

W. B. Hopkins
DISTRICT MANAGER
M. I. Taylor
DISTRICT PRODUCTION
MANAGER

F. O. Mortlock

GISTRICT EXPLORATION
MANAGER

H. A. Rankin
DISTRICT SERVICES MANAGER

September 22, 1964

Case 3/18

P. O. Drawer 1938

Recwell, New Mexico 88201

Secretary Director New Mexico Oil Conservation Commission Post Office Box 2088 Santa Fe, New Mexico 87501

> Re: Application of Gulf Oil Corporation for Approval of the South Penrose Skelly Unit Agreement, Providing for Secondary Recovery Operations in a Portion of the Penrose Skelly Pool, Lea County, New Mexico

Dear Sir:

Gulf Oil Corporation, as the proposed Unit Operator, respectfully requests the Commission's approval of the South Penrose Skelly Unit Agreement on the grounds that the proposed Unit plan will, in principle, tend to promote the conservation of oil and gas and the prevention of waste. In support of its application, Gulf states as follows:

(1) That the Unit Area shall be:

```
T. 22 S., R. 37 E.
Section 3: Lots 3 and 4, SW/4 NW/4 and NW/4 SW/4
Section 4: Lots 1, 2, 3 and 4, S/2 N/2, SW/4 and W/2 SE/4
Section 5: All
Section 6: Lot 1, S/2 \text{ NE}/4 and SE/4
Section 7: NE/4
Section 8:
            All
Section 9:
            All
Section 10: N/2, SW/4 and N/2 SE/4
Section 15: N/2 NW/4
Section 16: N/2, N/2 SW/4, N/2 SE/4 and SE/4 SE/4
Section 17: N/2 NE/4, SE/4 NE/4 and NE/4 SE/4
containing 4,399.65 agres, more or less, more fully
shown on the enclosed plat marked Enclosure A.
```

- (2) That the project area described above includes all producing Penrose Skelly Pool wells situated south of the northern boundary of Township 25 South, except as follows:
  - (a) Twelve wells situated in Units K and M, Section 3; I and P, Section 4; D and E, Section 11; and E, F, K, L, M and N, Section 15, operated by Ambassador. These wells were not included in the proposed Unit at the request of the Operator.

- (b) Three wells situated in Units M, N and O, Section 16, operated by Moore and Russell. These wells were not included in the proposed Unit since production has been from the Queen formation only, whereas the Unit is being formed to waterflood the Grayburg formation.
- (c) One well situated in Unit L, Section 11 was not included at the request of the Operator, R. L. Parker.
- (d) Continental Oil Company's Elliott A-15 Lease, S/2 SE/4 Section 15, was not included in the unitization since the lease is not contiguous to the Unit Area.
- (3) That the average daily production for the wells in the proposed Unit Area has declined to approximately 3 barrels per day per well and all wells have reached an advanced stage of depletion as described in Rule 701 (E)(1).
- (4) That applicant initially proposes to convert 6 wells to water injection wells. The description of these 6 wells, together with each well's casing program, is shown on the enclosed plat marked Enclosure B. A copy of a typical injection well log is enclosed marked Enclosure C.
- (5) That the applicant plans to develop a source of brackish water in the vicinity of the Unit from the San Andres formation. The proposal is to inject approximately 500 barrels of water per day into each injection well.
- (6) That the order of the Commission should become effective upon the first day of the month following the final approval of said Unit Agreement by the Director of the U. S. Geological Survey, and shall terminate ipso facto upon the termination of said Unit Agreement.
- (7) That a copy of this application with enclosures has been sent to the State Engineer's office. Gulf Oil Corporation has previously obtained preliminary approval of the Unit Agreement from the Commissioner of Public Lands of the State of New Mexico and the Director of the U. S. Geological Survey.

It is requested that this matter be set for hearing before an examiner.

Respectfully submitted,

GULF OIL CORPORATION

M. I. Taylor

DOCKET MAILED

Enclosures VMH:ers

cc: New Mexico Oil Conservation Commission Post Office Box 1980 Hobbs, New Mexico 88240

> State Engineer's Office Capitol Building Santa Fe, New Mexico 87501

State Land Office Post Office Box 1148

Santa Fe, New Mexico 87501

Attn: Mrs. Marion Rhea