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WFC-56  
New Date Oct 20

October 3, 1960

R. C. TUCKER, PRES.

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

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

Re: Application for Administrative Approval  
for conversion of Unit well to water in-  
jection well, 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 Unit well 24-4 to a water injection well. This well is located in the NW/4 of NW/4 of Sec. 24, T-13-S, R-31-E, Chaves County, New Mexico.

Well No. 13-13, offset by the above requested well, has received response to water injection since September 21, 1960. The last test prior to response, September 1, 1960, gave this well 5.57 barrels of oil by pump in 24 hours. After stimulation, September 27, 1960, this well produced 15.28 barrels in 24 hours.

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 Well 24-4 is converted to a water injection well at this time.

Attached to this application are: The C-116 of Well 13-13, before and after stimulation; a plat of the area showing all producing, water injection and proposed water injection well; and offset operators.

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

Yours very truly,

GREAT WESTERN DRILLING COMPANY

OHC:TR

By Shelton



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, 19 60  
SCHEDULED TEST..... COMPLETION TEST..... SPECIAL TEST X..... (Check One)  
(Sec 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 18	13-13	9-1	Pump		24	33	0	5.57	TSTM	
			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 3, 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 September, 19 60  
SCHEDULED TEST \_\_\_\_\_ COMPLETION TEST \_\_\_\_\_ SPECIAL TEST ☒ (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 18	13-13	9-27	Pump	-	24	33	0	15.28	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 3, 1960

Great Western Drilling Company  
Company

By O. H. Crews O. H. Crews

Administrative Coordinator  
Title









October 3, 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

By *R. C. Tucker*

OHC:TR

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

Unit Well No.

Location

24-4

NW/4 of NW/4 of Sec. 24, T-13-S, R-31-E

as requested in your application of October 3, 1960.

GREAT WESTERN DRILLING COMPANY

By *R. C. Tucker*

Date *Oct 10, 1960*





October 3, 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 *Al Lewis*

OHC:TR

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

Unit Well No.

Location

24-4

NW/4 of NW/4 of Sec. 24, T-13-S, R-31-E

as requested in your application of October 3, 1960.

GRARIDGE CORPORATION

By *J. A. Ford*

Date *10/7/60*





October 3, 1960

R. C. TUCKER, PRES.

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

Ambassador Oil Corporation,  
Box 9338  
Fort Worth, 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 well to a water injection well:

Unit Well No.

Location

24-4

NW/4 of NW/4 of Sec. 24, T-13-S, R-31-E

as requested in your application of October 3, 1960.

AMBASSADOR OIL CORPORATION

By *E. A. Kelly*

Date *October 6, 1960*





STATE OF NEW MEXICO

STATE ENGINEER OFFICE

SANTA FE

October 7, 1960

S. E. REYNOLDS  
STATE ENGINEER

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 the application of Great Western Drilling Company to convert well 24-4 in the North Central Caprock Queen Unit, Chaves County, to water injection well.

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

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