

**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. 10822
Order No. R-9973**

**APPLICATION OF CROSS TIMBERS
OPERATING COMPANY FOR A WATERFLOOD
PROJECT, LEA COUNTY, NEW MEXICO.**

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 8:15 a.m. on September 9, 1993, at Santa Fe, New Mexico, before Examiner David R. Catanach.

NOW, on this 22nd day of September, 1993, 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) The applicant, Cross Timbers Operating Company, seeks authority to institute a waterflood project on its State "BY" Lease comprising the SE/4 of Section 32, Township 17 South, Range 33 East, NMPM, Lea County, New Mexico, by the injection of water into the Grayburg formation, Maljamar-Grayburg San Andres Pool, through the gross perforated interval from approximately 4,602 feet to 4,708 feet in its State "BY" Well No. 6 located 2310 feet from the South line and 430 feet from the East line (Unit I) of Section 32.

(3) The applicant further seeks to establish an administrative procedure whereby additional wells may be approved for injection and/or production within the project area without the necessity for further hearings.

(4) Such provisions and procedures are currently contained within the Oil Conservation Division Rules and Regulations and it is unnecessary to duplicate such provisions within this order.

(5) According to applicant's testimony, it will utilize the existing State "BY" Well No. 5, located in Unit J, and the State "BY" Well No. 3, located in Unit I, as producing wells within the proposed waterflood project.

(6) The State "BY" Well No. 5 is currently a producing well completed in the Maljamar-Grayburg-San Andres Pool and is capable of marginal production only. The State "BY" Well No. 3 is currently completed in the Corbin-Queen Pool; however, the applicant proposes to deepen this well to the Maljamar-Grayburg-San Andres Pool.

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

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

(9) The injection of water into the proposed injection well should be accomplished through 2 3/8-inch internally plastic-lined tubing installed in a packer set at a depth of approximately 4,550 feet; the casing-tubing annulus should be filled with an inert fluid and a gauge or approved leak-detection device should be attached to the annulus in order to determine leakage in the casing, tubing or packer.

(10) Prior to commencing injection operations into the proposed injection well, the casing should be pressure tested throughout the interval from the surface down to the proposed packer setting depth, to assure the integrity of such casing.

(11) The injection well or pressurization system should be initially equipped with a pressure control device or acceptable substitute which will limit the surface injection pressure to no more than 920 psi.

(12) The Division Director should have the authority to administratively authorize a pressure limitation in excess of the pressure limitation described above upon a showing by the operator that such higher pressure will not result in the fracturing of the injection formation or confining strata.

(13) 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.

(14) The proposed waterflood project should be approved and the project should be governed by the provisions of Rule Nos. 701 through 708 of the Oil Conservation Division Rules and Regulations.

(15) The injection authority granted herein for the proposed injection well should terminate one year after the effective date of this order if the operator has not commenced injection operations into the subject well, provided however, the Division, upon written request by the operator, may grant an extension thereof for good cause shown.

IT IS THEREFORE ORDERED THAT:

(1) The application of Cross Timbers Operating Company for authority to institute a waterflood project on its State "BY" Lease comprising the SE/4 of Section 32, Township 17 South, Range 33 East, NMPM, Lea County, New Mexico, by the injection of water into the Grayburg formation, Maljamar-Grayburg-San Andres Pool, through the gross perforated interval from approximately 4,602 feet to 4,708 feet in its State "BY" Well No. 6 located 2310 feet from the South line and 430 feet from the East line (Unit I) of Section 32, is hereby approved.

(2) The applicant shall 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.

(3) Injection shall be accomplished through 2 3/8-inch plastic-lined tubing installed in a packer set at a depth of approximately 4,550 feet; the casing-tubing annulus shall be filled with an inert fluid and equipped with an approved pressure gauge or attention-attracting leak detection device.

(4) The injection well or pressurization system shall be equipped with a pressure control device or acceptable substitute which will limit the surface injection pressure to no more than 920 psi.

(5) The Division Director shall have the authority to administratively authorize a pressure limitation in excess of the above upon a showing by the operator that such higher pressure will not result in the fracturing of the injection formation or confining strata.

(6) Prior to commencing injection operations, the casing shall be pressure-tested throughout the interval from the surface down to the proposed packer setting depth, to assure the integrity of such casing.

(7) The operator shall 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 tests in order that the same may be witnessed.

(8) The applicant shall immediately notify the supervisor of the Hobbs District Office of the Division of the failure of the tubing, casing or packer in the injection well, 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 steps as may be timely and necessary to correct such failure or leakage.

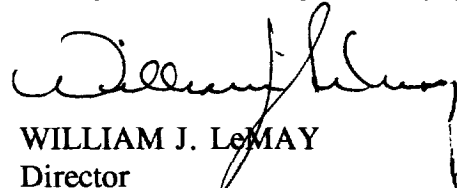
(9) The subject waterflood project is hereby designated the State "BY" Maljamar Waterflood Project, and the applicant shall conduct injection operations in accordance with Division Rule Nos. 701 through 708 and shall submit monthly progress reports in accordance with Division Rule Nos. 706 and 1115.

(10) The injection authority granted herein for the proposed injection well shall terminate one year after the effective date of this order if the operator has not commenced injection operations into the subject wells, provided however, the Division, upon written request by the operator, may grant an extension thereof for good cause shown.

(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


WILLIAM J. LEMAY
Director

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