Area which would be expensive and would likely endanger the productivity of the subject wells, and would not allow for effective and manageable secondary recovery operations which is the purpose for the Unit.
- 5. A reasonable solution to the problem is to contract the vertical limits of the Eumont Gas Pool and to expand the vertical limits of the Eunice-Monument Oil Pool, upward, so as to be at a subsea datum of -100 feet or the top of the Grayburg formation, whichever is higher. This new vertical limits definition to the Eunice-Monument Oil Pool would apply only to the area underlying the Eunice Monument South Unit, Lea County, New Mexico. This adjustment will allow for a more manageable

Unit Area and a more effective waterflood of the entire oil column underlying the Unit Area which will prevent waste and should not impair correlative rights.

WHEREFORE, Gulf respectfully requests that this application be set for hearing before the Oil Conservation Commission at the earliest practicable date and that the Commission enter its order approving the extension of the vertical limits of the Eunice Monument Oil Pool underlying the Eunice Monument South Unit.

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