

BEFORE THE OIL CONSERVATION COMMISSION
OF THE STATE OF NEW MEXICO

APPLICATION OF SKELLY OIL COMPANY FOR
AN ORDER AUTHORIZING THE INJECTION OF
WATER FOR PRESSURE MAINTENANCE AND
SECONDARY RECOVERY PURPOSES INTO THE
GALLUP (TOCITO) SANDSTONE FORMATION
UNDERLYING APPLICANT'S NAVAJO "P" AND
"M" LEASES, SECTIONS 33, 34, 35 and 36
AND THE SOUTH HALFS OF SECTIONS 25 and 26,
TOWNSHIP 32 NORTH, RANGE 17 WEST, SAN
JUAN COUNTY, NEW MEXICO, AND FOR
PROMULGATION OF SPECIAL RULES GOVERNING
THE OPERATION OF SAID PROJECT.

CASE NO. 2994

TO: THE HONORABLE OIL CONSERVATION COMMISSION OF THE STATE OF NEW MEXICO
AND THE SECRETARY-DIRECTOR THEREOF

COMES NOW Skelly Oil Company, a Delaware Corporation,
authorized to do business in the State of New Mexico as owner and operator
of those certain oil and gas leases commonly called Navajo "P" and Navajo
"M" leases, executed by the Navajo tribe of Indians as Lessor, which leases
cover the land described above, and hereby makes application to the New
Mexico Oil Conservation Commission for an Order authorizing the injection of
water for pressure maintenance and secondary recovery purposes into the Gallup
(Tocito) Sandstone formation underlying the Navajo "P" and "M" leases, pursuant
to Rule 701 of this Commission, and for promulgation of special rules governing
the operation of said project.

In support of this application, applicant shows:

1.

There is attached hereto and made a part hereof, marked "Exhibit A,"
a plat showing the Navaho "P" and "M" leases, the location of all wells drilled
thereon and all wells drilled within a radius of two miles from the proposed
injection well hereinafter identified. Said Exhibit A also shows the location
of all wells which are producing from the Gallup (Tocito) Sandstone formation.

Said Exhibit A also shows the location of the proposed injection well for which authorization is requested herein, and the ownership of the respective leasehold interests within a radius of two miles from the proposed injection well.

2.

Exhibit A shows in outline the proposed project area which includes the following described lands, towit:

Sections 33, 34, 35, and 36; the South $\frac{1}{2}$ of Section 25 and the South $\frac{1}{2}$ of Section 26, Township 32 North, Range 17 West, San Juan County, New Mexico.

3.

There is also attached hereto, made a part hereof, marked "Exhibit B," a diagrammatic sketch of the proposed injection well, which shows the total depth of the well, the size of production casing in the well, the depth to which the casing has been set, the estimated top of the cement used in setting the casing in the well, the perforated intervals in the well, and the completion date.

4.

The proposed injection well which has been drilled by applicant is the Navaho "B" Well No. 6, located approximately 660 feet from the south line and 660 feet from the east line of Section 35, Township 32 North, Range 17 West, San Juan County. There is attached hereto and made a part hereof an electric survey run in said well, marked "Exhibit C."

5.

Applicant proposes to inject water into its Navaho "P" 6 Well into the Gallup (Tocito) Sandstone producing formation at an interval ranging from 1303 to 1310 feet, such water to be injected at rates ranging from 90 to 125 barrels per day.

6.

Applicant has arranged to obtain the water for such injection from Humble Oil and Refining Company. If this application is granted and applicant later requests administrative approval pursuant to Rule 701 to enlarge the pressure maintenance project, applicant plans to obtain water from its own wells drilled into the Morrison formation.

7.

Applicant and The Cities Service Oil Company are the sole owners of the Navaho "P" and "M" leases, each owning a 50% interest and the Navajo Tribe of Indians is the sole royalty owner under said leases. Applicant has negotiated lease line pressure maintenance agreements by and between applicant and the operators of oil and gas leases to the south of Sections 34, 35 and 36. Applicant and said operators propose to institute pressure maintenance operations on a cooperative basis, with each operator continuing to operate its own leases.

8.

Applicant believes and asserts that it will be in the interest of conservation and the prevention of waste to inaugurate a water injection program for pressure maintenance and secondary recovery purposes as soon as possible by the injection of water into the injection well for which authority is requested, and that said project is in the interest of obtaining the greatest ultimate recovery of oil and gas from the Gallup (Tocito) Sandstone formation. Applicant therefore respectfully requests that its proposed pressure maintenance project be approved, that the area designated above be designated as the project area, that an allowable formula be fixed therefor, and in connection therewith applicant recommends the adoption of special field rules governing said project, as follows:

RULE 1. The project area of the Many-Rocks-Gallup Pressure Maintenance Project No. 1, hereinafter referred to as the Project, shall comprise the following-described area:

Sections 33, 34, 35, and 36; the South $\frac{1}{2}$ of Section 25 and the South $\frac{1}{2}$ of Section 26, Township 32 North, Range 17 West, San Juan County, New Mexico.

RULE 2. The allowable for the Project shall be the sum of the allowables of the several wells within the project area, including those wells which are shut-in, curtailed, or used as injection wells. Allowables for all wells shall be determined in a manner hereinafter prescribed.

RULE 3. Allowables for injection wells may be transferred to producing wells within the project area, as may the allowables for producing wells which, in the interest of more efficient operation of the Project, are shut-in or curtailed because of high gas-oil ratio, pressure regulation, control of pattern or sweep efficiencies, or to observe changes in pressures or changes in characteristics of reservoir liquids or progress of sweep.

RULE 4. The allowable assigned to any well which is shut-in or which is curtailed in accordance with the provisions of Rule 3, which allowable is to be transferred to any well or wells in the project area for production, shall in no event be greater than its ability to produce during the test prescribed by Rule 6, below, or greater than the current top unit allowable for the pool during the month of transfer, whichever is less.

RULE 5. The allowable assigned to any injection well on a 40-acre proration unit shall be top unit allowable for the pool.

RULE 6. The allowable assigned to any well which is shut-in or curtailed in accordance with Rule 3 shall be determined by a 24-hour test at a stabilized rate of production which shall be the final 24-hour period of a 72-hour test throughout which the well should be produced in the same manner and at a constant rate. The daily tolerance limitation set forth in Rule 502 I (a) of the General Rules and Regulations and any limiting gas-oil ratio for the pool shall be waived during such tests. The project operator shall notify the Commission and all offset operators in writing of the exact time and date such tests are to be conducted. The Commission and representatives of the offset operators may witness the tests.

RULE 7. The allowable assigned to each producing well in the Project shall be equal to the well's ability to produce or to top unit allowable for the pool, whichever is less.

RULE 8. Each month the project operator shall, within three days after the normal unit allowable for Northwest New Mexico has been established, submit to the Commission a Pressure Maintenance Project Operator's Report, on a form prescribed by the Commission, outlining thereon the date required, and requesting allowables for each of the several wells in the project as well as the total project allowable. The aforesaid Pressure Maintenance Project Operator's Report shall be filed in lieu of Form G-120 for the Project.

RULE 9. The Commission shall, upon review of the report and after any adjustments deemed necessary, calculate the allowable for each well in the project for the next succeeding month in accordance with these rules. The sum of the allowables so calculated shall be assigned to the project and may be produced from the wells in the project in any proportion.

RULE 11. The conversion of producing wells to injection, the drilling of additional wells for injection, and expansion of the project area shall be accomplished only after approval of the same by the Secretary-Director of the Commission. To obtain such approval, the project operator shall file proper application with the Commission, which application, if it seeks authorization to convert additional wells to injection or to drill additional injection wells shall be filed in accordance with Commission Rule 701-B and shall be accompanied by a statement that all offset operators to the proposed injection well have been furnished a complete copy of the application and the date of notification.

The Secretary-Director may approve the proposed injection well if, within 15 days after receiving the application, no objection to the proposal is received. The Secretary-Director may grant immediate approval, provided waivers of objection are received from all offset operators and from the State Engineer.

Expansion of the project area may be approved by the Secretary-Director of the Commission administratively when good cause is shown therefor.

Therefore, applicant requests that this application be set down
for hearing before an Examiner, after due notice as required by law.

Respectfully submitted,

SKELLY OIL COMPANY

BY GILBERT, WHITE & GILBERT

W B Kelly