

see R-972

8-2-57  
B.F.  
copy to [unclear]  
[unclear]

BEFORE THE OIL CONSERVATION COMMISSION OF THE  
STATE OF NEW MEXICO

send all notices to  
Atwood + Malone  
ATTN: Kim Norman  
wjm

IN THE MATTER OF THE APPLICATION OF  
AMBASSADOR OIL CORPORATION, GRARIDGE  
CORPORATION AND GULF OIL CORPORATION  
FOR A PERMIT UNDER RULE 701 OF THE NEW  
MEXICO OIL CONSERVATION COMMISSION  
STATEWIDE RULES AND REGULATIONS FOR AN  
ORDER GRANTING APPROVAL TO INJECT WATER  
INTO THE QUEEN SAND UNDERLYING A PORTION  
OF THE CAPROCK QUEEN POOL IN LEA AND  
CHAVES COUNTIES, NEW MEXICO, AND AN  
ORDER EXCEPTING CERTAIN OIL WELLS IN THE  
CAPROCK QUEEN POOL FROM THE PROVISIONS  
OF RULE 502 OF THE NEW MEXICO OIL  
CONSERVATION COMMISSION STATEWIDE RULES  
AND REGULATIONS.

NO. 1294

A P P L I C A T I O N

AMBASSADOR OIL CORPORATION, GRARIDGE CORPORATION  
and GULF OIL CORPORATION hereby make application to the  
Commission for an order authorizing the injection of water  
in the Queen Sand Formation in the Caprock Queen Pool in Lea  
and Chaves Counties, New Mexico, and further make application  
to the Commission for an order excepting the wells described  
hereinbelow from the provisions of Rule 502 of the New Mexico  
Oil Conservation Commission Statewide Rules and Regulations,  
authorizing applicants to produce at capacity the wells lo-  
cated within and offsetting the pilot water flood program  
outlined herein and for which a permit is sought by this ap-  
plication. In support of this application, applicants res-  
pectfully submit and show the following:

- (1) Attached hereto as Exhibit "A" and made a part  
hereof is a plat of the Caprock Queen Pool area showing the  
location of the proposed intake wells, the location of all  
oil and gas wells including drill wells and dry holes and  
the names of Lessees within one-half mile of all intake wells

and the name of each offset operator.

(2) All wells within more than one-half mile of the proposed injection wells as well as all wells within more than one-half mile of the proposed injection wells for a full scale flood operation all as shown in Exhibit "A" hereto are now producing from the Queen Sand, Permian Age. The Queen Sand is the only formation producing in the immediate area involved in this application.

(3) Injection will be made into the Queen Sand encountered at an approximate depth of 3,030. The actual average thickness of the pay section of the Queen Sand is not known, however, the average thickness thereof is estimated to be in excess of 12 feet in the area of the proposed project. Attached hereto as Exhibits B1, B2, B3 and B4 are Gamma Ray-Neutron logs on four of the six injection wells to be used in the pilot flood initially installed, such logs being the only available logs and being made in Ambassador Oil Corporation's wells State E-1, State H-2, State J-2 and State M-1, all of which are indicated on Exhibit "A".

(4) The casing program followed during the primary development of the Caprock Queen Pool was to set sufficient surface casing to protect the fresh water sands and to set the oil string from the surface to the top of the pay. In cases where the casing was not set down to the top of the pay, liners will be run and cemented in order to definitely confine injection to the Queen Sand. In cases where the casing is set to the top of the pay, leak tests will be made and if the present casing is satisfactory, it will be used in its present condition. The casing program for the proposed injection wells is set forth more fully in Exhibit "C" attached

hereto and made a part hereof.

(5) Water will be injected in the Queen Sand and will be obtained from a shallow sand encountered from the surface to a depth of 350 feet. Approval for the use of the water has been obtained from the State Engineer of the State of New Mexico. It is estimated that the initial injection rate will be approximately 500 to 800 barrels per well per day.

(6) The injection wells are located on leases owned by the applicants. All of the injection wells will be operated by the applicants herein. The address of Ambassador Oil Corporation is Box 9938, Fort Worth, Texas. The address of Granridge Corporation is Breckenridge, Texas, and the address of Gulf Oil Corporation is Post Office Drawer 1290, Fort Worth, Texas.

(7) The names and approximate location of the six wells in which injection is first proposed to be made as a pilot flood area are as follows:

Ambassador Oil Corporation  
State E-1

20

SE $\frac{1}{4}$ SW $\frac{1}{4}$  of Section 1, Township 13 South,  
Range 31 East.

Ambassador Oil Corporation  
State H-2

6

SE $\frac{1}{4}$ SE $\frac{1}{4}$  of Section 1, Township 13 South,  
Range 31 East.

Ambassador Oil Corporation  
State J-2

3

NW $\frac{1}{4}$ NE $\frac{1}{4}$  of Section 12, Township 13 South,  
Range 31 East

Ambassador Oil Corporation  
State M-1

7

SE $\frac{1}{4}$ NW $\frac{1}{4}$  of Section 12, Township 13 South,  
Range 31 East.

Graridge Corporation  
Maxwell State A-1 3

NW $\frac{1}{4}$ SE $\frac{1}{4}$  of Section 1, Township 13 South,  
Range 31 East.

Gulf Oil Corporation  
Chaves State A-2 3

NW $\frac{1}{4}$ NW $\frac{1}{4}$  of Section 12, Township 13 South,  
Range 31 East.

The wells for which applicants request an exception  
to Rule 502 of the New Mexico Oil Conservation Commission  
Statewide Rules and Regulations are as follows:

Ambassador Oil Corporation  
State L-1 15

SW $\frac{1}{4}$ SW $\frac{1}{4}$  of Section 1, Township 13 South,  
Range 31 East.

Ambassador Oil Corporation  
State D-1 2

NE $\frac{1}{4}$ SW $\frac{1}{4}$  of Section 1, Township 13 South,  
Range 31 East.

Graridge Corporation  
Malco State E-1 3

SW $\frac{1}{4}$ NE $\frac{1}{4}$  of Section 1, Township 13 South,  
Range 31 East.

Graridge Corporation  
Malco State F-3 /

NE $\frac{1}{4}$ SE $\frac{1}{4}$  of Section 1, Township 13 South,  
Range 31 East.

Ambassador Oil Corporation  
State H-1 10

SW $\frac{1}{4}$ SE $\frac{1}{4}$  of Section 1, Township 13 South,  
Range 31 East.

Ambassador Oil Corporation  
State J-1 4

NE $\frac{1}{4}$ NE $\frac{1}{4}$  of Section 12, Township 13 South,  
Township 31 East.

Gulf Oil Corporation  
Chaves State A-1 4

NE $\frac{1}{4}$ NW $\frac{1}{4}$  of Section 12, Township 13 South,  
Range 31 East.

Ambassador Oil Corporation  
State M-2 8

SW $\frac{1}{4}$ NW $\frac{1}{4}$  of Section 12, Township 13 South,  
Range 31 East.

Ambassador Oil Corporation  
State G-1

4

NE $\frac{1}{4}$ NE $\frac{1}{4}$  of Section 11, Township 13 South,  
Range 31 East.

Graridge Corporation  
Livermore State J-3

✓

SW $\frac{1}{4}$ SW $\frac{1}{4}$  of Section 6, Township 13 South,  
Range 32 East.

Applicants respectfully request that this case be set for hearing before a trial examiner in Hobbs, New Mexico, unless the case can be sooner heard elsewhere by an examiner, in which event, the applicants request the earlier setting.

Respectfully submitted:

AMBASSADOR OIL CORPORATION

By H. L. McCracken

GRARIDGE CORPORATION

By Robert H. Zwick

GULF OIL CORPORATION

By B. E. Thompson *csd*