

Case No.

704

Application, Transcript,
Small Exhibits, Etc.

CASE 704: Kewanee Oil Company application
to dually recomplete Pearl Well No. 25-B
in unorthodox location

OIL CONSERVATION COMMISSION
P. O. BOX 871
SANTA FE, NEW MEXICO

June 29, 1954

Mr. John E. Cochran, jr.
Garper Building
Artesia, N. M.

Dear John:

For your information and that of your client, Kewanee Oil Company, we enclose copies of orders issued in Cases 704 and 705, which were heard at the May 19 hearing.

Thank you very much for the proposed orders which you sent. As you know, we are always glad to get them, and the changes made in yours were very slight, as you will notice.

Very truly yours,

W. B. Macey
Chief Engineer

WBM:nr

C
O
P
Y

BEFORE THE OIL CONSERVATION COMMISSION
OF THE STATE OF NEW MEXICO

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

CASE NO. 704
Order No. R-483

IN THE MATTER OF THE APPLICATION OF
KEWANEE OIL COMPANY FOR AN ORDER
GRANTING PERMISSION TO RECOMPLETE
PEARL WELL NO. 25-B, IN THE SW/4 NE/4
OF SECTION 25, TOWNSHIP 17 SOUTH, RANGE
32 EAST, NMPM, IN LEA COUNTY, NEW
MEXICO, IN THE RED SAND AS AN UNORTHODOX
LOCATION: AND TO CONVERT THE MALJAMAR
PAY HORIZON IN SAID WELL INTO A GAS-
INJECTION WELL.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This matter came on regularly for hearing at 10 o'clock a.m. on May 19, 1954 at Santa Fe, New Mexico, before the Oil Conservation Commission of New Mexico, hereinafter referred to as the "Commission".

NOW, on this 17th day of June, 1954, the Commission having before it for consideration the testimony adduced at the hearing of said cause and being fully advised in the premises,

FINDS:

1. That due public notice having been given in compliance with law, the Commission has jurisdiction hereof.
2. That on May 25, 1948, in Case No. 141 the Commission entered order No. 770 granting Kewanee Oil Company permission to drill Pearl Well No. 25-B in the SW/4 NE/4 of Section 25, Township 17 South, Range 32 East, NMPM, located 1345 feet south of the north line and 2615 feet west of the east line of said Section 25 as an unorthodox location to be drilled to the Maljamar pay; that said well was drilled to a depth of 4203 feet and completed in the Maljamar pay on October 5, 1948 with an initial production of approximately 20 barrels per day; that at the present time said well is producing approximately 3 barrels of oil per day.
3. That on May 1, 1952, the Commission entered order No. R-146 in Case No. 356 granting Kewanee Oil Company permission to inject gas in the Maljamar reservoir through Wells Nos. 22-B, 24-B and 26-B; that a gas injection program is being carried on on the Pearl Lease at the present time.
4. That at the time Pearl Well No. 25-B was drilled a commercial show of oil was found in the Red Sand section from approximately 3420 feet to 3440 feet and that Kewanee Oil Company desires to recomplete said well

as a producing oil well in the Red Sand and to convert the Maljamar pay in said well to a gas injection well to supplement the present gas injection program now under way in this portion of the Maljamar reservoir.

5. That in completing said Pearl Well No. 25-B as a producing well in the Red Sand and converting the Maljamar Pay in said well to a gas-injection well, Applicant proposes to run Gamma Ray - Neutron Survey, plug off the lower 7th Maljamar Zone completely, set a Baker Model "D" retainer production packer, blank off Baker Model "D" retainer production packer, perforate the Red Sand zone, test the Red Sand zone for oil production, sand-oil treat with sufficient volume to stimulate production, remove blanking tool from Baker Model "D" retainer production packer, run 2-inch tubing and 1-inch macaroni string with special Baker Adapter and tubing flow tube to separate producing horizons, and then produce Red Sand zone through 2-inch tubing and inject gas through 1-inch macaroni string into Maljamar reservoir with an initial volume of approximately 200,000 cubic feet of gas per day at 1500 pounds of pressure.

6. That said Pearl Lease is committed to the Maljamar Cooperative Repressuring Agreement and that gas for injection into Pearl Well No. 25-B will be obtained from the Maljamar Cooperative Repressuring Agreement Plant.

IT IS THEREFORE ORDERED:

1. That the application of Kewanee Oil Company for an order authorizing it to recomplete Pearl Well No. 25-B, in the SW/4 NE/4 of Section 25, Township 17 South, Range 32 East, NMPM, in Lea County, New Mexico, in the Red Sand as an unorthodox location, and to convert the Maljamar pay horizon in said well into a gas injection well in the manner hereinabove set forth be and the same is hereby approved, and production being had from said Pearl Well No. 25-B in the Red Sand, said well is hereby given an allowable separate from the well located on the same 40-acre legal subdivision producing from the Maljamar pay.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

E. L. Mecham

EDWIN L. MECHEM, Chairman

E. S. Walker

E. S. WALKER, Member

R. R. Spurrer

R. R. SPURRIER, Member and Secretary

S E A L

OIL CONSERVATION COMMISSION
P. O. BOX 871
SANTA FE, NEW MEXICO

March 23, 1956

Mr. G. T. Hanners
P.O. Box 605
Lovington, New Mexico

Dear Mr. Hanners:

I am enclosing various documents in connection with Kewanee Oil Company's Case No. 704 heard before this Commission in May of 1954. I presume that this is the matter to which you referred in our telephone conversation of this date.

I would appreciate your returning this information to the Commission when you have completed your examination of it.

Very truly yours,

W. B. Macey
Secretary - Director

WBM:brp
Encls.

C
O
P
Y

LAW OFFICES
JOHN E. COCHRAN, JR.
CARPER BUILDING
ARTESIA, NEW MEXICO

June 3, 1954

Mr. W. B. Macey, Engineer
New Mexico Oil Conservation Commission
Mabry Hall
Santa Fe, New Mexico

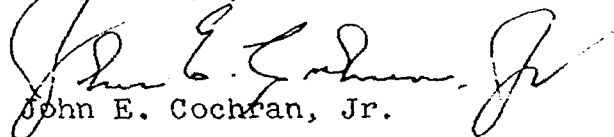
Dear Bill:

I enclose herewith original and two copies each of orders proposed to be entered in Kewanee Oil Company Cases Nos. 704 and 705 presented to the Commission at the hearing held on Wednesday May 19, 1954.

I trust these proposed orders will be helpful to you in preparing your order in these cases for the commission.

With kindest personal regards, I am

Very truly yours,


John E. Cochran, Jr.

Encls.

P.S. I was supposed to have mailed these to you about 10 days ago but as usual I am running about 10 days late and \$8.00 short.

BEFORE THE
OIL CONSERVATION COMMISSION
STATE OF NEW MEXICO
Santa Fe, New Mexico
* * * * *

TRANSCRIPT OF PROCEEDINGS
CASE NO. 704
Regular Hearing

May 19, 1954

BEFORE THE
OIL CONSERVATION COMMISSION
STATE OF NEW MEXICO
Santa Fe, New Mexico
May 19, 1954

IN THE MATTER OF:

Application of Kewanee Oil Company to
dually recomplate oil well in unorthodox
location.

Case No. 704

Applicant, in the above-styled case, seeks
an order authorizing the recompletion of
Pearl Well No. 25-B (Presently producing
from the Maljamar Oil Pool) located in
SW/4 NE/4 Section 25, Township 17 South,
Range 32 East, Lea County, New Mexico, in
the Red sand of the Pearsall Oil Pool in
an unorthodox location, and to convert the
Maljamar pay horizon in said well into a
gas -injection well.

TRANSCRIPT OF PROCEEDINGS

MR. COCHRAN: My name is John E. Cochran, Jr. representing
Kewanee Oil Company. W. H. Miles, is the witness in this case.

W. H. MILES

the witness, having been first duly sworn, testified as follows:

DIRECT EXAMINATION

By MR. COCHRAN:

Q Will you state your name please?

A My name is W. H. Miles.

Q By whom are you employed? A Kewanee Oil Company.

Q In what capacity? A Division engineer.

Q What is the area of your employment?

A We cover the entire west Texas area and New Mexico.

Q Mr. Miles, have you previously testified before the Commission as a petroleum engineer? A I have.

MR. COCHRAN: Are Mr. Miles' qualifications acceptable to the

Commission?

MR. SPURRIER: They are.

Q Mr. Miles, have you prepared a map in connection with the application of Kewanee Oil Company to recomplete Pearl Well No. 25-B in the Red sand and convert the Maljamar way to an injection well?

A Yes, sir, I have.

MR. COCHRAN: This will be Kewanee's Exhibit No. 1.

(Marked Kewanee's Exhibit No. 1 for identification.)

Q Mr. Miles, I hand you what is marked Kewanee's Exhibit No. 1. Will you state to the Commission what that purports to show?

A Exhibit No. 1 is a map of the general Maljamar Oil Pool with the Pearl lease on the east side of the map, the lease in question colored in yellow. On it also it shows the Kewanee Pearl 25 Well in red, which is the proposed Commission completion.

Q Mr. Miles, when was the Pearl Well 25-B drilled?

A The Pearl Well 25-B was drilled in May of 1948.

Q Was that well a regular location or an unorthodox location?

A It was an unorthodox location.

Q Do you know by what order of the Commission that was done?

A That was Pearl 25-B was drilled as an unorthodox location on permission granted by the Oil Conservation Commission in Case No. 141, entered as Order No. 770 granting Kewanee Oil Company permission to drill Pearl Well No. 25-B.

Q To what depth was the well drilled?

A It was drilled to a depth of 4273 feet.

Q And completed in the Maljamar way?

A That is right.

Q What did the well make initially?

A Initial potential of the well was approximately 20 barrels per day.

Q What does the well make at this time?

A At the present time this well is producing approximately three barrels of oil per day.

Q On the Pearl lease have you for some time carried on a gas injection program?

A Yes, sir, we have carried on a gas injection program for approximately two years now.

Q Permission was granted for that by the Oil Conservation Commission?

A Yes, sir, permission was granted to inject gas in the so-called Pearl lease pursuant to Order No. R-146, entered by the Oil Conservation Commission in Case No. 356 on May 1st, 1952.

Q Mr. Miles, when this well was drilled, did you encounter shows of oil in the Red sand? A Yes, sir, we did.

Q In your application you have asked that you be permitted to recomplete this well in the Red sands and convert the Maljamar pay into a gas injection well. Would you explain, or rather have you prepared any drawings which would be helpful to the Commission when you make your explanation of how this is to be done?

A Yes, sir, I have two schematic drawings here. One of the general geology of the area. Another of the actual manner in which we planned to effect this injection and completion in Pearl No. 25.

MR. COCHRAN: Will you mark that as Exhibit 2?

(Marked Newman's Exhibit No. 2 for identification.)

MR. COCHRAN: Mark that as Exhibit 3.

(Marked Kewanee's Exhibit No. 3,
for identification.)

Q I hand you Kewanee's Exhibit No. 2. Will you explain to the Commission what that purports to be and also explain in detail the method that you proposed to use in recompleting this well in the Red sand in converting the Maljamar pay into an injection well?

A Exhibit 2 is a diagrammatic sketch of the geologic section encountered in Pearl No. 25. As you will note, we have portrayed in there in color the approximate location of the Red sand, the approximate top of the Grayburg formation, the approximate top of the San Andres formation. Actually this is a radioactive survey, a gamma ray neutron survey of another typical Maljamar pay well. We have also showed on this diagram the location of the production string in Pearl No. 25 and further how we propose to cement the lower San Andres horizon which is non productive in Pearl 25, and then recomplete the subject well in the Red sand section at approximate depth of 3420 to 3440. Step by step we propose to effect this combination completion in the following manner.

We are going to go in and run a radioactive survey of the subject well and then we plan to plug off the lower 7 zone with cement. Then we propose to go in and set a Baker Model D Retainer Production Packer. Upon completing the setting of this tool we plan to blank off the tool and isolate the lower productive horizon. We then plan to go in there and perforate the Red sand zone and test the Red sand zone for oil production. If commercial oil is indicated, we will undoubtedly sand-oil treat the well with sufficient volume to stimulate production. Upon completion of this operation we will remove the blanking tool from the Baker Model E Retainer Production Packer and run a two-inch tubing string and cement back near point

string with a special filter pack and tubing, flow tube to separate the producing horizons.

Then we will produce the Red sand zone through the regular two inch tubing and inject gas through the one inch microni string into the Maljamar reservoir with initial volume of approximately 200,000 cubic feet per day, the pressure 1500 pounds per square inch.

Q Mr. Miles, I hand you Kewanee's Exhibit No. 3. Will you explain to the Commission what that portrays?

A Exhibit 3 is a diagrammatic sketch of our plans to actually effect the dual completion by the use of a Baker Model D Retainer Production Packer. As you will note, the exhibit shows the 7 inch production string, and the mechanism by which we propose to seal off the lower zone from the upper Red sand zone, and isolate the two zones from communication. I might point out to the Commission that when the Baker Retainer Production Packer is set, it will remain there permanently and cannot be removed from the well unless it is drilled up.

Q Mr. Miles, where do you propose to obtain your gas supply?

A In view of the fact that the Pearl lease is a part of the so-called Maljamar repressuring cooperative agreement, and is now committed to that agreement, we plan to obtain gas for injection purposes from the Maljamar cooperative repressuring agreement.

Q Mr. Miles, if permission is granted to complete this well in the Red sand and convert the Maljamar way into a gas injection well, what do you propose to do about the allowable for the Red sand?

A In the event that the Red sand horizon is productive in this well, we will request an allowable from the Commission for a regular 40 acre legal subdivision unit separate from the regular Maljamar way well which is also located on the same 40 acre unit.

6
Q. Mr. Miles, if this will be translated and converted in this manner, is it your opinion that it is an engineering plan that will be in the interest of conservation and prevent waste?

A. In my opinion it definitely is in the interest of conservation and will prevent waste and will also enable Kewanee to increase the ultimate production from the regular lower Midjamar way by injecting gas in that horizon.

MR. COCHRAN: If the Commission please, we would like for the record to show that at the time this application was filed with the Commission, a copy was also filed with the United States Geological Survey, with the request that they give us an expression as to the feeling of that office about this proposal. They neither approved or disapproved the proposal, but they verbally stated that they would defer any action on the request until after this hearing. That is all.

MR. SPURRIER: Anyone have a question of the witness? If not, the witness may be excused. (Witness excused.)

MR. COCHRAN: I do offer Kewanee's Exhibits one, two and three.

MR. SPURRIER: Without objection they will be admitted. Anyone else have a comment in the case? If not, we will go on to Case 705 and take this case under advisement.

C E R T I F I C A T E

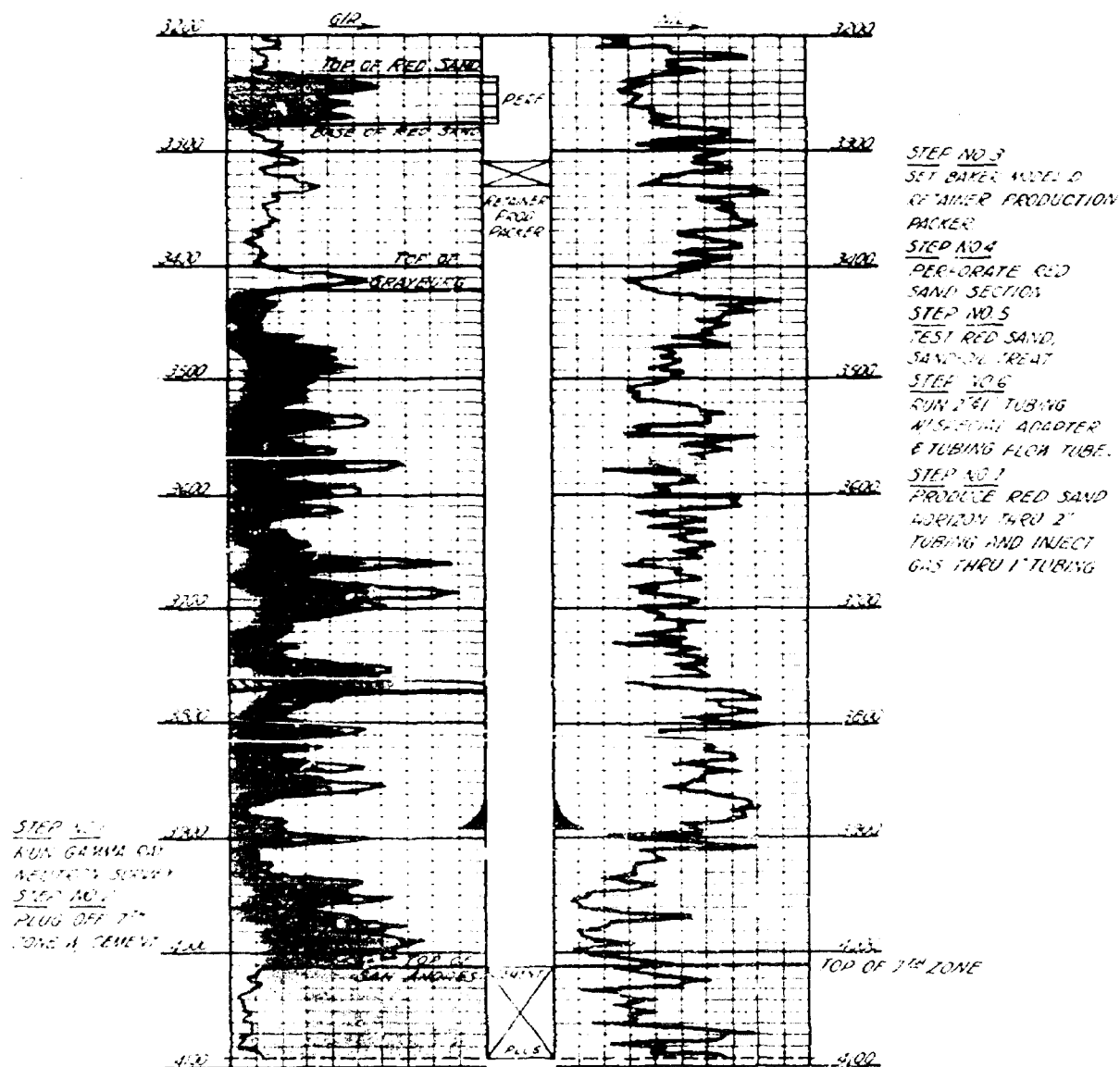
I, ADA DEARNLEY, Court Reporter, do hereby certify that the foregoing and attached transcript of proceedings in the matter of Case No. 704 was taken by me on May 19, 1954, that the same is a true and correct record to the best of my knowledge, skill and ability.

Ada Dearnley
Reporter

ADA DEARNLEY & ASSOCIATES
STENOTYPE REPORTERS
ROOM 105-106-107 EL CORTEZ BLDG.
PHONES 7-9645 AND 5-9546
ALBUQUERQUE, NEW MEXICO

KEWANEE OIL COMPANY
 PLAN TO EFFECT DUAL COMPLETION ON
 PEARL NO 25
 MALJAMAR FIELD - MALJAMAR, NEW MEX.

PRODUCE RED SAND OIL THRU 2" EUE TUBING
 INJECT GAS THRU 1" MACORONI STRING

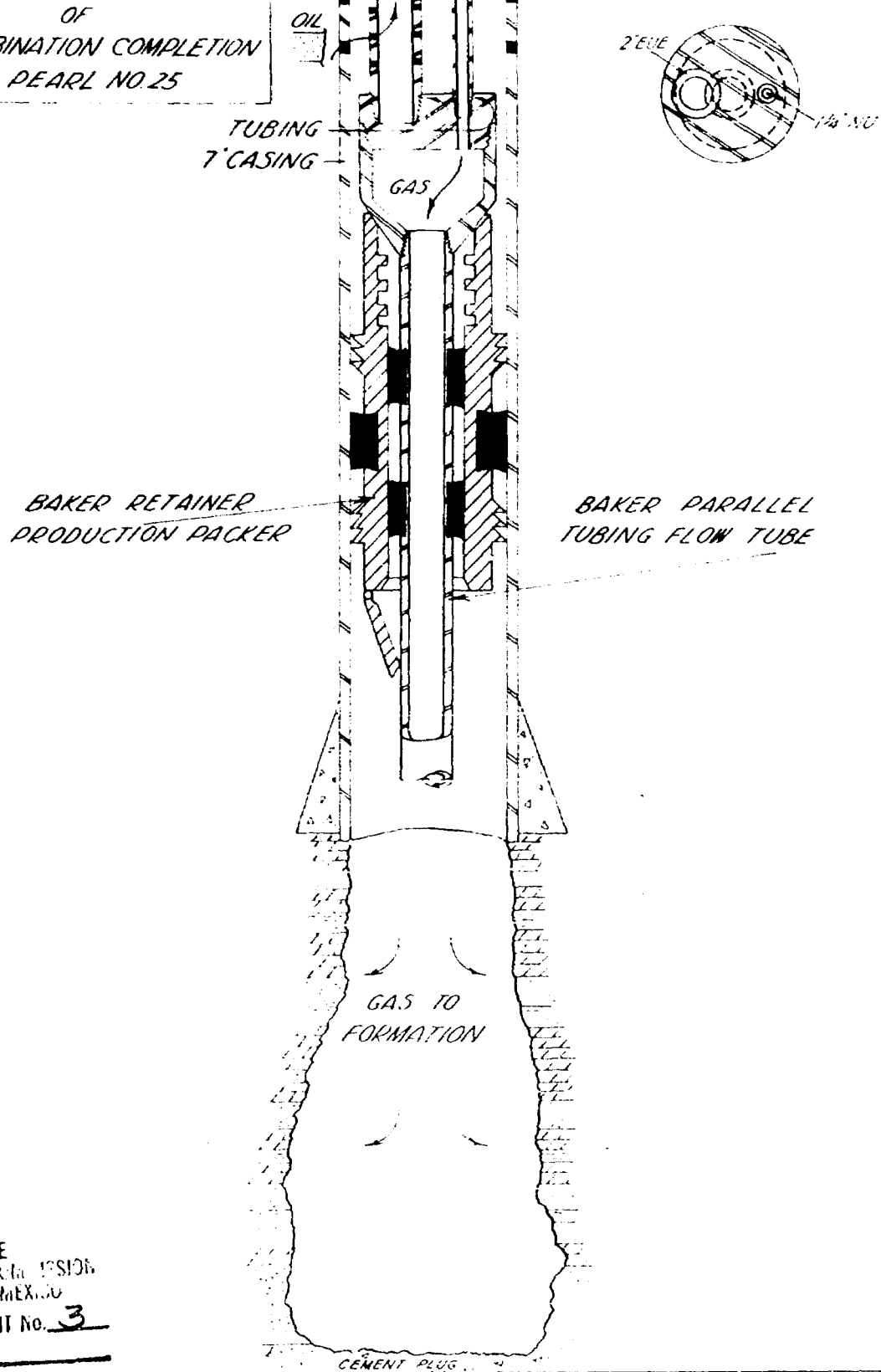


BEFORE THE
 OIL CONSERVATION COMMISSION
 SANTA FE, NEW MEX.

Kewanee EXHIBIT NO. 2

CASE 709

KEWANEE OIL CO
 DIAGRAMATIC SKETCH
 OF
 COMBINATION COMPLETION
 PEARL NO. 25



BEFORE THE
 OIL CONSERVATION COMMISSION
 SANTA FE, NEW MEXICO
 Kewanee EXHIBIT No. 3
 CASE 207

MAIN OFFICE OCC
1954 APR 30 AM 8:50

LAW OFFICES
JOHN E. COCHRAN, JR.
CARPER BUILDING
ARTESIA, NEW MEXICO

April 28, 1954

Case 704

Oil Conservation Commission
State of New Mexico
Mabry Hall
Santa Fe, New Mexico

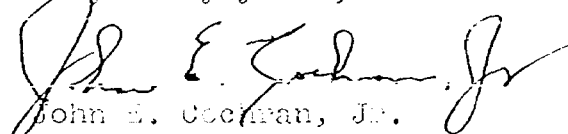
Attention: Mr. W. B. Macey

Gentlemen:

Enclosed herewith is Application in triplicate of Kewanee Oil Company for Order granting permission to recomplete Pearl Well No. 25-B in the SW/4 NE/4 of Section 25, Township 17 South, Range 32 East, N.M.P.M. in Lea County, New Mexico, in the Red Sand as an unorthodox location; and to convert the Maljamar Pay horizon in said well into a gas injection well.

The land upon which this well is located is embraced in Federal Oil and Gas Lease and, therefore, a copy of this Application is being furnished Mr. John A. Anderson, Supervisor of the United States Geological Survey at Roswell, New Mexico.

Very truly yours,


John E. Cochran, Jr.

Encls.

cc: Mr. John A. Anderson, Supervisor
United States Geological Survey
Roswell, New Mexico

BEFORE THE OIL CONSERVATION COMMISSION
OF THE STATE OF NEW MEXICO

IN THE MATTER OF THE APPLICATION OF KEWANEE
OIL COMPANY FOR ORDER GRANTING PERMISSION TO
RECOMPLETE PEARL WELL NO. 25-B, IN THE SW 1/4
NE 1/4 OF SECTION 25, TOWNSHIP 17 SOUTH, RANGE
32 EAST, N.M.P.M. IN LEA COUNTY, NEW MEXICO,
IN THE REED SAID AS AN UNORTHODOX LOCATION;
AND TO CONVERT THE MALJAMAR PAY HORIZON IN
SAID WELL INTO A GAS INJECTION WELL.

NO. 767

APPLICATION

KEWANEE OIL COMPANY, Applicant herein, is a corporation, organized and existing under and by virtue of the laws of the State of Delaware and is duly licensed to transact business in the State of New Mexico, and in connection herewith respectfully shows to the Commission:

1. That Applicant is the owner and holder of Federal Oil and Gas Lease Las Cruces Serial No. 058697(b), insofar as said lease covers the following described land situated in Lea County, State of New Mexico, to-wit:

All of Section 25, Township 17 South, Range 32 East, N.M.P.M.; and Lots 1, 2, 3 and 4 and E/2 W/2 of Section 30, Township 17 South, Range 33 East, N.M.P.M.

2. That there have been drilled on the above oil and gas lease known as the Pearl Lease a total of twenty-seven (27) wells to the Maljamar Pay. At the present time twenty-one (21) wells are producing from the Maljamar Pay, three (3) wells are used as input wells for returning gas to the Maljamar Reservoir, two (2) wells were abandoned as dry holes and one (1) well after producing for some time was abandoned.

3. That heretofore on May 25, 1948 in Case No. 141 the Oil Conservation Commission of New Mexico entered Order No. 770 granting Kewanee Oil Company permission to drill Pearl Well No. 25-B in the SW 1/4 NE 1/4 of Section 25,

Township 17 South, Range 32 East, N.M.P.M. located 1345 feet South of the North line and 2615 feet West of the East line of said Section 25 as an unorthodox location to be drilled to the Maljamar Pay. The location of which well is shown upon map attached hereto marked Exhibit "A" and by reference made a part hereof.

4. Thereafter said Pearl Well No. 25-B was drilled to a total depth of 4203 feet and completed in the Maljamar Pay with an initial production of approximately 20 barrels per day. This well was completed on October 5, 1948 and since the date of its completion has been producing from the Maljamar Pay and is at the present time producing approximately 3 barrels of oil per day.

5. That a gas injection program is being carried on on the Pearl Lease at the present time and gas is being returned to the Maljamar Reservoir through wells Nos. 22-B, 24-B and 26-B, pursuant to Order No. R-146 entered by the Oil Conservation Commission in Case No. 356 on May 1st, 1952.

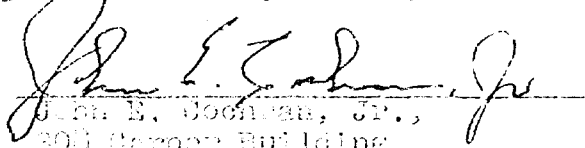
6. That at the time Pearl Well No. 25-B was drilled a commercial show of oil was found in the Red Sand section from approximately 3420 feet to 3440 feet and it is the desire of Applicant to recomplete Pearl Well No. 25-B as a producing oil well in the Red Sand and to convert the Maljamar Pay in said well to a gas injection well to supplement the present gas injection project now under way in this portion of the Maljamar Reservoir.

7. That in recompleting said Pearl Well No. 25-B as a producing oil well in the Red Sand and converting the Maljamar Pay in said well to a gas injection well, Applicant proposes to run Gamma Ray - Neutron Survey, plug off the lower 7th Maljamar zone completely, set a Baker Model "D" retainer production packer, blank off Baker Model "D" retainer produc-

tion packer, perforate the Red Sand zone, test the Red Sand zone for oil production, sand-oil treat with sufficient volume to stimulate production, remove blanking tool from Baker Model "D" retainer production packer, run 2 inch tubing and 1 inch macoroni string with special Baker Adapter, and tubing flow tube to separate producing horizons, and then produce Red Sand zone through 2 inch tubing and inject gas through 1 inch macoroni string into Maljamar Reservoir with an initial volume of approximately 200,000 cubic foot per day at 1500 pounds pressure.

8. That the Pearl Lease hereinabove described is committed to the Maljamar Cooperative Repressuring Agreement and that gas for injection in Pearl Well No. 25-B will be obtained from the Maljamar Cooperative Repressuring Agreement Plant.

WHEREFORE, Applicant prays that it be granted permission to recomplete Pearl Well No. 25-B in the Red Sand as an unorthodox location and to convert the Maljamar Pay Horizon in said well into a gas injection well in the manner hereinabove set forth; that the Commission set a date for hearing this Application in accordance with its rules and regulations and that upon presentation of this Application to the Commission that a proper order be entered granting permission to Applicant to recomplete said well in the Red Sand and convert the Maljamar Pay horizon in said well into a gas injection well, and if said well be productive of oil in the Red Sand, that it be granted an allowable separate from the other well located upon the same 40 acre legal subdivision which is producing from the Maljamar Pay.


John E. Cochran, Jr.,
308 Carter Building,
Albuquerque, New Mexico,
Attorney for Hovance
Oil Company

STATE OF NEW MEXICO)
 : ss.
COUNTY OF EDDY)

W. H. MILLS, being first duly sworn upon his oath deposes and states: That he is division engineer for Applicant in its West Texas and New Mexico Division and that he has read the foregoing application and from personal knowledge knows the matters therein contained to be true and correct except such statements that are alleged upon information and belief and as to those, he verily believes them to be true.



W. H. Mills

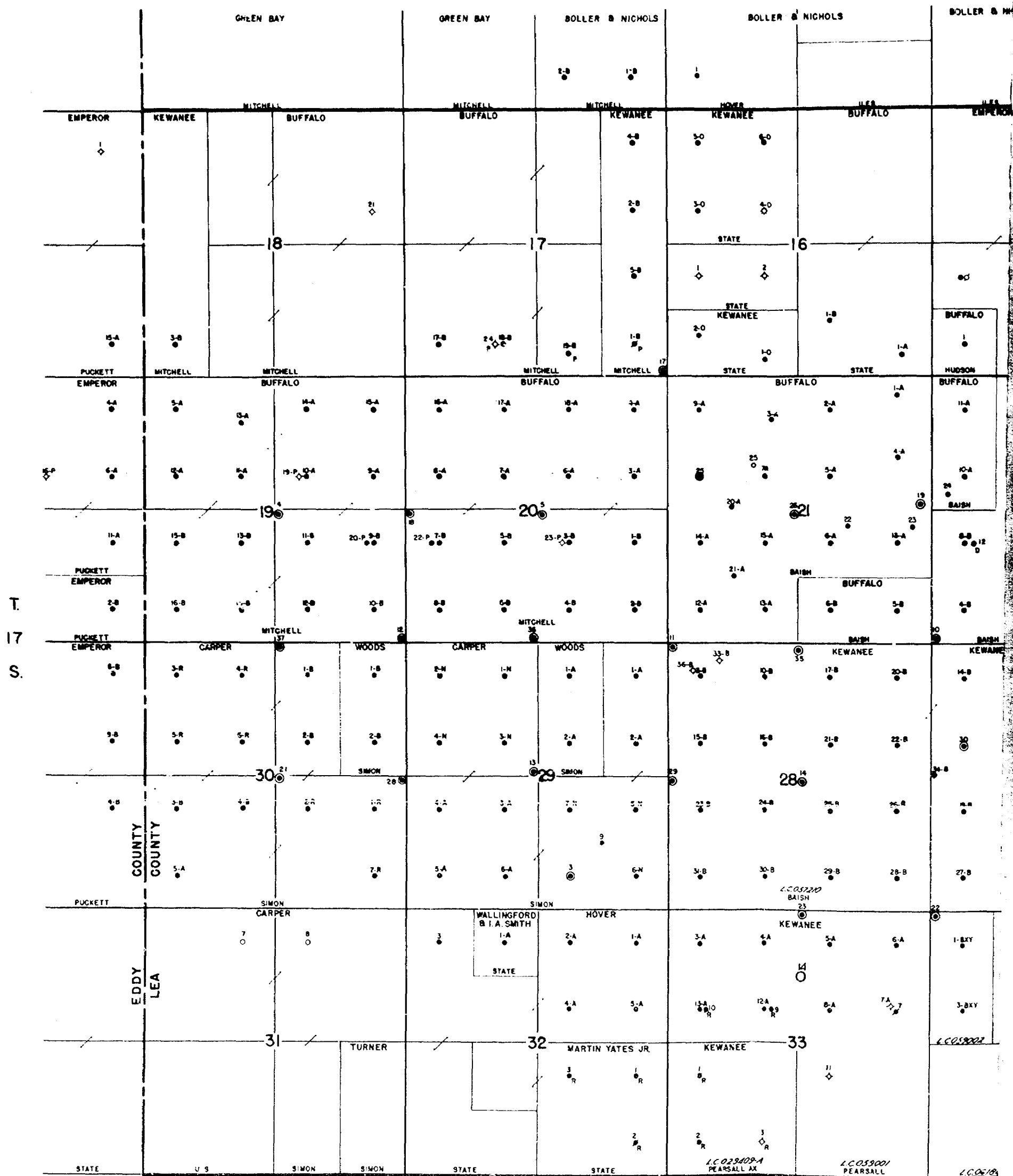
SUBSCRIBED AND SWORN to before me this 27th day of April, 1954.



Notary Public

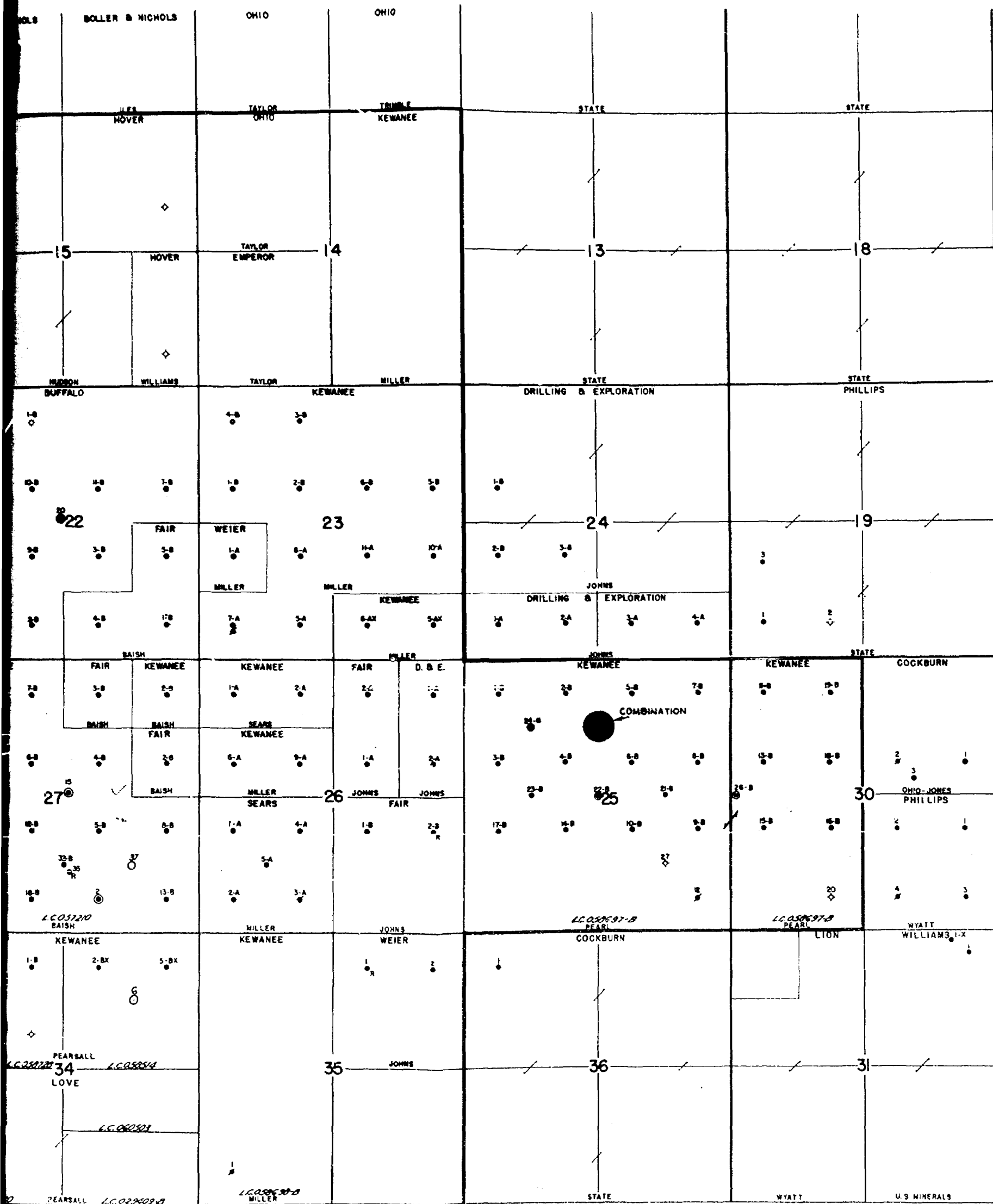
My commission expires:

October 1, 1956



LEGEND

- OIL WELL, PRODUCING
- OIL WELL, ABANDONED
- ◇ DRY HOLE

T.
17
S.

Legal Notice OCC Hearing

Date: _____

Publication: _____

CASE _____ :

IN THE MATTER OF THE APPLICATION OF
KEWANEE OIL COMPANY TO DUALY RE-
COMPLETE OIL WELL IN UNORTHODOX LO-
CATION.

Applicant, in the above styled case, seeks an order authorizing the recompletion of Pearl Well #25-B, (presently producing from the Maljamar Oil Pool) located in the SW $\frac{1}{4}$ NE $\frac{1}{4}$ Section 25, Township 17 S, Range 32 E, NMPM, Lea County, New Mexico, in the Red sand of the Pearsall Oil Pool in an unorthodox location, and to convert the Maljamar pay horizon in said well into a gas injection well.

Che _____

IN THE MATTER OF THE APPLICATION OF KEWANEE OIL COMPANY
FOR ORDER GRANTING PERMISSION TO RECOMPLETE PEARL WELL
25-B, IN THE SOUTHWEST QUARTER NORTHEAST QUARTER OF
SECTION 25, TOWNSHIP 17 SOUTH, RANGE 32 EAST, NMPM, IN LEA
COUNTY, NEW MEXICO, IN THE RED SAND, AS AN UNORTHODOX LOCATION;
AND TO CONVERT THE MALJAMAR PAY HORIZON IN SAID WELL INTO A
GAS INJECTION WELL.

of the Pearsall Pool

May 19