

BEFORE THE OIL CONSERVATION COMMISSION

STATE OF NEW MEXICO

IN THE MATTER OF THE APPLICATION)
OF THE ATLANTIC REFINING COMPANY)
FOR APPROVAL OF THE CULWIN QUEEN)
UNIT WATER FLOOD PROJECT (SHUGART)
POOL), CONSISTING OF 820.44 ACRES)
IN TOWNSHIPS 18 AND 19 SOUTH,)
RANGES 30 AND 31 EAST, EDDY COUNTY,)
NEW MEXICO)

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

Comes The Atlantic Refining Company acting by and through the undersigned attorneys, and hereby makes application for approval of the Culwin Queen Unit Water Flood Project (Shugart Pool), Eddy County, New Mexico in accordance with Rule 701 of the rules of the New Mexico Oil Conservation Commission and in support thereof respectfully shows:

1. That applicant is in the process of forming a unit for the purpose of instituting and operating a secondary recovery project by the injection of water in the Queen zone or formation of certain lands within the Shugart Pool, Eddy County, New Mexico. That the proposed unit area, which is hereinafter referred to as the "project area", will consist of the following described lands, to-wit:

Township 18 South, Range 30 East,
Section 36 - $S\frac{1}{2}NE\frac{1}{4}$, $NE\frac{1}{4}SW\frac{1}{4}$, $S\frac{1}{2}SW\frac{1}{4}$, $SE\frac{1}{4}$

Township 18 South, Range 31 East,
Section 31 - $W\frac{1}{2}SW\frac{1}{4}$

Township 19 South, Range 30 East,
Section 1 - $NE\frac{1}{4}NW\frac{1}{4}$, $NE\frac{1}{4}$, $N\frac{1}{2}SE\frac{1}{4}$

Township 19 South, Range 31 East,
Section 6 - $W\frac{1}{2}NW\frac{1}{4}$, $NW\frac{1}{4}SW\frac{1}{4}$

containing 820.44 acres, more or less

That of the above described lands 460.44 acres are Federal lands and 360 are lands of the State of New Mexico,

2. That there is attached hereto a plat showing the outlines of the project area and the location of the proposed injection wells within the project area, as well as the location of all other wells within a radius of two miles from the project area and the formation from which each of said wells is producing or has produced. Exhibit "A" also indicates the lessees of the lands within the project area as well as within two miles of the same.

3. That there is filed herewith as Exhibit "B" copies of the electrical logs of all of the proposed injection wells within the project area except the Trigg Federal No. 1 well located in the SW $\frac{1}{4}$ SW $\frac{1}{4}$ of Section 31, Township 18 South, Range 31 East, which well was not electrically logged, but is completed in the Queen zone or formation.

4. That there are also attached hereto as Exhibits "C", "D", "E", "F", "G" and "H" respectively diagrammatic sketches of each of the six injection wells shown on Exhibit "A" which includes diameters and setting depths of all casing strings, quantities and tops of cement, as well as perforated or open hole intervals, tubing strings, including diameters and setting depths, and the type and location of packers.

5. That there are eighteen producing wells at the present time producing from the Queen sand formation of the Shugart Pool within the project area, all of which have reached the advanced or stripper state of depletion, all producing an average of less than ten barrels per day. It is proposed to convert six of the producing wells to water injection wells as indicated on Exhibit "A" attached hereto.

That applicant proposes to obtain fresh water from the Caprock Water Company for injection into the six injection wells at a total combined rate of approximately 2,000 barrels per day. All water will be injected into the Queen sand formation and produced water will be re-injected when it occurs in sufficient quantities.

6. That a copy of this application with all exhibits has been mailed to the State Engineer of the State of New Mexico, Capitol Building, Santa Fe as of the date of this application.

7. That applicant requests that a project allowable be assigned to the Culwin Queen Unit Water Flood Project in accordance with the rules of the Commission and that the order of the Commission approving the project provide for administrative approval of expansion of the project and of any additional injection wells which may be required in connection therewith.

That applicant requests that a hearing on the within application be held before an examiner at the earliest possible date.

DATED this 23rd day of October, 1964.

Respectfully submitted,

THE ATLANTIC REFINING COMPANY

By 
Attorney

HINKLE, BONDURANT & CHRISTY

By 
Attorneys for Applicant
P.O. Box 10
Roswell, New Mexico