Case 14 33

GRARIDGE CORPORATION

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DOZET EKNOMINE, TEXAN

April 8, 1958

Oil Conservation Commission State of New Mexico State Capitol Santa Fe, New Mexico

Re: North Caprock Queen Unit

Lea and Chaves Counties, New Mexico

Gentlemen:

Attached hereto you will find an original and two copies of an application for authority to expand waterflood in the North Caprock Queen Unit, Lea and Chaves Counties, New Mexico.

It would be appreciated very much if you would set this matter up for hearing at your first Examiners! Hearing. Mr. Cooley informs me that you tentatively have one set up for the first part of May. If you could perfect your notice on this application prior to this date so as to include same on that hearing date, it would certainly be appreciated.

I shall also appreciate your notifying me of the date which has been set for the hearing of this application.

Thank you very much for giving this matter your usual prompt attention.

Yours very truly,

GRARIDGE CORPORATION

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cc-Graham Office

Lup Cap Unit 110.1

APPLICATION FOR AUTHORITY TO EXPAND THE WATERFLOOD IN NORTH CAPROCK QUEEN UNIT, LEA AND CHAVES COUNTIES, NEW MEXICO

OIL CONSERVATION COMMISSION OF STATE OF NEW MEXICO SANTA FE, NEW MEXICO

WHEREAS, on April 5, 1957, the Oil Conservation Commission of the State of New Mexico, by its Order No. R-972, authorized Graridge Corporation, Gulf Oil Corporation and Great Western Drilling Company to institute a pilot flood in Queen formation underlying certain of their leases in all or part of Section 31 - 12 S - 32/E and Sections 5 and 6 - 13 S - 32 E, Caprock-Queen Pool, Lea County, New Mexico. That in such order six (6) water injection wells were authorized, which are more particularly set out on the plat attached hereto and marked Exhibit "A" as well as Nos. 5-4, 6-2, 6-8, 31-10, 31-14 and 31.16 marked in red.

WHEREAS, the operation of said pilot flood over a period of months resulted in a successful increase in production and on November 13, 1957, the Oil Conservation Commission of the State of New Mexico, by its Order R-1073-A, authorized capacity production allowable for certain wells in the pilot waterflood project above referred to for the purpose of handling the increased production.

WHEREAS, effective as of March 1, 1958, certain oil and gas leases were unitized by that certain unit agreement approved by the owners of those leases shown on Exhibit "A" within the shaded area, creating the North Caprock Queen Unit, and designating Graridge Corporation as Unit Operator. This Unit Agreement was approved by the Commissioner of Public Lands of the State of New Mexico on February 27, 1958. The Unit Agreement was approved by the Oil Conservation Commission of the State of New Mexico, after due public notice had been given as required by law, on April 3, 1958, by its Order No. R-1145.

WHEREAS, after a duly called meeting of the Operator's Committee under the terms and provisions of the above referred to Unit Agreement, it was determined by such committee, that in order to prevent waste and obtain full ultimate recovery of oil from the waterflood area, such

unit must be expanded by converting additional wells into water injection wells. The unit operator was therefore authorized and requested to obtain authority from the Oil Conservation Commission of the State of New Mexico to so expand the unit as per this application.

It is, therefore, respectfully requested by the undersigned unit operator, Graridge Corporation, that this Commission immediately authorize the following wells situated in the North Queen Caprock Unit in Lea County, New Mexico, which are indicated in yellow on Exhibit "A" attached hereto, be converted to water injection wells:

- (1) Cap-Unit #31-2, situated in NW/4 NE/4 of Section 31 -12 S 32 E, N.M.P.M.
- (2) Cap-Unit #31-8, situated in SE/4 NE/4 of Section 31 12 S 32 E, N.M.P.M.
- (3) Cap-Unit #32-12, situated in NW/4 SW/4 of Section 32 12 S 32 E, N.M.P.M.
- (4) Cap-Unit #32-14, situated in SE/4 SW/4 of Section 32 12 S 32 E, N.M.P.M.

It is further respectfully requested that this Commission authorize orderly conversion, one at a time, at intervals of approximately every two months for the remainder of the year 1958, the following wells situated in the North Queen Caprock Unit in Lea County, New Mexico, which are indicated in green on Exhibit "A" attached hereto; it being understood, however, that each of these four injection wells shall be approved upon written request without a hearing by the Commission prior to each conversion:

- (1) Cap-Unit #30-16, situated in SE/4 SE/4 of Section 30 12 S 32 E, N.M.P.M.
- (2) Cap-Unit #32-4, situated in NW/4 NW/4 of Section 32 12 S 32 E, N.M.P.M.
- (3) Cap-Unit #32-6, situated in SE/4 NW/4 of Section 32 12 S 32 E, N.M.P.M.
- (4) Cap-Unit #32-10, situated in NW/4 SE/4 of Section 32 12 S 32 E, N.M.P.M.

It is, therefore, respectfully requested that this Commission set a date for a hearing on this application so that the undersigned may

establish the facts necessary to authorize this unit expansion in the interest of conservation and prevention of waste as above set out.

Respectfully yours,

GRARIDGE CORPORATION

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NORTH CAPROCK QUEEN UNIT		7.6	7.7	7.8	8-5	8.6			
CHAVES & LEA COUNTIES		7.11	7-10	7.9	8-72	5.//			

BEFORE THE OIL CONSERVATION COMMISSION OF THE STATE OF NEW MEXICO

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

> CASE NO. 1195 Order No. R-972

APPLICATION OF GRARIDGE CORPORATION:
GULF OIL CORPORATION, AND GREAT WESTERN
DRILLING COMPANY FOR AN ORDER AUTHORIZING
A PILOT WATER FLOOD PROJECT IN THE QUEEN
FORMATION OF THE CAPROCK-QUEEN POOL, LEA
COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 O'clock a. m. on January 9, 1957, at Santa Fe, New Mexico, before Warren W. Mankin, Examiner duly appointed by the New Mexico Oil Conservation Commission, hereinafter referred to as the "Commission," in accordance with Rule 1214 of the Commission Rules and Regulations.

NOW, on this <u>5th</u>day of April 1957, the Commission, a quorum being present, having considered the application, the evidence adduced, and the recommendations of the Examiner, Warren W. Mankin, 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 case and the subject matter thereof.
- (2) That the applicants, Graridge Corporation, Gulf Oil Corporation, and Great Western Drilling Company, propose to institute a pilot water flood operation in the Queen formation underlying certain of their leases in all or part of Section 31, Township 12 South, Range 32 East, and Sections 5 and 6, Township 13 South, Range 32 East, Caprock-Queen Pool, Lea County, New Mexico.
- (3) That the applicants propose to accomplish the said flooding operation by means of water injection through six of their wells located in the S/2 of Section 31, Township 12 South, Range 32 East, the NE/4 of Section 6 and the NW/4 of Section 5, Township 13 South, Range 32 East, NMPM, Lea County, New Mexico.
- (4) That the applicants have obtained authority from the State Engineer for the State of New Mexico to use fresh water in limited quantities until June 30, 1958, for the operation of the subject pilot water flood project.

-2-Case No. 1195 Order No. R-972

- (5) That the proposed program for secondary recovery will promote conservation and tend to prevent waste through the production of oil which might not otherwise be recovered.
- (6) That the progress of the secondary recovery program should be reported periodically to the Commission.

IT IS THEREFORE ORDERED:

- 1. That the application of Graridge Corporation, Gulf Oil Corporation, and Great Western Drilling Company for permission to institute a pilot water flood in the Queen formation of the Caprock-Queen Pool underlying all or portions of Section 31, Township 12 South, Range 32 East, Sections 5 and 6 of Township 13 South, Range 32 East, NMPM, Lea County, New Mexico, be and the same is hereby granted.
- 2. That the following wells be and the same are hereby approved as water injection wells in the above Pilot Water Flood Project:
- Graridge Malco State "A" Well No. 5
- Z Graridge-Livermore Maxwell State "G"
 Well No. 5
- Graridge-Livermore Maxwell State "G" Well No. 7
- Gulf-Lea State "B" Well No. 2

all in Lea County, New Mexico.

660 feet from the South line and 1980 feet from the West line of Section 31, Township 12 South, Range 32 East, NMPM.

1980 feet from the South line and 1980 feet from the East line of Section 31, Township 12 South, Range 32 East, NMPM.

660 feet from the South line and 660 feet from the East line of Section 31, Township 12 South, Range 32 East, NMPM.

654 feet from the North line and 1982 feet from the East line of Section 6, Township 13 South, Range 32 East, NMPM.

1980 feet from the North line and 660 feet from the East line of Section 6, Township 13 South, Range 32 East, NMPM.

660 feet from the North line and 660 feet from the West line of Section 5, Township 13 South, Range 32 East, NMPM.

-3-Case No. 1195 Order No. R-972

3. That monthly progress reports on the subject water flood project shall be submitted to the Commission in accordance with Rule 1119 of the Commission Rules and Regulations.

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

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

EDWIN L. MECHEM, Chairman

MURRAY E. MORGAN, Member

A. L. PORTER, Jr., Member & Secretary

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