

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION

well

IN THE MATTER OF THE HEARING
CALLED BY THE OIL CONSERVATION
DIVISION FOR THE PURPOSE OF
CONSIDERING:

CASE NO. 6795
Order No. R-6304

APPLICATION OF TORREON OIL COMPANY
FOR A WATERFLOOD PROJECT, SANDOVAL
COUNTY, NEW MEXICO.

ORDER OF THE DIVISION

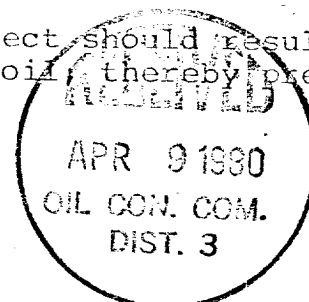
BY THE DIVISION:

This cause came on for hearing at 9 a.m. on February 13, 1980, at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this 31st day of March, 1980, the Division Director, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises,

FINDS:

- (1) That due public notice having been given as required by law, the Division has jurisdiction of this cause and the subject matter thereof.
- (2) That the applicant, Torreon Oil Company, seeks authority to institute a waterflood project on its San Luis Lease, San Luis-Mesaverde Oil Pool, by the injection of water into the 1000-foot sand of the Menefee formation through its San Luis Federal Well No. 1, located 1650 feet from the South line and 1980 feet from the West line, and its San Luis Federal Well No. 2, located 2278 feet from the South line and 2296 feet from the West line, both in Section 21, Township 18 North, Range 3 West, NMPM, Sandoval County, New Mexico.
- (3) That the wells in the project area are in an advanced state of depletion and should properly be classified as "stripper" wells.
- (4) That the proposed waterflood project should result in the recovery of otherwise unrecoverable oil, thereby preventing waste.



(5) That the operator should take all steps necessary to ensure that the injected water enters only the proposed injection interval and is not permitted to escape to other formations or onto the surface from injection, production, or plugged and abandoned wells.

(6) That injection into each of the proposed injection wells should be accomplished through tubing set in a packer as close as is practicable to the uppermost perforations in the 1000-foot sand of the Menefee formation. The casing-tubing annulus in each injection well should be loaded with an inert fluid and a pressure gauge installed to facilitate detection of leakage in the casing, tubing, or packer.

(7) That the injection pressurization system shall be equipped with a pressure limitation switch or other acceptable device which will limit the surface injection pressure to 200 psi unless the Division Director shall have administratively authorized a higher injection pressure after adequate showing by the applicant that such higher pressure will not fracture the confining strata.

(8) That although there are several wells in the general area which have casing and cementing programs or plugging and abandonment programs which are either known and of questionable integrity, or are unknown, it is believed that due to their depth (to the 600-foot shallow Menefee sand) or their distance from the two proposed injection wells, they will present no hazard to any underground water supply during flooding operations in the 1000-foot Menefee sand, provided however there is one well which should be further investigated, and if necessary, re-entered to ensure the integrity of its plugging program.

(9) That said well is identified as the Myers King Well No. 1-X, located 1100 feet from the South line and 2475 feet from the West line of Section 21, Township 18 North, Range 3 West, NMPM, and was drilled to a reported depth of approximately 945 feet before being plugged in an unknown manner.

(10) That prior to commencing its proposed water injection program, applicant should establish to the satisfaction of the Supervisor of the Aztec District Office of the Division that said well is plugged in such a manner as to prevent it from becoming an avenue of escape for waters injected into the 1000-foot Menefee sand, either by substantial documentation of the plugging operations performed on said well or by re-entering and, if necessary, re-plugging said well.

(11) That the subject application should be approved and the project should be governed by the provisions of Rules 701, 702, and 703 of the Division Rules and Regulations.

IT IS THEREFORE ORDERED:

(1) That the applicant, Torreon Oil Company, is hereby authorized to institute a waterflood project on its San Luis Federal Lease, San Luis-Mesaverde Oil Pool, by the injection of water into the 1000-foot sand of the Menefee formation through the following described wells in Section 21, Township 18 North, Range 3 West, NMPM, Sandoval County, New Mexico:

San Luis Federal Well No. 1, 1650 feet from South line and 1980 feet from West line

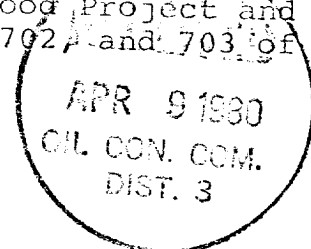
San Luis Federal Well No. 2, 2278 feet from South line and 2296 feet from West line

(2) That injection into each of said wells shall be through tubing, set in a packer which shall be located as near as practicable to the uppermost perforation; that the casing-tubing annulus of each injection well shall be loaded with an inert fluid and equipped with an approved pressure gauge or attention-attracting leak detection device.

(3) That the injection pressurization system shall be equipped with a pressure limitation switch or other acceptable device which will limit the surface injection pressure to no more than 200 psi provided however, that the Division Director shall have authority to approve a higher injection pressure limitation upon an adequate showing by the operator that such higher pressure will not result in the fracturing of the confining strata.

(4) That the operator shall immediately notify the supervisor of the Division's Aztec district office of the failure of the tubing or packer in any of the injection wells, the leakage of water or oil from or around any producing well, or the leakage of water or oil from any plugged and abandoned well within the project area and shall take such timely steps as may be necessary or required to correct such failure or leakage.

(5) That the subject waterflood project is hereby designated the Torreon San Luis Mesaverde Waterflood Project and shall be governed by the provisions of Rules 701, 702, and 703 of the Division Rules and Regulations.



(6) That monthly progress reports of the waterflood project herein authorized shall be submitted to the Division in accordance with Rules 704 and 1120 of the Division Rules and Regulations.

(7) That prior to the commencement of injection operations, the operator shall establish to the satisfaction of the Supervisor of the Aztec District Office of the Division that the Myers King Well No. 1-X, located 1100 feet from the South line and 2475 feet from the West line of Section 21, Township 18 North, Range 3 West, NMPM, is plugged in such a manner as to prevent it from becoming an avenue of escape for waters injected into the 1000-foot sand of the Menefee formation, either by substantial documentation of the plugging operations on said well or by re-entering said well and, if necessary, re-plugging the well.

(8) That jurisdiction of this cause is retained for the entry of such further orders as the Division may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION



JOE D. RAMEY
Director

S E A L

fd/