Enlessed December 14,1438

BEFORE THE OIL CONSERVATION COMMISSION OF THE STATE OF NEW MEXICO

IN THE MATTER OF THE HEARING CALLED BY THE OIL CONSERVATION COMMISSION OF NEW MEXICO FOR THE PURPOSE OF CONSIDERING:

> CASE NO. 1564 Order No. R-1311

APPLICATION OF GREAT WESTERN DRILLING COMPANY FOR APPROVAL OF A UNIT AGREEMENT AND FOR PERMISSION TO INSTITUTE A PILOT WATER FLOOD PROJECT IN THE CAPROCK-QUEEN POOL, CHAVES AND LEA COUNTIES, NEW MEXICO, AND FOR THE ESTABLISHMENT OF AN ADMINISTRATIVE PROCEDURE WHEREBY SAID PROJECT MAY BE EXPANDED.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 o'clock a.m. on December 10, 1958, at Santa Fe, New Mexico, before Daniel S. Nutter, Examiner duly appointed by the Oil Conservation Commission of New Mexico, hereinafter referred to as the "Commission," in accordance with Rule 1214 of the Commission Rules and Regulations.

NOW, on this 17th day of December, 1958, the Commission, a quorum being present, having considered the application, the evidence adduced and the recommendations of the Examiner, Daniel S. Nutter, and being fully advised in the premises,

FINDS:

- (1) That due public notice having been given as required by law, the Commission has jurisdiction of this cause and the subject matter thereof.
- (2) That the proposed unit plan will in principle tend to promote the conservation of oil and gas and the prevention of waste.
- (3) That the applicant will be the operator of the proposed North Central Caprock Queen Unit comprising 2,040 acres, more or less, of State and Federal land in Sections 13, 14, 15, and 24 of Township 13 South, Range 31 East, and Sections 17, 18, and 19 of Township 13 South, Range 32 East, Caprock-Queen Pool, Chaves and Lea Counties, New Mexico.
- (4) That the applicant proposes to institute a pilot water flood project on said North Central Caprock Queen Unit by the injection of water into the Queen formation underlying said unit through the following-described wells:

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	Tract	Section	Township	Range
Graridge Morgan State Well No. 2	NW/4 NW/4	17	13S	32E
Great Western State "N" Well No. 1	NW/4 NW/4	18	1 3 S	32E
Great Western State "N" Well No. 3	NW/4 NE/4	18	1 3 S	32E
Great Western State "N" Well No. 4	SE/4 NE/4	18	138	32E
Graridge Caprock State "A" Well No. 1	NW/4 SW/4	18	138	32E
Great Western State "Y" Well No. 2	SE/4 SW/4	18	138	32E
Great Western State "N" Well No. 7	SE/4 NW/4	18	138	32E
Graridge B-A State Well No. 1	NW/4 NE/4	13	1 3 S	31E
Great Western State "O" Well No. 1	SE/4 NE/4	13	13S	31E

- (5) That the applicant further proposes that it be authorized to convert any other well located on the said North Central Caprock Queen Unit to water injection, without notice and hearing, subject to administrative approval by the Commission.
- (6) That the applicant stipulates that the State Engineer is an interested party and is to be notified of any request for the expansion of said pilot water flood project.
- (7) That a seven well pilot project is adequate to test the efficiency of water flooding in the subject unit area; that accordingly permission to convert the said Great Western State "O" Well No. 1 and the said Graridge B-A State Well No. 1 should not be granted at this time.
- (8) That the applicant should be permitted to inject water into the Queen formation in the Caprock-Queen Pool on said North Central Caprock Queen Unit through the first seven wells described in Finding No. 4.
- (9) That the proposed pilot water flood project, as restricted by the deletion of the said Great Western State "O" Well No. 1 and the said Graridge B-A State Well No. 1, will not

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adversely affect the interests of any other operators in the area.

(10) That an administrative procedure should be established whereby approval may be granted for conversion to water injection of additional wells on said North Central Caprock Queen Unit when it is established to the satisfaction of the Secretary-Director that the proposed injection well has experienced a substantial response to the water flood project or is directly offset by a producing well which has experienced such response.

IT IS THEREFORE ORDERED:

(1) That Great Western Drilling Company be and the same is hereby authorized to immediately convert for the purpose of water injection into the Queen formation in the Caprock-Queen Pool, the following-described wells:

3	Tract	Section	Township	Range
Graridge Morgan State Well No. 2	NW/4 NW/4	17	13S	32E
Great Western State "N" Well No. 1	NW/4 NW/4	18	13S	32E
Great Western State "N" Well No. 3	NW/4 NE/4	18	13S	32E
Great Western State ''N'' Well No. 4	SE/4 NE/4	18	138	32E
Graridge Caprock State "A" Well No. 1	NW/4 SW/4	18	13S	32E
Great Western State "Y" Well No. 2	SE/4 SW/4	18	138	32E
Great Western State "N" Well No. 7	SE/4 NW/4	18	138	32E

(2) That Great Western Drilling Company be and the same is hereby authorized to convert to water injection any well located on the proposed North Central Caprock Queen Unit in the Caprock-Queen Pool, subject to administrative approval by the Commission. The proposed North Central Caprock Queen Unit Area comprises that acreage hereinafter described in paragraph 5 (a) of this order.

PROVIDED HOWEVER, That no well located on the said North Central Caprock Queen Unit shall be eligible for administrative approval for conversion to water injection unless it is established to the satisfaction of the Secretary-Director of the Commission that the proposed water injection well has experienced a substantial

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response to the water flood 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 water flood.

PROVIDED FURTHER, That 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 water flood, and attaching thereto Commission Form C-116, showing production tests of the affected well or wells both before and after stimulation by water flood. Applicant shall also attach plats of the water flood 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 shall submit evidence that a copy of the application to expand the water flood project area has been sent to each operator offsetting the proposed expansion and to the State Engineer.

The Secretary-Director of the Commission may, if in his opinion there is need for the expansion of the water flood project area, authorize said expansion without notice and hearing, provided no offset operator nor the State Engineer objects to said expansion within fifteen (15) days. The Secretary-Director may grant immediate approval of the expansion upon receipt of waivers of objection from all operators offsetting the proposed expansion and the State Engineer.

- (3) (a) That the unit herein referred to shall be known as the North Central Caprock Queen Unit Agreement.
- (b) That the Plan by which the unit area shall be operated shall be embraced in the form of a unit agreement for the development and operation of the North Central Caprock Queen Unit Area, referred to in the Petitioner's petition and filed with said petition, and such plan shall be known as the North Central Caprock Queen Unit Agreement Plan.
- (4) That the North Central Caprock Queen Unit Agreement Plan shall be, and hereby is, approved in principle as a proper conservation measure; provided, however, that notwithstanding any of the provisions contained in said unit agreement, this approval shall not be considered as waiving or relinquishing in any manner any right, duties or obligations which are 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 North Caprock Queen Unit Agreement, or relative to the production of oil and gas therefrom:

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> (5) (a) That the unit area shall be:

NEW MEXICO PRINCIPAL MERIDIAN

TOWNSHIP 13 SOUTH, RANGE 31 EAST, NMPM, CHAVES COUNTY, N.M.

Section 13: All Section 14: A11

Section 15: SE/4 NE/4 and E/2 SE/4

NW/4 NW/4 Section 24:

TOWNSHIP 13 SOUTH, RANGE 32 EAST, NMPM, LEA COUNTY, N.M. Section 17: N/2 NW/4

W/2 and NE/4Section 18:

NW/4 NW/4 Section 19:

containing 2,040 acres more or less.

The unit area may be enlarged or contracted as (b) provided in said Plan.

- (6) That the unit operator shall file with the Commission an executed original or executed counterpart of the North Central Caprock Queen Unit Agreement within 30 days after the effective date thereof.
- (7) That any party owning rights in the unitized substances who does not commit such rights to said unit agreement before the effective date thereof may thereafter become a party thereto by subscribing to such agreement or counterpart thereof, or by ratifying the same. The unit operator shall file with the Commission within 30 days an original of any such counterpart or ratification.
- (8) That this order shall become effective upon the approval of said unit agreement by the Commissioner of Public Lands for the State of New Mexico and the Director of the United States Geological Survey and shall terminate ipso facto upon the termination of said unit agreement. The last unit operator shall immediately notify the Commission in writing of such termination.

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

STATE OF NEW MEXICO OIL CONSERVATION COMMISSION

EDWIN L. MECHEM, Chairman Managa

MURRAY E. MORGAN, Member

PORTER, Jr., Member & Secretary

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