



WFX-57

Handwritten notes: "Holding permit" and "Low cost Col 10"

October 4, 1960

R. C. TUCKER, PRES.

Oil Conservation Commission,  
Box 871,  
Santa Fe, New Mexico

PHONE MU 2-5241  
ADDRESS REPLY TO:  
BOX 1659  
MIDLAND, TEXAS

Re: Application for Administrative Approval  
for conversion of Unit Wells to Water  
Injection Wells, North Central Caprock  
Queen Unit, Lea and Chaves Counties, New  
Mexico

Gentlemen:

As provided in the Oil Conservation Commission Order No. R-1311, Great Western Drilling Company, as operator of the North Central Caprock Queen Unit, requests administrative approval for the conversion of the following unit wells to water injection wells:

<u>Unit Well No.</u>	<u>Location</u>
14-4	NW/4 of NW/4 of Sec. 14, T-13-S, R-31-E
15-8	SE/4 of NE/4 of Sec. 15, T-13-S, R-31-E

Well No. 14-5, offset by the above wells, has received response to water injection since October 2, 1960. The last test in September, i.e. September 22, 1960 was 6.78 barrels per day at 315 GOR. As of October 2, 1960, this well made 16 barrels with only a show of gas.

We respectfully submit that the ultimate recoverable oil from the North Central Caprock Queen Unit Reservoir will be decreased and that waste will occur due to an unbalanced condition in the pattern flooding system unless Wells 14-4 and 15-8 are converted to water injection at this time.

Attached to this application are: The C-116 of Great Western Drilling Company Well No. 14-5, before and after stimulation; a plat of the area showing all producing, water injection and proposed water injection wells; and the offset operators.

Waivers from the offset operators are being requested at this time and these waivers will be forwarded to the Commission so as to decrease the required fifteen (15) day interim set up by the Commission Order for administrative expansion.

Yours very truly,

GREAT WESTERN DRILLING COMPANY

By Oil news

OHC:TR



NEW MEXICO OIL CONSERVATION COMMISSION

GAS-OIL RATIO REPORT

OPERATOR Great Western Drilling Company POOL Caprock Queen  
ADDRESS Box 1659, Midland, Texas MONTH OF September, 1960  
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 26	14-5	9-22	Pump		24	30	0	6.78	2.05	315
Test prior to stimulation by water flood										

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 October 4, 1960

GREAT WESTERN DRILLING COMPANY  
Company

By O. H. Crews O. H. Crews

Administrative Coordinator

Title

## NEW MEXICO OIL CONSERVATION COMMISSION

## GAS-OIL RATIO REPORT

OPERATOR Great Western Drilling Company POOL Caprock Queen  
ADDRESS Box 1659, Midland, Texas MONTH OF October, 1960  
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 26	14-5	10-2	Pump		24	30	0	16.28	TSTM	
Test after stimulation by water flood										

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.)

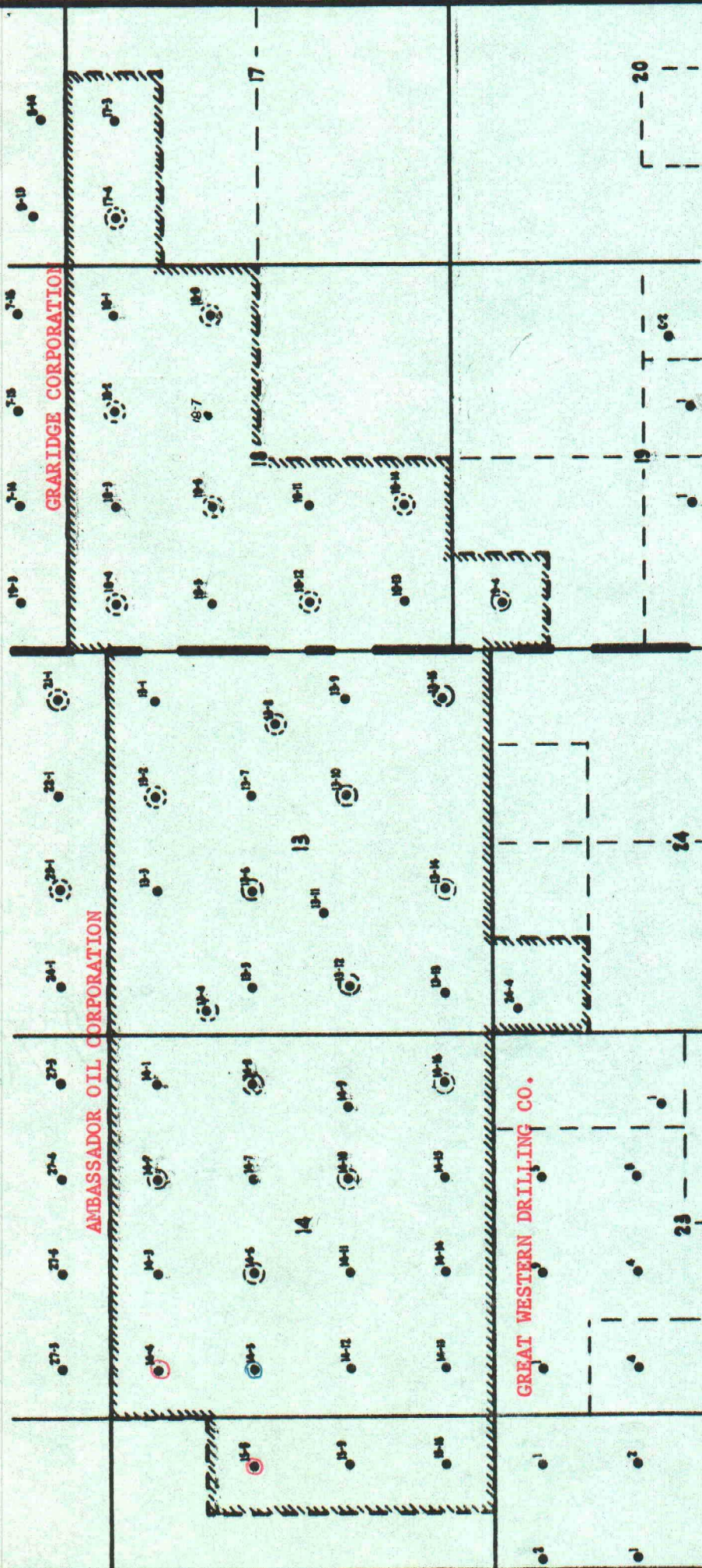
Date October 4, 1960

GREAT WESTERN DRILLING COMPANY  
Company

By O. H. Crews O. H. Crews

Administrative Coordinator  
Title





- Producing Well
- Stimulated Well
- Proposed inj. well
- Injection Well
- Unit Outline

# NORTH CENTRAL CAPROCK QUEEN UNIT GREAT WESTERN DRILLING COMPANY, OPERATOR







R. C. TUCKER, PRES.

October 10, 1960

PHONE MU 2-5241  
ADDRESS REPLY TO:  
BOX 1659  
MIDLAND, TEXAS

Oil & Gas Conservation Commission,  
Box 871,  
Santa Fe, New Mexico

Attn: Mr. J. E. Kaptelaa

Dear Sir:

Enclosed please find all required waivers for wells  
14-4, 15-0 and 24-6 in our North Central Caprock Queen Unit.

Very truly yours,

GREAT WESTERN DRILLING COMPANY

By *[Signature]*

OHC:TR  
Enclosures





October 4, 1960

R. C. TUCKER, PRES.

PHONE MU 2-5241  
ADDRESS REPLY TO:  
BOX 1659  
MIDLAND, TEXAS

Great Western Drilling Company,  
Box 1659,  
Midland, Texas

Gentlemen:

We have requested expansion of the North Central Caprock Queen Unit through administrative approval as set forth in Commission Order No. R-1311. A copy of our letter requesting this expansion is enclosed.

If you have no objection to the application, please signify by signing and returning one copy of this letter to this office.

Yours very truly,

GREAT WESTERN DRILLING COMPANY

OHC:TR

By Officer

We have no objection to the expansion of the North Central Caprock Queen Unit operations by reason of the conversion of the following wells to water injection wells:

<u>Unit Well No.</u>	<u>Location</u>
14-4	NW/4 of NW/4 of Sec. 14, T-13-S, R-31-E
15-8	SE/4 of NE/4 of Sec. 15, T-13-S, R-31-E

as requested in your application of October 4, 1960.

GREAT WESTERN DRILLING COMPANY

By Officer

Date Oct 10, 1960





October 4, 1960

R. C. TUCKER, PRES.

PHONE MU 2-5241  
ADDRESS REPLY TO:  
BOX 1659  
MIDLAND, TEXAS

Graridge Corporation  
Box 752  
Breckenridge, Texas

Gentlemen:

We have requested expansion of the North Central Caprock Queen Unit through administrative approval as set forth in Commission Order No. R-1311. A copy of our letter requesting this expansion is enclosed.

If you have no objection to the application, please signify by signing and returning one copy of this letter to this office.

Yours very truly,

GREAT WESTERN DRILLING COMPANY

By *Officer*

ONC:TR

We have no objection to the expansion of the North Central Caprock Queen Unit operations by reason of the conversion of the following wells to water injection wells:

<u>Unit Well No.</u>	<u>Location</u>
14-4	NW/4 of NW/4 Sec. 14, T-13-S, R-31-E
15-8	SE/4 of NE/4 Sec. 15, T-13-S, R-31-E

as requested in your application of October 4, 1960.

GRARIDGE CORPORATION

By *B. H. Harrison*

Date *Oct. 5 1960*





October 4, 1960

R. C. TUCKER, PRES.

Ambassador Oil Corporation,  
Box 9338  
Fort Worth, Texas

PHONE MU 2-5241  
ADDRESS REPLY TO:  
BOX 1659  
MIDLAND, TEXAS

OPER  
OCT 6 1960  
[Handwritten marks and checkboxes follow, including 'FILE' at the bottom.]

Gentlemen:

We have requested expansion of the North Central Caprock Queen Unit through administrative approval as set forth in Commission Order No. R-1311. A copy of our letter requesting this expansion is enclosed.

If you have no objection to the application, please signify by signing and returning one copy of this letter to this office.

Yours very truly,

GREAT WESTERN DRILLING COMPANY

OHC:TR

By *Officer*

We have no objection to the expansion of the North Central Caprock Queen Unit operations by reason of the conversion of the following wells to water injection wells:

Unit Well No.

Location

14-4

NW/4 of NW/4 of Sec. 14, T-13-S, R-31-E.

15-8

SE/4 of NE/4 of Sec. 15, T-13-S, R-31-E.

as requested in your application of October 4, 1960.

AMBASSADOR OIL CORPORATION

By *E. J. Kelly*

Date *October 6, 1960*







STATE OF NEW MEXICO

STATE ENGINEER OFFICE

SANTA FE

S. E. REYNOLDS  
STATE ENGINEER

October 7, 1960

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

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

Dear Mr. Porter:

Reference is made to the application of Great Western Drilling Company to covert wells 14-4 and 15-8 in the North Central Caprock Queen Unit, Chaves County, to water injection wells.

In view of the fact that injection will be through tubing under a packer set at about 3000 feet, which in each case is well below the top of the cement behind the oil string, it is concluded that a ~~threat~~ of contamination to any fresh waters which may exist in the area is not likely to occur. Therefore, this office offers no objection to the granting of this application.

Yours truly,

S. E. Reynolds  
State Engineer

By:

A handwritten signature in cursive script, reading "Frank E. Irby".

Frank E. Irby  
Chief

Water Rights Division

ma

cc-Great Western Drilling Co.  
F. H. Hennighausen