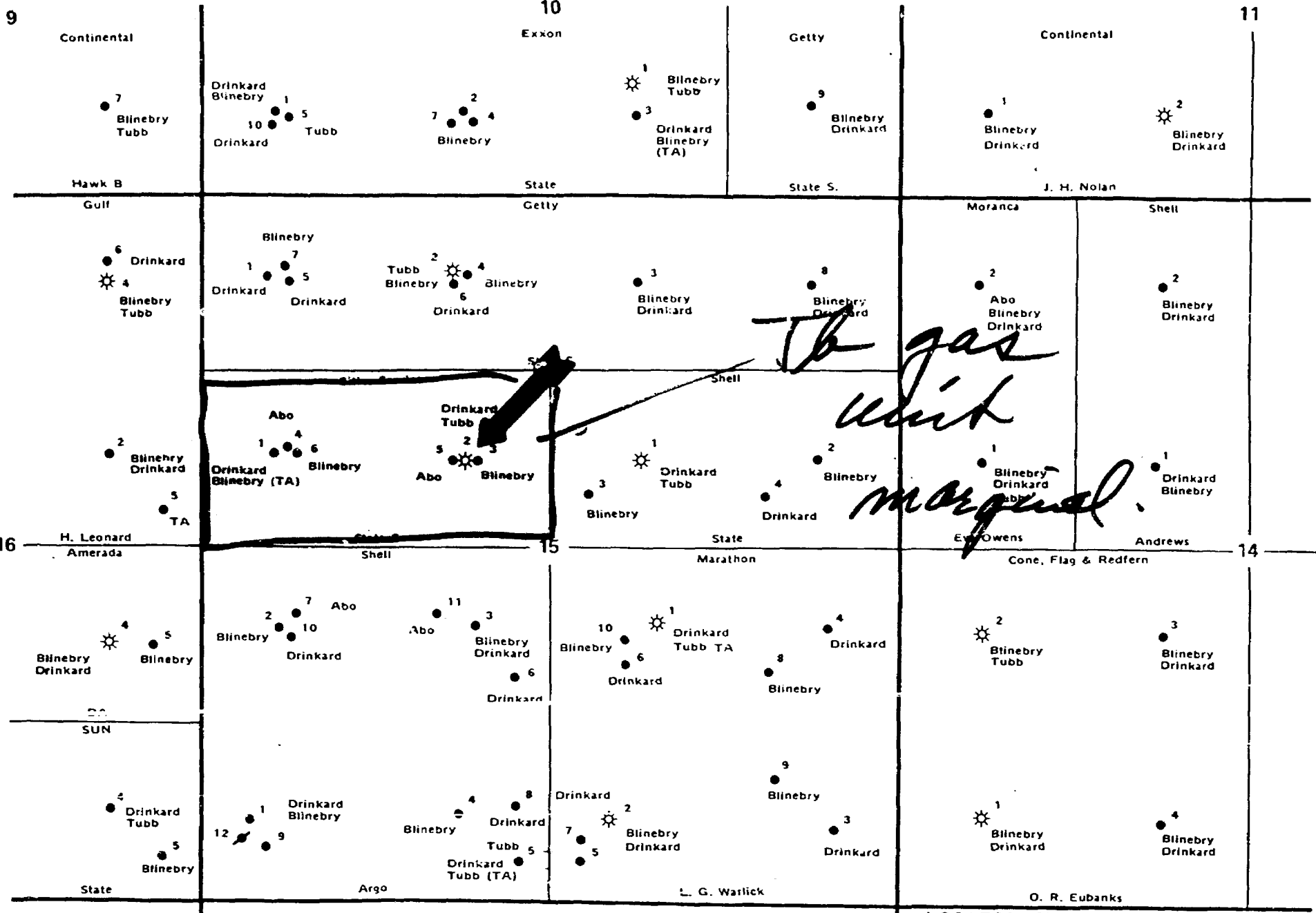


CASE 5703: CITIES SERVICE OIL CO.  
(FOR DOWNHOLE COMMINGLING, LEA 7  
COUNTY, NEW MEXICO

CASE NO.

5703

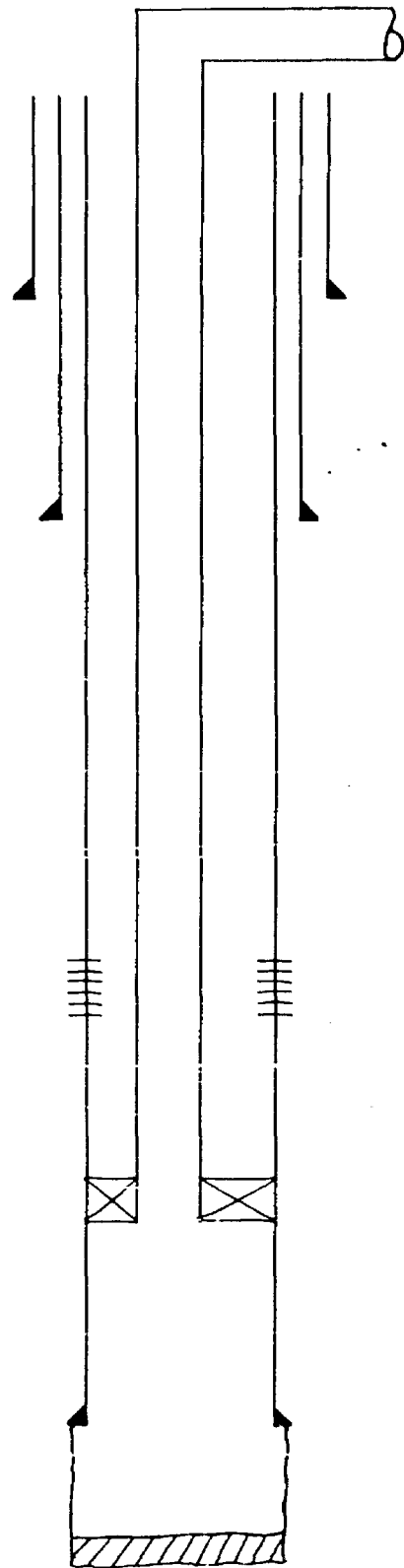
APPLICATION,  
TRANSCRIPTS,  
SMALL EXHIBITS,  
ETC.



ap ex 1  
 5703

LOCATOR PIAT  
 CITIES SERVICE OIL CO.  
 STATE'S LEASE  
 SEC. 15, T-21-S, R-37-E  
 LEA COUNTY, NEW MEXICO  
 SCALE: 1" = 1000'

CITIES SERVICE OIL CO.  
STATE-S No. 2  
CURRENT DRINKARD-TUBB  
DUAL COMPLETION



2" EUE Tubing

13 3/8" Csg. @ 297' Cem. W/300 SXS.

8 5/8" Csg. @ 2791' Cem. W/500 SXS.

Tubb 6044' - 6235'

Production Packer @ 6530'

5 1/2" Csg. @ 6586' Cem. W/125 SXS.

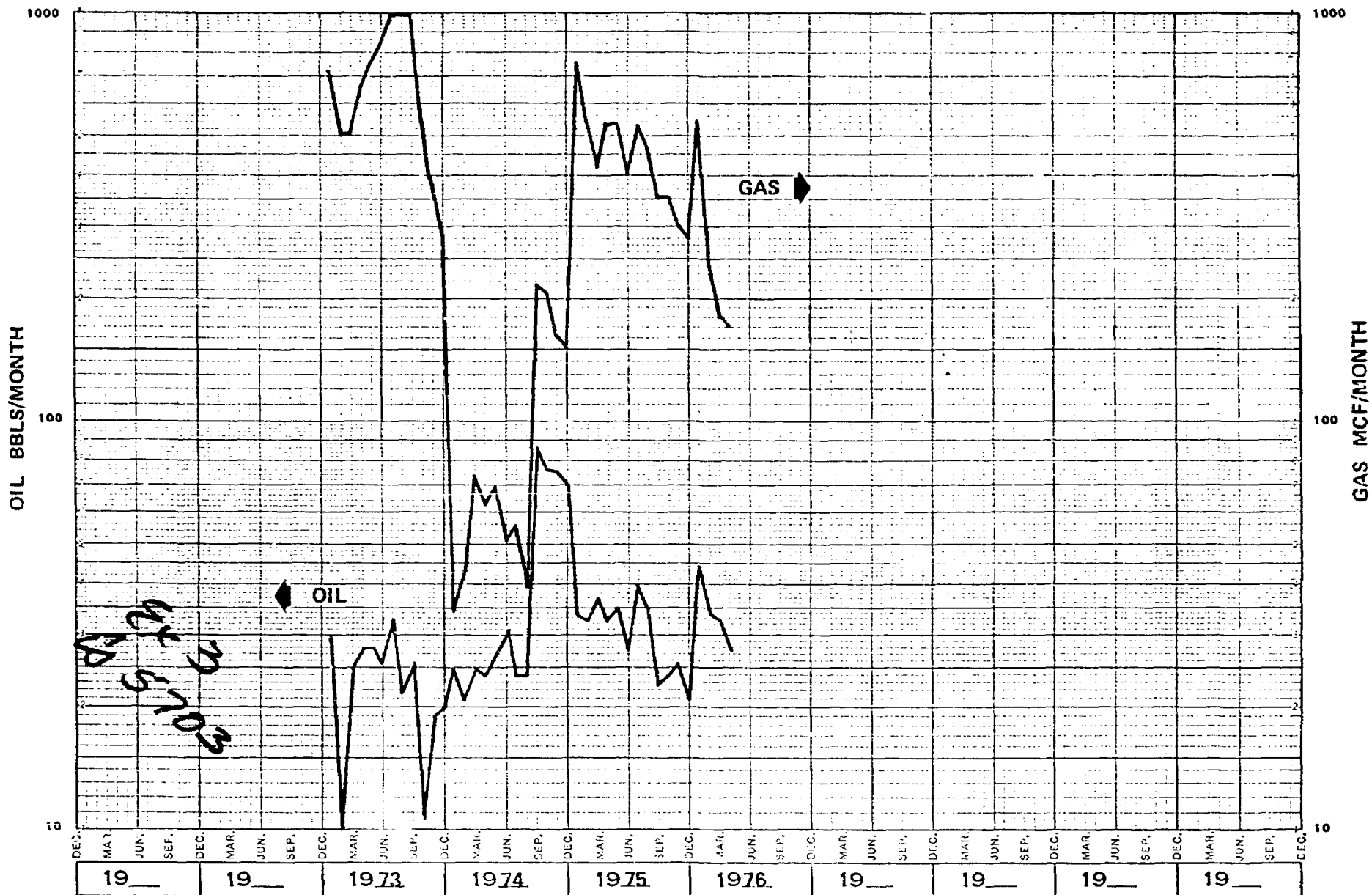
Drinkard (open hole) 6586' - 6655'

PBTD 6655'

TD 6676'

5x2  
5703

CITIES SERVICE OIL CO.  
STATE-S No. 2  
DRINKARD



180 Day Dn  
180 Day Th  
46 MCF gas  
233 MCF gas

FL BHP Dn 78  
Th 59

CITIES SERVICE OIL CO.  
STATE-S No. 2  
TUBB 516

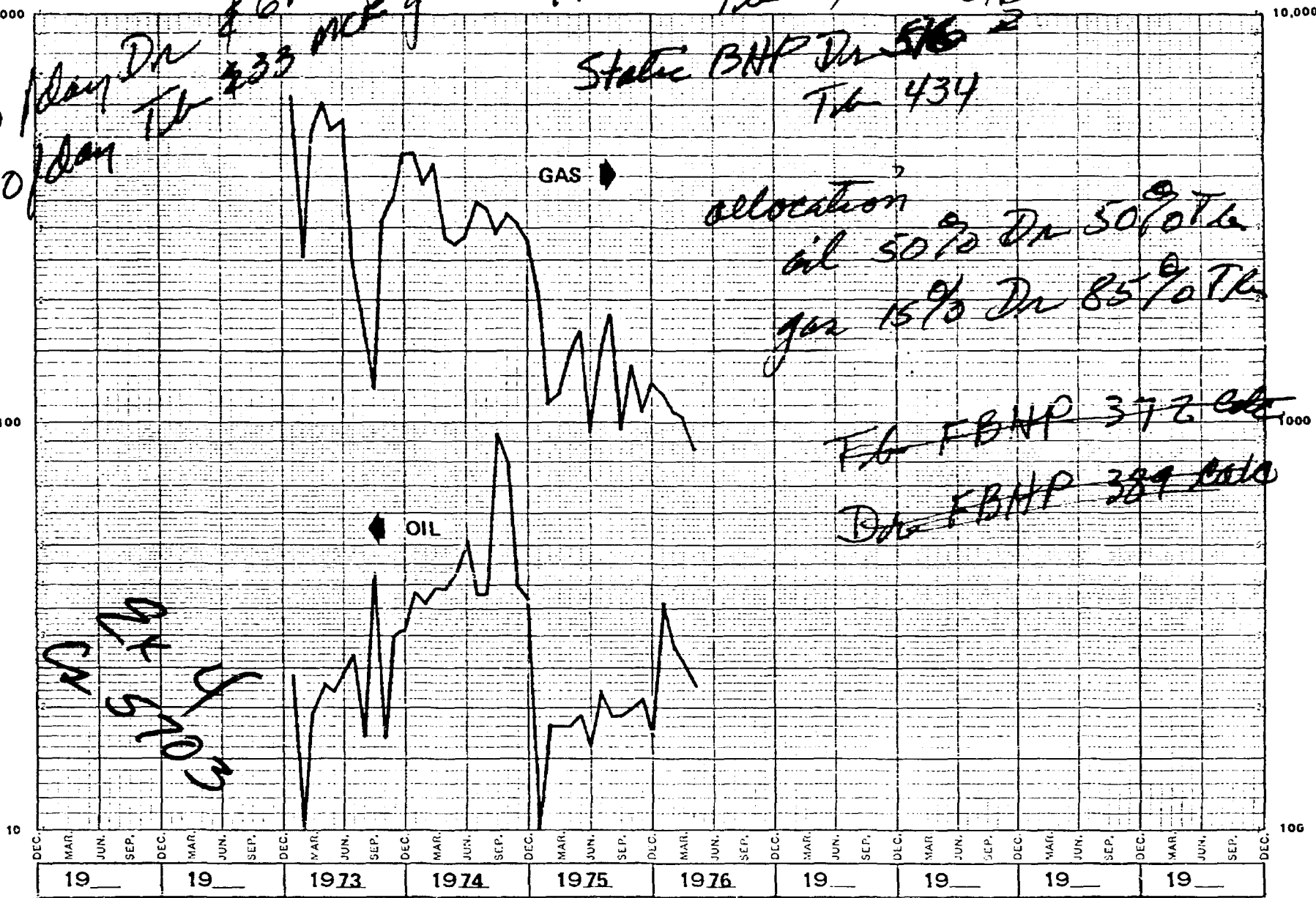
Static BHP Dn 516  
Th 434

allocation  
oil 50% Dn 50% Th  
gas 15% Dn 85% Th

Fl FBHP 372 MCF  
Dn FBHP 389 MCF

OIL BBL/MONTH

GAS MCF/MONTH



BEFORE THE  
NEW MEXICO OIL CONSERVATION COMMISSION  
Santa Fe, New Mexico  
July 7, 1976

EXAMINER HEARING

IN THE MATTER OF:

Application of Citiles Service Oil  
Company for downhole commingling,  
Lea County, New Mexico.

CASES  
5702 & 5703

BEFORE: Daniel S. Nutter, Examiner

TRANSCRIPT OF HEARING

A P P E A R A N C E S

For the New Mexico Oil Conservation Commission: William F. Carr, Esq.  
Legal Counsel for the Commission  
State Land Office Building  
Santa Fe, New Mexico

For the Applicant: Jason W. Kellahin, Esq.  
KELLAHIN & FOX  
Attorneys at Law  
500 Don Gaspar  
Santa Fe, New Mexico

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I N D E X

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1 MR. NUTTER: We will call now Case Number 5702.  
2 MR. CARR: Case 5702, application of Cities Service  
3 Oil Company for downhole commingling, Lea County, New Mexico.  
4 MR. KELLAHIN: If the Examiner please, Jason Kellahin,  
5 Kellahin & Fox, Santa Fe, appearing on behalf of the applicant  
6 in this case. We have one witness I would like to have sworn.  
7 (THEREUPON, the witness was duly sworn.)  
8 MR. KELLAHIN: Mr. Examiner, the witness says he can  
9 handle them both in one record so I would ask that you con-  
10 solidate Case 5702 with 5703.  
11 MR. NUTTER: We will now call Case 5703.  
12 MR. CARR: Case 5703, application of Cities Service  
13 Oil Company for downhole commingling, Lea County, New Mexico.  
14 MR. NUTTER: Cases 5702 and 5703 will be consolidated  
15 for purpose of hearing.  
16 MR. KELLAHIN: If the Examiner please, the two sets  
17 of exhibits have been marked as to each case and sequence so  
18 there may be a little confusion back and forth there but we  
19 will attempt to cover them as we go along here.  
20  
21 ELMER STARTZ  
22 called as a witness, having been first duly sworn, was  
23 examined and testified as follows:  
24 DIRECT EXAMINATION  
25 BY MR. KELLAHIN:

1 Q Would you state your name, please?

2 A Elmer Startz.

3 Q By whom are you employed and in what position,  
4 Mr. Startz?

5 A Cities Service Oil Company, *Regional* in the Region, Petroleum  
6 Engineer, Midland, Texas.

7 Q And have you testified before the Oil Commission  
8 and made your qualifications a matter of record?

9 A Yes.

10 MR. KELLAHIN: Are the witness's qualifications  
11 acceptable?

12 MR. NUTTER: Yes, they are.

13 Q (Mr. Kellahin continuing.) Mr. Startz, are you  
14 familiar with the applications of Cities Service Oil Company  
15 in Cases 5702 and 5703?

16 A Yes, sir.

17 Q Briefly what is proposed by the applicant in these  
18 two cases?

19 A We propose to seek Commission approval to commingle  
20 downhole the production from the Drinkard and Tubb formations.

21 Q Now, referring to what has been marked as Exhibits  
22 Number One in each of the two cases, would you identify those  
23 two exhibits please?

24 A They are plats showing the Brunson "B" lease and  
25 the State "S" lease of Cities Service Oil Company and the

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1 surrounding leases, as well as the surrounding well locations  
 2 and completions.

3 Q Has production from either one of these wells been  
 4 commingled within the two zones on the surface?

5 A No, sir.

6 Q You haven't used common tank batteries?

7 A Oh, yes, on the surface, yes, sir.

8 Q Do you have commingled production at the surface?

9 A Yes, sir.

10 Q On both of them?

11 A Yes, sir.

12 Q Has it caused any loss in the value of the product?

13 A No, sir.

14 Q Now, referring to what has been marked as Exhibits  
 15 Number Two in the two cases, would you identify those  
 16 exhibits?

17 A Those are schematic diagrams of the two wellbores  
 18 in each case under the present conditions.

19 Q These are as the wells are presently completed?

20 A Yes, sir.

21 Q Well, now, with reference to Exhibit Two in Case  
 22 5702, the Brunson "B" No. 7 Well, what is the status of that  
 23 well at the present time, have you had any problems with it?

24 A The well is commingled, in other words, there is  
 25 communication between the two zones.

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1 Q Is that because of a packer leakage or do you think  
 2 there are other problems in the well?

3 A We feel certain that it is communication behind the  
 4 casing. A little over a year ago, or last year it was, we  
 5 pulled the tubing and checked everything out and the tubing  
 6 appeared to be in good condition and as a result of this we  
 7 feel that the communication is behind the long string.

8 Q Now, this did show up on your latest packer leakage  
 9 test?

10 A Yes.

11 Q Now, if this application is approved do you propose  
 12 to do anything in the nature of recompleting this well?

13 A No, sir, we would propose to continue producing as  
 14 it is.

15 Q Would the production from this well justify a  
 16 recompletion?

17 A In my opinion, no, considering the fact that the  
 18 communication is behind the five-and-a-half casing.

19 Q Now, what is the status of the State No. 2 Well?

20 A The latest packer leakage test there showed communica-  
 21 tion between the two zones also and this is an extremely  
 22 marginal well. However, in this case I believe the  
 23 communication -- I don't know but it is probably in the tubing  
 24 string.

25 Q Now, would you propose to make any change in the

1 present completion if this application is approved?

2 A. No, sir.

3 Q. In fact, the production is presently being commingled  
4 in this well?

5 A. Yes, sir.

6 Q. Now, referring to Exhibits Three in the two cases,  
7 would you identify those two exhibits?

8 A. These are production curves during the last three  
9 years of the Drinkard formation in each well.

10 Q. Now, in the Brunson "B" No. 7 that well is not at  
11 the present time a marginal well, is it?

12 A. No, sir, it is above marginal, I guess.

13 Q. But is the production such that you would anticipate  
14 a long life if you recompleted the well as a dual completion,  
15 could you justify a dual completion?

16 A. I don't believe we could justify dually completing  
17 the well and eliminating the communication.

18 Q. That is because you think it is behind the pipe?

19 A. Yes, sir.

20 Q. And would you run the risk of losing the well if  
21 you attempted to do that?

22 A. I think we would lose considerable production if  
23 we did.

24 Q. Now, how about the No. 2 Well, what is the status  
25 of that well, is it a marginal well?

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1 A Yes, sir, it is very marginal.

2 Q In 1974 there apparently was some increase in  
3 production, was that due to the well having been shut in for  
4 a period of time?

5 A Yes, it was curtailed there. I'm not real sure but  
6 I believe it was overproduced slightly.

7 Q And that would account for the sudden rise in it?

8 A Yes, a sudden drop and then a sudden rise later on.

9 MR. NUTTER: You are talking about the Drinkard zone  
10 in the No. 2 Well, Mr. Kellahin?

11 MR. KELLAHIN: Yes, sir, the State "S" 2.

12 MR. NUTTER: You are talking about that increase in  
13 production in '74?

14 A Yes, sir, the decrease and then the increase later  
15 in the year.

16 Q (Mr. Kellahin continuing.) You say you think the  
17 well was shut in?

18 A It wasn't completely shut in, I think it was curtailed  
19 due to being overproduced. I believe it was, I'm not real  
20 sure on this now.

21 MR. NUTTER: Mr. Startz, am I reading this exhibit  
22 right, the well currently would be producing about twenty-eight  
23 barrels a month?

24 A Yes, sir. That's twenty-eight barrels of oil, yes,  
25 sir.

1 Q (Mr. Kellahan continuing.) Now, turning to Exhibits  
2 Number Four on the two wells could you discuss these exhibits,  
3 that would be the Tubb production curves?

4 A These are production curves from the history during  
5 the last recent years of the Tubb formation, the oil and gas  
6 production.

7 Q Does that show that the wells are declining?

8 A Yes, sir.

9 Q Now, on the basis of the present production, what  
10 are the bottom-hole pressures on these wells, do you have any  
11 information on that?

12 A In the Brunson now our flowing bottom-hole pressure  
13 is calculated. Now, we don't have any measured bottom-hole  
14 pressures in these but the Drinkard bottom-hole pressure  
15 flowing is calculated to be three hundred and eighty-nine psi  
16 and the Tubb flowing bottom-hole pressure is calculated to  
17 be three hundred and seventy-two psi.

18 Q What is the production from the wells from those  
19 two zones?

20 A The Drinkard is currently producing approximately  
21 one barrel of oil and five hundred and ten MCF of gas per  
22 day from the Brunson "B" 7 and the Tubb is producing approxi-  
23 mately one barrel of oil and two hundred and twenty-one MCF  
24 of gas per day.

25 Q Have you calculated the static bottom-hole pressure

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1 on the two zones?

2 A Yes, sir, the calculated static bottom-hole pressure  
3 in the Drinkard is nine hundred and thirty and the calculated  
4 static bottom-hole pressure in the Tubb is eight hundred and  
5 seventy-two psi.

6 Q And what is the flowing pressure as you have given  
7 it here for the two zones, would there be any danger that  
8 fluid or gas would migrate from one zone to the other?

9 A No, sir, I don't believe so.

10 Q Now, is the ownership in this well common throughout?

11 A Yes, sir.

12 Q On what basis would you propose to allocate  
13 production from --

14 A We would recommend allocating production, the oil  
15 would be fifty percent Drinkard and fifty percent Tubb based  
16 on the current tests and the gas based on current tests would  
17 be seventy percent to the Drinkard and thirty percent to the  
18 Tubb.

19 Q Now, on the State "S" No. 2 Well, what is the  
20 production from the two zones there and the pressures?

21 A The production from the Drinkard is approximately  
22 one barrel of oil and six MCF of gas per day and from the  
23 Tubb it's approximately one barrel of oil and thirty-three  
24 MCF of gas per day.

25 Q Now, what is the flowing tubing pressure on those



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1 two zones?

2 A The flowing -- here again this is a calculated  
3 flowing bottom-hole pressures. The Drinkard is calculated to  
4 be seventy-eight psi and the Tubb fifty-nine psi.

5 Q And what is the static pressures?

6 A The static pressures are calculated to be bottom-hole  
7 in the Drinkard five hundred and sixteen psi and the Tubb  
8 four hundred and thirty-four psi.

9 Q Now, with those pressures do you feel there is any  
10 danger of fluids migrating from one zone to the other in this  
11 well?

12 A No, sir.

13 Q How would you allocate production on this well?

14 A Based on current tests the oil would be split fifty-  
15 fifty to each zone and the gas would be fifteen percent to the  
16 Drinkard and eighty-five percent to the Tubb.

17 Q And that would reflect the results of the current  
18 tests of the well?

19 A Yes.

20 Q Now, is the ownership on that well common throughout  
21 as to both zones?

22 A Yes, sir.

23 Q As to both wells it is common as to royalty, over-  
24 riding royalty and working interest?

25 A Yes, sir.

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1 Q In all zones?

2 A Yes, sir.

3 Q Now, referring to what has been marked as Exhibit  
4 Number Five in each of the cases, would you identify that  
5 exhibit?

6 A That's the well logs showing the current perforations  
7 and it shows the current perforations and well tops on the  
8 log.

9 Q And that is as to each of the wells?

10 A As to each of the wells, yes, sir.

11 MR. KELLAHIN: Does the Commission want more than  
12 one copy of that log? We have others here.

13 MR. NUTTER: I think one will be sufficient.

14 Q (Mr. Kellahin continuing.) Now, Mr. Startz, in your  
15 opinion will the approval of this application result in the  
16 prolonged productive life for these two wells?

17 A Yes, sir, it will prolong it considerably, yes, sir.

18 Q Will that result in the recovery of hydrocarbons  
19 from each of the wells that would not otherwise be recovered?

20 A Yes, sir, definitely, sir.

21 Q And would waste occur, in your opinion, if the  
22 application is not approved?

23 A Yes, sir.

24 Q Will the correlative rights of any operator be  
25 impaired in any way by approval of this application?

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1 A No, sir.

2 Q Have there been other commingling cases in this  
 3 particular area approved by this Commission?

4 A The Brunson "B" No. 3 was approved earlier this  
 5 year in the same two formations, in the Drinkard and the Tubb.

6 Q Is that in the same section there as the No. 7?

7 A Yes, it is a west offset to Well No. 7.

8 MR. NUTTER: That is the No. 3, you say?

9 A Yes, sir.

10 MR. NUTTER: What was the order number on that, do  
 11 you know?

12 A No, sir, I don't recall.

13 MR. KELLAHIN: We can get it for you.

14 MR. NUTTER: Do you know, Mr. Startz, whether it was  
 15 by hearing or administrative?

16 A Hearing.

17 MR. NUTTER: There was a hearing?

18 A Yes, sir.

19 MR. NUTTER: We can find that. Reference will be  
 20 made to our files in this case.

21 Q (Mr. Kellahin continuing.) Were Exhibits One through  
 22 Five in each of the cases prepared by you or under your  
 23 supervision?

24 A Yes, sir.

25 MR. KELLAHIN: At this time I would like to offer

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1 the exhibits in the two cases.

2 MR. NUTTER: Let's see, it's five in each, isn't it?

3 MR. KELLAHIN: Yes.

4 MR. NUTTER: Exhibits One through Five will be  
5 admitted in Cases Number 5702 and 5703.

6 (THEREUPON, Exhibits One through Five  
7 in each case were admitted into  
8 evidence.)

10 CROSS EXAMINATION

11 BY MR. NUTTER:

12 Q Mr. Startz, are each of these wells classified as  
13 a gas well or an oil well in the Tubb formation?

14 A As gas wells, yes, sir.

15 Q They are both gas wells?

16 A Yes, sir.

17 Q Okay, now, what is the size of the proration unit  
18 that is assigned to the Brunson No. 7?

19 A The Drinkard has a forty-acre allocation and the  
20 Tubb has a hundred-and-twenty acres.

21 Q Being that Brunson lease?

22 A It's a total of a hundred and sixty, excluding the  
23 location of the No. 3 Well. In other words, it is a hundred  
24 and twenty acres.

25 Q For purposes of the Tubb gas pool do you dedicate

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1 the Arco forty too?

2 A Yes, sir, those three forty-acre locations are  
 3 dedicated to the No. 7 Well.

4 Q And that well is classified as a marginal or  
 5 non-marginal well in the Tubb gas pool?

6 A I believe it is marginal in the Tubb pool. I'm  
 7 not real sure on that, two hundred and twenty-one MCF per day  
 8 is the test.

9 Q Okay, now, on the State "S", this well is also a  
 10 gas well in the Tubb gas pool?

11 A Yes, sir.

12 Q And I presume the proration unit that's dedicated  
 13 to it would be eighty acres, being the south half of the  
 14 northwest of 15?

15 A That is correct and forty acres to the Drinkard.

16 Q And forty acres to the Drinkard?

17 A Yes, sir.

18 Q And is this unit classified as a marginal or non-  
 19 marginal unit?

20 A Marginal.

21 Q Now, both wells are producing through the annulus  
 22 at this time as far as the Tubb is concerned, right?

23 A Yes, sir.

24 Q Now, the State "S", you said you think probably has  
 25 a leak in the tubing string, how do you propose to continue

1 to produce this, produce as much as it will make out of the  
2 annulus and also produce from the tubing?

3 A Yes, sir.

4 Q Without disturbing the tubing or setting a packer?

5 A Yes, sir.

6 Q And you would handle the other well the same way  
7 then?

8 A Yes.

9 Q Use the annulus and the tubing?

10 A Yes, sir.

11 MR. NUTTER: Are there any further questions of  
12 Mr. Startz? He may be excused.

13 (THEREUPON, the witness was excused.)

14 MR. NUTTER: Do you have anything further, Mr.  
15 Kellahin?

16 MR. KELLAHIN: That's all we have, Mr. Nutter.

17 MR. NUTTER: Mr. Carr, do you have anything?

18 MR. CARR: Mr. Examiner, we have received a letter  
19 from Mobil Oil Corporation concerning the application in  
20 Case 5702. The letter is signed by J. A. Morris, Regulatory  
21 Engineering Supervisor, and reads in part: (Reading.) Recent  
22 wellhead shut-in pressure tests indicate that there could be  
23 as much as three hundred pounds per square inch differential  
24 existing between the zones proposed to be commingled. If  
25 this differential is found to exist in the well of this

1 application we believe that the subject of the request for  
2 downhole commingling should be denied. (End of reading.)

3 MR. NUTTER: Thank you.

4 MR. KELLAHIN: If the Examiner please, I don't  
5 think the letter makes reference to any particular test and  
6 we don't know what test he is talking about. We haven't been  
7 able to find that that shows such a pressure differential.

8 MR. NUTTER: Okay, Mr. Kellahin, he says a recent  
9 test run on Mobil's lease indicates that there could be as  
10 much as a three hundred psi differential existing between the  
11 zones. If this differential is found to exist in the well  
12 of this application he objects and should be denied.

13 Now, Mr. Startz, you are back under oath.

14  
15 RECROSS EXAMINATION

16 BY MR. NUTTER:

17 Q Mobil has found a three hundred pound differential  
18 on the tests on their Brunson-Argo lease and they say if this  
19 kind of a differential is found on your lease, this subject  
20 well being the Brunson "B" No. 7, that your application should  
21 be denied. Do you find a three hundred pound differential on  
22 your lease?

23 A No, sir, we don't find this now. We haven't  
24 measured the bottom-hole pressures but based on all of our  
25 available information we don't find this kind of pressure.

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1 Q Now, you stated that you had a calculated flowing  
2 bottom-hole pressure on the Brunson "B" No. 7, which is the  
3 well that Mobil is talking about, you stated you had a  
4 calculated flowing bottom-hole pressure in the Tubb of three,  
5 seventy-two and a flowing bottom-hole pressure calculated  
6 in the Drinkard at three, eighty-nine, so there isn't  
7 apparently any three hundred pound differential there, is  
8 there?

9 A No, sir.

10 Q And you stated that your calculated static bottom-  
11 hole pressure in the Tubb on that well was eight, seventy-two  
12 and your calculated static on the Drinkard was nine, thirty,  
13 so is there any three hundred pound differential there?

14 A No, sir.

15 Q Okay, how did you arrive at these calculated  
16 pressures, both flowing and static?

17 A This is a computer equation and calculation our  
18 reservoir engineer has set up based on the surface pressures  
19 and the fluid GOR's and specific gravities and things of this  
20 nature. They are all considered and this is the way we  
21 calculate these.

22 Q Okay, this is surface tubing pressure calculated  
23 down to the perforated interval or to the datum?

24 A Yes, sir, to the mid perfs.

25 Q In each zone? Now, these aren't both taken to a



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1 common datum then?

2 A. No, sir, these are to the mid perms.

3 Q. The perforation in the Tubb is to the mid perms of  
4 the Tubb?

5 A. Yes, sir.

6 Q. Of the calculation and the bottom-hole pressure  
7 calculation for the Drinkard is to the mid perms of the  
8 Drinkard zone?

9 A. Yes, sir.

10 Q. And that is calculated from flowing tubing pressure  
11 and from shut-in tubing pressure?

12 A. Yes, sir.

13 Q. How long were your wells shut in in order to obtain  
14 your shut-in pressure?

15 A. It was forty-eight hours on the shut-in tubing  
16 pressures and, of course, the flowing I really don't know  
17 how long those were.

18 MR. NUTTER: Okay, does anyone else have anything  
19 they wish to offer in Cases Number 5702 or 5703? We will  
20 take the cases under advisement.

21

22

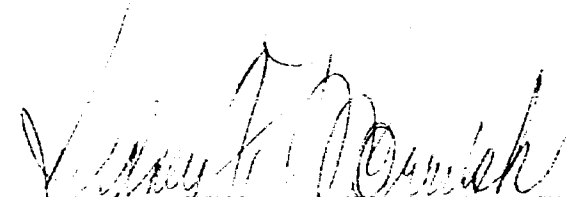
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24

25

REPORTER'S CERTIFICATE

I, SIDNEY F. MORRISH, a Certified Shorthand Reporter,  
do hereby certify that the foregoing and attached Transcript  
of Hearing before the New Mexico Oil Conservation Commission  
was reported by me, and the same is a true and correct record  
of the said proceedings to the best of my knowledge, skill and  
ability.

  
Sidney F. Morrish, C.S.R.

I do hereby certify that the foregoing is  
a complete record of the proceedings in  
the Examiner hearing of Case No. 5702-5703  
heard by me on 2/7, 19 76.

 Examiner  
New Mexico Oil Conservation Commission

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# OIL CONSERVATION COMMISSION

STATE OF NEW MEXICO

P. O. BOX 2088 - SANTA FE

87501



DIRECTOR  
JOE D. RAMEY

LAND COMMISSIONER  
PHIL R. LUCERO  
August 12, 1976

STATE GEOLOGIST  
EMERY C. ARNOLD

Mr. Jason Kellahin  
Kellahin & Fox  
Attorneys at Law  
Post Office Box 1769  
Santa Fe, New Mexico

Re: CASE NO. 5703  
ORDER NO. R-5254

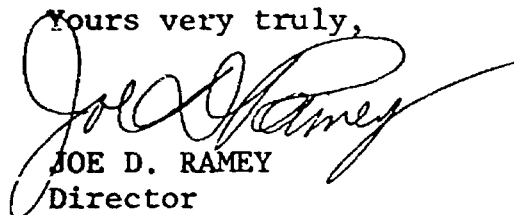
Applicant:

Cities Service Oil Company

Dear Sir:

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

Yours very truly,

  
JOE D. RAMEY  
Director

JDR/fd

Copy of order also sent to:

Hobbs OCC x  
Artesia OCC \_\_\_\_\_  
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. 5703  
Order No. R-5254

APPLICATION OF CITIES SERVICE OIL  
COMPANY FOR DOWNHOLE COMMINGLING,  
LEA COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on July 7, 1976,  
at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this 11th day of August, 1976, the Commission,  
a quorum being present, having considered the testimony, the  
record, and the recommendations of the Examiner, 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 owner and operator of the State "S" Well No. 2, located in Unit F of Section 15, Township 21 South, Range 37 East, NMPM, Lea County, New Mexico.
- (3) That the applicant seeks authority to commingle Tubb Gas Pool and Drinkard Oil Pool production within the wellbore of the above-described well.
- (4) That from the Tubb zone, the subject well is capable of low marginal production only.
- (5) That from the Drinkard zone, the subject well is capable of low marginal production only.
- (6) That the proposed commingling may result in the recovery of additional hydrocarbons from each of the subject pools, thereby preventing waste, and will not violate correlative rights.
- (7) That the reservoir characteristics of each of the subject zones are such that underground waste would not be caused by the proposed commingling provided that the well is not shut-in for an extended period.

-2-

Case No. 5793  
Order No. R-5254

(8) That to afford the Commission the opportunity to assess the potential for waste and to expeditiously order appropriate remedial action, the operator should notify the Hobb's district office of the Commission any time the subject well is shut-in for 7 consecutive days.

(9) That in order to allocate the commingled production to each of the commingled zones in the subject well, 85 percent of the commingled gas production should be allocated to the Tubb zone and 15 percent to the Drinkard, and 50 percent of the commingled oil production should be allocated to the Tubb zone and 50 percent to the Drinkard zone.

IT IS THEREFORE ORDERED:

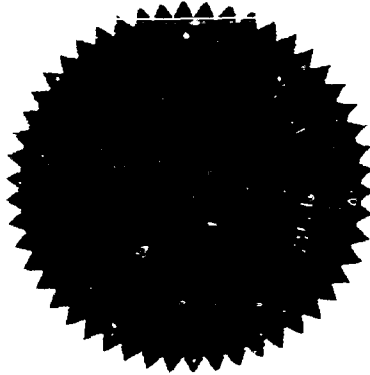
(1) That the applicant, Cities Service Oil Company, is hereby authorized to commingle Tubb Gas Pool and Drinkard Oil Pool production within the wellbore of the State "S" Well No. 2, located in Unit F of Section 15, Township 21 South, Range 37 East, NMPM, Lea County, New Mexico.

(2) That 85 percent of the commingled gas production shall be allocated to the Tubb zone and 15 percent to the Drinkard, and 50 percent of the commingled oil production shall be allocated to the Tubb zone and 50 percent to the Drinkard zone.

(3) That the operator of the subject well shall immediately notify the Commission's Hobb's district office any time the well has been shut-in for 7 consecutive days and shall concurrently present, to the Commission, a plan for remedial action.

(4) 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 hereinabove designated.



S E A L

STATE OF NEW MEXICO  
OIL CONSERVATION COMMISSION

*Phil R. Lucero*  
PHIL R. LUCERO, Chairman

*Emery C. Arnold*  
EMERY C. ARNOLD, Member

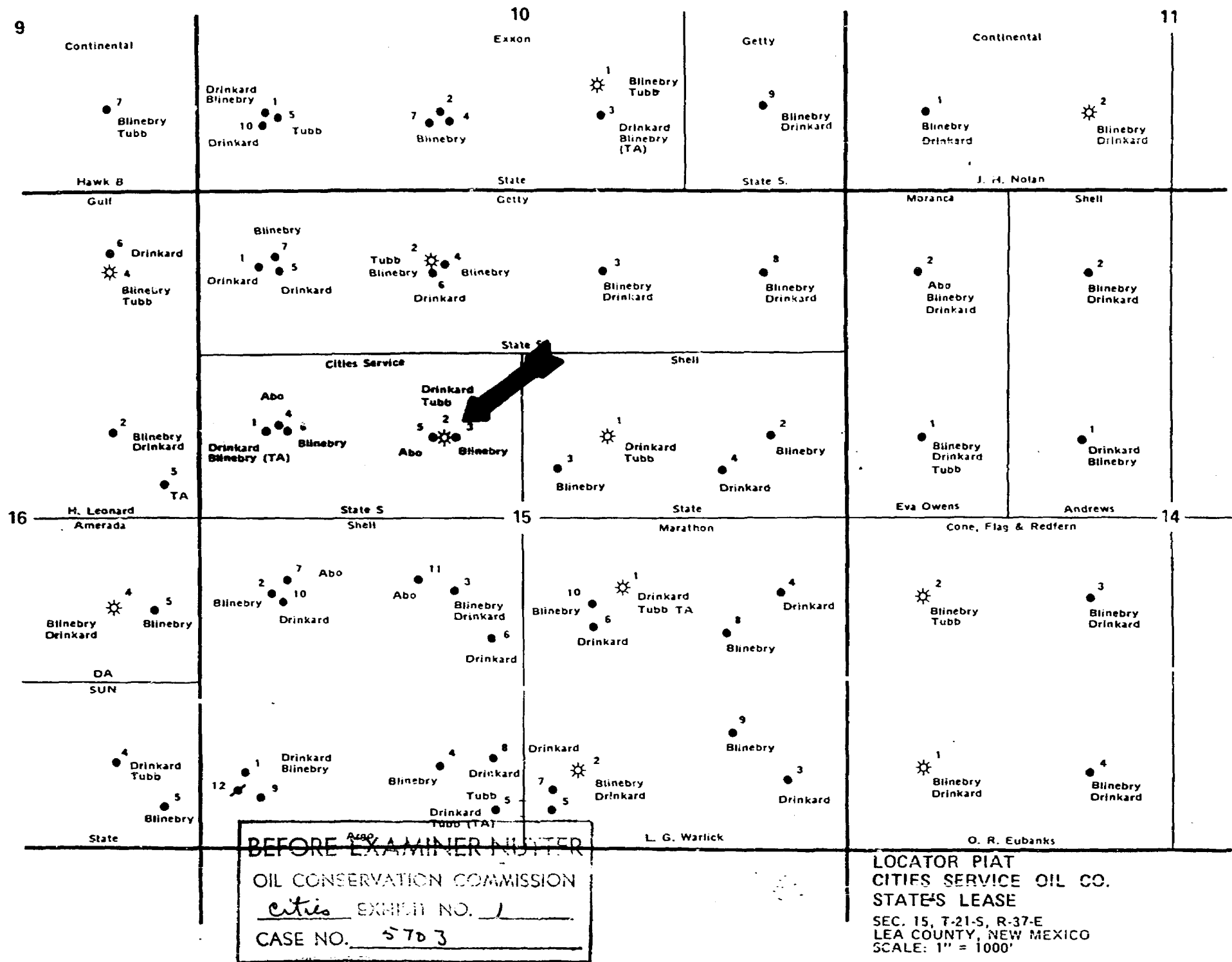
*Joe D. Ramey*  
JOE D. RAMEY, Member & Secretary

jr/

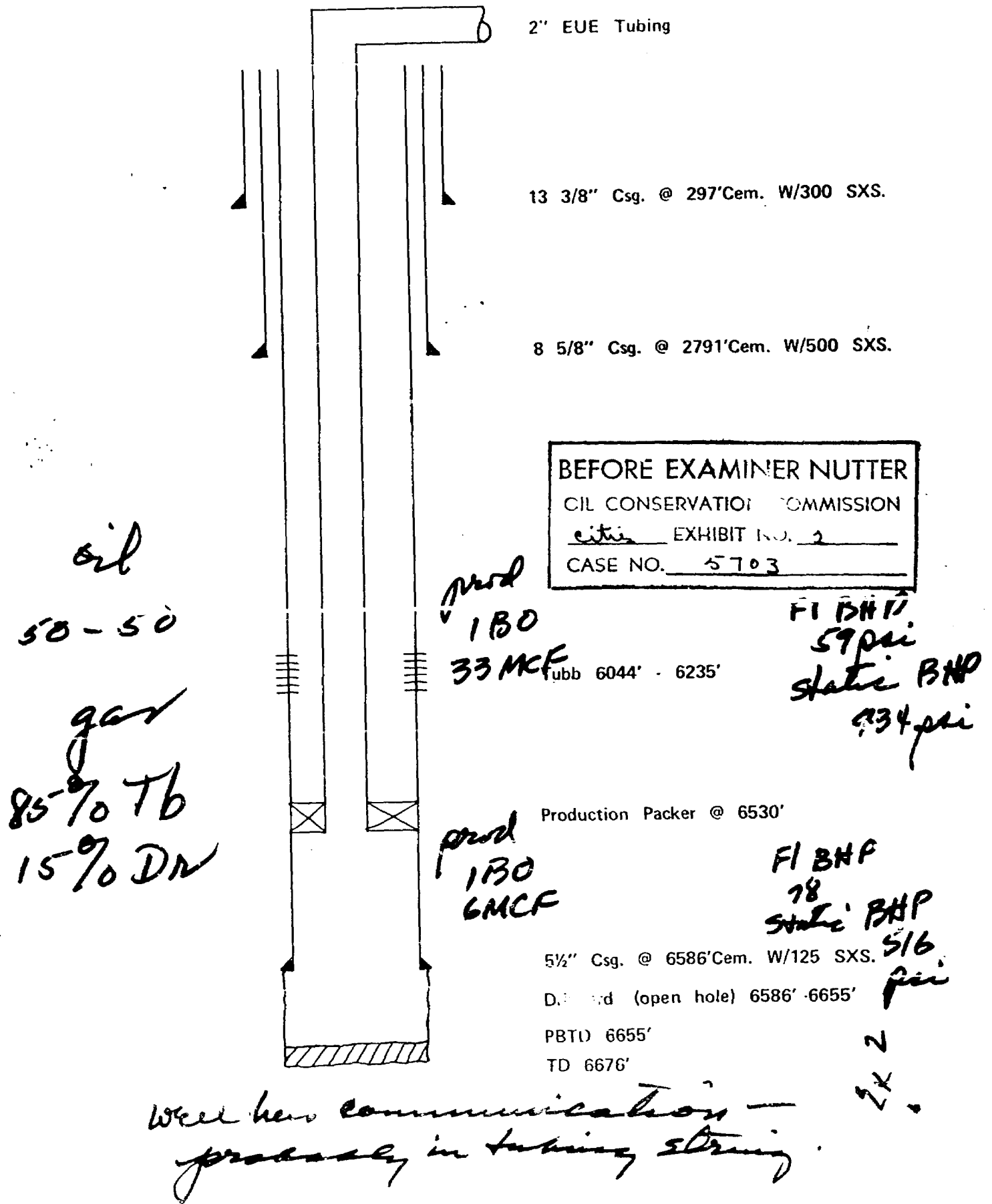
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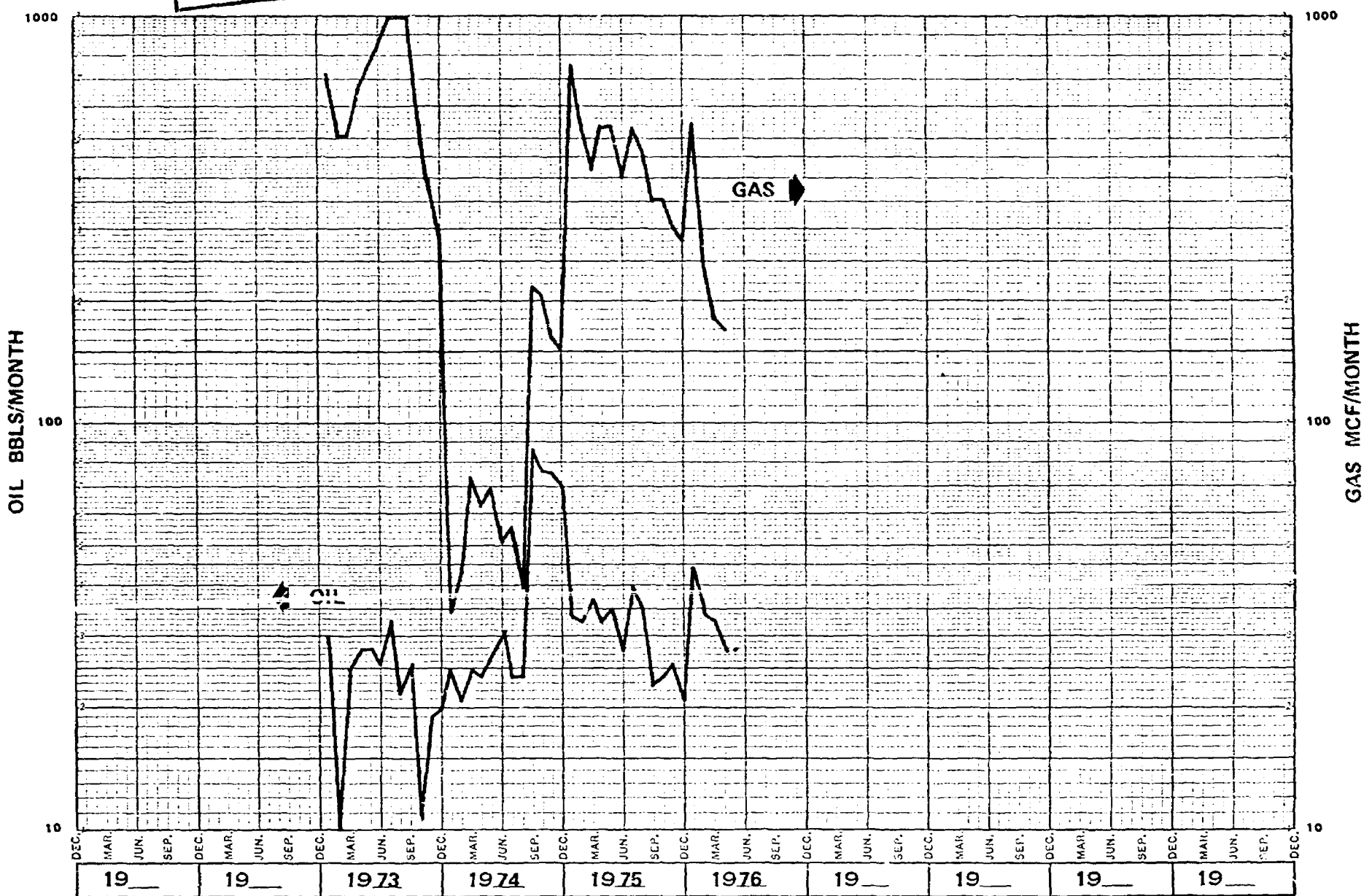


CITIES SERVICE OIL CO.  
STATE-S No. 2  
CURRENT DRINKARD-TUBB  
DUAL COMPLETION



BEFORE EXAMINER NUTTER  
OIL CONSERVATION COMMISSION  
cti EXHIBIT NO. 3  
CASE NO. 5723

CITIES SERVICE OIL CO.  
STATE-S No. 2  
DRINKARD





BEFORE EXAMINER NUTTER

OIL CONSERVATION COMMISSION

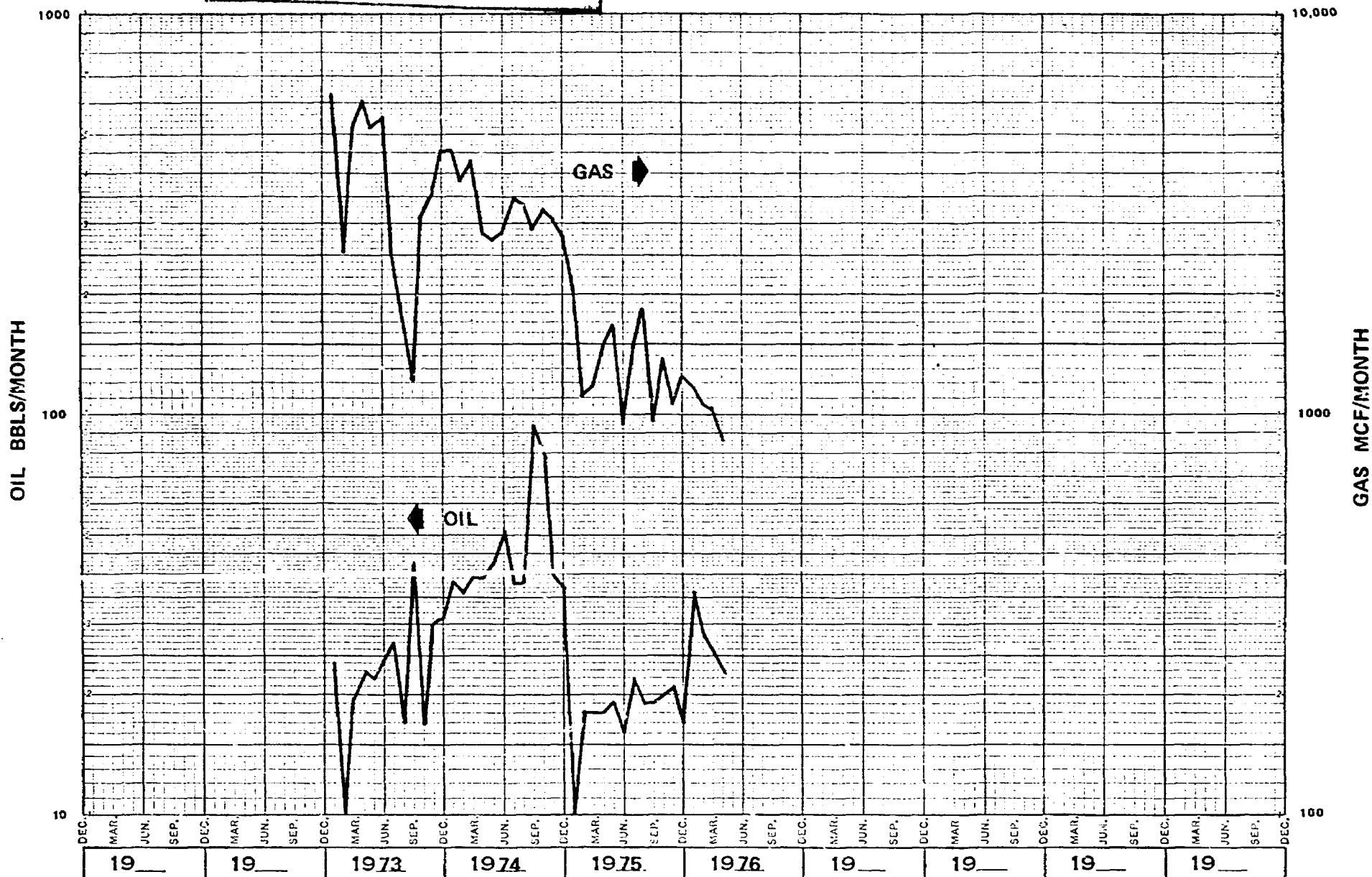
Cities EXHIBIT NO. 4

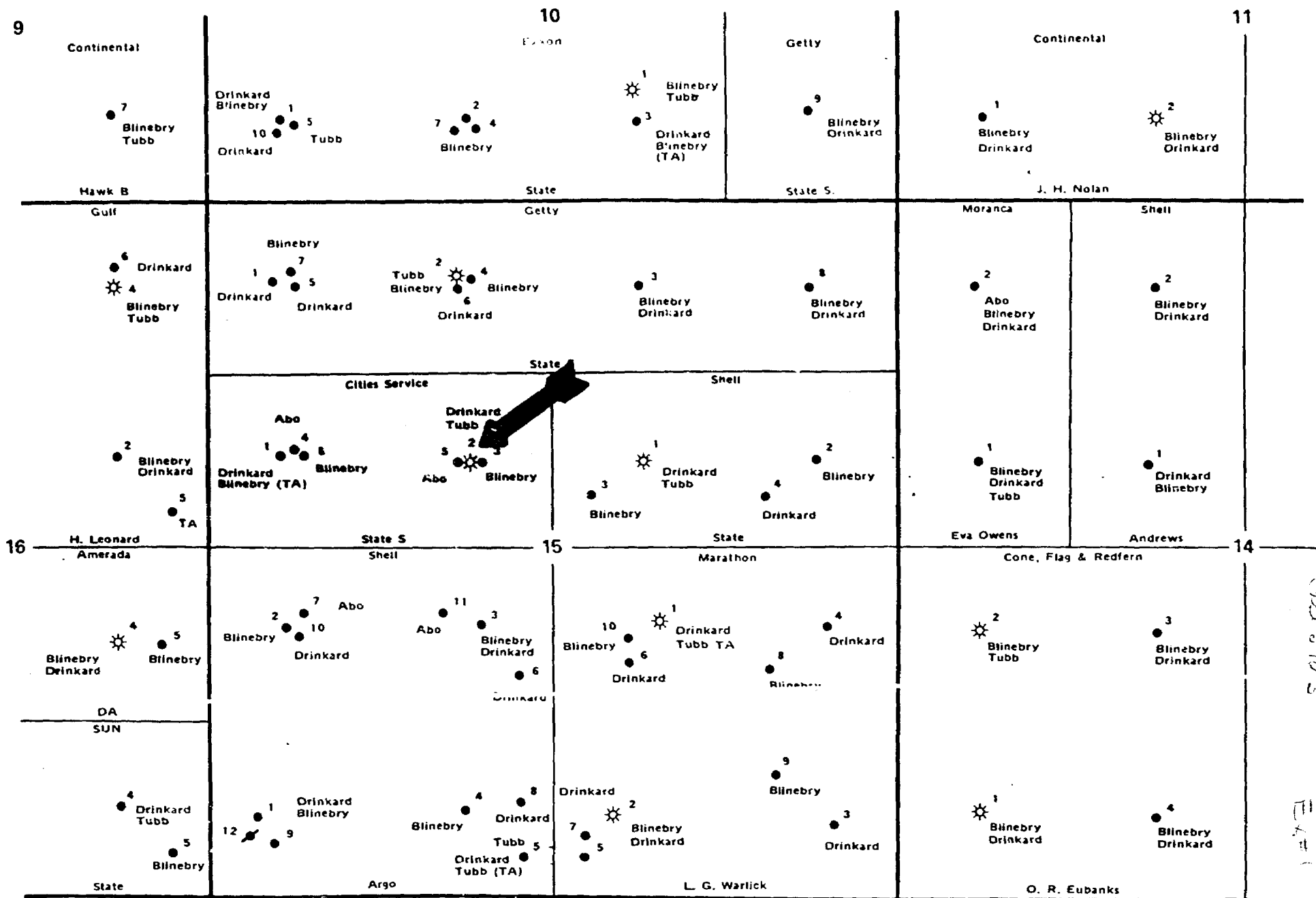
CASE NO. 5703

CITIES SERVICE OIL CO.

STATE-S No. 2

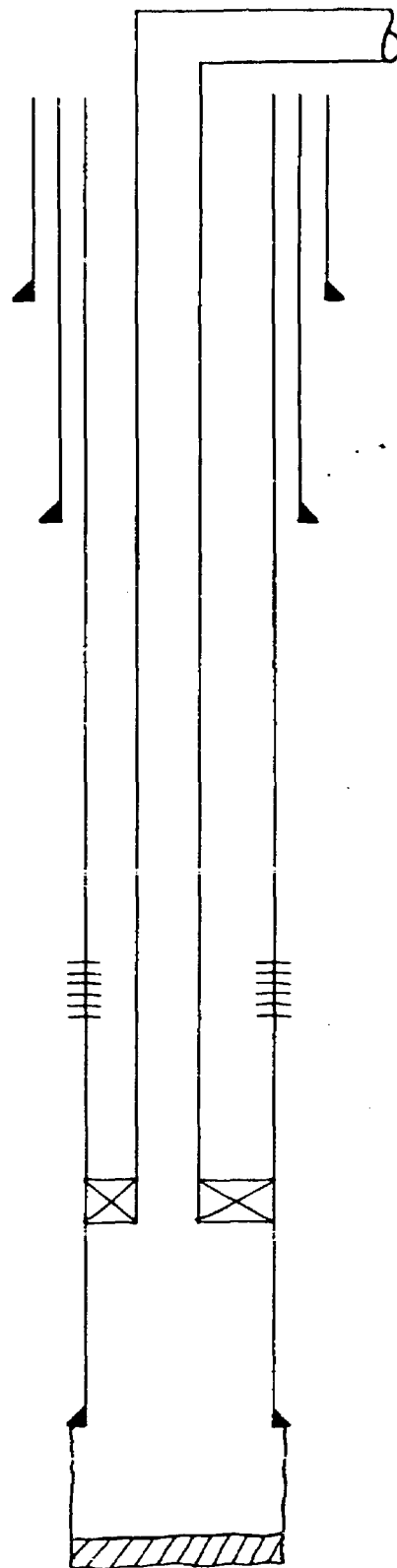
TUBB





LOCATOR PIAT  
CITIES SERVICE OIL CO.  
STATE'S LEASE  
SEC. 15, T-21-S, R-37-E  
LEA COUNTY, NEW MEXICO  
SCALE: 1" = 1000'

CITIES SERVICE OIL CO.  
STATE-S No. 2  
CURRENT DRINKARD-TUBB  
DUAL COMPLETION



2" EUE Tubing

13 3/8" Csg. @ 297'Cem. W/300 SXS.

8 5/8" Csg. @ 2791'Cem. W/500 SXS.

Tubb 6044' - 6235'

Production Packer @ 6530'

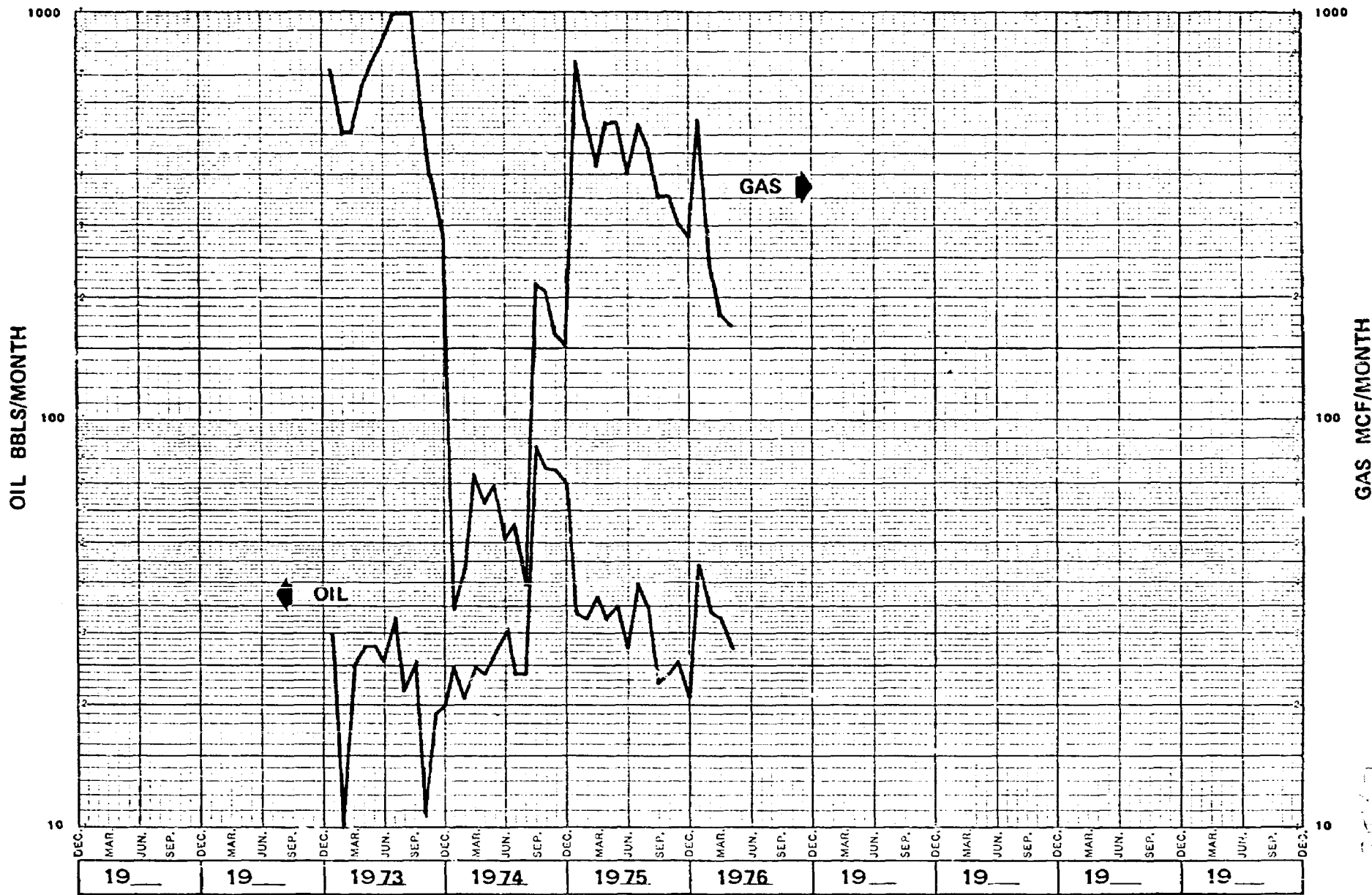
5 1/2" Csg. @ 6586'Cem. W/125 SXS.

Drinkard (open hole) 6586' -6655'

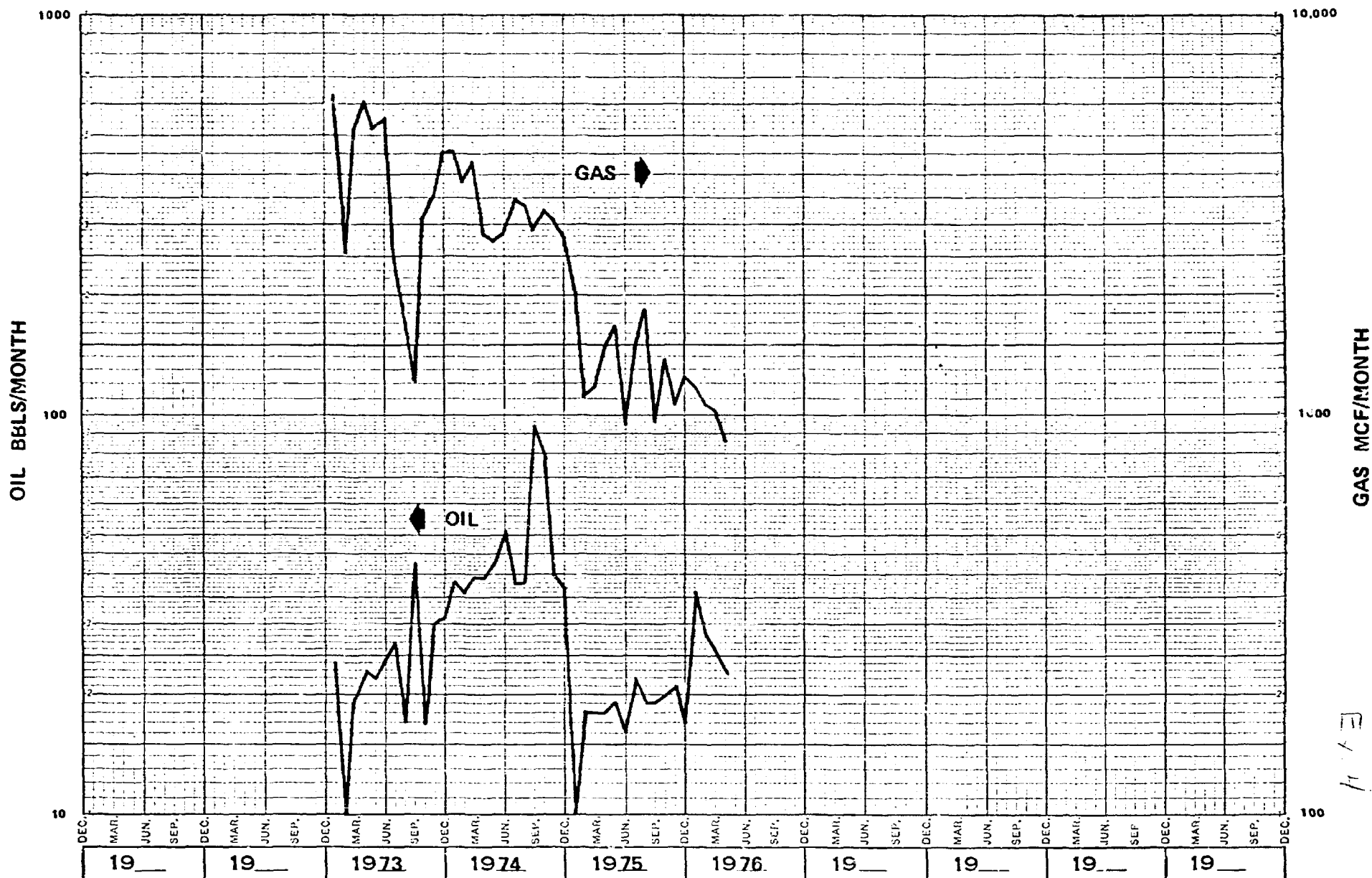
PBTD 6655'

TD 6676'

CITIES SERVICE OIL CO.  
STATE-S No. 2  
DRINKARD



CITIES SERVICE OIL CO.  
STATES No. 2  
TUBB



CASE 5703: Application of Cities Service Oil Company for downhole commingling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to commingle Tubb Gas Pool and Drinkard Oil Pool production in the wellbore of its State "C" Well No. 2, located in Unit F of Section 15, Township 21 South, Range 37 East, Lea County, New Mexico.

CASE 5692: (Reopened & Readvertised)

Application of Cities Service Oil Company for a dual completion and downhole commingling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the dual completion (conventional) of its Owen "A" Well No. 1 located in Unit F of Section 35, Township 21 South, Range 37 East, Lea County, New Mexico, completing said well in such a manner as to commingle Blinebry and Drinkard oil production and to dually complete said zones with the Wantz-Granite Wash Pool.

CASE 5711: Application of Hanson Oil Corporation for a dual completion and downhole commingling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the dual completion (conventional) of its Max Gutman Well No. 7 located in Unit D of Section 19, Township 22 South, Range 38 East, Lea County, New Mexico, in such a manner as to commingle Blinebry and Tubb Pool oil and gas production and to dually complete said zones with the Drinkard Pool.

Docket No. 20-76

Dockets Nos. 21-76 and 22-76 are tentatively set for hearing on August 4 and August 18, 1976. Applications for hearing must be filed at least 22 days in advance of hearing date.

DOCKET: COMMISSION HEARING - WEDNESDAY - JULY 14, 1976

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

CASE 5712: In the matter of the hearing called by the Oil Conservation Commission upon its own motion to permit all interested parties to appear and show cause why the San Juan 30-4 Unit Area in Townships 30 and 31 North, Range 4 West, Rio Arriba County, New Mexico, should not be contracted by the deletion of all lands not presently within an approved participating area or which cannot be expected to be in such participating area within the reasonably foreseeable future as the result of commercial production being developed thereon.

CASE 5713: In the matter of the hearing called by the Oil Conservation Commission on its own motion to permit Agua, Inc., and all other interested parties to appear and show cause why Agua, Inc. should be authorized to dispose salt water disposal into the San Andres formation in its SWD Well No. H-35 located in Unit H of Section 35, Township 22 South, Range 37 East, Lea County, New Mexico.

CASE 5714: Application of Agua, Inc. for salt water disposal, Lea County, New Mexico. Applicant, in the above-styled cause, seeks permanent authority to dispose of produced salt water into the San Andres formation through the perforated interval from 4230 feet to 4320 feet below the surface and into the open-hole interval from 4400 feet to 5000 feet in its SWD Well No. C-2 located in Unit C of Section 2, Township 22 South, Range 37 East, Lea County, New Mexico.

CASE 5703: Application of Cities Service Oil Company for downhole commingling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to commingle Tubb Gas Pool and Brinkard Oil Pool production in the wellbore of its State "S" Well No. 2 located in Unit F of Section 15, Township 21 South, Range 37 East, Lea County, New Mexico.

CASE 5670: (Continued from June 9, 1976 Examiner Hearing)

Application of Read & Stevens, Inc. for an unorthodox location and directional drilling, Chaves County, New Mexico. Applicant, in the above-styled cause, seeks authority to deviate its Harris-Federal Well No. 3, the surface location of which is 660 feet from the South line and 1920 feet from the East line of Section 27, Township 15 South, Range 28 East, Chaves County, New Mexico, by directionally drilling said well from a kick-off point at approximately 6000 feet and bottoming it at an unorthodox location in the Pennsylvanian formation within 250 feet of a point 990 feet from the South line and 1650 feet from the East line of said Section 27, the S/2 of the Section to be dedicated to the well.

*misadvertised in the New Mexican;  
ready for July 7*

JASON W. KELLAHIN  
ROBERT E. FOX  
W. THOMAS KELLAHIN

MAY 21 1976  
KELLAHIN AND FOX  
ATTORNEYS AT LAW  
500 DON GASPAR AVENUE  
POST OFFICE BOX 1769  
SANTA FE, NEW MEXICO 87501

TELEPHONE 982-4315  
AREA CODE 505

May 21, 1976

Mr. Bill Carr  
Oil Conservation Commission  
P. O. Box 2088  
Santa Fe, New Mexico 87501

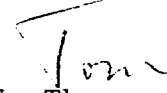
Re: State "S" Well No. 2  
Sec. 15, T21S, R37E, NMPM  
Lea County, New Mexico

Dear Bill:

Please accept for filing the enclosed application on behalf of Cities Service Oil Company for downhole commingling of production in the above referenced well.

Please set this matter for hearing at the next available examiner hearing on June 23, 1976.

Very truly yours,

  
W. Thomas Kellahin

CC: Mr. E. F. Motter

WTK:kjf

Enclosure



BEFORE THE  
OIL CONSERVATION COMMISSION OF NEW MEXICO

IN THE MATTER OF THE APPLICATION OF  
CITIES SERVICE OIL COMPANY FOR  
DOWNHOLE COMMINGLING, LEA COUNTY,  
NEW MEXICO.

A P P L I C A T I O N

COMES NOW CITIES SERVICE OIL COMPANY and applies to the Oil Conservation Commission of New Mexico for approval of downhole commingling in its State "S" No. 2 well located 1980 feet from the North line and 1980 feet from the West line of Section 15, Township 21 South, Range 37 East, N.M.P.M., Lea County, New Mexico and in support thereof would show the Commission:

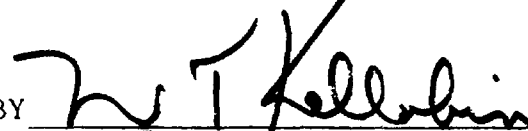
1. The subject well was completed as a dual completion producing from the Tubb Gas Pool and the the Drinkard Pool.
2. Subsequent to completion the well has experienced a packer leakage problem which is not economical to repair.
3. Applicant desires to produce the well as a downhole commingling of the Tubb and Drinkard production.
4. Approval of this application will result in the production of hydrocarbons that would not otherwise be produced, will prevent waste, and will not cause any damage to either the Drinkard or Tubb formations. Correlative rights including those of offset operators will not be impaired.

WHEREFORE applicant prays that this application be set

for hearing before the Commission's duly appointed examiner, and that after notice and hearing as provided by law, the Commission enter its order approving commingling as prayed for.

Respectfully submitted,

CITIES SERVICE OIL COMPANY

BY 

KEILAHIN & FOX

P. O. Box 1769

Santa Fe, New Mexico 87501

Attorneys for Applicant

BEFORE THE  
OIL CONSERVATION COMMISSION OF NEW MEXICO

IN THE MATTER OF THE APPLICATION OF  
CITIES SERVICE OIL COMPANY FOR  
DOWNHOLE COMMINGLING, LEA COUNTY,  
NEW MEXICO.

A P P L I C A T I O N

COMES NOW CITIES SERVICE OIL COMPANY and applies to the Oil Conservation Commission of New Mexico for approval of downhole commingling in its State "S" No. 2 well located 1980 feet from the North line and 1980 feet from the West line of Section 15, Township 21 South, Range 37 East, N.M.P.M., Lea County, New Mexico and in support thereof would show the Commission:

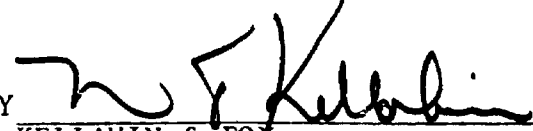
1. The subject well was completed as a dual completion producing from the Tubb Gas Pool and the the Drinkard Pool.
2. Subsequent to completion the well has experienced a packer leakage problem which is not economical to repair.
3. Applicant desires to produce the well as a downhole commingling of the Tubb and Drinkard production.
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Respectfully submitted,

CITIES SERVICE OIL COMPANY

BY 

KELLAHIN & FOX  
P. O. Box 1769  
Santa Fe, New Mexico 87501

Attorneys for Applicant

BEFORE THE  
OIL CONSERVATION COMMISSION OF NEW MEXICO

IN THE MATTER OF THE APPLICATION OF  
CITIES SERVICE OIL COMPANY FOR  
DOWNHOLE COMMINGLING, LEA COUNTY,  
NEW MEXICO.

A P P L I C A T I O N

COMES NOW CITIES SERVICE OIL COMPANY and applies to the Oil Conservation Commission of New Mexico for approval of downhole commingling in its State "S" No. 2 well located 1980 feet from the North line and 1980 feet from the West line of Section 15, Township 21 South, Range 37 East, N.M.P.M., Lea County, New Mexico and in support thereof would show the Commission:

1. The subject well was completed as a dual completion producing from the Tubb Gas Pool and the the Drinkard Pool.
2. Subsequent to completion the well has experienced a packer leakage problem which is not economical to repair.
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Respectfully submitted,

CITIES SERVICE OIL COMPANY

BY 

KELLAHIN & FOX  
P. O. Box 1769  
Santa Fe, New Mexico 87501

Attorneys for Applicant

BEFORE THE  
NEW MEXICO OIL CONSERVATION COMMISSION  
Santa Fe, New Mexico  
June 23, 1976

EXAMINER HEARING

IN THE MATTER OF:

Application of Cities Service Oil ) CASE  
Company for downhole commingling, Lea ) 5703  
County, New Mexico. )

BEFORE: Richard L. Stamets, Examiner

TRANSCRIPT OF HEARING

A P P E A R A N C E S

For the New Mexico Oil Conservation Commission: William F. Carr, Esq.  
Legal Counsel for the Commission  
State Land Office Building  
Santa Fe, New Mexico

**sid morrish reporting service**  
General Court Reporting Service  
825 Calle Mejia, No. 122, Santa Fe, New Mexico 87501  
Phone (505) 982-9212

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MR. STAMETS: We will call next Case 5703.

MR. CARR: Case 5703, application of Cities Service Oil Company for downhole commingling, Lea County, New Mexico.

Mr. Examiner, due to an error in the advertisement the case should be continued to the July 7th Examiner Hearing.

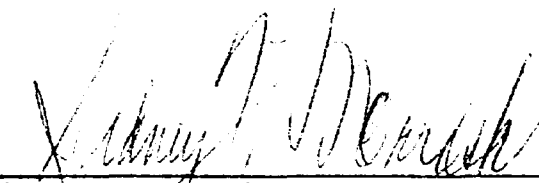
MR. STAMETS: Case 5703 will be continued.

**sid morrish reporting service**  
General Court Reporting Service  
825 Calle Mejia, No. 122, Santa Fe, New Mexico 87501  
Phone (505) 982-9212

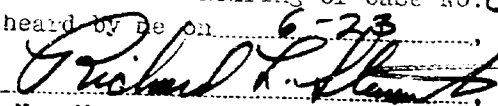


REPORTER'S CERTIFICATE

I, SIDNEY F. MORRISH, a Certified Shorthand Reporter,  
do hereby certify that the foregoing and attached Transcript  
of Hearing before the New Mexico Oil Conservation Commission  
was reported by me, and the same is a true and correct record  
of the said proceedings to the best of my knowledge, skill and  
ability.

  
Sidney F. Morrish, C.S.R.

**sid morrish reporting service**  
General Court Reporting Service  
825 Calle Mejia, No. 122, Santa Fe, New Mexico 87501  
Phone (505) 982-9212

I do hereby certify that the foregoing is  
a complete record of the proceedings in  
the Examiner hearing of Case No. 5703,  
heard by me on 6-23, 1986.  
  
Richard L. Stambaugh, Examiner  
New Mexico Oil Conservation Commission

BEFORE THE OIL CONSERVATION COMMISSION  
OF THE STATE OF NEW MEXICO

dr/

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

CASE NO. 5703

Order No. R- 5254

APPLICATION OF CITIES SERVICE OIL COMPANY  
FOR DOWNHOLE COMMINGLING, LEA  
COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on July 7,  
19 76, at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this        day of July, 1976, the Commission,  
a quorum being present, having considered the testimony, the record,  
and the recommendations of the Examiner, 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  
owner and operator of the State "S" Well No. 2, located  
in Unit F of Section 15, Township 21 South, Range  
37 East, NMPM, Lea County, New Mexico.

(3) That the applicant seeks authority to commingle  
Tubb Gas Pool and Drinkard Oil Pool production  
within the wellbore of the above-described well.

(4) That from the Tubb zone, the  
subject well is capable of low marginal production only.

(5) That from the Drinkard zone, the  
subject well is capable of low marginal production only.

(6) That the proposed commingling may result in the recovery  
of additional hydrocarbons from each of the subject pools, thereby  
preventing waste, and will not violate correlative rights.

Case No. \_\_\_\_\_  
Order No. R- \_\_\_\_\_

(7) That the reservoir characteristics of each of the subject zones are such that underground waste would not be caused by the proposed commingling provided that the well is not shut-in for an extended period.

(8) That to afford the Commission the opportunity to assess the potential for waste and to expeditiously order appropriate remedial action, the operator should notify the Hobb's district office of the Commission any time the subject well is shut-in for 7 consecutive days.

(9) That in order to allocate the commingled production to each of the commingled zones in the subject well, 85 percent of the commingled gas production should be allocated to the Tubb <sup>and 15 percent to the Drinkard,</sup> zone, and 50 percent of the commingled oil production <sup>should be allocated</sup> to the Drinkard Tubb zone <sup>and 50 percent to the Drinkard</sup>.

IT IS THEREFORE ORDERED:

(1) That the applicant, Cities Service Oil Company, is hereby authorized to commingle Tubb Gas Pool and Drinkard Oil Pool production within the wellbore of the State "S" Well No. 2, located in Unit F of Section 15, Township 21 South, Range 37 East, NMPM, Lea County, New Mexico.

(2) That 85 percent of the commingled gas production shall be allocated to the Tubb zone and 15 percent to the Drinkard, and 50 percent of the commingled oil production shall be allocated to the Drinkard Tubb zone <sup>and 50 percent to the Drinkard</sup>.

(3) That the operator of the subject well shall immediately notify the Commission's Hobb's district office any time the well has been shut-in for 7 consecutive days and shall concurrently present, to the Commission, a plan for remedial action.

(4) 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 hereinafore designated.