

STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION

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

CASE NO. 9683
ORDER NO. R-8968

APPLICATION OF KERR-MCGEE CORPORATION
FOR A WATERFLOOD PROJECT, CHAVES COUNTY,
NEW MEXICO

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 8:15 a.m. on June 7, 1989, at Santa Fe, New Mexico, before Examiner Michael E. Stogner.

NOW, on this 1st day of August, 1989, the Division Director, having considered the testimony, the record and the recommendations of the Examiner, and being fully advised in the premises,

FINDS THAT:

(1) Due public notice having been given as required by law, the Division has jurisdiction of this cause and the subject matter thereof.

(2) At the time of the hearing, this case was consolidated with Case No. 9682 for the purposes of testimony.

(3) The applicant, Kerr-McGee Corporation, seeks authority to initiate a waterflood project within its proposed K-M Chaveroo San Andres Unit Area (Division Case No. 9682), by the injection of water into the San Andres formation as found in that stratigraphic interval between 4211 and 4345 feet as measured on the Compensated Formation Density Log run in the Kerr-McGee Corporation State "F" Well No. 1 located 660 feet from the North and West lines (Unit D) of Section 2, Township 8 South, Range 33 East, NMPM, Chaves County, New Mexico, through the following described nine existing wells in said Township 8 South, Range 33 East, NMPM, designated and Undesignated Chaveroo-San Andres Pool:

WELL NAME AND NUMBER	FOOTAGE LOCATION	UNIT	SECTION	PROPOSED INJECTION INTERVAL (FEET)
State "F" No. 1	660'FNL - 660'FWL	(D)	2	4211 to 4345
State "F" No. 4	1980'FNL - 1980'FWL	(F)	2	4200 to 4328
State "F" No. 5	1980'FSL - 660'FWL	(L)	2	4208 to 4331
State "F" No. 7	1980'FSL - 1980'FEL	(J)	2	4219 to 4328
State "F" No. 10	990'FSL - 1980'FWL	(N)	2	4238 to 4331
State "F" No. 13	990'FSL - 1980'FEL	(P)	2	4241 to 4336
State TR C No. 1	660'FNL - 1980'FEL	(B)	2	4204 to 4347
State TR C No. 3	1980'FNL - 660'FEL	(H)	2	4236 to 4380
State TR C No. 4	660'FNL - 660'FWL	(D)	1	4244 to 4338

(4) It was proposed that the waterflood project area coincide with the boundary of the K-M Chaveroo San Andres Unit Area, which was the subject of Case No. 9682 and was heard in conjunction with this case, being all of Sections 1 and 2, Township 8 South, Range 33 East, NMPM, Chaves County, New Mexico.

(5) In compliance with Division General Rule 701.F.2, the project area should be reduced to the following described area:

TOWNSHIP 8 SOUTH, RANGE 33 EAST, NMPM
Section 1: Lots 3 and 4 and the SW/4 NW/4
Section 2: All

(6) The wells in the project area are in an advanced state of depletion and should be properly classified as "stripper wells."

(7) The proposed waterflood project should result in the recovery of otherwise unrecoverable oil, thereby preventing waste.

(8) 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 into other formations or onto the surface from injection, production or plugged and abandoned wells.

(9) Prior to commencing injection operations, the casing in each of the subject wells should be pressure tested throughout the interval, from the surface down to the proposed packer setting depth, to assure integrity of such casing.

(10) The injection wells or injection pressurization system for each well should be so equipped as to limit injection pressure at the wellhead to no more than 800 psi.

(11) The Director of the Division should be authorized to administratively approve an increase in the injection pressure upon a proper showing by the operator that such a higher pressure will not result in migration of the injected waters from the San Andres formation.

(12) The operator should give advance notification to the supervisor of the Hobbs District Office of the Division of the date and time of the installation of injection equipment and of the mechanical integrity pressure-test in order that the same may be witnessed.

(13) The subject application should be approved and the project should be governed by the provisions of Rule 702 through 708 of the Division Rules and Regulations.

IT IS THEREFORE ORDERED THAT:

(1) The applicant, Kerr-McGee Corporation, is hereby authorized to institute and operate a waterflood project within the K-M Chaveroo San Andres Unit Area (Division Case No. 9682) by the injection of water into the unitized interval which shall include the San Andres formation as found in that stratigraphic interval between 4211 and 4345 feet as measured on the Compensated Formation Density Log run in the Kerr-McGee Corporation State "F" Well No. 1 located 660 feet from the North and West lines (Unit D) of Section 2, Township 8 South, Range 33 East, NMPM, Chaveroo-San Andres Pool, Chaves County, New Mexico.

(2) The waterflood project area, hereby designated the K-M Chaveroo San Andres Unit Waterflood Project, shall be comprised of the following described lands in Chaves County, New Mexico:

TOWNSHIP 8 SOUTH, RANGE 33 EAST, NMPM
Section 1: Lots 3 and 4 and the SW/4 NW/4
Section 2: All

(3) Injection into said waterflood project shall be through the following described nine existing wells all in said Township 8 South, Range 33 East, NMPM:

WELL NAME AND NUMBER	FOOTAGE LOCATION	UNIT	SECTION	PROPOSED INJECTION INTERVAL (FEET)
State "F" No. 1	660'FNL - 660'FWL	(D)	2	4211 to 4345
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(4) Prior to commencing injection operations, the casing in each of the subject wells shall be pressure-tested to assure the integrity of such casing in a manner that is satisfactory to the supervisor of the Division's Hobbs District office.

(5) Injection into each of the said wells shall be through a 2 3/8-inch internally coated tubing installed in a packer set approximately 100 feet above the uppermost perforation; 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.

(6) Each injection well or system shall be equipped with a pressure limiting switch or other acceptable device which will limit the wellhead pressure on the injection well to no more than 800 psi.

(7) The operator shall notify the supervisor of the Hobbs district office of the Division in advance of the date and time of the installation of injection equipment and of the mechanical integrity pressure-test in order that the same may be witnessed.

(8) The operator shall immediately notify the supervisor of the Hobbs District office of the failure of the tubing or packer in any of said injection wells, the leakage of water or oil from or around any producing well within the project area and shall take such timely steps as may be necessary or required to correct such failure or leakage.

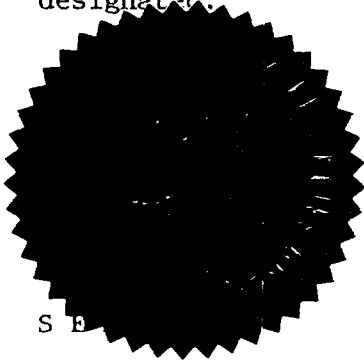
(9) The K-M Chaveroo San Andres Unit Waterflood Project shall be governed by the provisions of Rules 701 through 708 of the Division Rules and Regulations.

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(10) Monthly progress reports of the waterflood project herein authorized shall be submitted to the Division in accordance with Rules 706 and 1115 of the Division Rules and Regulations.

(11) 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

Victor L. Lyon
for WILLIAM J. LEMAY
Director

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