

*Log in: assign WFX #8*

GRARIDGE CORPORATION

1111 BUILDING

POST OFFICE BOX 732

BECKENRIDGE, TEXAS

*due: now  
all  
(Wavers  
rec'd.)*

April 13, 1959

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

Re: Application For Administrative  
Approval To Convert One Unit Well  
To Water Injection Well In North  
Caprock Queen Unit No. 1, Lea and  
Chaves Counties, New Mexico

Dear Sirs:

In accordance with Commission Order No. R-972-B, issued on August 6, 1958, Graridge Corporation as Unit Operator respectively request administrative approval to convert the following well to a water injection well.

<u>Unit No.</u>	<u>Location</u>
7-2	NW/4, NE/4, Sec. 7, T13S, R32E

The following data pertinent to the proposed expansion are given:

(1) The proposed injection well is directly offset by a producing well which has shown response to the water flood project. See attached Form C-116 and Exhibit No. 1.

(2) The well requested has undergone remedial work and readied for water injection.

(3) Exhibit No. 2 indicates present injection well data. It is evident that some of the injection wells are not as receptive to water injection as others, thus, it is desirable to place wells on injection as early as responses warrant in order to maintain balance.

(4) Exhibit No. 3 gives performance curves for the overall water flood project.

April 13, 1959

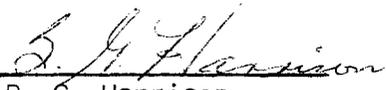
Attached Exhibit No. 1 indicates all offset operators and all injection wells in North Caprock Queenen Unit Nos. 1, 2, and 3 as is required by Order No. R-972-B.

Copies of this application are being sent to Ambassador Oil Corporation and to Great Western Drilling Company as they are offset operators to the proposed expansion. We are submitting waivers to the offset operators and will forward these to the Commission as soon as possible.

Any consideration by the Commission in expediting this matter will be greatly appreciated.

Yours very truly,

GRARIDGE CORPORATION

By   
B. G. Harrison  
Manager of Secondary  
Recovery

BGH:gl

Attachment

## Monthly Water Flood Report

## Injection Well Data (con't)

Project: Caprock Queen Unit No. 1Month: February, 1959Field: Caprock QueenFormation: Queen Sand

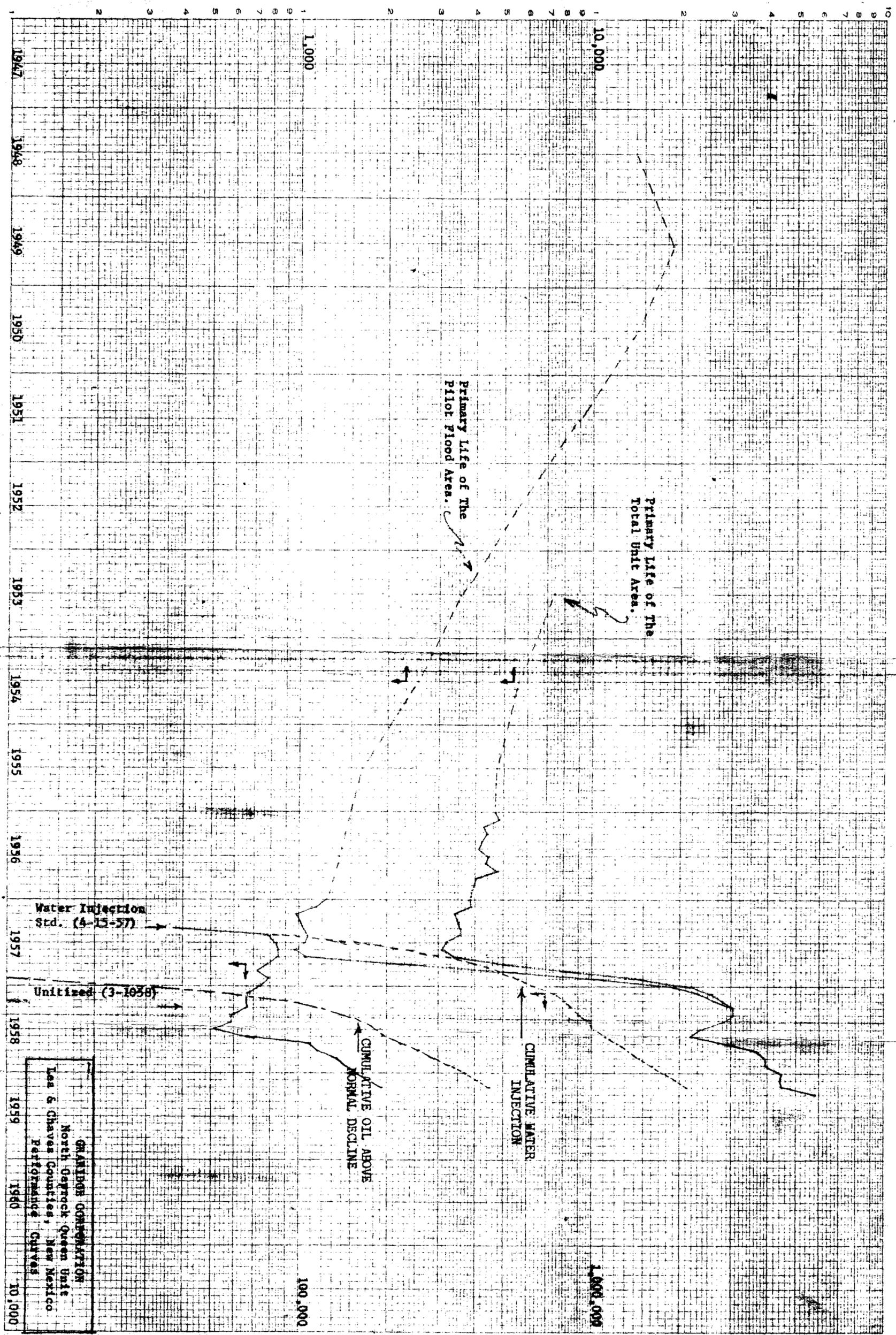
Lease & Well No.	Effective Acre-Feet		Total Water Input			Ibex* Net-Input	Inject-ion Pressure	Total Bbls.	Cumulative Input	
	Total	Ibex*	Mo.	Avg/Day	B/D/Ac-Ft.				Ibex* Net Bbls.	Net B/Net AF
Caprock 31-8	800		12528	448	0.56		650		96,693	121
31-10	"		11417	409	0.51		0		312,186	390
31-12	"		11466	409	0.51		530		63,017	79
31-14	"		3683	132	0.17		1,070		85,040	116
31-16	"		12844	459	0.57		420		343,823	429
** 32-4	"		1573	394	0.49		20		1,573	2
32-6	"		10739	384	0.48		80		15,314	19
** 32-10	"		1687	169	0.21		1,000		1,729	2
32-12	"		9383	335	0.42		20		47,456	59
32-14	"		11854	424	0.53		960		79,237	99
36-16	"		10717	383	0.48		90		47,483	59
Totals (23)			191,175	7,508	0.41		531 (avg)		2,139,925	117 (avg)

## Remarks:

\*\* Injection commenced on these wells as follows:

6-10	February 13
6-14	February 13
6-16	February 13
32-4	February 25
32-10	February 19

Oil Production ( Bbls/Mo. )



Water Injected ( Bbls/Mo. )  
Cumulative Oil Produced & Water Injected, bbls.

GRANIBER CORPORATION  
North Ogden, Queen Unit  
Las & Chaves Counties, New Mexico  
Petroland, Oxyas

EXHIBIT No 3

NEW MEXICO OIL CONSERVATION COMMISSION

GAS-OIL RATIO REPORT

OPERATOR Graridge Corporation POOL Caprock Queen  
 ADDRESS P. O. Box 752, Breckenridge, Texas MONTH OF April, 19 59  
 SCHEDULED TEST..... COMPLETION TEST..... SPECIAL TEST X..... (Check One)  
 North Caprock Queen Unit No. 1  
 Test submitted in accordance with Commission Order No. R-972-B

Lease	Well No.	Date of Test	Producing Method	Choke Size	Test Hours	Daily Allowable Bbls.	Production During Test			GOR Cu. Ft. Per Bbl.
							Water Bbls.	Oil Bbls.	Gas MCF	
North Caprock Queen Unit #1	6-153	3/27/59	Pump	--	24	15	0	11.09	--	--

No well will be assigned an allowable greater than the amount of oil produced on the official test.

During gas-oil ratio test, each well shall be produced at a rate not exceeding the top unit allowable for the pool in which well is located by more than 25 percent. Operator is encouraged to take advantage of this 25 percent tolerance in order that well can be assigned increased allowables when authorized by the Commission.

Gas volumes must be reported in MCF measured at a pressure base of 15.025 psia and a temperature of 60 degrees F. Specific gravity base will be 0.60.

Mail original and one copy of this report to the district office of the New Mexico Oil Conservation Commission. In accordance with Rule 301 and Appropriate Pool Rules.

(I certify that the information given is true and complete to the best of my knowledge.)

Date April 13, 1959

Graridge Corporation  
 Company  
 By B. G. Harrison B. G. Harrison  
 Manager of Secondary Recovery  
 Title

NEW MEXICO OIL CONSERVATION COMMISSION

GAS-OIL RATIO REPORT

OPERATOR Graridge Corporation POOL Caprock Queen  
 ADDRESS P. O. Box 752, Breckenridge, Texas MONTH OF April, 19 59  
 SCHEDULED TEST..... COMPLETION TEST..... SPECIAL TEST X..... (Check One)

North Caprock Queen Unit No. 1  
 Test prior to increase caused by waterflood.

Lease	Well No.	Date of Test	Producing Method	Choke Size	Test Hours	Daily Allowable Bbls.	Production During Test			GOR Cu. Ft. Per Bbl.
							Water Bbls.	Oil Bbls.	Gas MCF	
North Caprock Queen Unit No. 1	6-15	2/24/59	Pump	--	24	--	0	2	--	--

No well will be assigned an allowable greater than the amount of oil produced on the official test.

During gas-oil ratio test, each well shall be produced at a rate not exceeding the top unit allowable for the pool in which well is located by more than 25 percent. Operator is encouraged to take advantage of this 25 percent tolerance in order that well can be assigned increased allowables when authorized by the Commission.

Gas volumes must be reported in MCF measured at a pressure base of 15.025 psia and a temperature of 60 degrees F. Specific gravity base will be 0.60.

Mail original and one copy of this report to the district office of the New Mexico Oil Conservation Commission. In accordance with Rule 301 and Appropriate Pool Rules.

(I certify that the information given is true and complete to the best of my knowledge.)

Date April 13, 1959

Graridge Corporation  
 Company  
 By B.G. Harrison B.G. Harrison  
 Manager of Secondary Recovery  
 Title

## Monthly Water Flood Report

## Injection Well Data

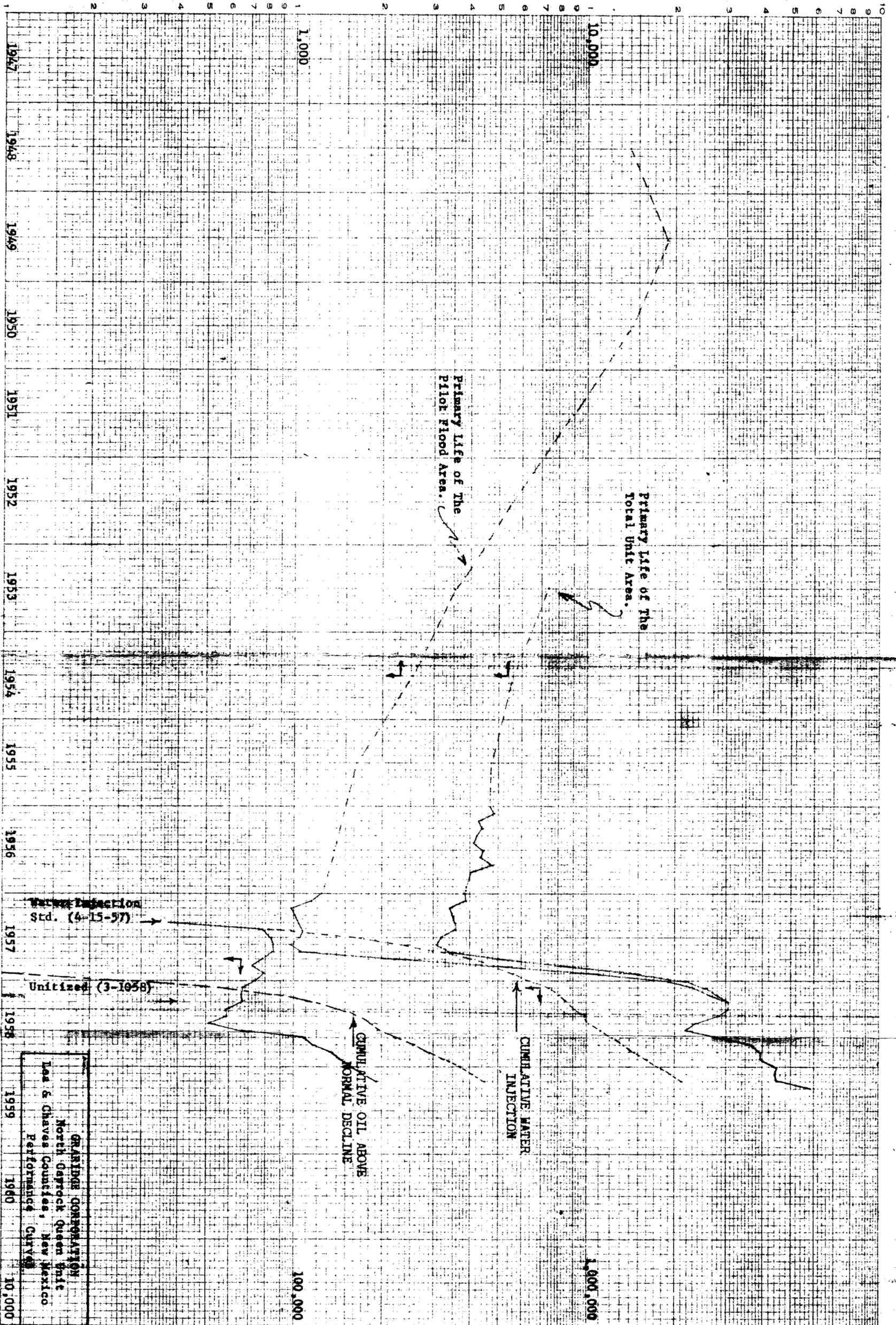
Project: Caprock Queen Unit No. 1Month: February, 1959Field: Caprock QueenFormation: Queen Sand

Lease & Well No.	Effective Acre-Feet		Total Water Input			Ibex* Net- Input	Inject- ion Pressure	Total Bbls.	Cumulative Ibex* Net Bbls.	Input Net B/ Net AF
	Total	Ibex*	Mo.	Avg/ Day	B/D/ Ac-Ft.					
Caprock 5-4	800		12463	445	0.56		560		313,479	392
5-12	"		4876	174	0.22		990		21,632	27
6-2	"		10691	382	0.82		410		335,533	419
6-4	"		10112	362	0.45		875		27,826	35
6-6	"		5871	210	0.26		980		30,808	39
6-8	"		6742	241	0.30		1,050		165,714	207
** 6-10	"		1778	110	0.14		1,000		1,778	2
6-12	"		9426	336	0.42		20		32,355	40
** 6-14	"		6137	384	0.48		0		6,137	8
** 6-16	"		725	45	0.06		1,000		725	1
30-16	"		11902	426	0.53		190		13,608	17
31-2	"		12507	447	0.56		290		96,779	121

Remarks:

*Exhibit No. 2*

Oil Production ( Bbls/Mo. )



Water Injected ( Bbls/Mo. )  
Cumulative Oil Produced & Water Injected, bbls.

Exhibit No 3

GRANIBGE CORPORATION  
North Opatock Queen Unit  
Las & Chaves Counties, New Mexico  
Ref: 104144, Curves

LARGE FORMAT  
EXHIBIT HAS  
BEEN REMOVED  
AND IS LOCATED  
IN THE NEXT FILE

GRARIDGE CORPORATION  
WELL BUILDING POST OFFICE BOX 752  
BRECKENRIDGE, TEXAS

April 18, 1951

Waivers

New Mexico Oil Conservation Commission  
P. O. Box 871  
Santa Fe, New Mexico

Re: Graridge Corporation Request for  
Administrative Approval to Expand  
the Caprock Queen Unit No. 1 by  
placing Unit Well No. 7-2 on  
injection

Gentlemen:

Attached please find the required waiver of objection to the above captioned expansion from offset operators Great Western Drilling Company and Ambassador Oil Corporation. These were obtained to eliminate the fifteen (15) day waiting period and to expedite placing this well on injection to "back up" a producing well (No. 6-15) which has experienced an increase in production as a direct result of the water flood.

The cooperation of the Commission in expediting action in this matter would be greatly appreciated.

Yours very truly,

GRARIDGE CORPORATION

*B. G. Harrison*

B. G. Harrison  
Manager of Secondary Recovery

BGH:CS  
Encls. (2)

GRARIDGE CORPORATION  
BOX 752  
BRECKENRIDGE, TEXAS

April 13, 1959

Great Western Drilling Company  
P. O. Box 1659  
Midland, Texas

Attn: Mr. M. B. Wilson

Ambassador Oil Corporation  
P. O. Box 9338  
Fort Worth 7, Texas

Attn: Mr. R. H. Vick

Gentlemen:

It is the desire of Graridge Corporation to expand the water injection program in the North Casprock Queen Unit No. 1 in Lea and Chaves Counties, New Mexico. The expansion is to include the following well:

<u>Unit No.</u>	<u>Location</u>
7-2	NW/4, NE/4, Sec. 7, T13S, R32E

A fifteen (15) day waiting period is set up by the Commission unless waivers are obtained from all operators offsetting the proposed expansion.

In order to expedite matters, please sign and return one copy of this letter to this office if your company has no objection to the proposed expansion.

Yours very truly,

GRARIDGE CORPORATION

  
B. G. Harrison  
Manager of Secondary  
Recovery

BGH:gl

Signed by: M. B. Wilson  
Vice President Production  
For: Great Western Drilling Company

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GRARIDGE CORPORATION  
BOX 752  
BRECKENRIDGE, TEXAS

April 13, 1959

Great Western Drilling Company  
P. O. Box 1659  
Midland, Texas

Attn: Mr. M. B. Wilson

Ambassador Oil Corporation  
P. O. Box 9338  
Fort Worth 7, Texas

Attn: Mr. R. H. Vick

Gentlemen:

It is the desire of Graridge Corporation to expand the water injection program in the North Casprock Queen Unit No. 1 in Lea and Chaves Counties, New Mexico. The expansion is to include the following well:

<u>Unit No.</u>	<u>Location</u>
7-2	NW/4, NE/4, Sec. 7, T13S, R32E

A fifteen (15) day waiting period is set up by the Commission unless waivers are obtained from all operators off-setting the proposed expansion.

In order to expedite matters, please sign and return one copy of this letter to this office if your company has no objection to the proposed expansion.

Yours very truly,

GRARIDGE CORPORATION

By B. G. Harrison  
B. G. Harrison  
Manager of Secondary  
Recovery

BGH:g1

Signed by: E. A. Kelly  
For: Ambassador Oil Corp



*Graridge  
SU 87*

STATE OF NEW MEXICO

STATE ENGINEER OFFICE

SANTA FE

S. E. REYNOLDS  
STATE ENGINEER

April 27, 1959

ADDRESS CORRESPONDENCE TO:  
P. O. BOX 1079  
SANTA FE, N. M.

Mr. A. L. Porter, Jr.  
Secretary-Director  
Oil Conservation Commission  
Santa Fe, New Mexico

Dear Mr. Porter:

Reference is made to Graridge Corporation's application for administrative approval to convert One Unit Well to water injection well in North Caprock Queen Unit No. 1, Lea and Chaves Counties, New Mexico, dated April 13, 1959.

This office offers no objection to the granting of this application, provided the injection and production wells are cased in a manner which will prevent commingling of the fluids in these wells with the fresh waters encountered in the area.

Yours truly,

S. E. Reynolds  
State Engineer

By: *Frank E. Irby*  
Frank E. Irby  
Chief  
Water Rights Division

FEI/ma  
cc-Graridge Corporation

