



207 X - 23

## CITIES SERVICE OIL COMPANY

BOX 97

HOBBS, NEW MEXICO

December 2, 1959

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

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

Gentlemen:

Cities Service Oil Company, operator of the Drickey Queen Sand Unit, Caprock Queen Pool, Chaves County, New Mexico requests administrative approval as provided in Rule 701 for the conversion of the following wells to water injection:

Tract 3	Well No. 1 ✓	NW SE, Section 10	J	6-12-54	7" 1000' SAV
Tract 6	Well No. 1 ✓	SE NW, Section 10	H	5-23-54	1 1/2" 100' SAV
Tract 6	Well No. 4 ✓	SE NE, Section 10	H		
Tract 6	Well No. 13 ✓	SE NE, Section 3	H	12-1-54	
Tract 6	Well No. 16 ✓	SE NW, Section 3	F		
Tract 6	Well No. 20 ✓	NW NE, Section 3	B	11-20-54	2 1/2" 300'
Tract 38	Well No. 2 ✓	NW SW, Section 2	L		
Tract 40	Well No. 1 ✓	SE SW, Section 2	H	10-1-54	2" 15'
Tract 47	Well No. 2 ✓	NW NW, Section 11	D	5-5-54	2" 125' SAV

All located in Township 14 South, Range 31 East,  
Chaves County, New Mexico.

All of the above proposed water injection wells have experienced a response to water injection from the pilot project or are directly offset by producing wells which have experienced response. Forms C-116 are enclosed showing production tests at the start of water flooding and most recent tests.

The proposed injection wells are located on a pattern previously established in the Caprock Queen Pool, results of which have indicated a thorough and efficient sweep of oil by the injected water. All injection wells will be equipped with plastic coated tubing and packers to prevent possible contamination of fresh water in the event of a casing leak.

A line agreement has been entered with John H. Trigg, offset operator, to convert certain producing wells to injection wells along the common line between the Drickey Queen Sand Unit and properties operated by Mr. Trigg. This agreement was presented as Exhibit No. 3 in New Mexico Oil Conservation Commission Case No. 1744.

Oil Conservation Commission

-2-

December 2, 1959

Copies of this application have been sent to each offset operator and to the State Engineer.

Very truly yours,

CITIES SERVICE OIL COMPANY



E. F. Motter  
Assistant Division Engineer

EFM/gk

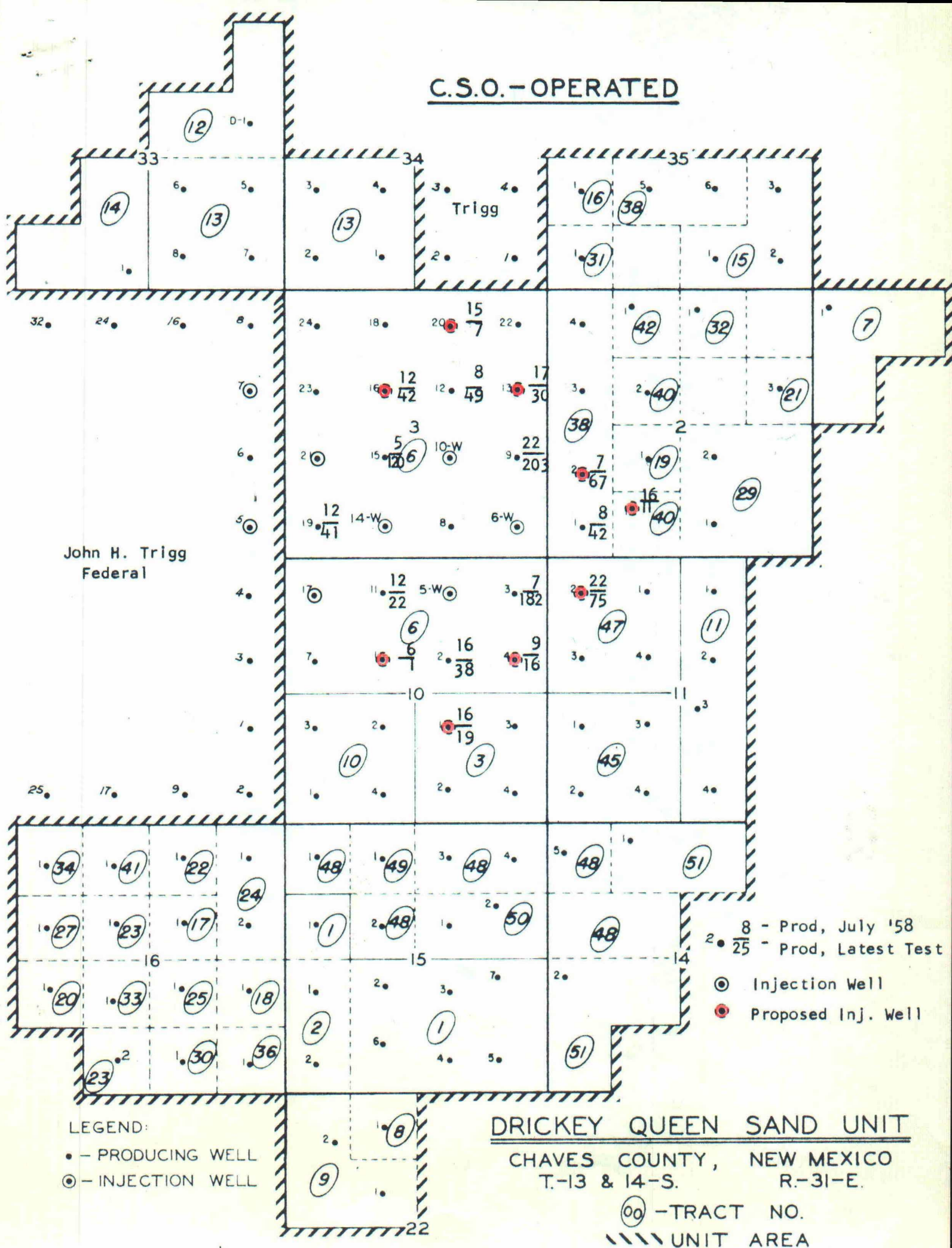
Encls.

cc: State Engineer  
P. O. Box 1069  
Santa Fe, New Mexico  
Attn: Mr. Frank Irby

John H. Trigo  
P. O. Box 2409  
Roswell, New Mexico

Oil Conservation Commission  
P. O. Box 2245  
Hobbs, New Mexico

# C.S.O. - OPERATED



## NEW MEXICO OIL CONSERVATION COMMISSION

## GAS-OIL RATIO REPORT

OPERATOR Cities Service Oil Company POOL Caprock Queen  
 ADDRESS Box 97, Hobbs, New Mexico MONTH OF July-August, 1958  
 SCHEDULED TEST..... COMPLETION TEST..... SPECIAL TEST.....\* (Check One)  
 (See Instructions on Reverse Side)

## \* Before Stimulation

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	
Tract No. 3	1	7-21	P	-	24		0	16	10	625
6	1	8-11	P	-	24		0	6	8	1333
6	2	8-13	P	-	24		0	16	13	813
6	3	8-28	P	-	24		0	7	11	1571
6	4	8-15	P	-	24		0	9	11	1222
6	9	8-10	P	-	24		0	22	10	455
6	11	8-27	P	-	24		0	12	41	3417
6-	12	7-16	P	-	24		0	8	10	1250
6	13	7-31	P	-	24		0	17	16	941
6	15	8-14	P	-	24		0	5	17	3400
6	16	8-19	P	-	24		0	12	12	1000
6-	19	8-16	P	-	24		0	12	18	1500
6	20	7-26	P	-	24		0	15	16	1067
33	1	8-3	P	-	24		0	8	13	1625
38	2	7-19	P	-	24		0	7	17	2428
40	1	8-1	P	-	24		0	16	12	750
47	2	8-9	P	-	24		0	22	5	227

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 December 1, 1959

Cities Service Oil Company

By C. W. Lindsey  
 Petroleum Engineer  
 Title

## NEW MEXICO OIL CONSERVATION COMMISSION

## GAS-OIL RATIO REPORT

OPERATOR Cities Service Oil Company POOL Caprock Queen  
 ADDRESS Box 97, Hobbs, New Mexico MONTH OF July-Aug.-Sept.-Oct., 1959  
 SCHEDULED TEST..... COMPLETION TEST..... SPECIAL TEST \*..... (Check One)  
 (See Instructions on Reverse Side)

\* After Stimulation

Lease	Well No.	Date of Test	Producing Method	Choke Size	Test Hours	Daily Allowable Bbls. NOV.	Production During Test			GOR Cu. Ft. Per Bbl.
							Water Bbls.	Oil Bbls.	Gas MCF	
Tract No. 3	1	8-5	P	-	24	19	0	19	12	632
6	1	9-25	P	-	24	5	0	1	1	1000
6	2	9-24	P	-	24	42	0	38	11	289
6	3	10-24	P	-	24	200	0	182	25	137
6	4	9-24	P	-	24	16	0	16	4	250
6	9	10-27	P	-	24	240	0	203	15	74
6	11	10-28	P	-	24	24	0	22	37	1682
6	12	10-8	P	-	24	80	0	49	37	755
6	13	9-8	P	-	24	35	0	30	3	100
6	15	11-5	P	-	24	150	0	120	14	117
6	16	10-12	P	-	24	35	0	42	10	240
6	19	9-19	P	-	24	48	0	41	29	951
6	20	9-10	P	-	24	7	0	7	8	1143
38	1	8-18	P	-	24	90	0	42	8	190
38	2	8-13	P	-	24	35	0	67	21	313
40	1	9-7	P	-	24	11	0	11	8	727
47	2	9-11	P	-	24	35	0	75	16	213

No well will be assigned an allowable greater than the amount of oil produced on the official test.

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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 December 1, 1959

Cities Service Oil Company  
Company

By.....

Petroleum Engineer

Title



STATE OF NEW MEXICO

STATE ENGINEER OFFICE

SANTA FE

S. E. REYNOLDS  
STATE ENGINEER

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

December 7, 1959

Mr. A. L. Porter, Jr.  
Secretary-Director  
Oil Conservation Commission  
Santa Fe, New Mexico

Attn. Mr. Jim Kapteina

Dear Mr. Kapteina:

Reference is made to application of the Cities Service Oil Company dated December 2, 1959 requesting administrative approval for the conversion of the following wells to water injection wells:

Tract 3	Well No. 1	NW SE, Section 10
Tract 6	Well No. 1	SE NW, Section 10
Tract 6	Well No. 4	SE NE, Section 10
Tract 6	Well No. 13	SE NE, Section 3
Tract 6	Well No. 16	SE NW, Section 3
Tract 6	Well No. 20	NW NE, Section 3
Tract 38	Well No. 2	NW SW, Section 2
Tract 40	Well No. 1	SE SW, Section 2
Tract 47	Well No. 2	NW NW, Section 11

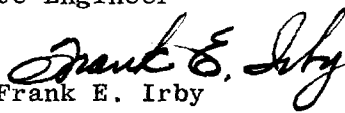
All located in Township 14 South, Range 31 East, Chaves County, New Mexico.

It appears that the proposed plan of injection will not create a hazard to the fresh water zones below the surface of the land. Therefore, this office offers no objection to the granting of this application.

FEI/ma  
cc-F. H. Hennighausen  
E. F. Motter

Yours truly,

S. E. Reynolds  
State Engineer

By:   
Frank E. Irby  
Chief  
Water Rights Division