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July 14, 1970

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Case 4391

Oil Conservation Commission
Box 2088
Santa Fe, New Mexico 87501

Gentlemen:

There are enclosed herewith in triplicate applications of Murphy H. Baxter for approval of the Unit Agreement for the Development and Operation of the North EK Queen Unit, Lea County, and for the waterflood project which is to be inaugurated in connection therewith, together with exhibits referred to in said applications.

I would appreciate your placing these two cases on the examiner's hearing docket for August 5 and would further appreciate it very much if you would place these cases as near the first of the docket as possible as I have an engagement for that afternoon. Your cooperation in this connection will be greatly appreciated.

Yours very truly,

HINKLE, BONDURANT, COX & EATON

By Clarence E. Hinkle
cd

CEH:cs
Enc.
cc: W. U. Sumner

DOCKET MAILED

Date 7/15/70

BEFORE THE OIL CONSERVATION COMMISSION
STATE OF NEW MEXICO

APPLICATION OF MURPHY H. BAXTER
FOR APPROVAL OF A WATERFLOOD
PROJECT FOR THE NORTH EK QUEEN
UNIT AREA, LEA COUNTY, NEW MEXICO.
UNDER THE PROPOSED PROJECT THE
QUEEN SAND FORMATION WILL BE
FLOODED INITIALLY THROUGH FOUR
INJECTION WELLS THROUGH PERFORATED
DEPTHS RANGING FROM 4291 FEET TO
4360 FEET. APPLICANT SEEKS A PRO-
JECT ALLOWABLE AND ADMINISTRATIVE
APPROVAL OF ADDITIONAL INJECTION
WELLS.

Case 43 91

Oil Conservation Commission
Box 2088
Santa Fe, New Mexico 88201

Comes Murphy H. Baxter, acting by and through the undersigned attorneys, and hereby makes application for approval of a waterflood project for the North EK Queen Unit Area and in support thereof respectfully shows:

1. Applicant has filed an application with the Oil Conservation Commission for approval of the Unit Agreement for the Development and Operation of the North EK Queen Unit Area, Lea County, New Mexico. That the proposed unit area embraces the following described lands of the State of New Mexico, to-wit:

Township 17 South, Range 33 East
Section 36 - S $\frac{1}{2}$ SE $\frac{1}{4}$, NW $\frac{1}{4}$ SE $\frac{1}{4}$

Township 18 South, Range 33 East
Section 1 - Lots 1, 2, S $\frac{1}{2}$ NE $\frac{1}{4}$, NE $\frac{1}{4}$ SE $\frac{1}{4}$

Township 18 South, Range 34 East
Section 6 - Lots 4, 5, 6, 7, SE $\frac{1}{4}$ NW $\frac{1}{4}$, E $\frac{1}{2}$ SW $\frac{1}{4}$,
W $\frac{1}{2}$ SE $\frac{1}{4}$, SE $\frac{1}{4}$ SE $\frac{1}{4}$
Section 7 - Lot 1, E $\frac{1}{2}$ NW $\frac{1}{4}$, NE $\frac{1}{4}$
containing 978.44 acres, more or less.

2. That the primary purpose of the unit agreement is to inaugurate a waterflood project coextensive with the unit area for the purpose of secondary recovery operations in connection with the Queen Sand formation underlying the unit area which occurs between the logged depths measured from the Kelly bushing of 4121 feet and 4210 feet in the Cities Service Oil Company Cockburn "B" State No. 2 well located in the SE $\frac{1}{4}$ NE $\frac{1}{4}$ Section 1, Township 18 South, Range 33 East, Lea County, New Mexico.

3. That there is attached hereto, made a part hereof and for purposes of identification marked Exhibit 1, a plat showing the outlines of the proposed unit area and all of the wells producing from the Queen Sand formation, as well as the acreage ownership, within a radius of two miles of the proposed unit area.

4. There is attached hereto as Exhibit 2 a plat showing the four proposed initial injection wells, namely the following Murphy H. Baxter wells: State "M" No. 2 located 1650 feet from the North line and 2310 feet from the West line of Section 7; State "M" No. 3 located 853 feet from the West line and 480 feet from the North line of Section 7; State "CL" No. 6 located 330 feet from the North line and 660 feet from the East line of Section; and State "CL" No. 7 located 990 feet from the South line and 660 feet from the West line of said Section 7, all in Township 18 South, Range 34 East. There are also attached diagrammatic sketches of the above mentioned wells showing all casing strings including diameters and setting depths; quantities used and tops of cement; perforated or open hole intervals; tubing strings including diameters and setting depth; and location of packers.

5. There are also filed herewith electrical logs of each of the proposed injection wells.

6. Applicant proposes to initially inject water in the four wells hereinabove referred to and estimates that the water injected will be at a maximum rate of 500 barrels per day per well, or a total of 2,000 barrels per day. The source of the injected fluid will be produced water from Mobil Oil Company's EK Queen Unit which lies to the south of the proposed unit area.

7. The four initial injection wells have been selected with a view to causing the secondary recovery oil to be swept up-structure and it may be necessary later to convert other wells or to drill additional wells for injection purposes and applicant would like to have the order approving the waterflood project provide that additional injection wells may be approved administratively, without a hearing.

8. That applicant also seeks the approval of a project allowable for the proposed waterflood project in accordance with Rule 701 of the Commission.

9. In the opinion of applicant the proposed waterflood project is in the interest of conservation and the prevention of waste and will tend to protect correlative rights.

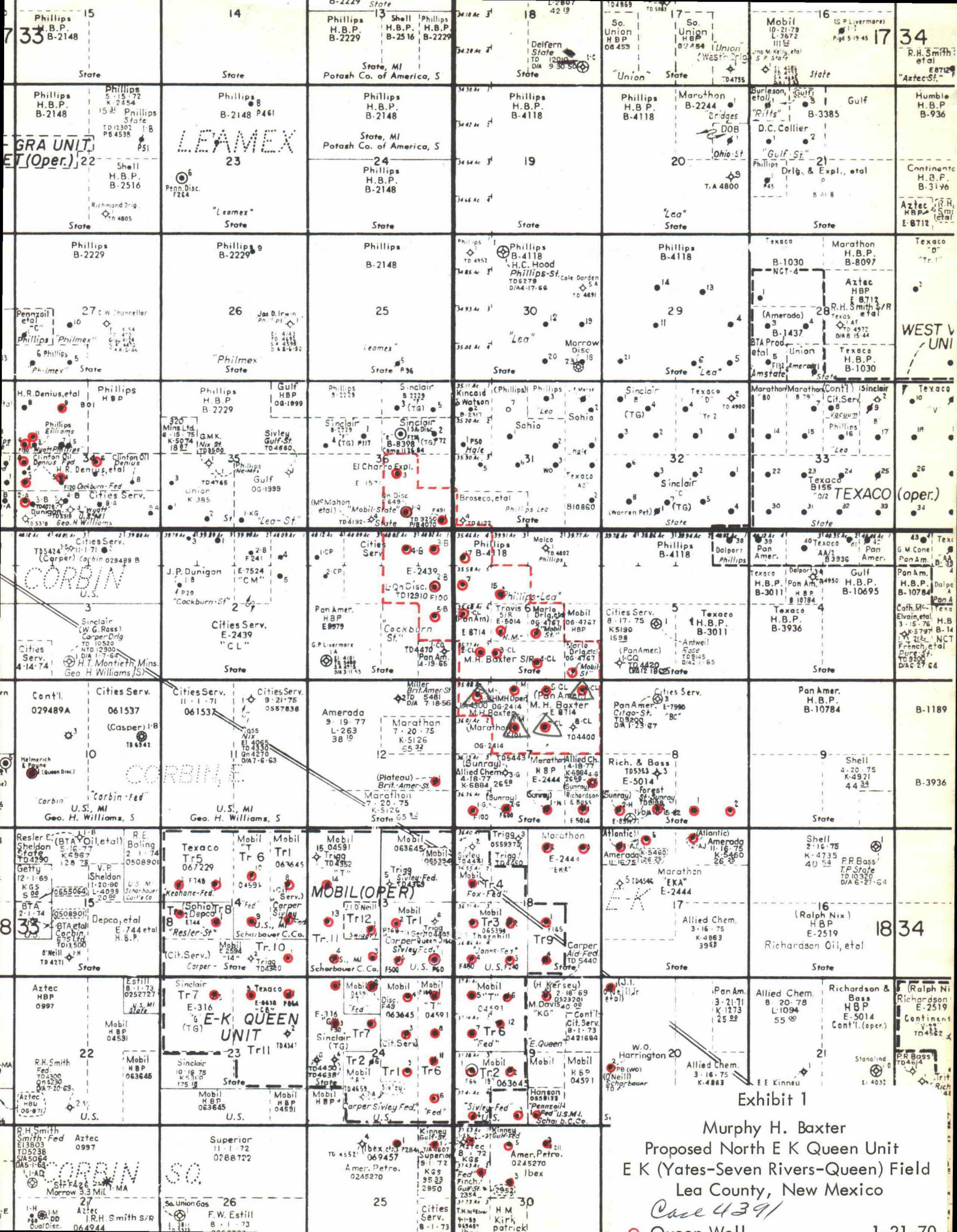
10. Applicant requests that this matter be set down for hearing at the examiner's hearing to be held on August 5, 1970.

Respectfully submitted,

MURPHY H. BAXTER

By 

Member of the Firm of
HINKLE, BONDURANT, COX & EATON
Box 10
Roswell, New Mexico 88201
Attorneys for Applicant

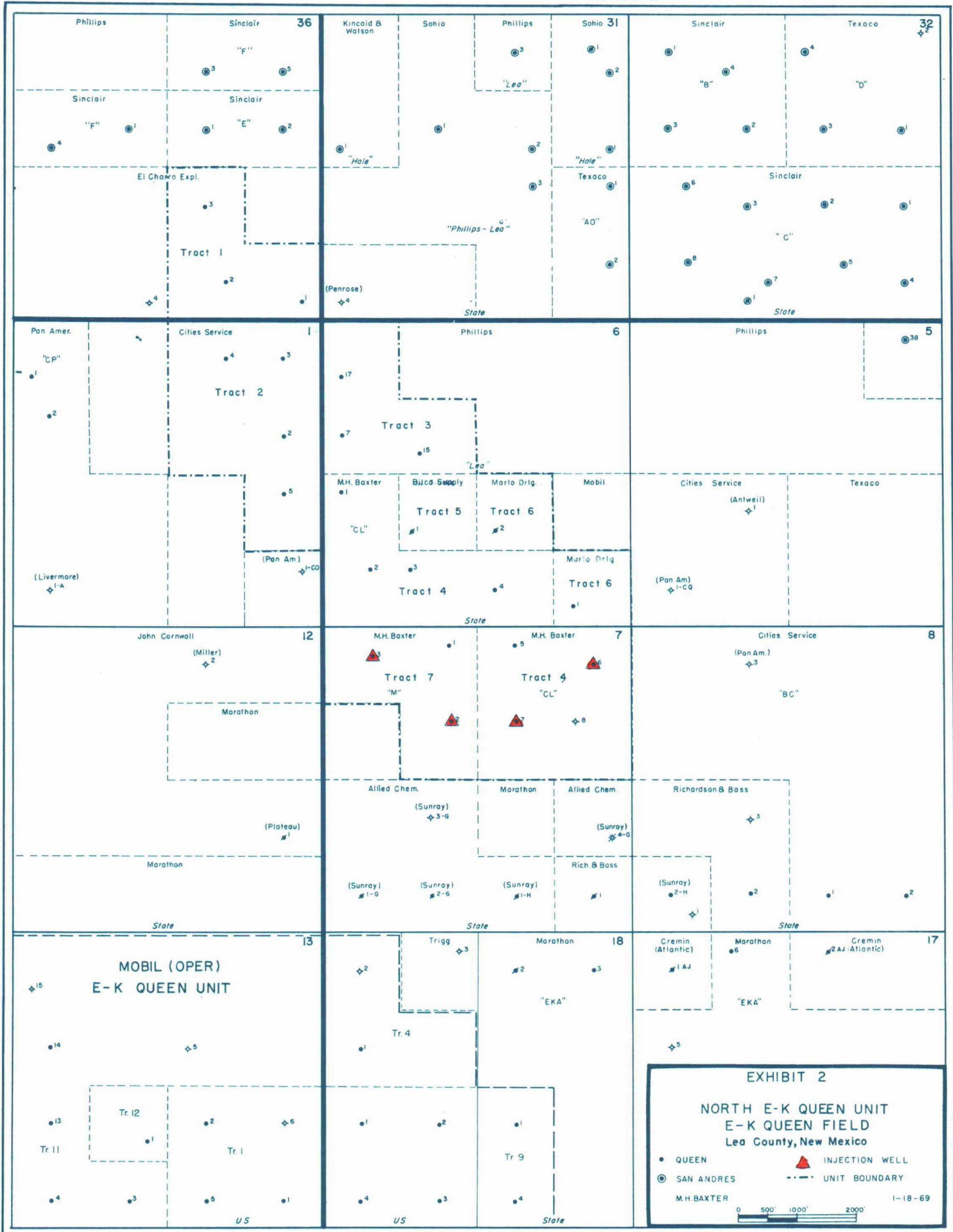


Prepared by
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