

GRARIDGE CORPORATION

IBEX BUILDING

POST OFFICE BOX 752

BRECKENRIDGE, TEXAS

May 4, 1960

*WFX- 38
Shutting down
Due date May 24*

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

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

Gentlemen:

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.

WELL NO.
8-14

LOCATION
SE/4, SW/4, Sec. 8, 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 waterflood 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 flood balance.

(4) Exhibit No. 3 gives performance curves of the overall waterflood project.

Graridge Corporation is requesting the State Engineers office to

May 4, 1960

waive its requirement of placing tubing and packer in this injection well as only fresh water will be injected into it. They offered no objection to this procedure when approval was granted for converting well Nos. 7-14, 7-8 and 8-4.

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 Ambassador Oil Corporation and will forward these to the Commission as soon as possible.

We are attaching a photostatic copy of a letter from Great Western Drilling Company in which they request that we convert well No. 8-14 to a water injection well. They indicate that this letter is also to serve as a notice that they as offset operators have no objection to the conversion.

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

Very truly yours,

GRARIDGE CORPORATION



B. G. Harrison
Manager of Secondary Recovery

SHL:BGH:gl

Attachment

cc: Oil Conservation Commission, Hpbbs
Mr. Frank Irby
Mr. Paul Holloway
Mr. Cliff Chapman
Graham Office

GRARIDGE CORPORATION

IBEX BUILDING

POST OFFICE BOX 752

BRECKENRIDGE, TEXAS

May 5, 1960

1960 MAY -9 AM 8:26
STATE ENGINEERS OFFICE
SANTA FE, TEXAS

State Engineers Office
State of New Mexico
Capitol Building
Santa Fe, New Mexico

ATTENTION: Mr. Frank E. Irby

Dear Sir:

Graridge Corporation is asking the Oil Conservation Commission to approve the conversion of the following well to a water injection well in the North Caprock Queen Unit No. 1 in Lea County.

<u>WELL NO.</u>	<u>LOCATION</u>
8-14	SE/4, SW/4, Sec.8, T13S, R32E

The well has been completed in the following manner.

The well was drilled to a depth of 3070'; 10 3/4" casing is set at 278' and cemented with 200 sacks; 7" casing is set at 3033' and cemented with 600 sacks; and a 5 1/2" liner, 129' long, is set at 3043' and cemented with 75 sacks.

Graridge Corporation request that the State Engineers Office waive its requirement of placing tubing and packer in this well in which only fresh water will be injected.

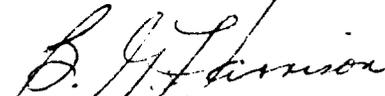
Reference is made to our letter to your office dated July 24, 1959, for more details.

If the above request is granted, it is further requested that the State Engineers Office notify the Oil Conservation Commission that tubing and packer will not be required in Unit Well No. 8-14.

If we maybe of service in supplying additional information, please do not hesitate to advise us.

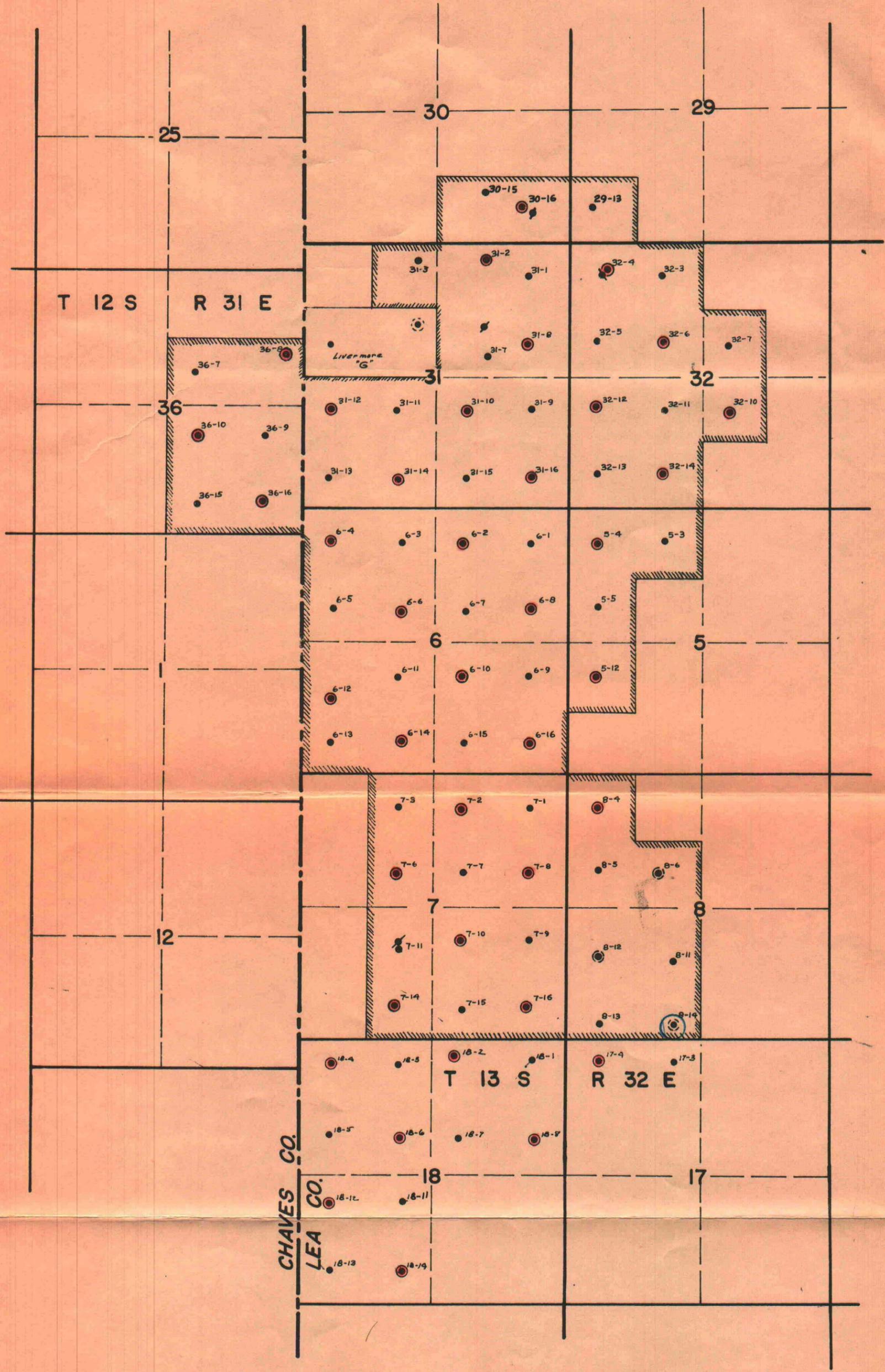
Yours very truly,

GRARIDGE CORPORATION



B. G. Harrison
Manager of Secondary Recovery

SHL:BGH:gl



**NORTH CAPROCK QUEEN
 UNIT NO. 1
 CHAVES & LEA COUNTIES, NEW MEX.
 SCALE: 1" = 2000'**

- PRESENT INJECTION WELL
- ⊙ PROPOSED INJECTION WELL

Exhibit I

NEW MEXICO OIL CONSERVATION COMMISSION

GAS-OIL RATIO REPORT

OPERATOR.....**Great Western Drilling Company** POOL..... **Caprock Queen**
 ADDRESS..... **P. O. Box 1659, Midland, Texas** MONTH OF..... **April**....., 19. **60**
 SCHEDULED TEST..... COMPLETION TEST..... SPECIAL TEST..... **X**..... (Check One)
 (See Instructions on Reverse Side)

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 Central Caprock Queen Unit										
Tract 1	17-3	4-25	Pump		24	4	2	20	TSTM	
	17-3	4-28	Pump		24	4	2	20	TSTM	
These tests were made after Waterflood Stimulation.										

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..... **May 2, 1960**.....
 **Great Western Drilling Company**
 By..... *O. H. Crews* (**O. H. Crews**)
 **General Superintendent**

NEW MEXICO OIL CONSERVATION COMMISSION

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Date..... **May 2, 1960**
 By..... **O. H. Crews** (O. H. Crews)
 Title..... **General Superintendent**

GRARIDGE CORPORATION

MONTHLY WATER FLOOD REPORT

Page 11.

Injection Well Data

Project: Cap Unit No. 1

Month: March, 1960

Lease & Well No.	Total Water Input		Injection Pressure	Cumulative Input
	Month	Avg./Day		
Cap Unit 5-4	5,562	179	1,070	418,862
5-12	2,939	95	1,000	70,787
6-2	8,401	271	1,080	464,321
6-4	5,060	163	1,100	115,021
6-6	4,072	131	1,040	91,199
6-8	10,385	335	1,030	300,517
6-10	3,234	104	1,100	42,855
6-12	13,394	432	1,050	229,148
6-14	15,362	495	400	190,493
6-16	2,696	87	1,100	53,725
7-2	6,393	206	1,100	80,461
7-6	3,365	109	1,100	44,640
7-8	4,376	141	1,100	4,376
7-10	228	8	1,100	2,865
7-14	22,027	711	990	134,447
7-16	1,944	85	1,100	2,811
8-4	4,979	199	1,100	4,979
30-16	13,277	428	650	139,017
31-2	13,630	440	800	233,518
31-8	15,261	492	920	271,486

Exhibit II

GRARIDGE CORPORATION

MONTHLY WATER FLOOD REPORT

Page 11.

Injection Well Data

(2)

Project: Cap Unit No. 1

Month: March, 1960

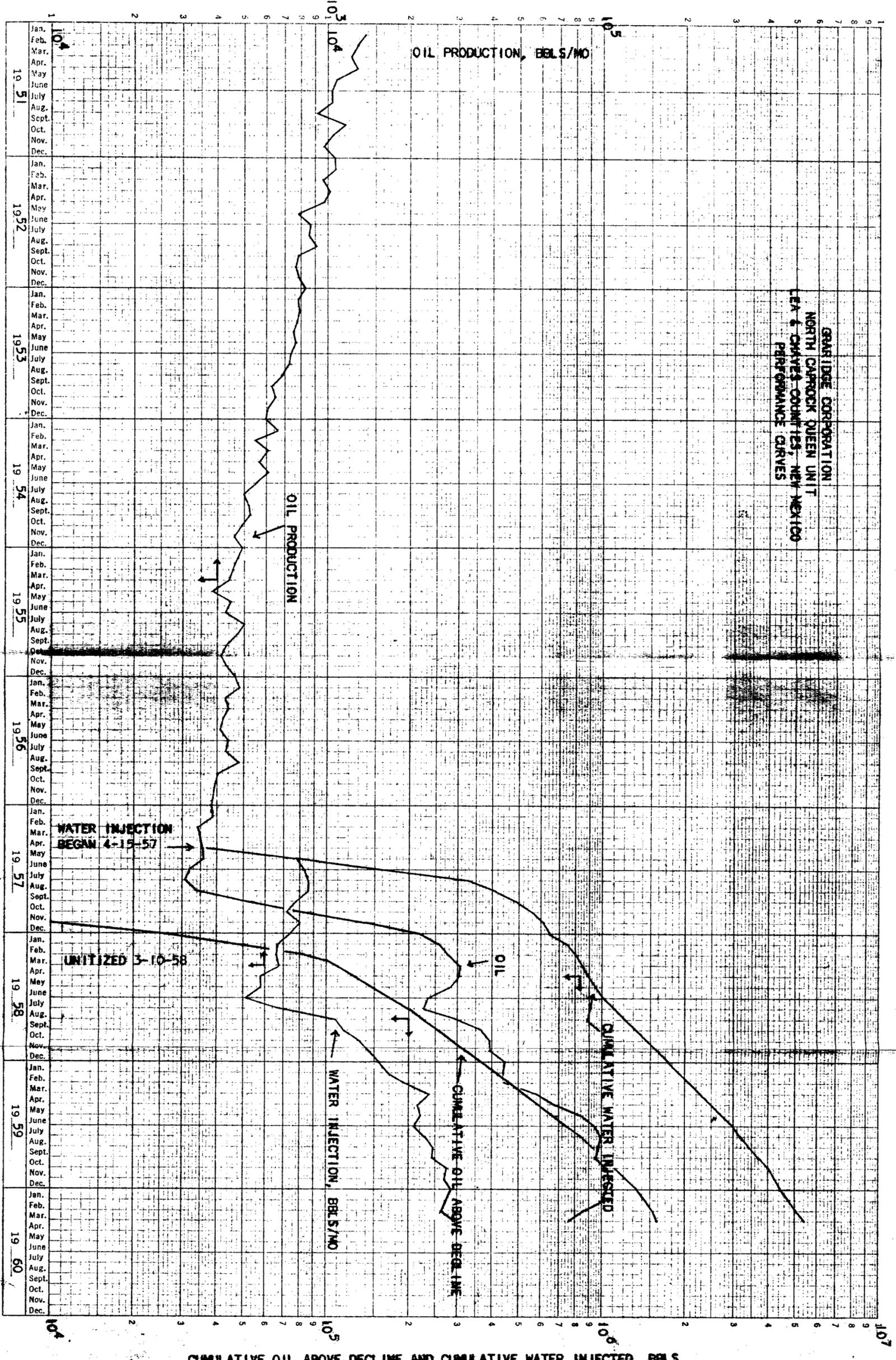
Lease & Well No.	Total Water Input		Injection Pressure	Cumulative Input
	Month	Avg./Day		
Cap Unit 31-10	10,285	332	90	442,120
31-12	15,708	507	590	248,209
31-14	5,250	169	1,100	130,823
31-16	13,238	427	580	505,574
32-4	4,170	135	1,100	67,089
32-6	19,793	638	1,100	186,293
32-10	3,052	98	1,100	66,979
32-12	14,256	460	1,080	206,035
32-14	13,255	428	1,060	240,703
36-8	8,773	286	120	101,288
36-10	10,125	327	1,100	91,304
36-16	19,652	634	400	232,674
Totals (32)	294,242	9,552	917 (avg)	5,414,601

Exhibit II

WATER INJECTED, BBL/MO

OIL PRODUCTION, BBL/MO

GRANITE CORPORATION
 NORTH CARROCK QUEEN UNIT
 LEA & CHAVES COUNTIES, NEW MEXICO
 PERFORMANCE CURVES



CUMULATIVE OIL ABOVE DECLINE AND CUMULATIVE WATER INJECTED, BBL

Exhibit III



STATE OF NEW MEXICO

STATE ENGINEER OFFICE
SANTA FE

S. E. REYNOLDS
STATE ENGINEER

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

May 10, 1960

Mr. A. L. Porter, Jr.
Secretary-Director
Oil Conservation Commission
Santa Fe, N. M.

Dear Mr. Porter:

Reference is made to the application of the Graridge Corporation seeking administrative approval to convert one well to water injection well in North Caprock Queen Unit No. 1. The specific well referred to is 8-14.

Since fresh water only is to be injected through this well, it appears that there will be no threat of contamination to the fresh waters which may exist in the area. Therefore, this office offers no objection to the granting of this application, so long as fresh water only is injected through the well, but suggests that the matter be reconsidered at anytime that non-potable water is injected or proposed to be injected.

Yours truly,

S. E. Reynolds
State Engineer

FEI/ma
cc-Graridge Corporation
F. H. Hennighausen

By: 
Frank E. Irby
Chief
Water Rights Division

1960 MAY 24 PM 1:31
OCC
GRARIDGE CORPORATION
IBEX BUILDING POST OFFICE BOX 752
BRECKENRIDGE, TEXAS

May 13, 1960

W 7738

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

ATTENTION: Mr. Dan Nutter

Gentlemen:

Attached please find letter from offset operator, Ambassador Oil Corporation, indicating they have no objections to the expansion of North Caprock Queen Unit No. 1 by conversion of Well No. 8-14 (SE/4, SW/4, Sec. 8, T13S, R32E) to a water injection well.

Yours very truly,

GRARIDGE CORPORATION



B. G. Harrison
Manager of Secondary Recovery

SHL:BGH:vl

cc: Oil Conservation Commission
Hobbs, New Mexico

Graham Office

GRARIDGE CORPORATION
IBEX BUILDING
BRECKENRIDGE, TEXAS 76731
1960 MAY 15 PM

May 4, 1960

OPERATIONS	
MAY 5 1960	
<input type="checkbox"/> Exec:	.....
<input type="checkbox"/> Prim:	.....
<input type="checkbox"/> Sec:	.....
<input type="checkbox"/> Acq:	.....
<input type="checkbox"/> Engr:	.....
<input checked="" type="checkbox"/> Adm:	.....
<input type="checkbox"/> Prod:	.....
<input type="checkbox"/> Mat:	.....
<input type="checkbox"/> Per:	.....
<input checked="" type="checkbox"/> FILE:	.....

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

ATTENTION: Mr. R. H. Vick

Gentlemen:

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

<u>WELL NO.</u>	<u>LOCATION</u>
8-14	SE/4, SW/4, Sec. 8, T13S, R32E

A fifteen-day waiting period is set up by the Commission unless waivers are obtained from all offset 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
B. G. Harrison
Manager of Secondary Recovery

Signed By: *Robert H. Vick*
For: *Ambassador Oil*

SHL:BGH:gl

cc: Graham Office