



Formerly named

CITIES SERVICE OIL COMPANY

BOX 97

HOBBS, NEW MEXICO

March 1, 1961

WFX - 79

Working on it
1/10/61
6

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

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

Gentlemen:

Cities Service Petroleum 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. 4	SE SE, Section 10
Tract 10	Well No. 3	NW SW, Section 10
Tract 10	Well No. 4	SE SW, Section 10
Tract 11	Well No. 1	NW NE, Section 11
Tract 38	Well No. 4	NW NW, Section 2
Tract 45	Well No. 1	NW SW, Section 11
Tract 47	Well No. 4	SE NW, Section 11

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

Tract 13 Well No. 1 SE SE, Section 34
Located in Township 13 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 project or are directly offset by producing wells which have experienced response. Forms C-116 are enclosed showing production tests at the start of waterflooding and most recent tests.

Oil Conservation Commission -- Page 2.

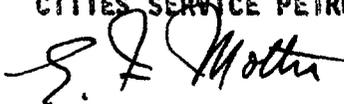
The proposed injection wells are located on a pattern previously established in the Caprock Queen Pool, results of which have indicated a thorough and efficient sweep of oil by the injected water. All injection wells will be equipped with plastic coated tubing and packers to prevent possible contamination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

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

Very truly yours,

CITIES SERVICE PETROLEUM COMPANY



E. F. Motter
Assistant Division Engineer

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

John H. Trigg
P. O. Box 5629
Roswell, New Mexico

Oil Conservation Commission
P. O. Box 2045
Hobbs, New Mexico

NEW MEXICO OIL CONSERVATION COMMISSION

GAS-OIL RATIO REPORT

OPERATOR Cities Service Petroleum Company POOL Caprock Queen
 ADDRESS Box 97 - Hobbs, New Mexico MONTH OF June, July, Aug, Sept., 19 60
 SCHEDULED TEST..... COMPLETION TEST..... SPECIAL TEST X..... (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 3	✓ 2	7-22	P	-	2	10	0	2	1	500
	✓ 3	7-22	P	-	24	23	0	26	15	577
	✓ 4	7-22	P	-	24	4	0	1	1	1000
Tract 6	✓ 7	7-18	P	-	24	15	0	35	14	400
	18	8-1	P	-	24	33	0	8	12	1500
	22	8-12	P	-	24	33	0	29	0	0
Tract 10	1	7-13	P	-	24	12	0	5	11	2200
	2	7-11	P	-	24	19	0	18	27	1500
	✓ 3	7-9	P	-	24	15	0	5	8	1600
	✓ 4	7-12	P	-	24	15	0	12	17	1417
Tract 11	✓ 1	9-15	P	-	24	12	0	6	2	333
	✓ 2	9-20	P	-	6	4	0	8	0	0
Tract 13	✓ 1	8-18	P	-	24	4	0	2	8	4000
	2	7-3-60	P	-	24	10	0	6	9	500
	4	7-12-60	P	-	24	4	0	2	4	2000
Tract 31	✓ 1	6-27-60	P	-	24	10	0	12	20	1667
Tract 38	✓ 3	9-21-60	P	-	7	25	0	6	0	0
	4	9-21-60	P	-	4	12	0	1	0	0
Tract 42	1	7-27-60	P	-	24	19	0	10	12	1200

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 March 6, 1961

Cities Service Petroleum Company
Company

By W. L. Janney
Production Engineer
Title

NEW MEXICO OIL CONSERVATION COMMISSION

GAS-OIL RATIO REPORT

OPERATOR Cities Service Petroleum Company POOL Caprock Queen
 ADDRESS Box 97 - Hobbs, New Mexico MONTH OF June, July, Aug. Sept., 1960
 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 45	✓ 1	7-1-60	P	-	24	11	0	5	20	4000
	2	Shut-in	-	-	-	-	-	-	-	-
Tract 47	3	7-27	P	-	24	6	0	4	4	1000
	1	9-15	P	-	24	12	0	3	0	0
	3	8-30	P	-	24	12	0	12	0	0
	✓ 4	9-19	P	-	5	22	0	7	1	143

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.

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(I certify that the information given is true and complete to the best of my knowledge.)

Date March 6, 1961 Cities Service Petroleum Company
 By W. L. Jannet
Production Engineer
 Title

NEW MEXICO OIL CONSERVATION COMMISSION

GAS-OIL RATIO REPORT

OPERATOR Cities Service Petroleum Company POOL Caprock Queen
 ADDRESS Box 97 - Hobbs, New Mexico MONTH OF December, 1960, Jan., Feb., 19 61
 SCHEDULED TEST..... COMPLETION TEST..... SPECIAL TEST X..... (Check One)
 (See Instructions on Reverse Side)

After 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 3	2	2-2-61	P	Open	24	2	0	8	4	500
	3	2-7-61	P	-	24	23	0	48	27	577
	4	2-8-61	P	-	24	1	0	19	19	1000
Tract 6	7	2-9-61	P	-	24	45	0	63	9	1428
	18	2-7-61	P	-	24	8	0	128	12	94
	22	1-31-61	P	-	24	45	0	43	0	0
Tract 10	1	2-9-61	P	-	24	5	0	7	2	285
	2	2-10-61	P	-	24	18	0	14	1.5	103
	3	2-11-61	P	-	24	5	0	10	3	300
	4	2-12-61	P	-	24	12	0	8	4	500
Tract 11	1	1-21-61	P	-	24	6	0	9	7	778
	2	1-20-61	P	-	24	4	0	2	1	500
Tract 13	1	2-14-61	P	-	24	2	0	2	1	500
	2	2-17-71	P	-	24	6	0	3	2	667
	4	2-15-61	P	-	24	15	0	1	0	0
Tract 31	1	2-4-61	P	-	24	10	0	7	4	571
Tract 38	3	2-16-61	P	-	24	23	0	40	13	325
	4	2-3-61	P	-	24	1	0	24	8	333
Tract 42	1	2-2-61	P	-	24	10	0	7	5	714

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 March 6, 1961

Cities Service Petroleum Company
 By W. L. Janney
Production Engineer
 Title

NEW MEXICO OIL CONSERVATION COMMISSION

GAS-OIL RATIO REPORT

OPERATOR Cities Service Petroleum Company POOL Caprock Queen
 ADDRESS Box 97 - Hobbs, New Mexico MONTH OF December, 1960, Jan., Feb., 19 61
 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.	Production During Test			GOR Cu. Ft. Per Bbl.
							Water Bbls.	Oil Bbls.	Gas MCF	
Tract 45	1	1-23-61	P	Open	24	5	0	12	7	583
	2	12-5-60	P	-	-	2	0	2	0	0
	3	1-24-61	P	-	-	4	0	4	0	0
Tract 47	1	1-23-61	P	-	24	3	0	12	4	333
	3	2-13-61	P	-	24	12	0	28	9	321
	4	1-19-61	P	-	24	7	0	10	4	400

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.

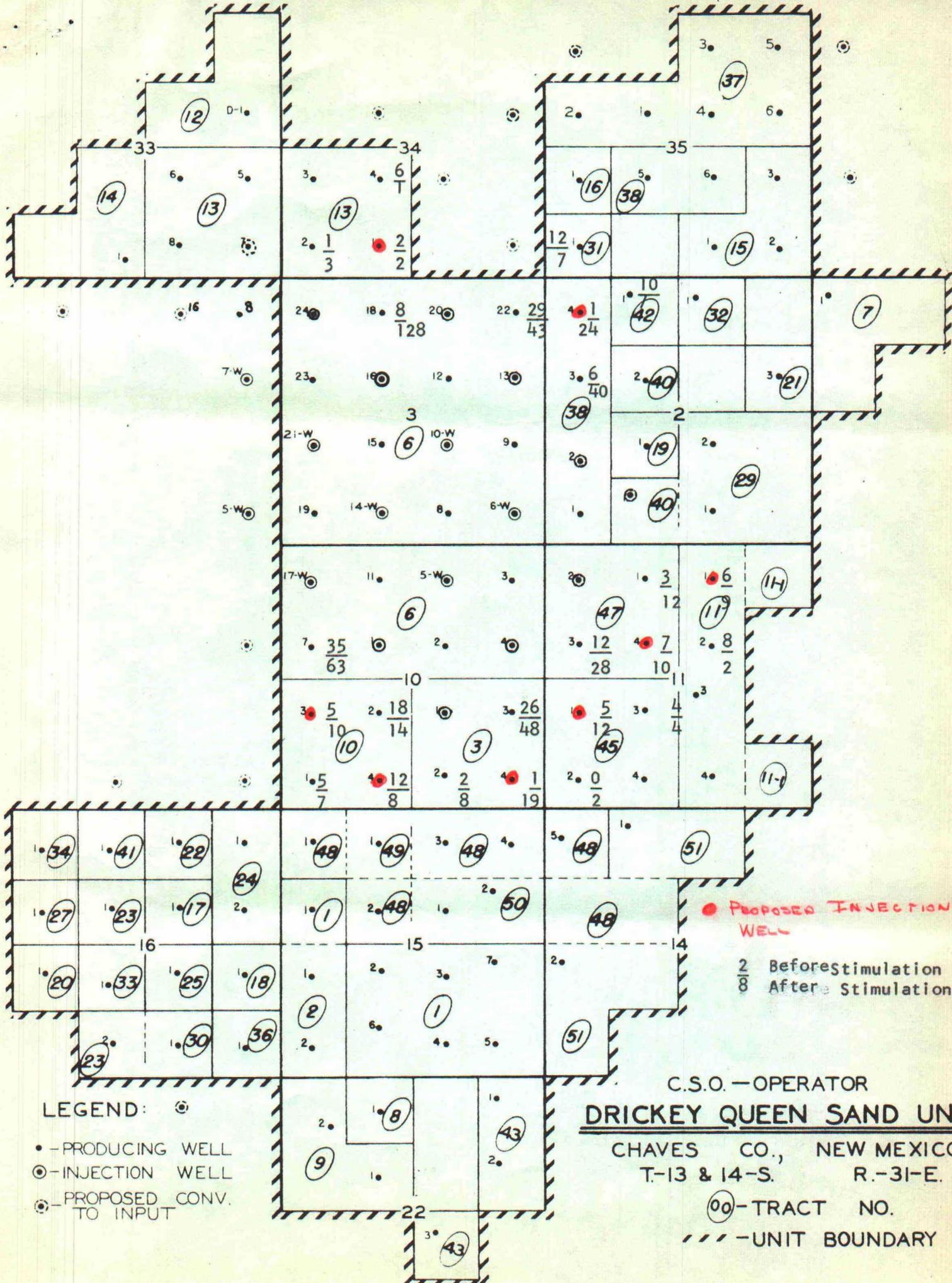
Gas volumes must be reported in MCF measured at a pressure base of 15.025 psia and a temperature of 60 degrees F. Specific gravity base will be 0.60.

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 March 6, 1961

Cities Service Petroleum Company
 Company
 By W. L. Jarney
 Production Engineer
 Title



● PROPOSED INJECTION WELL

$\frac{2}{8}$ Before stimulation
 After stimulation

LEGEND: ●

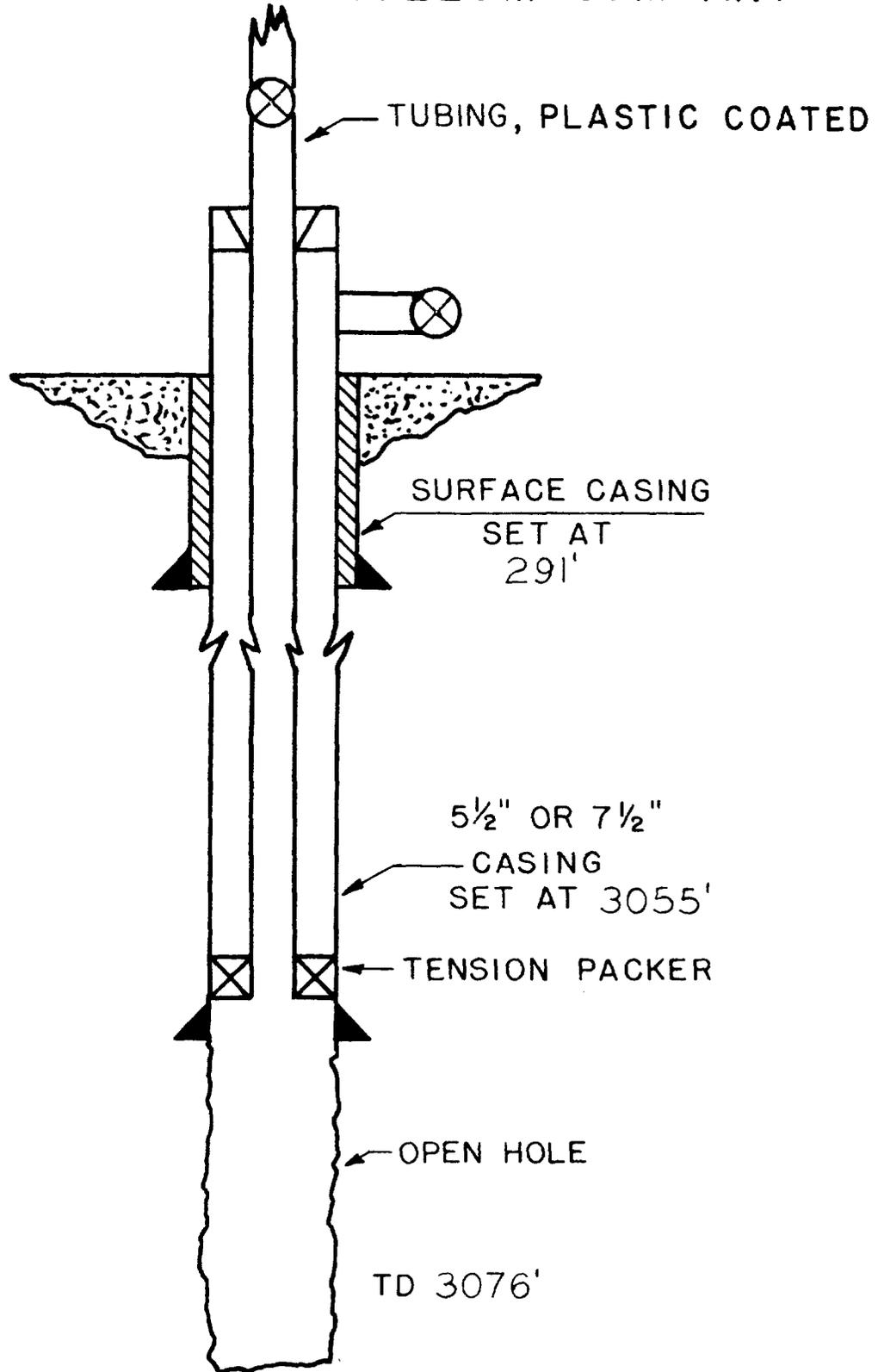
- - PRODUCING WELL
- ⊙ - INJECTION WELL
- ⊙ - PROPOSED CONV. TO INPUT

C.S.O. - OPERATOR
DRICKEY QUEEN SAND UNIT

CHAVES CO., NEW MEXICO
 T-13 & 14-S. R.-31-E.

⊙ - TRACT NO.
 --- UNIT BOUNDARY

CITIES SERVICE PETROLEUM COMPANY



WATER INPUT WELL SCHEMATIC
DRICKEY QUEEN SAND UNIT

CITIES SERVICE PETROLEUM COMPANY



FORMERLY NAMED

CITIES SERVICE PETROLEUM COMPANY

BOX 87

HOBBS, NEW MEXICO

March 20, 1961

1961 MAR 21 AM 8:11
STATE ENGINEER OFFICE
SANTA FE, N.M.

State Engineer
P. O. Box 1069
Santa Fe, New Mexico

Attention: Mr. Frank Irby

Gentlemen:

Would you please forward two of the three copies of the requests to convert some wells to water injection wells dated March 1, 1961, to Mr. A. L. Porter, Jr., Oil Conservation Commission, P. O. Box 871, Santa Fe, New Mexico. The extra two copies were sent to you in error.

Thank you for your help.

Very truly yours,

CITIES SERVICE PETROLEUM COMPANY

E. F. Mottel
Asst. Division Engineer

100-10100-000

11-14
WJ/sjb



STATE OF NEW MEXICO

STATE ENGINEER OFFICE

SANTA FE

S. E. REYNOLDS
STATE ENGINEER

March 21, 1961

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:

In accordance with Mr. Motter's request of March 20, 1961, we are herewith enclosing the two copies of the requests to convert some wells to water injection wells dated March 1, 1961, which were sent to this office in error.

Yours truly,

S. E. Reynolds
State Engineer

By:

Frank E. Irby
Frank E. Irby

Chief

Water Rights Division

ma
encl.
cc-Mr. E. E. Motter



STATE OF NEW MEXICO

STATE ENGINEER OFFICE

SANTA FE

S. E. REYNOLDS
STATE ENGINEER

March 14, 1961

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 Cities Service Oil Company dated March 1, 1961 which seeks administrative approval for the conversion of the following wells to water injection:

Tract 3	Well No. 4	SE $\frac{1}{4}$ SE $\frac{1}{4}$, Section 10
Tract 10	Well No. 3	NW $\frac{1}{4}$ SW $\frac{1}{4}$, Section 10
Tract 10	Well No. 4	SE $\frac{1}{4}$ SW $\frac{1}{4}$, Section 10
Tract 11	Well No. 1	NW $\frac{1}{4}$ NE $\frac{1}{4}$, Section 11
Tract 38	Well No. 4	NW $\frac{1}{4}$ NW $\frac{1}{4}$, Section 2
Tract 45	Well No. 1	NW $\frac{1}{4}$ SW $\frac{1}{4}$, Section 11
Tract 47	Well No. 4	SE $\frac{1}{4}$ NW $\frac{1}{4}$, Section 11

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

Tract 13 Well No. 1 SE $\frac{1}{4}$ SE $\frac{1}{4}$, Section 34
Located in Township 13 South, Range 31 East, Chaves County, New Mexico.

After studying the application and the attachments, I have reached the conclusion that the conversion of these wells and the injection of water, as proposed in the application, will not constitute a threat of contamination to the fresh waters which may exist in the area. Therefore, this office offers no objection to the granting of this application.

Yours truly,

S. E. Reynolds
State Engineer

ma

cc-John H. Trigg
Cities Service Oil Co.
(Attn. Mr. E. F. Motter)
F. H. Hennighausen

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