MAN OFFICE

## CITIES SERVICE OIL COMPANY,

**BOX 97** 

HOBBS, NEW MEXICO

November 12, 1957

Ex hey 1-7-58

Oil Conservation Commission State of New Mexico Box 871 Santa Fe, New Mexico

Attn: Mr. A. L. Porter

Re: Application for Permit under Rule 701 to Inject Water, Caprock Queen Pool, Chaves County, New Mexico

## Gentlemen:

Cities Service Oil Company hereby makes application to the Oil Conservation Commission for an order authorizing the injection of water into the Queen Sand formation in the Caprock Queen Pool, Chaves County, New Mexico. In support of this application, Cities Service Oil Company respectfully submits the following:

 Attached hereto is a plat marked Exhibit "A" of the Caprock Queen Pool area showing the location of the proposed water intake wells, the location of all oil wells, the names of Lessees within one-half mile of all proposed water intake wells and the names of all offset operators.

2. All wells within one-half mile of the proposed water intake wells are now producing from the Queen Sand, Permian Age. The Queen Sand is the only known producing formation in the immediate area involved with this application.

3. Injection of water is to be made into the Queen Sand encountered at an approximate depth of 3050'. The net pay section of the Queen Sand in the area of the proposed water intake wells is from 4 to 8'. Attached hereto and marked Exhibit "B" is a schematic drawing showing the casing program, top of pay and total depth of the four proposed water intake wells. A copy of the Gamma Ray Neutron Log of the Government "B" No. 5 is attached marked Exhibit "C" and is the only log now available on the four proposed water intake wells. The names and locations of the proposed water intake wells are as follows:

Government "B" No. 5, NW/4 NE/4, Section 10, T-14-S, R-31-E;

Government "B" No. 6, SE/4 SE/4, Section 3, T-14-S, R-31-E;

Government "B" No. 10, NE/4 SE/4, Section 3, T-14-S, R-31-E;

Government "B' No. 14, SE/4 SW/4, Section 3, T-14-S, R-31-E.

- 4. The casing program followed during development for wells in the vicinity of the proposed intake wells 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. Casing Leakage tests will be performed and casing will be repaired if found unsatisfactory. Injection of water will be made down tubing with a packer set near the bottom of the casing as shown in the schematic diagram, Exhibit "B".
- 5. Water will be injected into the Queen Sand and will be obtained from the Ogallaha formation in Section 24, T-14-S, R-31-E. Approval for the use of fresh water for waterflooding purposes has been granted by the State Engineer of the State of New Mexico. It is estimated that the water injection rate will be approximately 400 barrels per day per intake well.
- 6. All intake wells are located on leases owned by the applicant and will be operated by the applicant, Cities Service Oil Company.

It is respectfully requested that the Oil Conservation Commission schedule a hearing at an early date at Santa Fe, New Mexico, to consider Cities Service Oil Company's application for a permit under Rule 701 to inject water into wells described heretofore. A copy of this application has been sent by registered mail to each operator named on the attached mailing list.

Very truly yours,

CITIES SERVICE OIL COMPANY

D. D. Bodie

Division Superintendent

EFM/gb Attachs.

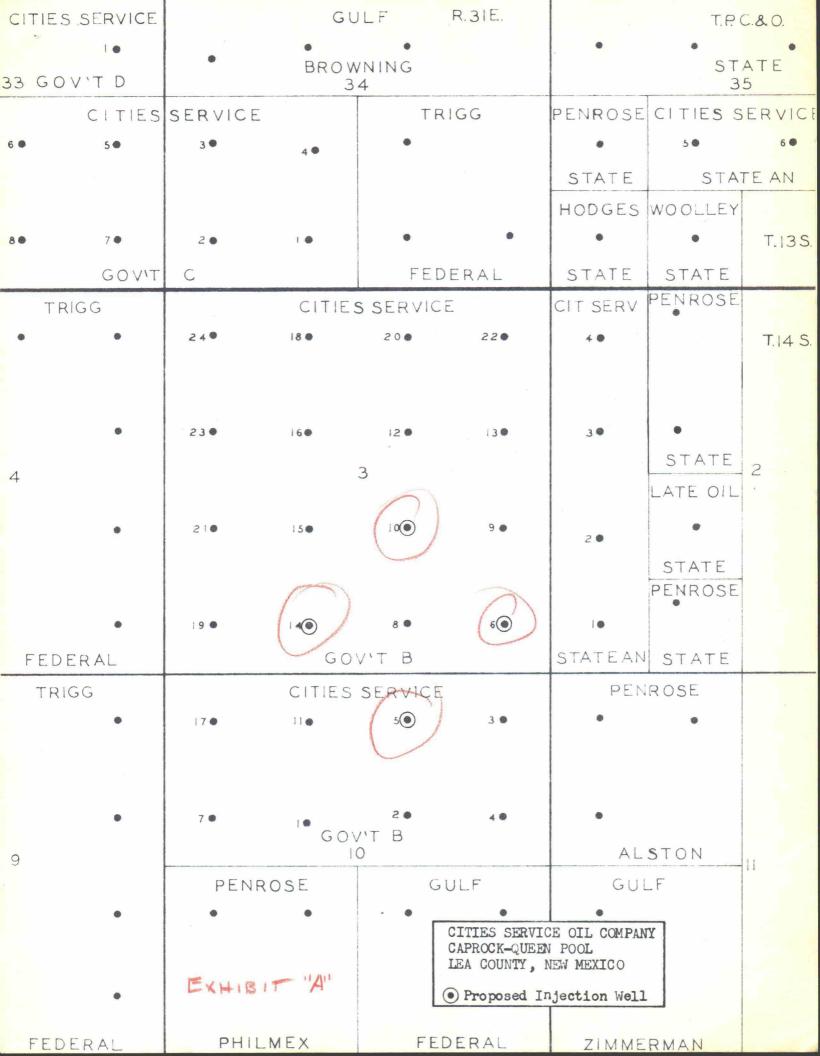
## MAILING LIST

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Late Oil Company (1) P. O. Box 670 San Angelo, Texas Neville G. Penrose, Inc. (1) 1813 Fair Building Fort Worth, Texas

John H. Trigg Company (1) Box 5629 Roswell, New Mexico R.R. Wooley (1)
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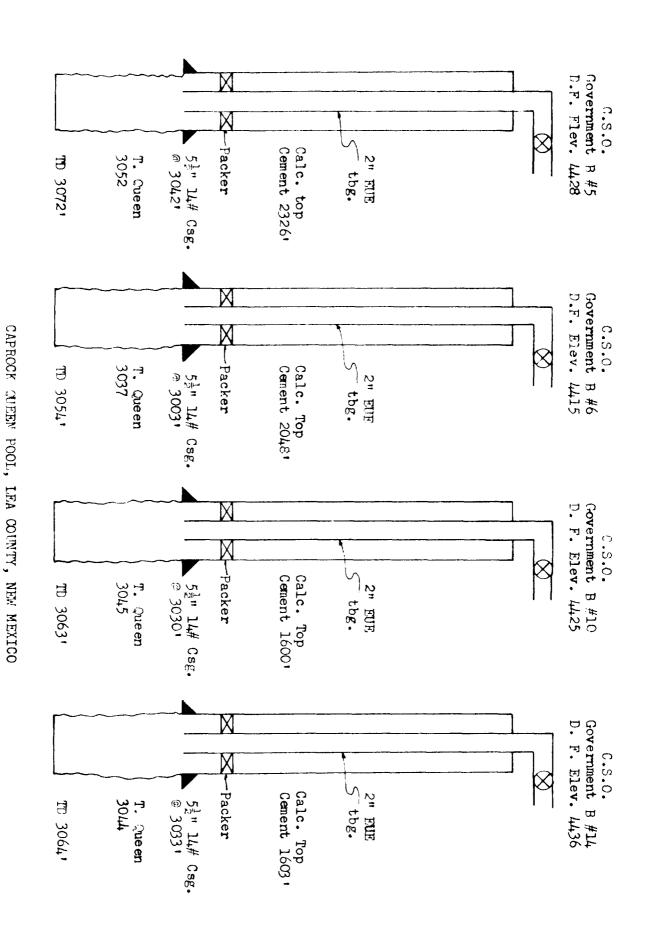


EXHIBIT "B"

SCHEMATIC OF PROPOSED MATER INJECTION WELLS