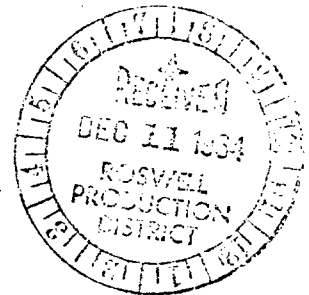


December 10, 1964

87501



Mr. A. L. Porter, Jr.  
Secretary-Director  
Oil Conservation Commission  
Santa Fe, New Mexico

Dear Mr. Porter:

Reference is made to the application of Gulf Oil Corporation submitted November 23, 1964, which seeks approval for expansion of their W. A. Ramsey (NCP-A) pilot waterflood and permission to drill an infill water injection well. Further reference is made to my letter of December 2, 1964 to Gulf Oil Corporation, a copy of which was forwarded to you,

Mr. Taylor has forwarded me the information desired.

The diagrammatic sketch of the proposed infill injection well indicates that the 4½ inch casing will be cemented from the shoe at approximately 3900 feet to the base of the salt at approximately 2900 feet, and that injection will be down 2 3/8 inch O.D. plastic-coated tubing with a tension packer set at approximately 3750 feet, and that the annulus between the tubing and the 4½ inch casing will be loaded with corrosion inhibited fluid. It appears, from the planned construction and equipping of the well, that no threat of contamination to the fresh waters which may exist in the area will occur. Therefore, this office offers no objection to the granting of this application.

FBI/ma  
cc-Gulf Oil Corp.  
F. H. Hennighausen

Yours truly,

Frank E. Irby  
Chief  
Water Rights Division

CASE NO. 3164  
EXHIBIT NO. 6

*Case file  
W. B. Hopkins  
M. I. Taylor  
F. O. Mortlock  
H. A. Rankin*

# Gulf Oil Corporation

ROSWELL PRODUCTION DISTRICT

November 23, 1964

P. O. Drawer 1938  
Roswell, New Mexico 88201

W. B. Hopkins  
DISTRICT MANAGER  
M. I. Taylor  
DISTRICT PRODUCTION  
MANAGER  
F. O. Mortlock  
DISTRICT EXPLORATION  
MANAGER  
H. A. Rankin  
DISTRICT SERVICES MANAGER

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

Re: Application by Gulf Oil Corporation to Expand the W. A. Ramsay (NCT-A) Pilot Waterflood Area and to Drill a Non-Standard Location, Infill Water Injection Well, Approximately 1320 Feet From the South and West Lines of Section 34-21S-36E, Lea County, New Mexico.

Dear Sir:

Since June, 1961, Gulf Oil Corporation has been operating a 28-well pilot waterflood on the W. A. Ramsay (NCT-A) Lease, Eumont and South Eunice Pools, Lea County, New Mexico (Case No. 2111, Order No. R-1820). As shown on the attached plat injection has been through six wells in Section 34-21S-36E on a double 80-acre 5-spot pattern. After 40 months of injection only token response has been noted in three or four of the producing wells in the southeast portion of the pilot area. As yet the flood is uneconomical and expansion on this pattern cannot be justified.

Before abandoning operation of the pilot, Gulf would like to try another approach to waterflooding the Queen in this area. Gulf proposes to drill an infill well approximately 1320 feet from the south and west lines of Section 34-21S-36E to be used for injection of water into the Queen formation on a 40-acre 5-spot pattern. This would be a non-standard location centered among Wells No. 38, 34, 36 and 49. Since this area is contiguous to, but not included in the original 680-acre pilot area, Gulf proposes that the original area be expanded to include the 40 acres immediately surrounding the proposed infill well.

The purpose of this new injection well, to be operated in conjunction with the existing injection wells, would be to (1) better evaluate the oil reservoir through latest coring and logging methods, (2) insure that injected water is going into the main pay zones only, (3) test the feasibility of waterflooding this area on closer well spacings, and (4) quickly determine whether the Queen will flood successfully in this area.

Gulf requests the Commission's approval to drill a non-standard location injection well and to expand the Ramsay Pilot Waterflood area to include the 40 acres surrounding the infill well on the grounds that the proposed plan will in principle tend to promote the conservation of oil and gas, thus preventing waste.

DOCKET MAILED

Date 12-4-64

Secretary Director  
New Mexico Oil Conservation Commission

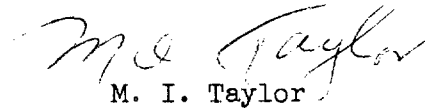
November 23, 1964

- 2 -

It is requested that this matter be set for hearing before an examiner.  
A copy of this application, complete with attachment, has been sent to the State  
Engineer Office, Santa Fe, New Mexico.

Respectfully submitted,

GULF OIL CORPORATION

  
M. I. Taylor

Attachment  
DGB:sz

cc w/Attachment

Commissioner of Public Lands  
State of New Mexico  
Post Office Box 1148  
Santa Fe, New Mexico 87501

State Engineer Office  
State of New Mexico  
Capitol Building  
Santa Fe, New Mexico 87501

New Mexico Oil Conservation Commission  
Post Office Box 2045  
Hobbs, New Mexico 88240

OIL CONSERVATION COMMISSION

P. O. BOX 871

SANTA FE, NEW MEXICO

December 21, 1964

C  
Mr. Bill Kastler  
Gulf Oil Corporation  
Post Office Drawer 1938  
Roswell, New Mexico

O  
Dear Mr. Kastler:

Enclosed herewith is Commission Order No. R-2849, entered in Case No. 3164, approving the expansion of Gulf Oil Corporation's W. A. Ramsay Waterflood Project.

P  
Injection into the authorized injection well shall be through plastic-coated tubing and packer, said packer being set within 100 feet of the uppermost perforation. The casing-tubing annulus is to be loaded with corrosion inhibited fluid.

Y  
As to allowable, our calculations indicate that when all of the authorized injection wells have been placed on active injection, the maximum allowable which this project will be eligible to receive under the provisions of Rule 701-E-3 will increase from the present 1134 barrels per day to 1260 barrels per day.

Please report any error in this calculated maximum allowable immediately both to the Santa Fe office of the Commission and the appropriate district proration office.

In order that the allowable assigned to the project may be kept current, and in order that the operator may fully benefit from the allowable provisions of Rule 701, it behooves him to promptly notify both of the aforementioned Commission offices by letter of any change in the status of wells in the project area, i.e., when active injection commences, when additional injection or producing wells are drilled,

OIL CONSERVATION COMMISSION

P. O. BOX 871

SANTA FE, NEW MEXICO

-2-

Mr. Bill Kastler

when additional wells are acquired through purchase or unitization, when wells have received a response to water injection, etc.

Your cooperation in keeping the Commission so informed as to the status of the project and the wells therein will be appreciated.

Very truly yours,

A. L. PORTER, Jr.  
Secretary-Director

ALP/ir

Enclosure

cc: Mr. Frank Irby  
State Engineer Office  
Santa Fe, New Mexico

Oil Conservation Commission  
Post Office Box 1980  
Hobbs, New Mexico

C  
O  
P  
Y