

October 11, 1960

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 Wells to Water Injection Wells, North Central Caprock Queen Unit and Rock Queen Unit, Lea & Chaves Counties, New Mexico

Gentlemen:

As provided in the Oil Conservation Commission orders No. R-1311 and R-1541, Great Western Drilling Company, as operator of both the North Central Caprock Queen Unit and Rock Queen Unit, requests administrative approval for the conversion of the following Unit Wells:

Unit Well No.

Location

North Central Ca	prock								
Queen Unit	15-16	SE/4	of	SE/4	of	Sec.	15,	T-13-S,	R-31-E
Rock Queen Unit	23-4	NW/4	of	NW/4	of	Sec.	23,	T-13-S,	R-31-E

Well No. 22-1, in the Rock Queen Unit, is offset by the above listed wells. Well 22-1 has received response to water injection since September 20, 1960. Early in September this well was producing 2 barrels per day on test. As of September 30, Well 22-1 is pumping 20 barrels of oil per day.

We respectfully submit that the ultimate recoverable oil from both the North Central Caprock Queen Unit and the Rock Queen Unit Reservoirs will be decreased and that waste will occur due to an unbalanced condition in the pattern flooding system unless Wells 15-16 and 23-4 are converted to water injection at this time.

Attached to this application are: the C-116 of Great Western Drilling Company Well No. 22-1, before and after stimulation; a plat of the area showing all producing, water injection and the proposed water injection wells; and the offset operators.

Waivers from the offset operators are being requested at this time.

Yours very truly,

GREAT WESTERN DRILLING COMPANY

By: Alew



### 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. <b>60</b>
SCHEDULED TES	C COMPLETION TEST	·····	SPECIAL TEST. X	(Check One)

(See Instructions on Reverse Side)

	Well	Date of	Producing	Choke	Test	Daily	Produ	GOR		
Lease	No. Test Method Size Hours Allowable Bbls.	Allowable	Water Bbls.	Oil Bbls.	Gas MCF	Cu. Ft. Per Bbl.				
Rock Queen Unit Tract 17	22-1	9-30	Pump		24	8	0	20	TSTM	
		Test	after st	imulatio	n by wa	iter floo	d.			
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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.)

Great Western Drilling Company

By Officers O. H. Crews

Administrative Coordinator

Mexico OII 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 11, 1960

Great Western Drilling Company

By Offerson O. H. Crews

Administrative Coordinator

## NEW MEXICO OIL CONSERVATION COMMISSION

# **GAS-OIL RATIO REPORT**

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		Midland, Texas			
		(Sec Instruction	ns on Reverse Side	c)	

	Lesse Well Date of Producing Choke Test Daily		Daily	Produ	GOR					
Lease	No.	No. Test	Method S	Size	Test Hours	Allowahla	Water Bbls.	Oil Bbls.	Gas MCF	Cu. Ft. Per Bbl.
ock Queen Unit Tract 17	22-1	9-2	Pump		24	8	0	2	TSTM	
			Test bef	ore stim	ulation	by wate	r 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.

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Date October 11, 1960

 Great Western Drilling Company
By Officers O. H. Crews
Administrative Coordinator

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## STATE OF NEW MEXICO

#### STATE ENGINEER OFFICE

SANTA FE

October 13, 1960

S.E.REYNOLDS

P. O. BOX 1079 SANTA FE, N. M.

ADDRESS CORRESPONDENCE TO:

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 converte wells 15-16 of the North Central Caprock Queen Unit and 23-4 of the Rock 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. There, this office offers no objection to the granting of this application.

Very truly yours,

S. E. Reynolds State Engineer

By: C Frank E. Irby

Chief Water Rights Division

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



R. C. TUCKER, PRES.

October 27, 1960

PHONE MU 2-5241 Address Reply to: Box 1659 Midland, Texas

Oil Conservation Commission, Box 871 Santa Fe, New Mexico

Attn: Mr. J. E. Kapteina

Gentlemen:

Enclosed please find all waivers required for the expansion of the North Central Caprock Queen Unit by conversion of Unit Well No. 15-16 to water injection and for the Rock Queen Unit by conversion of Well No. 23-4 to water injection.

Yours very truly,

GREAT WESTERN DRILLING COMPANY

By Offeren

OHC:TR (Enclosures)





October 11, 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 Rock Queen Unit and North Central Caprock Queen Unit through administrative approval as set forth in Commission Order No. R-1541 and 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

OHC:mc

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

Unit Well No.

Location

North Central Caprock Queen Unit 15-16 Rock Queen Unit 23-4

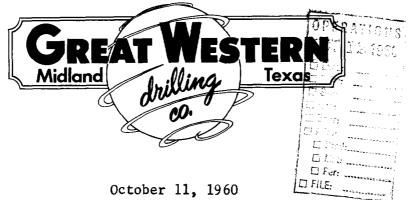
SE/4 of SE/4 of Sec. 15, T-13-S, R-31-E NW/4 of NW/4 of Sec. 23, T-13-S, R-31-E

as requested in your application of October 11, 1960.

GREAT WESTERN DRILLING COMPANY

By\_ Off. Jews Date\_Oct 27, 1960\_\_\_\_





October 11, 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 Rock Queen Unit and North Central Caprock Queen Unit through administrative approval as set forth in Commission Order No. R-1541 and 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 Offseurs

OHC:mc

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

Unit Well No.

Location

North Central Caprock Queen Unit 15-16 Rock Queen Unit 23-4

SE/4 of SE/4 of Sec. 15, T-13-S, R-31-E NW/4 of NW/4 of Sec. 23, T-13-S, R-31-E

as requested in your application of October 11, 1960.

AMBASSADOR OIL CORPORATION By Date



#### GREAT WESTERN DRILLING CO. MIDLAND, TEXAS

RECEIVED OCT 17'60 MIDLAND. TEXAS

October 11, 1960

Mr. John Trigg Box 5629 Roswell, New Mexico

Dear Sir:

We have requested expansion of the Rock Queen Unit and North Central Caprock Queen Unit through administrative approval as set forth in Commission Order No. R-1541 and 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, a set

GREAT WESTERN DRILLING COMPANY

By Oklews

ONC: mc

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

Date

Unit Well No.

### Location

North Central Caprock Queen Unit 15-16 Rock Queen Unit 23-4

BE/4 of SE/4 of Sec. 15, T-13-S, R-31-E NW/4 of NW/4 of Sec. 23, T-13-S, R-31-E

as requested in your application of October 11, 1960.

JOHN TRÍGG By Date

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October 11, 1960

Graridge Corporation P.O. Box 752 Breckenridge, Texas

Gentlemen:

We have requested expansion of the Rock Queen Unit and North Central Caprock Queen Unit through administrative approval as set forth in Commission Order No. R-1541 and 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 Officers

OHC:mc

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

Unit Well No.

Location

North Central Caprock Queen Unit 15-16 Rock Queen Unit 23-4

SE/4 of SE/4 of Sec. 15, T-13-S, R-31-E NW/4 of NM/4 of Sec. 23, T-13-S, R-31-E

as requested in your application of October 11, 1960.

GRARIDGE CORPORATION

<u>Al Ard</u> 10/13/60 Dete



October 11, 1960

ADDRESS REPLY TO: BOX 1659 MIDLAND, TEXAS

PHONE MU 2-5241

Cities Service Oil Company Box 97 Hobbs, New Mexico

Attn: Mr. Geo. Geyer

Gentlemen:

We have requested expansion of the Rock Queen Unit and North Central Caprock Queen Unit through administrative approval as set forth in Commission Order No. R-1541 and 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 Officers

OHC:mc

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

Unit Well No.

Location

North Central Caprock Queen Unit 15-16 Rock Queen Unit 23-4

SE/4 of SE/4 of Sec. 15, T-13-S, R-31-E NW/4 of NW/4 of Sec. 23, T-13-S, R-31-E

as requested in your application of October 11, 1960.

CITIES SERVICE OLL COMPANY Date 10 -1

