



100-120  
100-10-120

November 5, 1962

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 Two  
Units to Water Injection Wells,  
Rock Queen Unit

Gentlemen:

As provided in the Oil Conservation Commission Order No. R-1541, Great Western Drilling Co., as operator of the Rock 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>
19-10	NW/4 of SE/4 of Sec. 19, T-13-S, R-32-E
19-16	SE/4 of SE/4 of Sec. 19, T-13-S, R-32-E

Well 19-15, an offset to wells 19-10 and 19-16, has received response to water injection. The test on September 18th was 4 bbls of oil per day. This same quantity was measured twice in August. A test November 2, 1962 measured 12 bbls of oil per day. (No pumping change has been made in this well during the past four months)

We respectfully submit that the ultimate recoverable oil from the Rock Queen Unit reservoir will be decreased and that waste will occur due to an unbalanced condition in the pattern flooding system if the Unit wells 19-10 and 19-16 are not converted to water injection at this time.

Attached to this application are: The C-116 of Great Western Drilling Co. well 19-15, before and after stimulation; a plat of the area showing all producing water injection and proposed water injection wells; and offset operators.

Waivers from offset operators are being requested at this time, to expedite this program.

Yours very truly,

GREAT WESTERN DRILLING CO.

By *RC Tucker*



NEW MEXICO OIL CONSERVATION COMMISSION

GAS-OIL RATIO REPORT

OPERATOR Great Western Drilling Co. POOL Caprock Queen  
 ADDRESS Box 1659 Midland, Texas MONTH OF November, 1962  
 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	
Rock Queen Unit Tract 37	19-15	11-2	pump		24	10	0	12	T.S.T.M.	
Test after stimulation by waterflood										

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 November 5, 1962

Great Western Drilling Co.  
Company

By O. H. Crews

Administrative Coordinator  
Title

NEW MEXICO OIL CONSERVATION COMMISSION

GAS-OIL RATIO REPORT

OPERATOR Great Western Drilling Co. POOL Caprock Queen  
 ADDRESS Box 1659 Midland, Texas MONTH OF October, 19 62  
 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	
Rock Queen Unit Tract 37	19-15	10-18	Pump		24	10	0	4	T.S.T.M.	
			Test before stimulation by waterflood							

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 November 5, 1962

Great Western Drilling Co.  
Company

By O. H. Crews

Administrative Coordinator  
Title





November 5, 1962

R. C. TUCKER, PRES.

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

Cities Service Petroleum Co.  
Box 97  
Hobbs, New Mexico  
Attn: Mr. Geo. Geyer

Gentlemen:

We have requested expansion of the Rock Queen Unit as per a copy of the enclosed application.

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

Yours very truly,

GREAT WESTERN DRILLING COMPANY

By *[Signature]*

OBC/bl

We have no objection to the expansion of the Rock Queen Unit operations by reason on conversion of the following wells to water injection wells:

<u>Unit Well No.</u>	<u>Location</u>
19-10	NW/4 of SE/4 of Sec. 19, T-13-S, R-32-E
19-16	SE/4 of SE/4 of Sec. 19, T-13-S, R-32-E

as requested in your application of November 5, 1962.

Cities Service Petroleum Co.

By *[Signature]*

Date 11/8/62





November 5, 1962

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 Rock Queen Unit as per a copy of the enclosed application.

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

Yours very truly,

GREAT WESTERN DRILLING COMPANY

By *E. H. Jew*

OHC/bl

We have no objection to the expansion of the Rock Queen Unit operations by reason on conversion of the following wells to water injection wells:

<u>Unit Well No.</u>	<u>Location</u>
19-10	NW/4 of SE/4 of Sec. 19, T-13-S, R-32-E
19-16	SE/4 of SE/4 of Sec. 19, T-13-S, R-32-E

as requested in your application of November 5, 1962.

GREAT WESTERN DRILLING COMPANY

By *E. H. Jew*

Date 11/8/62





November 5, 1962

1962 NOV -7 AM 1:21  
STATE ENGINEER OFFICE  
SANTA FE, N. M.

OK

PHONE MU 2-8241  
ADDRESS REPLY TO:  
BOX 1659  
MIDLAND, TEXAS

R. C. TUCKER, PRES.

**ILLEGIBLE**

Chief Water Rights Division  
State Engineer's Office  
Santa Fe, New Mexico  
Attn: Mr. Frank Irby

Re: Great Western Drilling Co.  
Application to convert wells  
19-10 and 19-16 to water  
injection

Dear Sir:

Well 19-10 was formerly the Superior Oil Co. State 335 well No. 1, located in the NW/4 of SE/4 of Sec. 19, T-13-S, R-32-E, Chave County, New Mexico. 13 3/8" casing was circulated with cement at 358'. 3756' of 36# new 9 5/8" casing was circulated with 2700 sacks of cement. This casing was gun perforated 3064-3071 with 4 holes per foot. Tests will be made to insure that the injected water is confined to the Queen sand. Injection will be down 2" tubing under a packer set at about 2900'.

Well 19-16 was formerly the Carper Drilling Co. Carper-Superior "C" #1, located in the SE/4 of SE/4 of Sec. 19, T-13-S, R-32-E, Chaves County, New Mexico. This well was drilled to 3072 in August 1957. 236' of 8 5/8" 24# new casing was circulated by cement. 3086' of 5 1/2" new 14# casing was cemented with 100 sacks of cement. The top is calculated to be at 2500' outside the 5 1/2". Perforations 3060-3072' are opposite the Queen sand. Tests will be made to insure that the injected water is confined to this zone. Injection will be down 2" under a packer at about 2900'.

The above wells are the proposed injection wells referred to in the enclosed application. Please make your recommendation to the commission so that Great Western Drilling Co. can complete the required work and get the flood in balance.

Yours very truly,

GREAT WESTERN DRILLING CO.

By Frank Irby





November 9, 1962

R. C. TUCKER, PRES.

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

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

Attn: Mr. J. E. Kapteina

Gentlemen:

Enclosed please find all required wavers as requested  
in the Great Western Drilling Company application of November  
5, 1962.

Yours very truly,

GREAT WESTERN DRILLING CO.

By *E. K. Lewis*

OHC/bl



Date 11-1-62

November 2, 1962

John Trigg  
P.O. Box 202  
Lawrence, Kansas, New Mexico

Enclosure:

We have requested expansion of the Rock Queen Unit as per a copy of the enclosed application.

If you have an objection, please signify by signing and returning one copy of the letter to this office.

Yours very truly,

GREAT WESTERN DRILLING COMPANY

By \_\_\_\_\_

cc: 101

We have no objection to the expansion of the Rock Queen Unit operations by reason of conviction of the following wells to water injection wells:

<u>Unit Well No.</u>	<u>Location</u>
19-10	NW/4 of SE/4 of Sec. 19, T-13-N, R-33-E
19-16	SE/4 of SE/4 of Sec. 19, T-13-N, R-33-E

as requested in your application of November 2, 1962.

JOHN TRIGG

By \_\_\_\_\_  
Date 11-7-62



STATE OF NEW MEXICO

STATE ENGINEER OFFICE

SANTA FE

S. E. REYNOLDS  
STATE ENGINEER

November 14, 1962

ADDRESS CORRESPONDENCE TO:  
STATE CAPITOL  
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 which seeks administrative approval for conversion of two units to water injection wells, Rock Queen Unit, which was submitted on November 5. Following are the specific wells involved in this application; Unit Well No. 19-10 located in the NW $\frac{1}{4}$  of the SE $\frac{1}{4}$  of Section 19, Township 13 South, Range 32 East and Unit Well No. 19-16 located in the SE $\frac{1}{4}$  of the SE $\frac{1}{4}$  of Section 19, Township 13 South, Range 32 East.

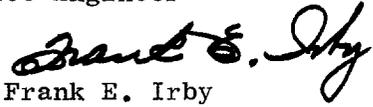
In view of Mr. Crews' statements, pertaining to the wells, that injection will be down 2" tubing under a packer set well below the top of the cement surrounding the intermediate string, this office offers no objection to the granting of the application.

Very truly yours,

S. E. Reynolds  
State Engineer

FEI/ma

cc-Mr. O. H. Crews  
Mr. F. H. Hennighausen

By:   
Frank E. Irby  
Chief  
Water Rights Division