

CLARK OFFICE 001

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BEFORE THE OIL CONSERVATION COMMISSION  
OF THE STATE OF NEW MEXICO

IN THE MATTER OF THE APPLI- )  
CATION OF MURPHY OIL COR- )  
PORATION FOR ORIGINAL )  
AUTHORITY FOR THE INJECTION )  
OF WATER INTO THE LOWER )  
GALLUP SAND TO MAINTAIN THE )  
RESERVOIR PRESSURE IN THE )  
MANY ROCKS-GALLUP POOL IN )  
SECTIONS 7, 17, 18, 19 and 20, )  
TOWNSHIP 32 NORTH, RANGE )  
17 WEST, N.M.P.M., SAN JUAN )  
COUNTY, NEW MEXICO. )  
\_\_\_\_\_ )

No. 3/26

APPLICATION

Murphy Oil Corporation hereby applies for original authority for the injection of water into the Lower Gallup Sand to maintain the reservoir pressure in the Many Rocks-Gallup Pool and in support thereof states:

1. The Many Rocks-Gallup Pool comprises the following described lands all situate in Township 32 North, Range 17 West, N.M.P.M., San Juan County, New Mexico:

Section 7:	All (fractional)
Section 17:	NW $\frac{1}{4}$ , S $\frac{1}{2}$ NE $\frac{1}{4}$ and S $\frac{1}{2}$
Section 18:	N $\frac{1}{2}$ , NE $\frac{1}{4}$ SW $\frac{1}{4}$ and SE $\frac{1}{4}$
Section 19:	NE $\frac{1}{4}$ NE $\frac{1}{4}$
Section 20:	N $\frac{1}{2}$ NW $\frac{1}{4}$ , SE $\frac{1}{4}$ NW $\frac{1}{4}$ and NE $\frac{1}{4}$

All of which is more fully shown on the map attached hereto as Exhibit "A".

2. The water injection will be into the Lower Gallup Sand through five injection wells at depths under the perforated intervals for each well, as more fully shown by the schematic diagrams for each proposed water injection well attached hereto as Exhibits "B", "C", "D", "E" and "F". The water source for this program will be the Entrada Formation which occurs at the interval from 3,399 feet to 3,404 feet from the Guyer Oil Company's Navajo B-1 well, formerly Texas Pacific Coal and Oil Company's Navajo Tribal "B" # 1 well, situate in Section 28, Township 32 North, Range 17 West, N.M.P.M., San Juan County, New Mexico. The anticipated water injection rates initially proposed are 65 barrels per day into the Navajo "AA" No. 4 well, 90 barrels per day into the Navajo "AA" No. 5 well, 160 barrels per day into the Navajo "AA" No. 6 well, 250 barrels per day into the Navajo "AA" No. 13 well and 90 barrels per day into the Navajo "AA" No. 18 well. Only wells Nos. 4, 13 and 18 would be used immediately upon approval of the pressure maintenance project; proposed injection well No. 18 has not yet been drilled but would be immediately drilled and completed upon approval of the pressure maintenance project. Wells Nos. 5 and 6 would be converted to injection wells at a later date.

3. Logs of the proposed injection wells Nos. 4, 5, 6 and 13, being all of the injection wells except the one which has not been drilled, are attached hereto as Exhibits "G", "H", "I" and "J".

4. All of the lands comprising the Many Rocks-Gallup Pool are included within that certain Oil and Gas Mining Lease dated March 12, 1954, by and between the Navajo Tribal Council acting for and on behalf of the Navajo Tribe of Indians, Lessor, and Texas Pacific Coal and Oil Company and Murphy Oil Corporation, Lessees. A copy of this Application, together with copies of all Exhibits attached hereto, is forwarded to the office of the United States Geological Survey, 120 West Second Street, Roswell, New Mexico.

5. A copy of this Application, together with copies of all Exhibits attached thereto, is likewise forwarded to the office of the State Engineer, P.O. Box 1079, Santa Fe, New Mexico.

6. The authorization of the pressure maintenance project comprising the area heretofore noted by means of the proposed injections wells would be in the best interest of conservation of natural resources and would prevent waste and increase the ultimate recovery from the Many Rocks-Gallup Pool.

WHEREFORE, Applicant respectfully requests that this Application be set for hearing before a duly appointed Examiner of the Commission at the earliest possible date, that notice thereof be given as required by law and the regulations of the Commission and that authority be given for the injection of water into the Lower Gallup Sand to maintain the reservoir pressure of the Many Rocks-Gallup Pool.

Respectfully submitted,

MURPHY OIL CORPORATION

BY 

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