

CASE 2769: Application of CITIES
SERVICE for three water injection
wells, Chaves County, New Mexico.

Letter from Phillips
inside -
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2769

plication, Transcript,
and Exhibits, Etc.

DRAFT

JMD/esr
March 11, 1963

BEFORE THE OIL CONSERVATION COMMISSION
OF THE STATE OF NEW MEXICO

IN THE MATTER OF THE HEARING
CALLED BY THE OIL CONSERVATION
COMMISSION OF NEW MEXICO FOR
THE PURPOSE OF CONSIDERING:

CASE No. 2769

Order No. R-2445

APPLICATION OF CITIES SERVICE OIL
COMPANY FOR THREE WATER INJECTION
WELLS, CHAVES COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 o'clock a.m. on March 7, 1963, at Santa Fe, New Mexico, before Daniel S. Nutter, Examiner duly appointed by the Oil Conservation Commission of New Mexico, hereinafter referred to as the "Commission," in accordance with Rule 1214 of the Commission Rules and Regulations.

NOW, on this _____ day of March, 1963, the Commission, a quorum being present, having considered the application, the evidence adduced, and the recommendations of the Examiner, Daniel S. Nutter, and being fully advised in the premises,

FINDS:

(1) That due public notice having been given as required by law, the Commission has jurisdiction of this cause and the subject matter thereof.

(2) That the applicant, Cities Service Oil Company, is the operator of the Drickey Queen Sand Unit which comprises, in part, a portion of Section 16, Township 14 South, Range 31 East, NMPM, Caprock-Queen Pool, Chaves County, New Mexico.

(3) That, by Order No. R-1128 and subsequent orders, the Commission authorized Cities Service Oil Company to conduct the Drickey Queen Sand Unit Waterflood Project in Township 14 South, Range 31 East, NMPM, Chaves County, New Mexico.

(4) That the applicant seeks authority to expand said waterflood project by converting to water injection the

following-described wells located in Section 16, Township 14 South, Range 31 East, NMPM, Chaves County, New Mexico:

Drickey Queen Sand Unit Tract 34 Well No. 1, located in Unit B of Section 16,

Drickey Queen Sand Unit Tract 36 Well No. 1, located in Unit P of Section 16.

(5) That the applicant ^{seeks} also/authority to drill the following-described well for water injection in Section 16, Township 14 South, Range 31 East, NMPM, Chaves County, New Mexico:

Drickey Queen Sand Unit Tract 33 Well No. 2-W, to be located 1325 feet from the South line and 1325 feet from the West line of Section 16.

(6) That the portion of Section 16, Township 14 South, Range 31 East, NMPM, Chaves County, New Mexico, that is included within the Drickey Queen Sand Unit Area is offset on all sides by waterflood projects.

(7) That the applicant has entered into Line Well Agreements with/operators of all of the said offsetting waterflood projects.

(8) That Line Well Agreements provide for water injection through the three subject wells.

(9) That approval of the subject application is necessary in order to protect correlative rights and prevent waste.

IT IS THEREFORE ORDERED:

(1) That the applicant, Cities Service Oil Company, is hereby authorized to expand its Drickey Queen Sand Unit Waterflood Project by converting to water injection the following-described wells located in Section 16, Township 14 South, Range 31 East, NMPM, Chaves County, New Mexico:

Drickey Queen Sand Unit Tract 34 Well No. 1, located in Unit B of Section 16,

Drickey Queen Sand Unit Tract 36 Well No. 1, located in Unit P of Section 16.

(2) That the applicant, Cities Service Oil Company, is hereby authorized to expand its Drickey Queen Sand Unit Waterflood Project by drilling the following-described well for water

-3-
CASE No. 2769

injection in Section 16, Township 14 South, Range 31 East, NMPM,
Chaves County, New Mexico:

Drickey Queen Sand Unit Tract 33 Well No. 2-W, to be
located 1325 feet from the South line and 1325 feet
from the West line of Section 16.

(3) That jurisdiction of this cause is retained for the
entry of such further orders as the Commission may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year herein-
above designated.

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

JACK M. CAMPBELL, Chairman

E. S. WALKER, Member

A. L. PORTER, Jr., Member & Secretary



OFFICE OCC

CITIES SERVICE OIL COMPANY FEB 13 AM 8 24

BOX 97

HOBBS, NEW MEXICO

February 15, 1963

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

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

Gentlemen:

Cities Service Oil Company, operator of the Dickey Queen Sand Unit, Caprock Queen Pool, Chaves County, New Mexico, requests administrative approval for the conversion of the following wells:

Tract 34 Well J, Unit B, Section 16, T-14S, R-31E
Tract 36 Well L, Unit P, Section 16, T-14S, R-31E.

It is further requested that approval be given to drill the following injection well:

Tract 33 Well 2-W, Unit k, Section 16, T-14S, R-31E.

These wells do not comply with requirements for conversion as provided in Rule 701 but are necessary to protect correlative rights with the Phillips Petroleum Company's East Gap Unit. The New Mexico Oil Conservation Commission Order H-2336 authorized 17 wells in the East Gap Unit to be converted simultaneously, thus to cooperate and protect correlative rights it will be necessary for the Dickey Queen to inject into these wells. Phillips and Phillips have selected these wells and provided for actually completed before long the conversion of the wells in the East Gap Unit. Phillips has agreed to convert the wells and therefore requests to expedite the conversion of the wells to maintain the balance.

The Dickey Queen Unit is a large unit and the wells in the unit are necessary to maintain the balance of the unit and to protect the correlative rights of the owners of the unit.

James H. Phillips, President, Phillips Petroleum Company
Dallas, Texas

600-2769

Oil Conservation Commission

Page -2-

Very truly yours,

CITIES SERVICE OIL COMPANY



E. F. Motter
Asst. Division Engineer

EFM:iar

Attachment

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

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

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

Phillips Petroleum Company
P.O. Box 2105
Hobbs, New Mexico

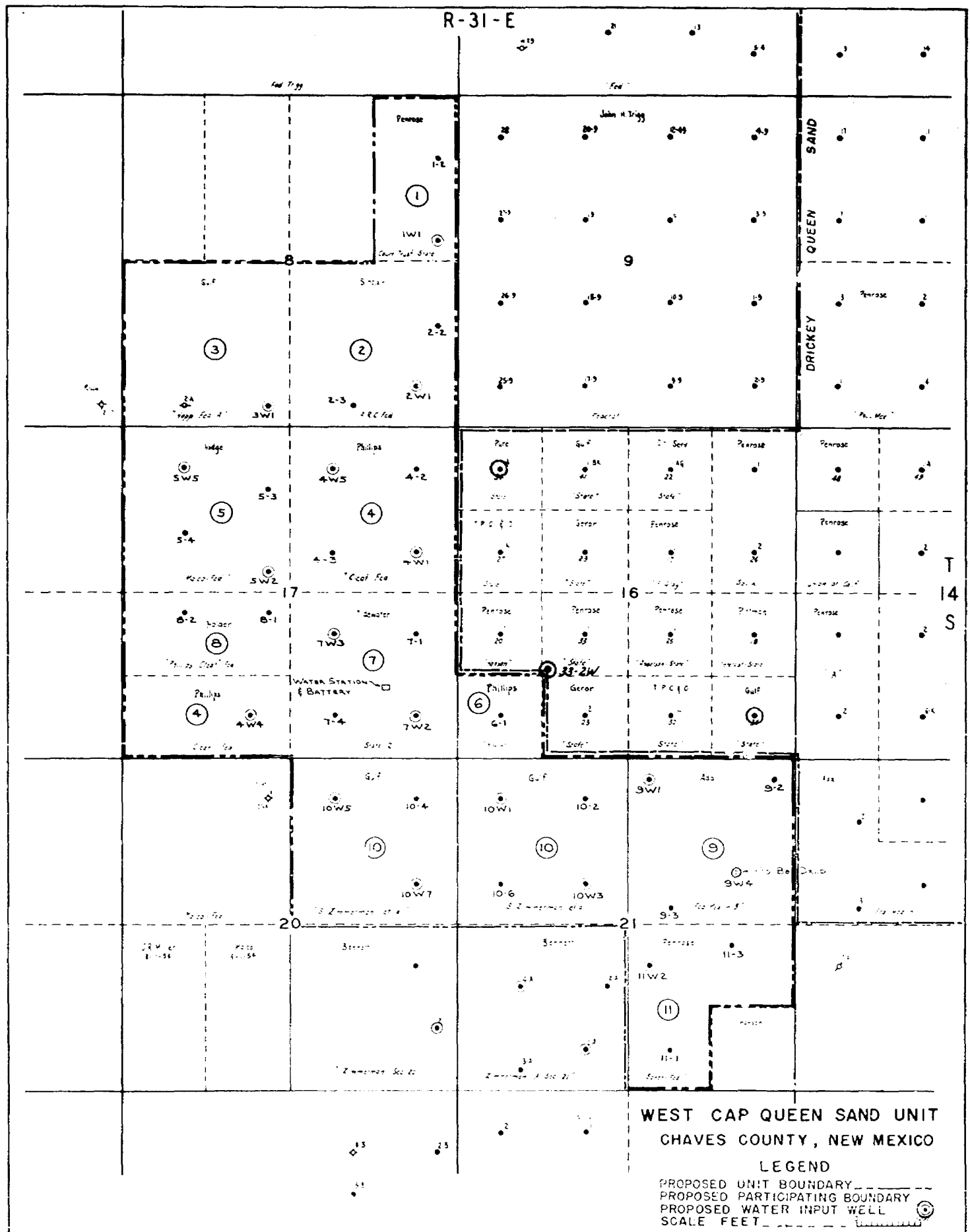
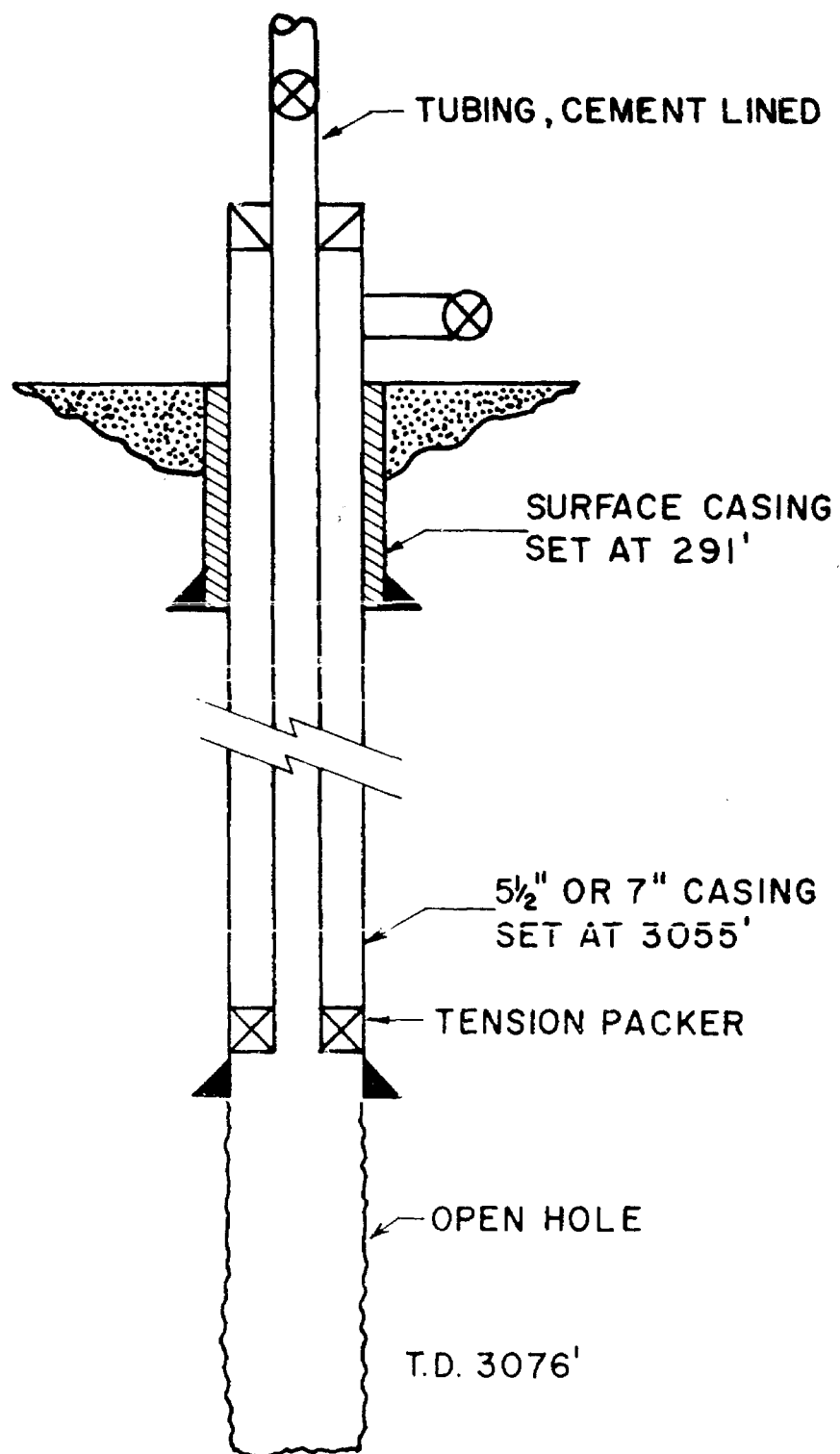


FIGURE ----- 1

CITIES SERVICE OIL COMPANY



WATER INJECTION WELL SCHEMATIC

DRICKEY QUEEN SAND UNIT

Rev 2-7

R-31-E

WEST CAP QUEEN SAND UNIT
CHAVES COUNTY, NEW MEXICO

LEGEND
PROPOSED UNIT BOUNDARY
PROPOSED PARTICIPATING BOUNDARY
PROPOSED WATER INPUT WELL
SCALE FEET

WEST GAP QUEEN SAND UNIT
CHAVES COUNTY, NEW MEXICO

LEGEND

PROPOSED UNIT BOUNDARY _____
 PROPOSED PARTICIPATING BOUNDARY _____
 PROPOSED WATER INPUT WELL _____
 SCALE FEET _____

FIGURE _ _ _ _ _ 1

LINE WELL AGREEMENT

BEFORE EXAMINER NUTTER	
OR CONVEYANCE	MISSION
CASH	

THIS AGREEMENT, made and entered into this _____ day of _____, 19____, by and between CITIES SERVICE OIL COMPANY, a corporation with offices in the Cities Service Building, Bartlesville, Oklahoma, as Operator of the Drickey Queen Sand Unit, hereinafter referred to as "Cities"; and PHILLIPS PETROLEUM COMPANY, whose address is Bartlesville, Oklahoma, as Operator of the West Cap Queen Sand Unit, hereinafter referred to as "Phillips".

WITNESSETH: THAT

WHEREAS, Cities is the Operator of the Drickey Queen Sand Unit, covering among other lands, all of Section 16 except the Southwest Quarter Southwest Quarter (SW/4 SW/4), 14S-31E, Chaves County, New Mexico.

WHEREAS, Phillips is the Operator of the West Cap Queen Sand Unit, covering among other lands, the Southwest Quarter Southwest Quarter (SW/4 SW/4) Section 16; East Half (E/2) Section 17; Northeast Quarter (NE/4) Section 21; and the North Half (N/2) Section 22, 14S-31E, Chaves County, New Mexico.

WHEREAS, the above described leaseholds are currently producing from the Queen Sand Formation at a depth of approximately 2940 feet and the parties hereto mutually desire to make an effort to increase substantially the ultimate recovery of oil from the Queen Sand.

NOW, THEREFORE, in consideration of the mutual covenants and agreements hereinafter contained to be completed and performed by the parties hereto, it is agreed as follows:

1. Cities shall convert, at its sole cost, risk and expense the following wells for the injection of water into the Queen Sand Formation.
 - A. Approximate Center of the Northwest Quarter Northwest Quarter (C NW/4 NW/4) of Section 16-14S-31E, Chaves County, New Mexico.
 - B. Approximate Center of the Southeast Quarter Southeast Quarter (C SE/4 SE/4) of Section 16-14S-31E, Chaves County, New Mexico.
2. Cities agrees to drill, at its sole cost, risk and expense, the following well for the injection of water into the Queen Sand Formation:
 - C. Approximately Thirteen Hundred and Twenty Feet (1320') from the South Line and Thirteen Hundred and Twenty Feet (1320') from the West Line of Section 16-14S-31E, Chaves County, New Mexico.
3. Phillips shall convert, at its sole cost, risk and expense, the following wells for the injection of water into the Queen Sand Formation:
 - D. Approximate Center of the Southeast Quarter Northeast Quarter (C SE/4 NE/4) Section 17-14S-31E, Chaves County, New Mexico.
 - E. Approximate Center of the Northwest Quarter Northeast Quarter (C NW/4 NE/4) Section 21-14S-31E, Chaves County, New Mexico.

The locations of the above wells are also shown on the plat attached hereto as Exhibit "A" and made a part hereof.

4. It is agreed that Phillips shall have full and complete access to the water injection well at location "C" and the records thereof at all times and shall have the right to receive a copy of any engineering reports made in connection with same.

5. Each party shall own, operate and maintain its respective injection wells and shall advance all costs of converting and equipping said water injection wells.

6. Upon completion of the water injection well at location "C" and within fifteen (15) days from receipt of a detailed statement of cost of said well, Phillips agrees to reimburse Cities for one-fourth ($1/4$) of the cost and expense incurred in drilling, completing and equipping (including one-fourth ($1/4$) of all costs attributable to any well which Cities commenced but was unable to satisfactorily complete at or near said location) said well. It is understood that said well is to be wholly owned by Cities. Cities shall install and maintain a meter at or near said well to record the volume of water injected into the Queen Sand Formation. It is agreed that initially, four producing oil wells will be served by the injection well at location "C". As long as all four wells continue to produce, Phillips shall pay Cities monthly as billed for one-fourth ($1/4$) of the water injected into said well at the rate of two and one-half ($2\frac{1}{2}$) cents per barrel, which sum shall represent Phillips' share of the cost and expense of operating and maintaining said water injection well in the Queen Sand Formation. In the event that any of the four wells ceases to produce oil, then operation and maintenance charges shall be charged on the basis of the remaining producing wells being served by said injection well at the rate of two and one-half ($2\frac{1}{2}$) cents per barrel. A statement of Cities' charges covering the water injected into said well each month shall be made to Phillips and shall be payable by Phillips within ten (10) days after receipt thereof.

7. Any expense incurred in "extraordinary maintenance" as the term is understood in the industry, on said wells shall not be included in the amount set forth above. Phillips shall reimburse Cities for its proportionate share of such "extraordinary maintenance" cost in the event such maintenance is necessary. No "extraordinary maintenance" costs in excess of \$1,500.00 shall be performed on the well at location "C" without the written consent of Phillips.

8. The cost of plugging and abandoning any water injection well shall be at the sole cost, risk, expense and liability of the drilling party unless the other party exercises its option under Paragraph 11, in which case the party exercising the option shall plug and abandon the well or wells at its sole cost, risk and expense.

9. The water injection wells provided for by this agreement shall be completed within one hundred twenty (120) days from the date of the last execution of this agreement between the parties hereto.

10. The rate of injection and the pressure maintained shall be adjusted as mutually agreed upon between the parties hereto, it being understood that neither party shall be required to inject water at a rate which requires a pressure in excess of the manufacturer's limits placed on the injection equipment, nor at a pressure which causes formation parting.

11. This agreement shall become effective on the date of the last execution and shall continue in full force and effect for a minimum period of one year from the date water injection commences and thereafter may be terminated by either party hereto on giving sixty (60) days written notice to the other party. The party giving such notice shall not be liable for any cost or liability accruing hereunder after the expiration of said sixty (60) day period. In the event either party elects to abandon any water injection well provided for by this agreement, said party shall notify the other party of such election in writing and the party receiving such notice shall have, for a period of thirty (30) days from the receipt of such notice, an option to take over said injection well, together with the pipe and equipment therein and thereon by agreeing to pay the estimated value of the salvable pipe and equipment and to assume full responsibility, cost, expense and liability for the proper plugging of said well upon ultimate abandonment. It is further agreed that should said option be exercised, to the extent that it has the right to do so, the abandoning party shall assign to the non-abandoning party, its right to continue operation of said injection well, it being understood that should the non-abandoning party desire to continue operations under the provisions of this paragraph, such party will obtain any consent necessary for continued water injection. Any notice required to be given hereunder shall be deemed to have been given when such notice in writing shall have been deposited in the United States Mail, postage prepaid, and addressed to the parties at the following addresses:

Cities Service Petroleum Company
Cities Service Building
Bartlesville, Oklahoma

Phillips Petroleum Company
Bartlesville, Oklahoma

12. This contract shall in no way affect the obligation of any party hereto to produce the oil from its own wells, and each party shall be entitled to all production from its own wells and leases. The duties, liabilities and obligations of the parties hereto are intended to be several and not joint or collective, and nothing herein contained shall ever be construed to impose a partnership obligation or

liability with regard to any of the parties hereto. Each party shall be individually responsible for only its obligation, as set out herein, and shall be liable only for its own costs and expenses incurred in complying with the terms of this agreement.

While each of the parties hereto recognizes that its rights and liabilities hereunder are several and not joint or collective, if solely for Federal Income Tax purposes, and for no other reason, the parties should be regarded as partners or joint venturers, and the operations carried on under this agreement be required to be treated as a partnership as defined in Section 761 of the Internal Revenue Code of 1954 for Federal Income Tax purposes, each and all of the parties hereto do hereby elect to exclude such operations from the application of all of subchapter K of the Internal Revenue Code of 1954 as provided in Section 761 (a) thereof.

13. Failure to perform any of the obligations hereof occasioned by any cause, accident or occurrence beyond the control of the party charged therewith, or occasioned by any valid orders, rules or regulations of duly constituted authorities shall not be considered as a breach of this agreement.

14. The terms and provisions of this agreement shall inure to the benefit of and be binding upon the parties hereto, their successors and assigns.

15. This instrument may be executed in counterparts by one or more parties and shall have the same effect as if each and every party had executed such counterpart; provided, however, that this agreement shall not become effective and binding upon the parties hereto until all of the said parties have executed this instrument or a counterpart thereof.

16. Cities, as Operator of the Drickey Queen Sand Unit, and Phillips, as Operator of the West Cap Unit, shall secure the consent and approval of its Non-Operators with respect to the performance intended under this agreement and shall indemnify and hold each other harmless with respect thereto. The parties hereto shall, upon request, furnish satisfactory evidence of such approval.

IN WITNESS WHEREOF, the parties hereto have executed this agreement as of the day, month and year first above written.

WITNESS:

CITIES SERVICE OIL COMPANY

By _____
Manager of Production

PHILLIPS PETROLEUM COMPANY

By _____

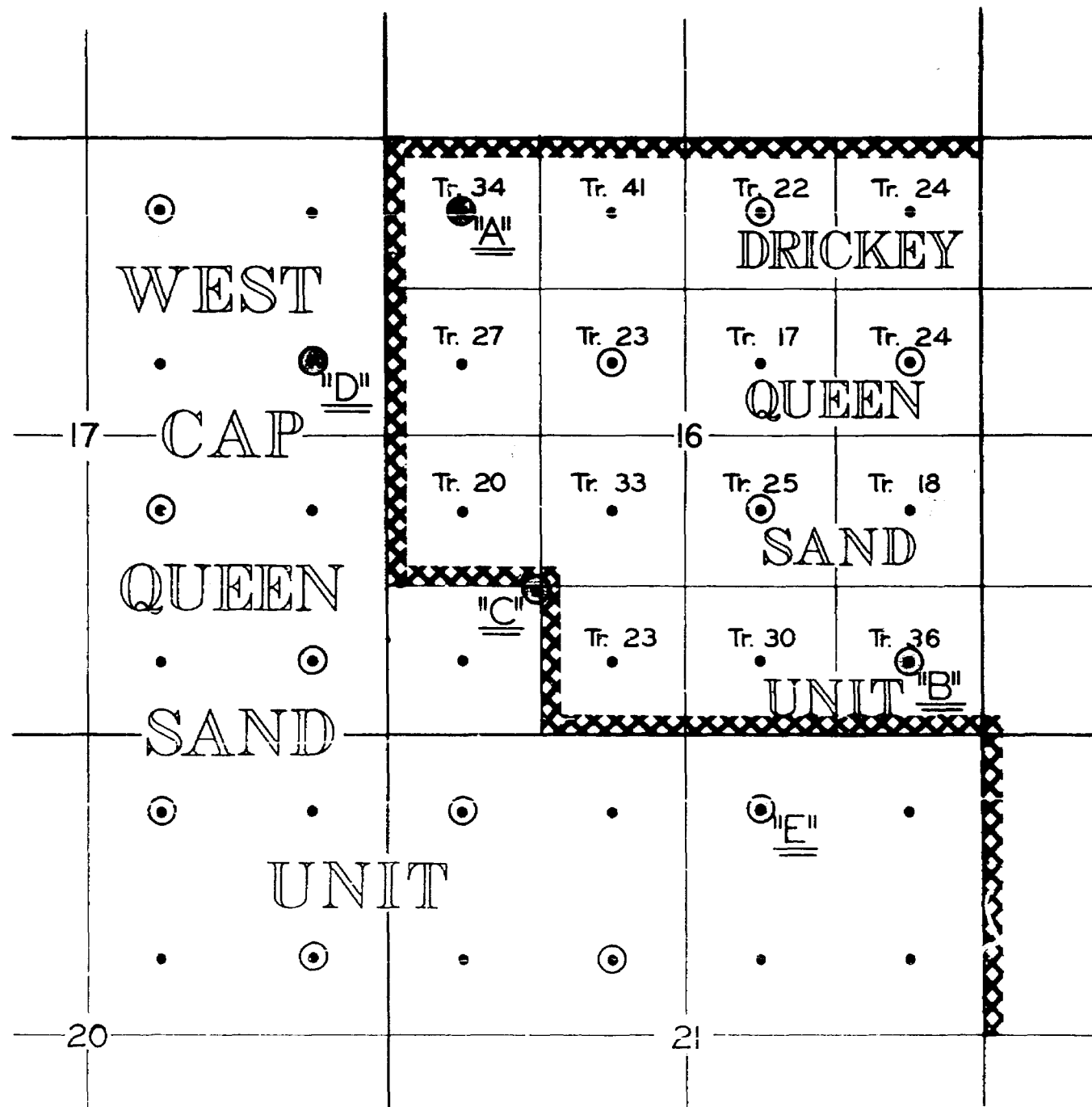


EXHIBIT "A"
CAPROCK FIELD

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

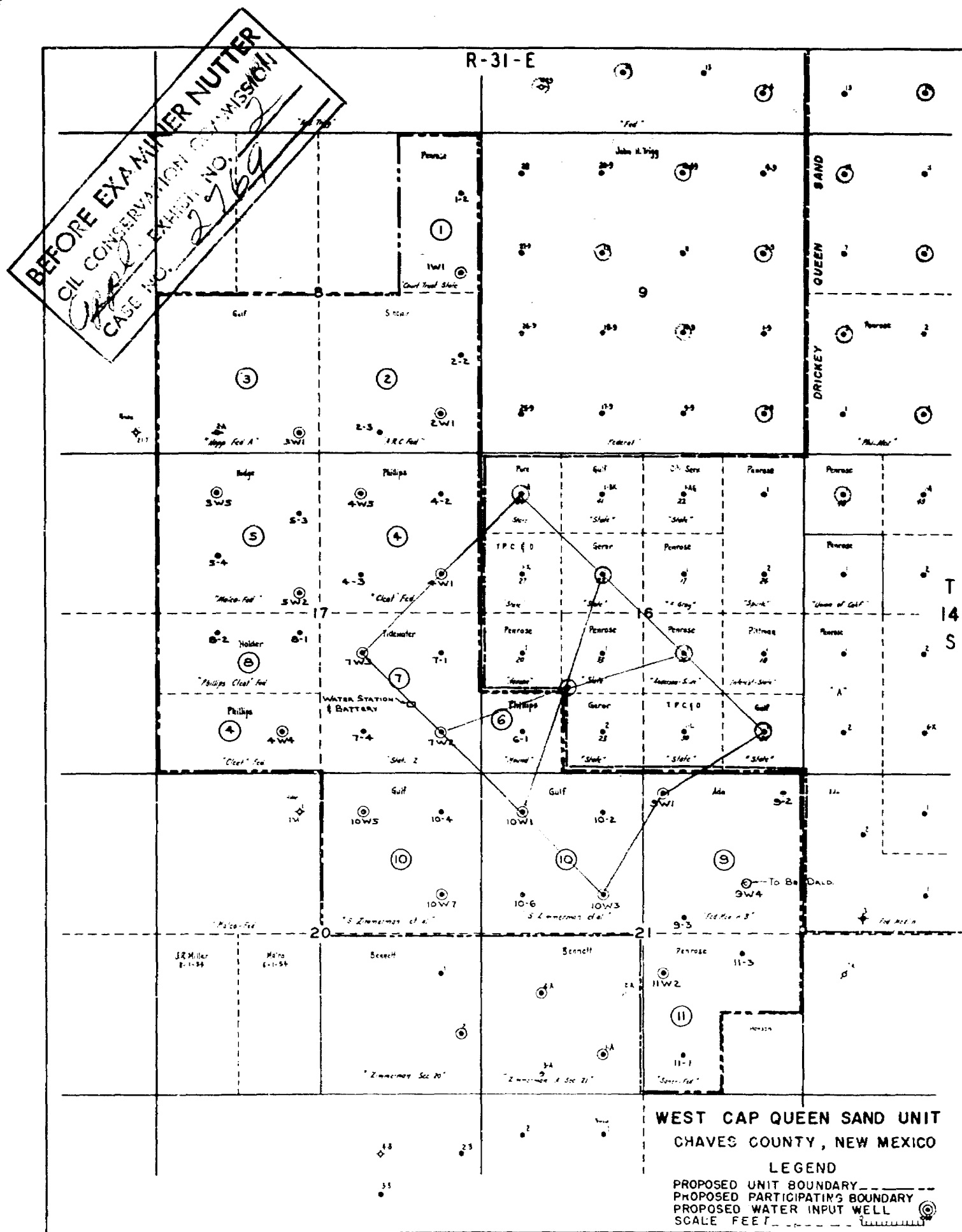


FIGURE - - - - 1



Case 2769
MAIN OFFICE OCC

CITIES SERVICE OIL COMPANY

BOX 97

HOBBS, NEW MEXICO

February 15, 1963

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

Attention: 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 for the conversion of the following wells:

Tract 34 Well 1, Unit B, Section 16, T-14S, R-31E
Tract 36 Well 1, Unit P, Section 16, T-14S, R-31E.

It is further requested that approval be given to drill the following injection well:

Tract 33 Well 2-W, Unit k, Section 16, T-14S, R-31E.

These wells do not comply with requirements for conversion as provided in Rule 701 but are necessary to protect correlative rights with the Phillips Petroleum Company's West Cap Unit. New Mexico Oil Conservation Commission Order P-2336 authorizes 17 wells in the West Cap Unit to be converted simultaneously, thus to cooperate and protect correlative rights it will be necessary for the Drickey Unit to inject into these wells. Cities and Phillips have entered into a line agreement providing for mutually accepted terms along the common line of the two units. In the event these wells cannot be approved administratively, Cities therefore requests you are not failing at the earliest possible date to consider this matter.

The injection wells will be equipped with cement lined tubing and a packer to prevent possible encroachment of fresh water zones in the event of a casing leak (see attached schematic diagram).

Copies of this application were sent to our other operators and to the State Engineer.

DOCKET MAILED

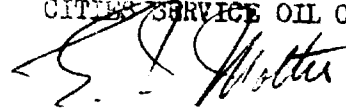
Date 2/25/63
JR

Oil Conservation Commission

Page -2-

Very truly yours,

CITIZENS SERVICE OIL COMPANY



E. F. Kotter
Asst. Division Engineer

EFM:iar

Attachment

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

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

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

Phillips Petroleum Company
P.O. Box 2105
Hobbs, New Mexico

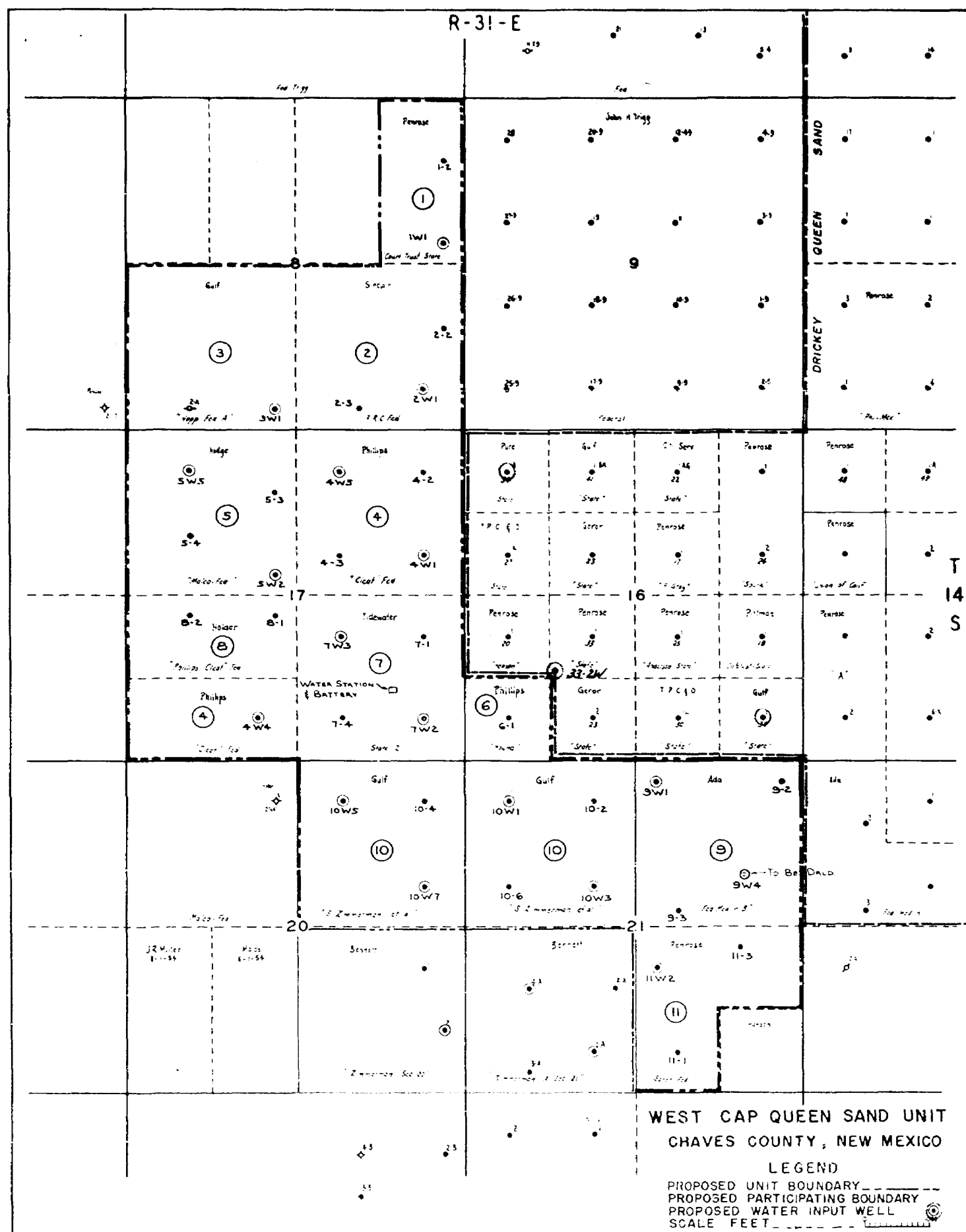
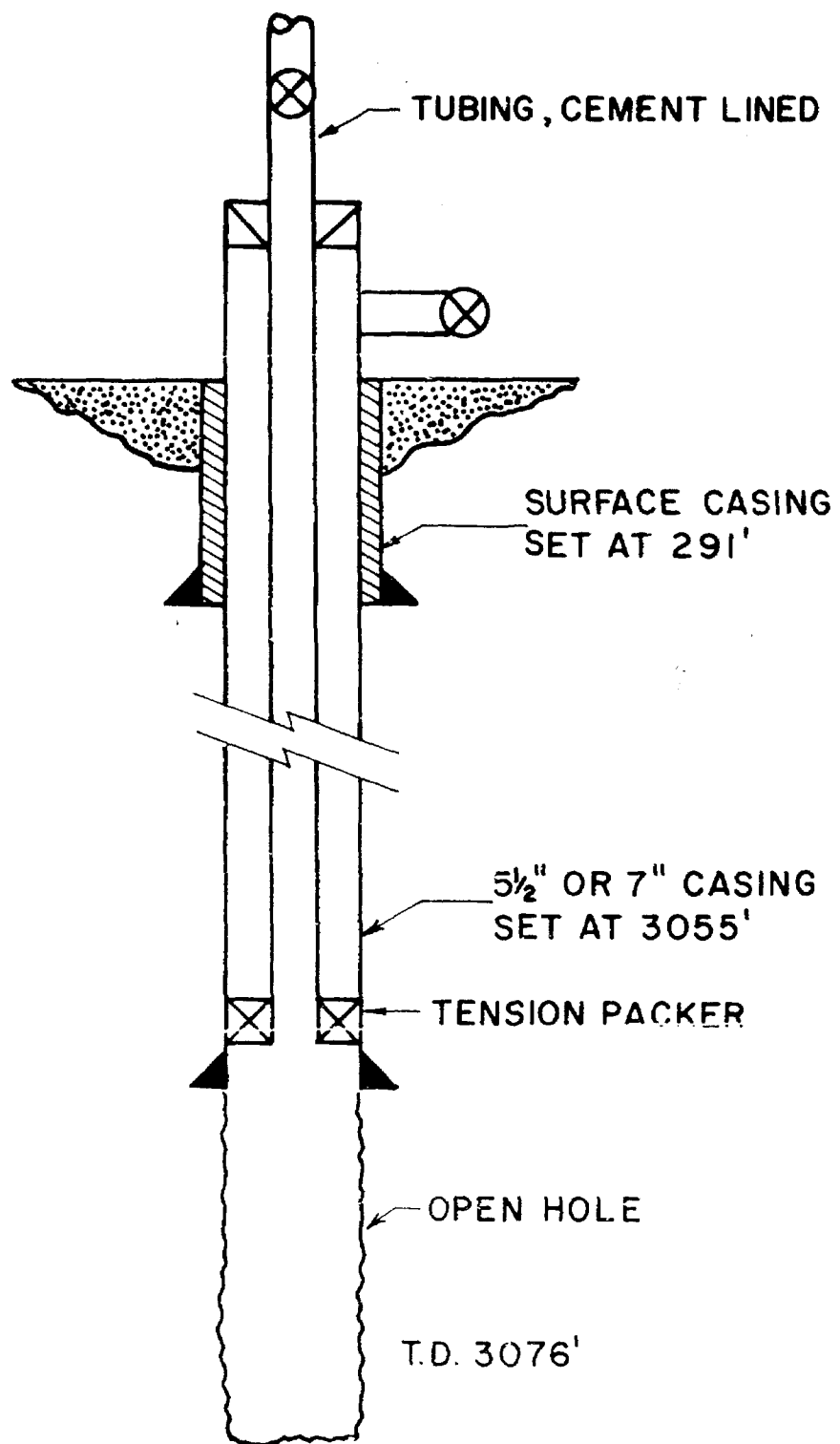


FIGURE ----- 1

CITIES SERVICE OIL COMPANY



WATER INJECTION WELL SCHEMATIC

DRICKEY QUEEN SAND UNIT

6/26/66

No. 8-63

DOCKET: EXAMINER HEARING - THURSDAY - MARCH 7, 1963

9 A. M. - OIL CONSERVATION COMMISSION CONFERENCE ROOM,
STATE LAND OFFICE BUILDING, SANTA FE, NEW MEXICO

The following cases will be heard before Daniel S. Nutter, Examiner, or
Elvis A. Utz, as alternate examiner:

CASE 2763: (Continued)

Application of Sunray DX Oil Company for the creation of a Strawn Gas Pool and for Special Temporary Pool Rules, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks the creation of a new Strawn Gas Pool for its New Mexico State "AH" Well No. 1, located in Unit K of Section 30, Township 18 South, Range 23 East, Eddy County, New Mexico, and the establishment of temporary pool rules therefor, including a provision for 640-acre proration units.

CASE 2766: Application of Tom Brown Drilling Company, Inc., for a unit agreement, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval of the Siegreist Draw Unit Area, comprising 7,578 acres, more or less, of State and fee lands in Township 19 South, Range 23 East, Eddy County, New Mexico.

CASE 2767: Application of Tom Brown Drilling Company, Inc., for a unit agreement, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval of the Antelope Sink Unit Area, comprising 7,561 acres, more or less, of State and fee lands in Township 19 South, Ranges 23 and 24 East, Eddy County, New Mexico.

CASE 2768: Application of Ernest A. Hanson and Harold Kersey for special nomenclature, Eddy County, New Mexico. Applicants, in the above-styled cause, seek an order extending the vertical limits of that portion of the Red Lake (Grayburg-San Andres) Pool underlying the NW/4 of Section 14, Township 17 South, Range 28 East, Eddy County, New Mexico, to include therein the Queen formation.

CASE 2769: Application of Cities Service Oil Company for three water injection wells, Chaves County, New Mexico. Applicant, in the above-styled cause, seeks authority to convert the Pure State No. 1 and the Gulf State Well No. 1 located in Units D and P, respectively, of Section 16, Township 14 South, Range 31 East, Chaves County, New Mexico, to water injection, offsetting Phillips Petroleum Company's West Cap Waterflood Project. Applicant further seeks authority to drill an additional water injection well at the southwest corner of Unit K of said Section 16.

-2-

Docket No. 8-63

CASE 2770:

Application of El Paso Natural Gas Company for permission to conduct certain special well tests, San Juan and Rio Arriba Counties, New Mexico. Applicant, in the above-styled cause, seeks authority to conduct maximum pressure build-up tests on 27 wells in the Blanco-Mesaverde, Basin-Dakota, Aztec-Pictured Cliffs, Ballard-Pictured Cliffs, and South Blanco-Pictured Cliffs Gas Pools, San Juan and Rio Arriba Counties, New Mexico. Applicant further seeks exception to the annual well-testing requirements of Order R-333-F for said wells during the testing period, as well as exception to the under-age and overage balancing requirements of Order R-1670. Further, applicant seeks authority to transfer said wells' allowables to other wells on the same basic lease for production. Applicant also seeks an administrative procedure for the designation of such substitute wells for testing as may be deemed necessary.

iqg/

OIL CONSERVATION COMMISSION
SANTA FE, NEW MEXICO

Date 3-7-63

CASE 2769

Hearing Date 3-7-63

My recommendations for an order in the above numbered cases are as follows:

Enter an order authorizing Cities Service Oil Company to convert to water injection in its Dickey Queen Sand Unit Water Flood Project, Caprock Queen Pool, Chaves County, N. Mex.:

Tract 34 Well No 1, Unit B, Sec 16, Twp 14S R. 3E
Tract 36 Well No 1, Unit P, Sec 16 Twp 14S R. 3E

Also authorize the drilling for water injection of

Tract 33 Well No 2-W, ~~the~~ Section 16, Twp 14S R. 3E
→ at a pt 1325' ESL & 1325' FWL of

Use as a finding the injection of water into these 3 wells is necessary to protect correlative rights and is in accordance with the Time Well Agreement ^{between} of Cities Service and ~~Chenier~~ the offset operators.
Examiner

GOVERNOR
JACK M. CAMPBELL
CHAIRMAN

State of New Mexico

Oil Conservation Commission



**LAND COMMISSIONER
E. B. JOHNNY WALKER
MEMBER**

STATE GEOLOGIST
A. L. PORTER, JR.
SECRETARY - DIRECTOR

P. O. BOX 871
SANTA FE

March 13, 1963

Mr. Jason Kellahin
Kellahin & Fox
Attorneys at Law
Post Office Box 1713
Santa Fe, New Mexico

Re: Case No. 2769
Order No. R-2448
Applicant:
Cities Service Oil Company

Dear Sir:

Enclosed herewith are two copies of the above-referenced Commission order recently entered in the subject case.

Very truly yours,

A. L. Porter, Jr.

A. L. PORTER, Jr.
Secretary-Director

12/

Carbon copy of order also sent to:

Hobbs OCC X

Artesia OCC x

Aztec OCC _____

OTHER _____

BEFORE THE OIL CONSERVATION COMMISSION
OF THE STATE OF NEW MEXICO

IN THE MATTER OF THE HEARING
CALLED BY THE OIL CONSERVATION
COMMISSION OF NEW MEXICO FOR
THE PURPOSE OF CONSIDERING:

CASE No. 2769
Order No. R-2448

APPLICATION OF CITIES SERVICE OIL
COMPANY FOR THREE WATER INJECTION
WELLS, CHAVES COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 o'clock a.m. on March 7, 1963, at Santa Fe, New Mexico, before Daniel S. Mutter, Examiner duly appointed by the Oil Conservation Commission of New Mexico, hereinafter referred to as the "Commission," in accordance with Rule 1214 of the Commission Rules and Regulations.

NOW, on this 13th day of March, 1963, the Commission, a quorum being present, having considered the application, the evidence adduced, and the recommendations of the Examiner, Daniel S. Mutter, and being fully advised in the premises,

FINDS:

(1) That due public notice having been given as required by law, the Commission has jurisdiction of this cause and the subject matter thereof.

(2) That the applicant, Cities Service Oil Company, is the operator of the Drickey Queen Sand Unit which comprises, in part, a portion of Section 16, Township 14 South, Range 31 East, NMPM, Caprock-Queen Pool, Chaves, County, New Mexico.

(3) That, by Order No. R-1128 and subsequent orders, the Commission authorized Cities Service Oil Company to conduct the Drickey Queen Sand Unit Waterflood Project in Township 14 South, Range 31 East, NMPM, Chaves County, New Mexico.

(4) That the applicant seeks authority to expand said waterflood project by converting to water injection the following-described wells located in Section 16, Township 14 South, Range 31 East, NMPM, Chaves County, New Mexico:

Drickey Queen Sand Unit Tract 34 Well No. 1, located
in Unit B of Section 16;

Drickey Queen Sand Unit Tract 36 Well No. 1, located
in Unit P of Section 16.

-2-

CASE No. 2769
Order No. R-2448

(5) That the applicant also seeks authority to drill the following-described well for water injection in Section 16, Township 14 South, Range 31 East, NMPM, Chaves County, New Mexico:

Drickey Queen Sand Unit Tract 33 Well No. 2-W, to be located 1325 feet from the South line and 1325 feet from the West line of Section 16.

(6) That the portion of Section 16, Township 14 South, Range 31 East, NMPM, Chaves County, New Mexico, that is included within the Drickey Queen Sand Unit Area is offset on all sides by waterflood projects.

(7) That the applicant has entered into Line Well Agreements with the operators of all of the said offsetting waterflood projects.

(8) That Line Well Agreements provide for water injection through the three subject wells.

(9) That approval of the subject application is necessary in order to protect correlative rights and prevent waste.

IT IS THEREFORE ORDERED:

(1) That the applicant, Cities Service Oil Company, is hereby authorized to expand its Drickey Queen Sand Unit Waterflood Project by converting to water injection the following-described wells located in Section 16, Township 14 South, Range 31 East, NMPM, Chaves County, New Mexico.

Drickey Queen Sand Unit Tract 34 Well No. 1, located in Unit B of Section 16;

Drickey Queen Sand Unit Tract 36 Well No. 1, located in Unit P of Section 16.

(2) That the applicant, Cities Service Oil Company, is hereby authorized to expand its Drickey Queen Sand Unit Waterflood Project by drilling the following-described well for water injection in Section 16, Township 14 South, Range 31 East, NMPM, Chaves County, New Mexico:

Drickey Queen Sand Unit Tract 33 Well No. 2-W, to be located 1325 feet from the South line and 1325 feet from the West line of Section 16.

(3) That jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

-3-
CASE No. 2769
Order No. B-2448

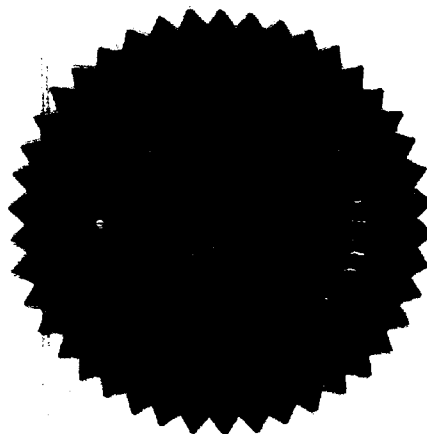
DONE at Santa Fe, New Mexico, on the day and year herein-
above designated.

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

Jack M. Campbell
JACK M. CAMPBELL, Chairman

E. S. Walker
E. S. WALKER, Member

A. L. Porter, Jr.
A. L. PORTER, Jr., Member & Secretary



esr/

DEARNLEY-MEIER REPORTING SERVICE, Inc.

FARMINGTON, N. M.
PHONE 325-1182

SANTA FE, N. M.
PHONE 983-3971

ALBUQUERQUE, N. M.
PHONE 243-6664

BEFORE THE
OIL CONSERVATION COMMISSION
Santa Fe, New Mexico
March 7, 1963

EXAMINER HEARING

IN THE MATTER OF:

Application of Cities Service Oil Company for three water injection wells, Chaves County, New Mexico.) CASE 2769
Applicant, in the above-styled cause, seeks authority to convert the Pure State No. 1 and the Gulf State Well No. 1 located in Units D and P, respectively, of Section 16, Township 14 South, Range 31 East, Chaves County, New Mexico, to water injection, offsetting Phillips Petroleum Company's West Cap Waterflood Project. Applicant further seeks authority to drill an additional water injection well at the southwest corner of Unit K of said Section 16.

BEFORE: Daniel S. Nutter, Examiner

TRANSCRIPT OF HEARING

MR. NUTTER: We will call next Case 2769.

MR. DURRETT: Application of Cities Service Oil Company for three water injection wells, Chaves County, New Mexico.

MR. KELLAHIN: Jason Kellahin, Kellahin and Fox, representing the Applicant. We will have one witness, Mr. Motter.

(Witness sworn.)

E. F. MOTTER

called as a witness herein, having been first duly sworn on oath, testified as follows:

DIRECT EXAMINATION

BY MR. KELLAHIN:

Q Would you state your name?

A E. F. Motter.

Q By whom are you employed and in what position?

A Cities Service Oil Company, Division Engineer in the Texas-New Mexico Division.

Q Have you previously testified before the Oil Conservation Commission and made your qualifications as a petroleum engineer a matter of record?

A Yes, I have.

MR. KELLAHIN: Are the witness' qualifications acceptable?

MR. NUTTER: Yes, sir, they are.

Q (By Mr. Kellahin) Are you familiar with the application of Cities Service Oil Company in Case Number 2769?

A Yes, I filed the application.

Q Briefly, what is proposed by Cities Service's application?

A We propose to convert two wells to injection; namely, Tract 34, Well 1, Unit D, Section 16, Township 14 South, Range 31 East; and Tract 36, Well 1, Unit F, Section 16, Township 14 South, Range 31 East, all in Chaves County, New Mexico. We further request that permission be granted to drill an injection well to be known as Tract 33, Well 2-W at the southwest corner of Unit

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K, Section 16, Township 14 South, 31 East.

Q Do you have a plat showing this area?

A Yes, I have.

(Whereupon, Applicant's Exhibit No. 1 marked for identification.)

Q Referring to what has been marked as Exhibit No. 1, will you state what is shown on that exhibit?

A This Exhibit No. 1 basically outlines in a red circle the three proposed injection wells.

Q Does it show the ownership and other information, too?

A Yes, it indicates the outline of the Phillips Petroleum Company West Cap Unit, the Drickey-Queen Sand Unit, and the John H. Triggs property to the north.

Q At this point, the Drickey-Queen Sand Unit and the Phillips West Cap Queen Sand Unit are adjacent, is that correct?

A Yes, that is correct. If it might be appropriate at this time, New Mexico Oil Conservation Commission Order R-2336 authorized the conversion of seventeen wells on the Phillips West Cap Unit in order to prevent migration of oil back and forth across the common unit lines; and also to protect correlative rights it will be necessary for the Drickey-Queen Sand Unit to convert these three wells or convert two wells and drill one, to prevent the migration of oil.

Q Has Phillips started injection on these seventeen wells as yet?



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A No, we have not, but we anticipate injection in four to six weeks.

Q In order to protect your correlative rights, will it be necessary that the wells proposed here be put on injection?

A In our opinion, it will be.

Q Do you have a line agreement with John H. Trigg?

A Yes.

(Whereupon, Applicant's Exhibit No. 2 marked for identification.)

A Exhibit No. 2 is basically the same as Exhibit No. 1, but with an overlay in a red pencil with an attempt to show the injection pattern which will result from this proposed drilling of the well in the southwest corner of Unit K, Section 16. A little background on this. At the outset of the Drickey-Queen Sand Unit, Phillips chose not to put their 40 acres in the Southwest Southwest of 16 into the Drickey-Queen Sand Unit.

Approximately a year or so later, we realized that with this 40 acres out of there, this put whoever was going to operate the West Cap Unit, the so-called Drickey-Queen Sand Unit, in an awkward position, in that the Drickey Unit would have two injection wells which would be the Northwest of the Southwest, and also the Southeast of the Southwest, under the present injection pattern would be injection wells.

Our unit agreement, which is on file with the Commission, does not provide for a reduction of area. It would be necessary

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to get a full hundred percent of the working interest owners to change the unit agreement to provide for a reduction of area to put 40 acres, either one of these two, possibly, in the Phillips Unit; and thus we would have had an equalization on the common lines and could have followed the same injection pattern.

Consequently, about the time this was brought to the attention of Phillips, we found out they had already been in Washington and had proposed this agreement as it is seen here to the U.S.G.S. and they thought that perhaps another solution could be worked out, rather than going back and changing this, putting the 40 acres in with the Drickey Unit. The Drickey Unit Agreement does provide for an enlargement of the area but does not provide for reduction.

Q Is it your understanding that the West Cap Queen agreement provides for a reduction?

A It's written almost identical to ours and it doesn't provide for a reduction, also.

Q Have you been able to reach a line agreement with Phillips as operator of the West Cap Queen?

A Yes, we have a line agreement between Phillips and Cities Service. Basically, this line agreement allows for the conversion of certain wells and the drilling of the 33 Well 2-W. Phillips and Cities Service have agreed that Cities Service will pay three-fourths of the interest of this well, Phillips one-fourth, and Cities Service will be the operator. It probably will

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be drilled some ten foot inside the corner of Unit K, so it will be on the Drickey-Queen Unit, Sand Unit property.

Q Will Phillips participate in the injection expense?

A Yes.

Q In your opinion, will the proposal made by Cities Service in this case adequately protect the West Cap Queen Sand Unit?

A Yes, in my opinion this is a reasonable solution to this problem, probably the only solution to this problem.

Q In your opinion, will it adequately protect the correlative rights of the operator of the Phillips properties?

A Yes, it will.

Q Were Exhibits 1 and 2 prepared by you and under your supervision?

A Yes, they were.

(Whereupon, Applicant's Exhibit No. 3 marked for identification.)

Q And Exhibit 3 is the line agreement which has been reached by your company and Phillips Petroleum Company as operators of the two units?

A Yes. I might add that the agreement has been signed by Phillips but not signed by Cities because of -- if I may refer to Section 9, it calls for a well to be completed within 120 days of the execution of this, and we felt it might be necessary to have approval of this Commission prior to signing that line agreement.

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I would like to add one more thing. On our original application, the schematic showing water injection well, it shows 5-1/2 or 7-inch casing. We propose to use 4-1/2 inch casing on the injection well.

MR. KELLAHIN: At this time I would like to offer in evidence Exhibits 1, 2, and 3.

MR. NUTTER: Cities Service 1, 2, and 3 will be admitted in evidence.

(Whereupon, Applicant's Exhibits Nos. 1, 2, and 3 admitted in evidence.)

MR. KELLAHIN: That's all we have on direct testimony.

MR. NUTTER: Any questions of Mr. Motter?

CROSS EXAMINATION

BY MR. NUTTER:

Q This line agreement calls for the well to be drilled to be drilled at approximately 1320 from the south and 1320 from the west. You stated it would be about 10 feet inside. Could you give us a footage description of the location of that well, please?

A Well, we could probably add five feet to each of those. That would put it 1325, put it on the Drickey property.

Q That will be the location, surface?

A Yes. Mr. Examiner, I might add that we do not have a line agreement with Mr. Triog at this Examiner Hearing, out that has been submitted to your office when we formed the unit. We have

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a line agreement along the common boundaries also with Mr. Triqq.

Q The well that's up there offsetting the Triqq property will be off pattern as far as the Drickey-Queen and John Triqq's flood, also?

A Yes. If you will notice on 1 and 2 we have circled in a blue pencil the wells that are injection on both the John Triqq and the Drickey-Queen Sand Unit.

Q In your opinion, will this new pattern which is necessitated by this odd 40 acres down here result in an efficient and thorough sweep of the oil in this area?

A Yes. It would be our proposal to inject perhaps about half as much water into this well to be drilled as we would normally into a 40-acre five spot or 80-acre five spot, so that we do thoroughly sweep to the four wells immediately offsetting the well. Once we get a high water cut at those wells, we will increase injection rates.

Q As far as you know, the Phillips wells will be on injection in four to six weeks?

A I have been advised that they will complete their facilities and will be able to inject water in that time. I assume they will probably start injection in the westerly portion of their unit until we can get the well drilled, and put the injection wells on approximately the same time.

Q Does the line agreement which Phillips and Cities Service have discussed provide for the time in which this well of

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yours will be put on injection?

A No, but it provides for mutual agreement, which I'm sure we'll work out.

Q Are you going to attempt to put it on at approximately the same time as the Phillips well?

A Yes, that's correct.

Q That would hold true for all three of these?

A We have no problems whatsoever on our wells, with the exception of drilling this. Our South Plant already has lines laid to the proposed injection wells. It's just a matter of converting.

Q This new well is going to be drilled and equipped with 4-1/2 inch casing?

A Yes.

Q Will injection be down the casing?

A No, it will be through the tubing.

Q That would also hold true of the other two wells?

A Yes, that is correct. The 4-1/2 inch casing affords us a saving of a thousand to fifteen hundred dollars because of the smaller casing.

Q But injection will be down tubing through a packer?

A Yes.

MR. NOTTER: Any other questions of Mr. Motter? He may be excused.

(Witness excused.)

MR. KELLAHIN: That's all we have.

MR. NUTTER: Does anyone have anything to offer in Case 2769? We will take the case under advisement.

* * * *

STATE OF NEW MEXICO)
COUNTY OF BERNALILLO) ss

I, ADA DEARNLEY, Notary Public in and for the County of Bernalillo, State of New Mexico, do hereby certify that the foregoing and attached Transcript of Proceedings before the New Mexico Oil Conservation Commission was reported by me, and that the same is a true and correct record of said proceedings to the best of my knowledge, skill and ability.

WITNESS my Hand and Seal this 25th day of March, 1963.

Ada Dearnley
NOTARY PUBLIC

My Commission Expires:
June 19, 1963.

I do hereby certify that the foregoing is a correct and true transcript of the proceedings in the State of New Mexico, Case No. 2769, heard on the 3/7, 1963.
Asst. Sec. 1, Chairman
New Mexico Oil Conservation Commission

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