



*WFX-24  
 Feb 11 1960  
 Lee York 1/21/60*

R. C. TUCKER, PRES.

January 4, 1960

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

Oil Conservation Commission  
 Mabry Building  
 Santa Fe, New Mexico

Re: Application for Administrative approval for a conversion of three Unit Wells to Water Injection Wells, North Central Caprock Queen Unit, Lea & 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>
14-8	SE/4 of NE/4 of Section 14, 13-S, 31-E <i>5 1/2" 15" new 100' case</i>
13-12	NW/4 of SW/4 of Section 13, 13-S, 31-E <i>5 1/2" 15" new 100' case</i>
13-16	SE/4 of SE/4 of Section 13, 13-S, 31-E <i>5 1/2" 15" new 100' case</i>

Well No. 13-5, an offset to both 14-8 and 13-12, has received response to water injection since December 10, 1959. The last test in November, 1959 was 4 barrels per day. This increased to 56 barrels per day on December 16, 1959 on a 24-hour pumping test. A request for this increase in allowable was made to the New Mexico Oil Conservation Commission on December 17, 1959 and granted on December 21, 1959. *60' 4 1/2" liner 17 28' case 100' case*

Well No. 18-13, an offset to proposed injection well No. 13-16, has had a response to water injection since December 30, 1959. This well was producing 3 barrels per day on tests December 4 and December 16, but since December 30, 1959 the average has been 16 barrels per day. Therefore, as provided in Order No. R-1311, Great Western Drilling Company applies for the expansion of the North Central Caprock Queen Unit by reason of the conversion of Wells No. 14-8, 13-12 and 13-16.



Page #2

Oil Conservation Commission

Re: Application for Approval for  
conversion of Unit Wells to  
Water Injection Wells, North  
Central Caprock Queen Unit

January 4, 1960

We respectfully submit that the ultimate recoverable oil from the Caprock Queen Reservoir will be decreased and waste will occur due to an unbalanced condition in the pattern flooding system if Unit Wells No. 14-8, 13-12 and 13-16 are not converted to Water Injection Wells at this time.

Attached to this application are: the C-116 of Great Western Drilling Company Wells No. 13-5 and 18-13, showing stimulation; a plat of the area showing all producing and water injection wells; the proposed water injection wells; and the offset operators.

Waivers from offset operators are being requested at this time, and these waivers will be forwarded to the Commission at such time as they are executed so as to decrease the required 15-day interim period set up by Commission order for administrative expansion.

Yours very truly,

GREAT WESTERN DRILLING COMPANY

By: O. H. Crews  
O. H. Crews

OHC:mc  
Att.

NEW MEXICO OIL CONSERVATION COMMISSION

GAS-OIL RATIO REPORT

OPERATOR Great Western Drilling Company POOL Caprock Queen  
 ADDRESS Box 1659, Midland, Texas MONTH OF December, 19 59  
 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 10	13-5	12-16	Pump		24	4	0	56	TSTM	
North Central Caprock Queen Unit - Tract 5	18-13	12-30	Pump		24	4	0	16	TSTM	

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 January 4, 1960

Great Western Drilling Company  
Company

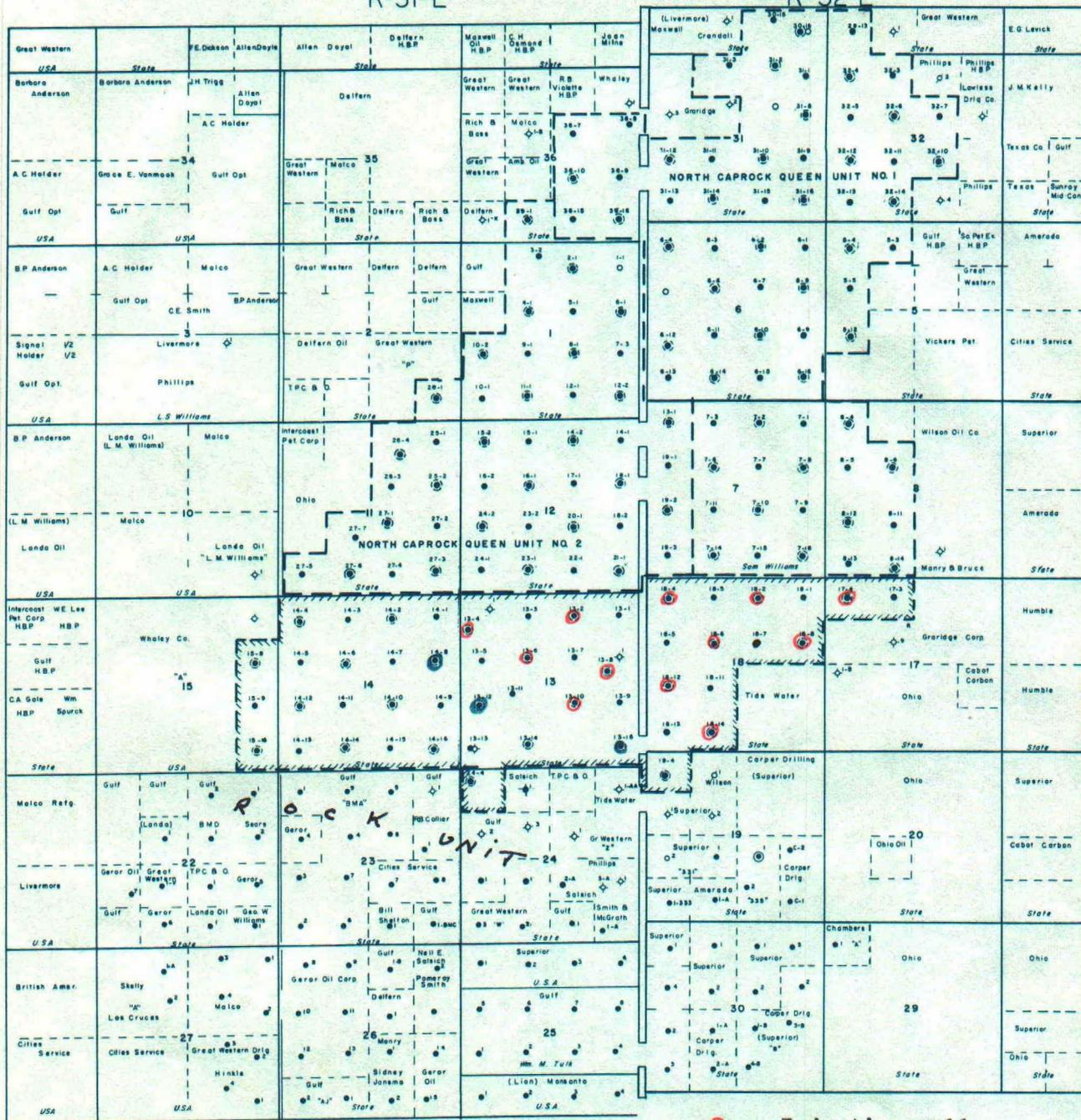
By O. H. Crews  
O. H. Crews

General Superintendent  
Title

R-31-E

R-32-E

T-12-S



T-13-S

# NORTH CENTRAL CAPROCK QUEEN UNIT

OPERATED BY  
GREAT WESTERN DRILLING COMPANY

CAPROCK QUEEN POOL  
LEA AND CHAVES COUNTIES, NEW MEXICO



### LEGEND

- Producer
- ⊙ Injection well
- ⊕ Proposed injection well
- ◇ Dry hole



R. C. TUCKER, PRES.

January 13, 1960

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

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

Re: Application for Administrative  
Approval for Conversion of  
Three Unit Wells to Water In-  
jection Wells, North Central  
Caprock, Lea & Chaves Counties, N.M.

Gentlemen:

Enclosed please find C-116 requested in your letter of  
January 8, 1960. Well No. 13-5 in Tract 10 was put back on  
production November 9, 1959. It produced some two to four barrels  
per day during the period November 10 to December 4.

The C-116 gives two tests on Well No. 13-5 before  
stimulation.

Well No. 18-13, Tract 5, also has two tests prior to  
the stimulation.

Yours very truly,

GREAT WESTERN DRILLING COMPANY

*O. H. Crews*  
O. H. Crews  
General Superintendent

OHC:amh  
Enclosures



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.....December....., 19.59.  
 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	
<u>North Central Caprock Queen Unit</u>										
Tract 10	13-5	12-4	Pump		24	3	0	2.28	TSTM	
Tract 10	13-5	12-11	Pump		24	3	0	3	TSTM	
Tract 5	18-13	12-5	Pump		24	4	0	1	TSTM	
Tract 5	18-13	12-12	Pump		24	4	0	2.56	TSTM	

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.....January 13, 1960.....  
 By.....*O. H. Crews*..... (O. H. Crews)  
 Title.....General Superintendent.....



R. C. TUCKER, PRES.

January 13, 1960

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

Oil Conservation Commission  
Mabry Building  
Santa Fe, New Mexico

Attention: Mr. A. L. Porter, Jr.

Gentlemen:

Please find waivers to requested expansion  
of the North Central Caprock Queen Unit.

Yours very truly,

GREAT WESTERN DRILLING COMPANY

BY: O. H. Crews  
O. H. CREWS

OHC/mls

Enclosures:





R. C. TUCKER, PRES.

January 4, 1960

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

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

Gentlemen:

We have requested expansion of the North Central Caprock Queen Unit under the system for administrative approval as set forth in the Oil Conservation Commission Order No. R-1311. A copy of our letter requesting this expansion is attached.

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

Yours very truly,

GREAT WESTERN DRILLING COMPANY

By: O. H. Crews  
O. H. Crews

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>
14-8	SE/4 of NE/4 of Section 14, 13-S, 31-E
13-12	NW/4 of SW/4 of Section 13, 13-S, 31-E
13-16	SE/4 of SE/4 of Section 13, 13-S, 31-E

as applied for in your letter dated January 4, 1960.

GREAT WESTERN DRILLING COMPANY



By: O. H. Crews  
Date: Jan 4, 1960

GREAT WESTERN DRILLING CO.  
MIDLAND, TEXAS

January 4, 1960

Graridge Corporation  
P.O. Box 752  
Breckenridge, Texas

Gentlemen:

We have requested expansion of the North Central Caprock Queen Unit under the system for administrative approval as set forth in the Oil Conservation Commission Order No. R-1311. A copy of our letter requesting this expansion is attached.

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

Yours very truly,

GREAT WESTERN DRILLING COMPANY

By: *O. H. Crews*  
O. H. Crews

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>
14-8	SE/4 of NE/4 of Section 14, 13-S, 31-E
13-12	NW/4 of SW/4 of Section 13, 13-S, 31-E
13-16	SE/4 of SE/4 of Section 13, 13-S, 31-E

as applied for in your letter dated January 4, 1960.

GRARIDGE CORPORATION

By: *B. G. Harrison*

Date: *JAN. 5, 1960*



R. C. TUCKER, PRES.

January 4, 1960

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

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

Gentlemen:

We have requested expansion of the North Central Caprock Queen Unit under the system for administrative approval as set forth in the Oil Conservation Commission Order No. R-1311. A copy of our letter requesting this expansion is attached.

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

Yours very truly,

GREAT WESTERN DRILLING COMPANY

By: O. H. Crews  
O. H. Crews

OPERATIONS	
JAN 5 1960	
<input checked="" type="checkbox"/> Sec:	
<input checked="" type="checkbox"/> Perm:	
<input checked="" type="checkbox"/> S.W.P.	NA
<input checked="" type="checkbox"/> Eng:	R.H.
<input checked="" type="checkbox"/> Adm:	1/4
<input type="checkbox"/> Prod:	
<input type="checkbox"/> Mat:	
<input type="checkbox"/> Perf:	
<input type="checkbox"/> FILE:	

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 tion wells:

<u>Unit Well No.</u>	<u>Location</u>
14-8	SE/4 of NE/4 of Section 14, 13-S, 31-E
13-12	NW/4 of SW/4 of Section 13, 13-S, 31-E
13-16	SE/4 of SE/4 of Section 13, 13-S, 31-E

as applied for in your letter dated January 4, 1960.

AMBASSADOR OIL CORPORATION

By: Robert H. Vick

Date: 1-8-60





STATE OF NEW MEXICO

STATE ENGINEER OFFICE

SANTA FE

January 19, 1960

S. E. REYNOLDS  
STATE ENGINEER

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

Oil Conservation Commission  
Santa Fe, New Mexico

Attn: Mr. A. L. Porter, Jr.

Dear Mr. Porter:

Reference is made to Great Western Drilling Company's application to convert wells No. 14-8, 13-12 & 13-16, North Central Caprock Queen Unit, to water injection wells. I have reviewed this application and discussed it with your staff and have concluded that their plan will not jeopardize the fresh water that may exist in this area. Therefore, this office offers no objection to the granting of the application.

Very truly yours,

S. E. Reynolds  
State Engineer

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

FEI/bv