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BEFORE THE OIL CONSERVATION COMMISSION

STATE OF NEW MEXICO

IN THE MATTER OF THE APPLICATION
OF GREAT WESTERN DRILLING COMPANY
FOR APPROVAL OF THE ROCK QUEEN
UNIT AGREEMENT FOR THE PURPOSE OF
SECONDARY RECOVERY OPERATIONS, AND
FOR AUTHORITY TO INSTITUTE A PILOT-
WATERFLOOD PROJECT IN THE CAPROCK-
QUEEN POOL

Case No. 1798

TO: The Oil Conservation Commission
State of New Mexico
Santa Fe, New Mexico

I.

Comes now the applicant, Great Western Drilling Company, whose address is Box 1659, Midland, Texas, and files herewith a copy of the proposed Rock Queen Unit Agreement for the development and operation of the Rock Queen Unit Area in Chaves and Lea Counties, New Mexico, and hereby makes application for the approval of said Unit Agreement as provided by law and regulations, and in support thereof states:

1. That the proposed Unit area covered by said Agreement embraces 4,939.77 acres, more or less, more particularly described as follows:

CHAVES COUNTY, NEW MEXICO

T. 13 S., R. 31 E.,

Sec. 22: $NW\frac{1}{4}SW\frac{1}{4}$, $E\frac{1}{2}SW\frac{1}{4}$, $E\frac{1}{2}$
Sec. 23: $N\frac{1}{2}NW\frac{1}{4}$, $NW\frac{1}{4}NE\frac{1}{4}$, $S\frac{1}{2}N\frac{1}{2}$, $S\frac{1}{2}$
Sec. 24: $N\frac{1}{2}SW\frac{1}{4}$, $NW\frac{1}{4}SE\frac{1}{4}$, $S\frac{1}{2}S\frac{1}{2}$
Sec. 25: All
Sec. 26: All
Sec. 27: $E\frac{1}{2}NW\frac{1}{4}$, $E\frac{1}{2}$
Sec. 36: All
Sec. 34: $NE\frac{1}{4}$, $S\frac{1}{2}NW\frac{1}{4}$
Sec. 35: $N\frac{1}{2}NW\frac{1}{4}$

LEA COUNTY, NEW MEXICO

T. 13 S., R. 32 E.,

Sec. 19: $SW\frac{1}{4}NE\frac{1}{4}$, $NE\frac{1}{4}SW\frac{1}{4}$, $S\frac{1}{2}SW\frac{1}{4}$, $SE\frac{1}{4}$
Sec. 30: $N\frac{1}{2}$, $N\frac{1}{2}S\frac{1}{2}$, $S\frac{1}{2}SW\frac{1}{4}$, $SW\frac{1}{4}SE\frac{1}{4}$
Sec. 31: $NW\frac{1}{4}NW\frac{1}{4}$

2. That the proposed Unit area is composed of 720 acres of Federal lands, 3,659.77 acres of State of New Mexico lands, and 560 acres of privately owned lands.

3. Applicant is informed and believes, and upon such information and belief states: That the lands to be embraced in the proposed Unit area cover all or substantially all of the available lands necessary for the effective and efficient institution of a secondary recovery operation by the institution of a waterflood project, and that said Unit Agreement will permit the producing area to be developed and operated in the interest of conservation, the protection of correlative rights, and the prevention of waste, of the Unitized Substances.

4. That Great Western Drilling Company is designated as Unit Operator in the Unit Agreement, and as such is given authority under the terms thereof to carry on all operations necessary for the development and operation of the Unit area and the recovery of Unitized Substances, subject to all applicable laws and regulations. That said Unit Agreement provides for the institution of a secondary recovery operation and the institution of a waterflood project in the Caprock-Queen pool as more fully stated hereinbelow.

5. That said Unit Agreement is in substantially the same form as Unit Agreements heretofore approved by the Commissioner of Public Lands of the State of New Mexico, the Director of the U. S. Geological Survey, and the Oil Conservation Commission of the State of New Mexico; it is believed that the field or area involved can be developed more economically and efficiently under the terms of said Unit Agreement to the end that the maximum recovery of Unitized Substances will be obtained.

6. That application has been made for the approval of said Unit Agreement by the Commissioner of Public Lands of the State of New Mexico, and that prior to the hearing on this application, informal approval of the form and context of said Unit Agreement will be obtained from said Commissioner. That application has been made for the approval of said Unit Agreement by the Director of U. S. Geological Survey, and that informal approval of the form of said Unit Agreement has been obtained from said Director. That upon order being entered by this Commission approving said Unit Agreement, and after formal approval thereof by the Commissioner of Public Lands of the State of New Mexico and the Director of U. S. Geological Survey, a fully executed and approved copy of said Unit Agreement will be filed with the Commission.

II.

Coming on further, applicant makes application for authority to institute a pilot waterflood project in the Caprock-Queen pool in Lea and Chaves Counties, New Mexico, and in support thereof states:

1. A plat showing the location of the intake wells and the location of all oil and gas wells including drilling wells and dry holes, and the names of the lessees within one-half mile of the intake wells and each offset operator, is attached hereto.

2. The formations from which the wells involved in this application are producing is stated in Section 2 (h) of the Unit Agreement filed herewith.

3. The name, description and depth of the formation to be affected by the proposed injection is likewise stated in said Section 2 (h).

4. With respect to a log of the intake wells, applicant states that there are a few available logs, and a diligent effort will be made to locate any existing logs of such wells, and that if any are found the same will be presented to the Commission at the hearing upon this application.

5. The intake wells' casing is $5\frac{1}{2}$ inch to 7 inch casing set at the top of the Queen formation pay zone, or set above such point and a liner set therein to the top of such pay zone. The proposed method for testing casing before use of the input wells will be in conformity with the established rules of the Commission, and all other applicable law and regulations.

6. Water is to be used for injection; its source is in the $SW\frac{1}{4}SE\frac{1}{4}$, Section 33, Township 13 South, Range 32 East, N.M.P.M. This fluid is fresh water from the Ogallala formation at a depth of approximately 261 feet. It is estimated that approximately 600 barrels of water must be injected daily to "fill up" and thereafter a decreasing amount of water sufficient to maintain effective and efficient secondary recovery operations.

7. The name and address of the proposed operator of the proposed project is Great Western Drilling Company, Box 1659, Midland, Texas.

8. Simultaneously with the filing of this application, applicant has filed with the Office of the State Engineer, P. O. Box 1079, Santa Fe, New Mexico: (i) Copy of this application; (ii) Geographical location of water source; (iii) name and depth of formation from which water is to be obtained; and (iv) analysis of water.

9. A description of the proposed initial intake wells is as follows:

<u>Name</u>	<u>Well No.</u>	<u>Description</u>
Geror Oil Corp.	7 - State	$NW\frac{1}{4}SW\frac{1}{4}$ - 22
Geror Oil Corp.	6 - State	$SE\frac{1}{4}SW\frac{1}{4}$ - 22
T - P	1 - State	$NW\frac{1}{4}SE\frac{1}{4}$ - 22
G. W. Williams	1 - Werner State	$SE\frac{1}{4}SE\frac{1}{4}$ - 22
Skelly	2 - A (L.C.)	$SE\frac{1}{4}NW\frac{1}{4}$ - 27
Antweil	3 - Malco Fed.	$NW\frac{1}{4}NE\frac{1}{4}$ - 27

13S/ 31E - Chaves

Applicant further requests that it be authorized to convert any other well located within the Unit area to water injection, without notice and hearing, subject to administrative approval by the Commission, when it is established to the satisfaction of the Secretary-Director that the proposed water injection well has experienced a substantial response to the waterflood project, or is directly offset by a producing well which has experienced such response; and that it is located on a water injection pattern which will result in a thorough and efficient sweep of oil by said waterflood. Applicant hereby stipulates that the State Engineer of the State of New Mexico is an interested party and is to be notified of any request for the expansion of this pilot project. Applicant suggests that such administrative procedure provide that:

(a) To obtain administrative approval for the conversion of any well to water injection, applicant shall submit to the Commission in triplicate a request for such administrative approval, setting forth therein all the facts pertinent to the need for expansion of the waterflood, and attaching thereto Commission Form C-116, showing production tests of the affected well or wells both before and after stimulation by waterflood. That applicant shall also attach plats of the waterflood project area and immediate surrounding area, indicating thereon the owner of each lease and the location of all water injection wells and producing wells, and applicant shall further submit evidence that a copy of the application to expand the waterflood project area has been sent to each operator offsetting the proposed expansion and to the State Engineer of the State of New Mexico.

(b) That the Secretary-Director of the Commission may, if in his opinion there is need for the expansion of the waterflood project area, authorize said expansion without notice and hearing, provided no offset operator nor the State Engineer of the State of New Mexico objects to said expansion within fifteen days. That the Secretary-Director of the Commission may further grant immediate approval of the expansion of the waterflood project area upon receipt of waivers of objection from all operators offsetting the proposed expansion and the State Engineer of the State of New Mexico.

Wherefore, applicant respectfully requests that a public hearing be held on this application before an Examiner, and that upon such a hearing that the Commission enter its Order:

(a) Approve in principle as a proper conservation measure the Rock Queen Unit Agreement; provided however that notwithstanding any of the provisions contained in said Unit Agreement that such approval shall not be considered as waiving or relinquishing in any manner any right, duty or obligation which now, or may hereafter be vested in the New Mexico Oil Conservation Commission by law relative to the supervision and control of operations for exploration and development of any lands committed to said Rock Queen Unit

Agreement, or relative to the production of oil or gas therefrom; and,

(b) Designate the Unit area of the Rock Queen Unit as the lands described in Paragraph I, 1, hereinabove, and provide that the Unit area may be expanded or contracted as provided in said Unit Agreement; and,

(c) Authorize Great Western Drilling Company as Operator of the Rock Queen Unit to immediately convert for the purpose of water injection into the Queen formation in the Caprock-Queen pool those wells described in Article II, 9, hereinabove, and further authorize said Unit Operator to convert to water injection any well located within said Unit area in the Caprock-Queen pool, subject to administrative approval by the Commission; and,


(d) Such other and further relief, rights, and privileges as may be just in the premises.

Dated this 22nd day of September, 1959.

Respectfully submitted,

GREAT WESTERN DRILLING COMPANY

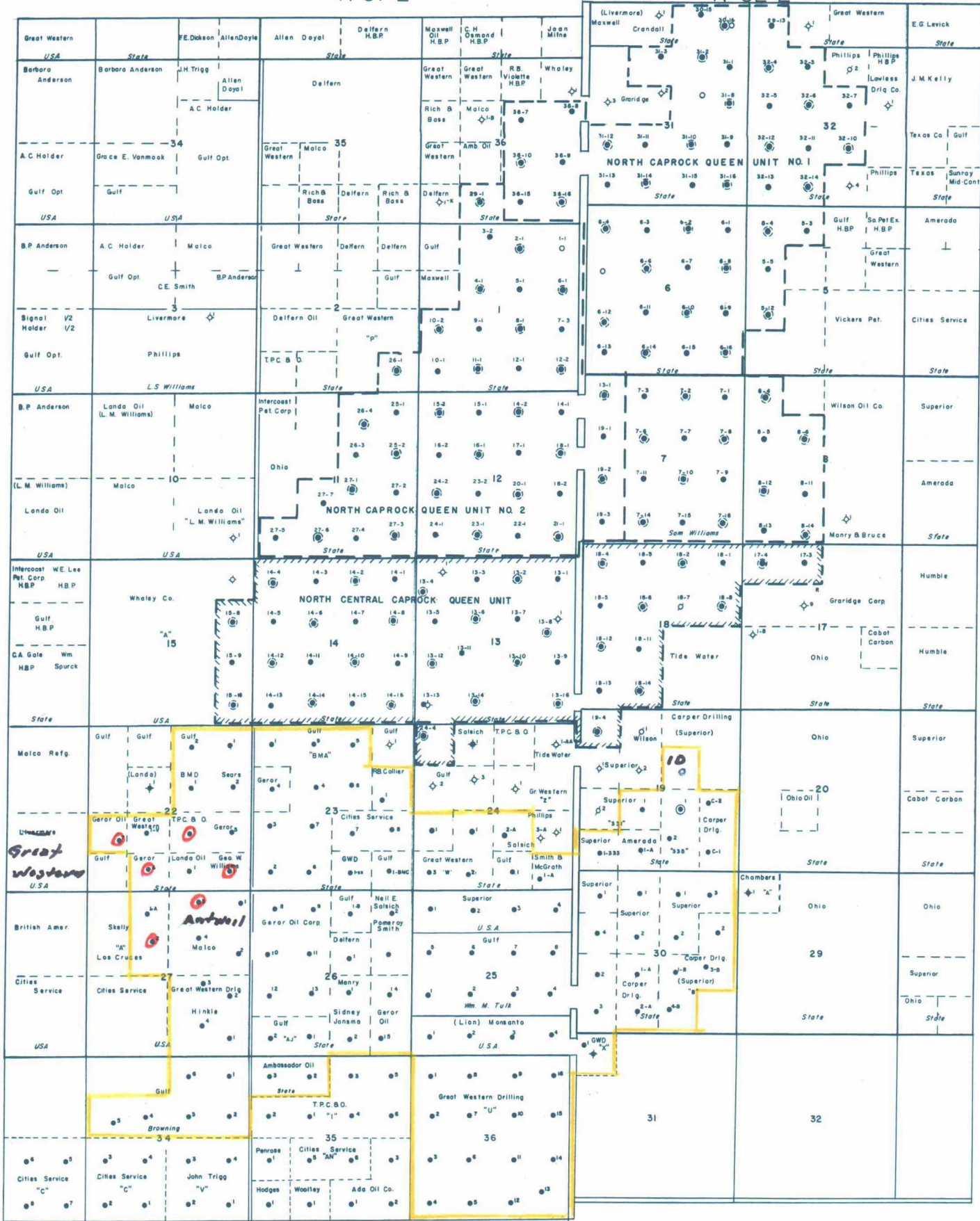
By


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