

Gulf Oil Corporation

ROSWELL PRODUCTION DISTRICT

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MANAGER
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DISTRICT EXPLORATION
MANAGER
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September 20, 1967

P. O. Drawer 1938
Roswell, New Mexico 88201

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

Case 3676

67 SEP 22 AM 10 30

Re: Application of Gulf Oil Corporation for the Approval of
the North Hackberry Yates Unit Agreement Providing for
Secondary Recovery Operations in a Portion of the North
Hackberry Yates Pool, Midy County, New Mexico

Dear Sir:

Gulf Oil Corporation, as proposed Unit Operator, seeks the Commission's approval of the North Hackberry Yates Unit Agreement on the basis that the proposed unit plan for waterflooding certain wells in the North Hackberry Yates Pool will promote the conservation of oil and gas and prevent waste. In support of this application, the following is offered:

- (1) The Unit Area shall be:

Township 19 North, Range 35 East

Section 23: S/2 NE/4 and SE/4
Section 24: S/2 N/2 and S/2

Containing 720.00 acres, more or less,
more fully shown on the enclosed plate.

- (2) The Unit Area includes only wells completed in the Yates formation and a dry hole. No producing North Hackberry Yates wells are contiguous to the Unit Area other than those in this proposed Unit.
- (3) Average production from the 16 wells in the proposed Unit Area has declined to approximately ten (10) barrels of oil a day per well, and the unit wells have reached an advanced stage of depletion as described in Rule 701(N)(1).
- (4) Applicant proposes to convert eight (8) wells to water injection wells, detailed descriptions of which are outlined and summarized in the enclosed diagrammatic sketches. Copies of logs on all injection wells are also enclosed.



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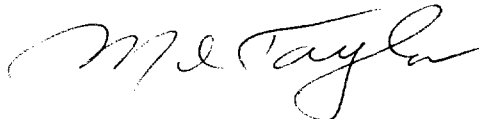
- (5) Applicant plans to inject up to 500 barrels a day of salt water into each injection well. Injection will be into the Yates formation (see typical well log) at depths ranging from 1750 to 2050 feet below the surface and will be on an 80-acre 5-spot pattern as shown on the enclosed plans.
- (6) Source of the injection water will be shallow wells to be drilled in Section 24, T19S, R30E. Saline water will be produced from the Rustler formation at depths ranging from 300 to 500 feet below the surface. Gulf's Applications to Appropriate Groundwater, GP-137, GP-137-X and GP-137-X-2, have previously been approved for this purpose by the State Engineer.
- (7) The order of the Commission should become effective upon the final approval of the Unit Agreement by both Working Interest Owners and the United States Geological Survey and terminate upon termination of the Unit Agreement.

Gulf Oil Corporation has obtained preliminary approval of the Unit Agreement from the U. S. Geological Survey, and a copy of this application, complete with all attachments, has been sent to the State Engineer Office, Santa Fe, New Mexico.

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

Respectfully submitted,

GULF OIL CORPORATION



M. I. Taylor

Attachments
DOB:ers

cc: U. S. Geological Survey
Post Office Box 1857
Reswell, New Mexico 88201

State Engineer Office
Post Office Box 1079
Santa Fe, New Mexico 87501

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