CASE 3425: Hearing on motion of the OCC TO CONSIDER ADOPTION OF A BONUS DISCOVERY ALLOWABLE.

Case Number

3425

Application

Transcripts.

Small Exhibits

ETC.

BEFORE THE
NEW MEXICO OIL CONSERVATION COMMISSION
Santa Fe, New Mexico
July 13, 1966

REGULAR HEARING

IN THE MATTER OF: the hearing called by the Oil Conservation Commission on its own motion to consider all aspects of the possible adoption of a bonus discovery allowable for the State of New Mexico.

Case No. 3425

BEFORE: Honorable Jack M. Campbell
Mr. A. L. "Pete" Porter
Mr. Guyton B. Hays

TRANSCRIPT OF HEARING

MR. PORTER: We will take up Case 3425.

MR. HATCH: In the matter of the hearing called by the Oil Conservation Commission on its own motion to consider all aspects of the possible adoption of a bonus discovery allowable for the State of New Mexico.

MR. PORTER: Would you read the balance of that paragraph, Mr. Hatch?

MR. HATCH: Although testimony both pro and con the discovery allowable will be presented by the Commission staff, the Commission invites and will entertain full discussion and testimony from the industry as to the advantages and disadvantages of a discovery allowable and the advisability of the adoption thereof, as well as suggested rules relating to the administration of a bonus discovery allowable, the amount of the allowable, the length of time and the number of wells to which it should apply, and any other pertinent facts relating thereto.

MR. PORTER: In connection with the Commission staff authority in this case, someone called me the other day when they saw that the Commission staff was going to present the pros and cons and asked me if I was going to put one witness on with the pros and the other with the cons. We told them, no, it would all be presented by the same witness. The Commission will have one witness in this case whom we will

call first to put on the testimony, but at this time I want to call for appearances, and when you make your appearance I would like for you to indicate whether you will present testimony or not. Mr. Morris.

MR. MORRIS: Dick Morris of Santa Fe, New Mexico, appearing for Shell Oil Company and Tidewater Oil Company. We will have no testimony to present, but a statement at the end of the case.

MR. DURRETT: J. M. Durrett, Junior, of Albuquerque, New Mexico, appearing on behalf of Standard Oil Company of Texas. We will have one witness.

MR. KELLY: Booker Kelly of White, Gilbert, Koch & Kelly, Santa Fe, on behalf of Texaco, Incorporated. We will have a statement at the conclusion of the case.

MR. PORTER: Mr. Kelly, did you indicate that you would put on testimony?

MR. KELLY: No, we will have a statement.

MR. PORTER: You are representing Texaco. Mr. Kellahin, we'll recognize you next.

MR. KELLAHIN: Jason Kellahin, Cities Service Oil Company. We will offer one witness whose testimony will contain some recommendations for administration of the proposal and it will be quite brief.

MR. REED: Charles Reed, an independent operator.

I am appearing on my own behalf. I do not have any testimony to offer but will make a statement at the end of the hearing.

MR. PORTER: Mr. Oscar Jordan.

MR. JORDAN: I'm Oscar Jordan with the New Mexico Land Office. We will have one witness, a short piece of testimony, and will have a statement.

MR. PORTER: Mr. Kastler.

MR. KASTLER: Bill Kastler with Gulf Oil Corporation. No testimony, but only a statement at the end.

MR. PORTER: Mr. Thompson.

MR. THOMPSON: Ed Thompson, Permian Basin Petroleum Association. We will have a statement to make.

MR. ANDERSON: R. M. Anderson, Sinclair. We will have a statement at the end of the case.

MR. TOMLINSON: Bill Tomlinson, Atlantic - Richfield; we will have a statement.

MR. HOCKER: R. L. Hocker for Amerada; simply a statement.

MR. KELLAHIN: Jason Kellahin for Penroc Oil. We'll have a statement at the end of the case.

MR. COUCH: Terrell Couch for Marathon Oil Company. No witness, possibly a statement.

MR. PORTER: Mr. Nutter has requested a few minutes to post some exhibits, so we'll have a short recess.

(Whereupon, a recess was held.)

MR. PORTER: The hearing will come to order, please. The Commission recognizes Mr. Hatch.

MR. HATCH: May the record show that Mr. Nutter has already been sworn?

MR. PORTER: The record will so show.

DANIEL NUTTER

called as a witness, having been previously duly sworn, was examined and testified as follows:

DIRECT EXAMINATION

BY MR. HATCH:

Q Mr. Nutter, will you state your name and position again for the Commission?

A Dan Nutter, chief engineer for the Oil Conservation Commission.

Q As a little background, would you tell us why a discovery allowable is being considered by the Commission today?

A Yes, sir. In 1944 the New Mexico Oil Conservation Commission adopted a bonus discovery allowable which remained in effect for some five years. In 1949 the Commission called another case and heard evidence and the report of a commission which had studied the bonus allowable and decided to discontinue it. Since that time we have had no bonus allowable.

I might mention the order numbers of those two

particular events. Order No. 573, dated September 6, 1944 established the bonus allowable. Order No. 831, dated July 22, 1949, abolished the allowable.

In the last several months there have been several instances of states which had bonus allowables calling hearings in which these allowables were considered for revision, and in each of three instances the bonus allowable in the respective states was liberalized. There's been a considerable amount of discussion regarding the bonus allowable since these three states have focused the spotlight on it, and as a result of the attention and the attached publicity thereto, we have called this hearing today to consider the possibility of the bonus allowable for the State of New Mexico.

Q You have prepared statements and exhibits as evidence both for and against the discovery allowable?

A Yes, sir. As Mr. Porter mentioned this morning, two members of the staff are not going to testify in this case. That would show a lack of unanimity in the staff if one person testified for the allowable and the other person testified against it. So, rather than show dissension in our staff, we have eliminated the dissension in the staff and confined it to an individual. This individual is a pro and a con. I have testified on numerous occasions. This is the first time I have had a chance to appear on both sides of the case and I am looking

forward to the experience.

GOVERNOR CAMPBELL: Besides this, you happen to be a member of a profession that follows that exact science of petroleum engineering, so you are capable of this?

A This is correct. During the testimony we will have one of these hats turned around and the other one facing forward at all times. We won't wear both hats at the same time.

Q (By Mr. Hatch) Now, in your opinion, then, why should a discovery allowable be adopted?

A Well, primarily -- Better get these hats adjusted. This is the pro case. Primarily the reason for consideration of the discovery allowable is the fact that drilling activity is down in the State of New Mexico. This applies not only to development wells but also to wildcat wells; and perhaps this bonus allowable would be an incentive to provide for additional wildcatting followed by additional development drilling. That's the primary purpose for the consideration of a bonus allowable.

Q Mr. Nutter, would you identify Exhibit No. 1 and refer only to the red lines on that exhibit?

A Yes, sir.

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

Q Tell us what it shows.

A Exhibit No. 1 is this large exhibit on the board here. It's identified as a ten-year comparison of wildcat activity. For the time being we are only going to talk about the red line, which is wildcat activity in the State of New Mexico. We have taken 1956 as the base year and give that as an index year of 1.00, and we have compared wildcat activity in New Mexico since 1956. The wildcat activity, or the relationship of wildcatting to the base year, to the index year of 1.00 is as follows: 1957, 96%; 1958, 96%; 1959, 94%; 1960, 90%. During the years of 1961, '62, '63, wildcatting activity exceeded 1956, and the percentage of wildcatting with relation to the index year of 1956, there was 5%, 6% and 14% more activity respectively for those three years. We get over to 1964, we are back to 90% of the wildcatting activity, and in 1956 we had 74% of the wildcat activity for the base year.

Q You have indicated there has been a decrease in the wildcat drilling activity. What has been the result of this decrease?

A The result of the decrease in wildcat drilling activity in the State of New Mexico has been that New Mexico reserves have shown a steady decrease since they reached their peak in 1961. That year crude oil reserves totaled one billion ninety million barrels, while total liquid hydrocarbon reserves amounted to one billion five hundred ninety-one million barrels.

At the close of 1965 New Mexico crude oil reserves totaled eight hundred ninety-five million barrels and liquid hydrocarbon reserves were one billion four hundred thirty-eight million barrels. This decrease in reserves from 12-31-61 to 12-31-65 amounts to one hundred ninety-five million barrels of crude oil, or one hundred fifty-three million barrels of liquid hydrocarbons.

As mentioned before, this decrease in reserves can be attributed to one thing only, the failure to discover new reserves to take the place of the current reserves as they are being depleted.

Q Now, in relation to New Mexico success ratio as depicted on Exhibit No. 2, why would there be a decrease in reserves?

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

A I might just bring this little discussion in on this Exhibit No. 2 at this time. Exhibit No. 2 shows a comparison of the wildcat success ratio in New Mexico as compared with the United States as a whole. We'll see that the red is the State of New Mexico, the green is the United States. We see that we've had a much higher success ratio in the State of New Mexico than this nation has had as a whole throughout the ten-year period that's being studied.

There was one exception, in the year 1962 the United States had a very slightly higher success ratio than the State of New Mexico. In 1957 we had a fantastic success ratio; thirty wildcat wells out of every one hundred was a success that year in the State. These are figures from the Oil and Gas Journal and reproduced in API yearbooks.

The question is, if we have this kind of a success ratio, why the decline in reserves. We get the successful wildcats, but we haven't had enough wildcats. This is the reason for the decrease in reserves.

Q Would you refer to Exhibits 3 through 14, now, and tell the Commission what these represent?

(Whereupon, Commission's Exhibits 3 through 14 were marked for identification.)

A Yes. Exhibits 3 through 14 are a family of bar graphs. These depict the allowables in five states for four different well groups or depths for three different periods of time. We have the 2500-foot wells for the States of New Mexico, Louisiana, Kansas, Oklahoma, Texas; the 2500-foot group in those states for two years, five years and ten years. We have the 5,000-foot well group for two years, five years and ten years. We have the 7,500-foot well group for two years, five and ten and the 10,000-foot well group.

I might identify the colors at this time. New Mexico is

red, Louisiana is blue, Kansas is black, Oklahoma is yellow and Texas is shown green on these exhibits.

Q Is there anything shown on Exhibits 3 through 14 that would indicate the desirability or the necessity of a discovery allowable?

A Yes, in general I would say in certain areas there is the necessity indicated.

Q Would you refer specifically to Exhibit No. 3? Does Exhibit No. 3 indicate the desirability or necessity of discovery allowable?

A This depends on the approach that you want to take. If we want to take the approach that New Mexico should have the best allowable for a given group of wells for a given period of time, and this is the proper approach to take if you live in New Mexico, then there is a necessity indicated, because Texas has slightly more allowable for a 2500-foot well in two years than New Mexico does. This exceeds Louisiana: Louisiana, Kansas and Oklahoma, but taking into consideration we want the best allowable for the well in New Mexico, then the necessity is indicated here.

Q Will you refer specifically to Exhibit No. 4?

A There's no necessity indicated on Exhibit No. 4, the 2500 feet for five years.

Q Would you go through each of the other exhibits,

5 through 14, and give us the same information?

A 2500-foot well in ten years has more allowable assigned to it in New Mexico than in any other state. We go over to the 5,000-foot bracket, New Mexico allowable for 5,000-foot wells in two years is as low as, or lower than Oklahoma and lower than Louisiana, Kansas and Texas. Something is indicated here, a necessity for some kind of allowable adjustment or increase.

5,000 feet for five years, New Mexico falls behind Louisiana, Kansas and Texas and exceeds Oklahoma. It would be evident something is indicated here. 5,000 feet for ten years, again we exceed Oklahoma but we fall behind Louisiana, Kansas and Texas.

Moving over to the 7,500-foot group of wells on Exhibit No. 9, in a two-year period New Mexico exceeds Louisiana and Oklahoma, falls behind Kansas and Texas, and an increase or an adjustment in allowable is indicated for New Mexico if we're going to have the most favorable picture.

When you move to five years with a 7,500-foot well, New Mexico exceeds all of the states. Move to ten years with a 7,500-foot well and New Mexico allowable is the most favorable. If we go to 10,000 feet we find that the Texas well in two years exceeds the New Mexico well, the New Mexico well exceeds Louisiana, Kansas and Oklahoma. If we move to five years or

ten years, New Mexico allowable for a 10,000-foot well exceeds all four other states.

I might add that these allowables are based on an eighteen-month average for the State of New Mexico, being a 40-acre normal unit allowable of 40 barrels, a Louisiana market demand factor of 33%, a zero market bonus in the State of Kansas, a 33% market factor in Oklahoma and 30% allowable factor in the State of Texas.

Q Summarizing Exhibits 3 through 14, is there apparent any group of wells or period of time in which the necessity for discovery allowable is indicated?

A Yes. I would say off-hand that the two-year group, that's the first two years of a wells history, there is a necessity for something if we are going to keep New Mexico allowables at the maximum so far as comparison with the other states is concerned. When you get to the five-year group, we've improved our situation in five years in all categories of depth except 5,000 feet. When we get to ten years we have improved our situation, we are well ahead in every respect except this 5,000-foot range again.

Q Would you summarize briefly the reasons you have given why the Commission should consider adopting a discovery allowable?

A Yes, sir. Wildcat activity, as I mentioned before,

is down. This is followed by a decrease in drilling activity for development wells. The decrease in wildcatting and development drilling has one result, a decrease in reserves if you are going to produce your reserves.

Three recent revisions in Texas, Oklahoma and Kansas to the bonus discovery allowable has provided a quicker pay-out for the wells in those states than some of the wells in New Mexico would receive in a comparable period of time. A bonus allowable in New Mexico might make this state more competitive with those states, and these are the three principal reasons for the adoption of the bonus allowable.

Q Do you have any suggestion as to what could be offered in the way of a discovery allowable?

A There are numerous formulas used in the various states. Some states provide the allowable on an escalating scale of time, depending on the depth of the well. Others apply a fixed amount of allowable per depth over a fixed period of time, in Kansas it's eighteen months, I believe it's eighteen months in Oklahoma, in Texas it was recently revised to twenty-four months, Kansas I think revised theirs from twelve months to eighteen months just recently. Texas revised theirs from eighteen months to twenty-four months.

It can be offered to one well, it can be offered to a limited number of wells, four wells, six wells, twelve wells.

It can be offered as in Oklahoma to all the wells in the pool during the given period of time in which it is effective. There are just numerous ways of applying the bonus discovery allowable, and I'm not prepared at this time to recommend any given one of them.

Q You had better turn your hat around for the next question. Will you refer to Exhibit No. 1 again, please, and in respect to the five producing states, New Mexico, Louisiana, Kansas, Oklahoma and Texas, what does this exhibit show?

A This shows that over-all there has probably been a decrease in activity in some of the states, some of the other states have fared a little better than others. There's nothing real general that you can say about the exhibit as a whole other than it's got a lot of color and covers a period of ten years.

Q Why did you use 1956 as an index?

A 1956 was chosen as the index year for two reasons, the first being that that was the year in which drilling activity in the United States was at an all-time high. There were more wells drilled in that year than in any year before or since. 1956 was also chosen because if you are going to make a ten-year study and you are going through 1965, that makes ten years.

Q Does this exhibit show anything in the way of

wildcat activity as between groups?

A Yes, it does. If we take the groups, take one group being New Mexico, red, Louisiana blue and take the other group, Kansas, Oklahoma and Texas being black, yellow and green respectively. We have two groups there. We see that for the most part, compared with the index year of 1956, the group comprising New Mexico and Louisiana has fared better than the group comprising Kansas, Oklahoma and Texas.

Q Using this index, how many times has New Mexico-Louisiana led the five states in wildcat activity?

A The two states have led the five states for a total of six times out of the last ten years.

Q Which states have led in wildcat activity during the last five years?

A Either New Mexico or Louisiana has led during the last five years, and the other state has been second, whichever was the leader; but it has been either New Mexico or Louisiana has been first or second during the last five years.

Q Is there any one thing that is peculiar to New Mexico and Louisiana but not to the other three states?

A Yes, this is the con case. I'll point out at this time that New Mexico and Louisiana are the two states that don't have the bonus allowable.

Q What has generally happened in the three states that

do have a discovery allowable?

A They see a decrease in drilling activity.

Q Particularly, what has happened in Texas?

A Texas has shown a very steady decrease, drilling activity is down to just 50 or 60% of what it was in 1956.

Q Would you point out what has happened to Kansas and then Oklahoma?

A Kansas experienced two good years since 1956, that was in 1959 and 1960. Since then they have had a rather erratic decrease over-all in their wildcat activity.

Q Oklahoma?

A Oklahoma has done just about as poorly as Texas has in wildcatting over the last ten years. They had a couple of good years, being 1958 and 1959.

Q Your exhibit shows the year 1956 through 1965. Do you have any recent figures made in 1966?

A Yes, if we take the wildcatting activity as reported through July 2nd, which would be approximately one-half of a year, and if we project that throughout the remainder of 1966, we can make a mark over on the right edge of the exhibit showing where these states are going to be at the end of December of this year if the wildcatting for the first half is indicative for the year as a whole.

New Mexico this year will lead on the index scale, being

at 90%. Louisiana comes second, being slightly more than 80%; Kansas follows Louisiana, being 70 some percent; Texas is just very little better than they were in 1965, and Oklahoma has stubbed their toe again and they're down. These are projections of the first half drilling activity for wildcats in those states.

GOVERNOR CAMPBELL: Just a minute, when you say "activity", you surely don't mean the number of wells?

A This is number of wells drilled.

GOVERNOR CAMPBELL: Not in relation to the number of actual drilling activity other than wildcat?

A No, this is wildcat drilling only. Development drilling is not included in these figures, Governor.

GOVERNOR CAMPBELL: This is just the number of wells in each state that are wildcat wells?

A As compared with 1956, for that year or for that state.

GOVERNOR CAMPBELL: Yes.

Q (By Mr. Hatch) A while ago when you were discussing the reasons why a bonus should be adopted, you mentioned that New Mexico had sustained a decrease in reserves. What is the reserves figure in relation to these other four states?

A I mentioned that New Mexico had sustained a loss in reserves in the last five years from 1961, or from December of

1961 through December of 1965 of, I believe it was one hundred ninety-five million barrels; Kansas has also sustained a loss of one hundred twenty-six million barrels of reserves; Oklahoma has sustained a loss of two hundred seventy million barrels of reserves. Texas has sustained a loss of five hundred forty-seven million barrels of reserves. The only state that has shown an increase in reserves in the last five years is Louisiana.

Of course, I believe this is probably due to the off-shore drilling activity that has been going on down there.

Q In your opinion, is there any indication that the discovery allowable has helped wildcatting activity or the reserves in the three states that have it?

A No, there's no indication that it has helped in the wildcat activity or in the reserve picture for these states.

Q Would you refer again to Exhibits 3 through 14? In your opinion is there any evidence that the discovery allowable has, in fact, hindered development?

A There may be. I've got some little marks made on these bar graphs for these various states. These marks -- Now the total length of the line is the amount of allowable that is assigned to the well in that depth group for that period of time. This includes the normal allowable assigned to a well in that state and it also includes the bonus allowable.

Now, if we make this mark big enough so that you can see

it, on this particular group it's so close to the end for Kansas and Oklahoma I won't bother to make it for those states, but it's less than, or it extends less than half the distance of the green line for the State of Texas for this two-year period. It's right here for five and right here for ten. It's right here in Texas, now there we see where the basic allowable for a well in that particular state without the bonus would be. In other words, that's the allowable that an operator drilling a 7,500-foot well would expect to get in the State of Texas if they didn't have the bonus. You can see that's far less than these other states.

The question was whether the bonus allowable, if there was any indication that the bonus allowable had hindered development. I think if you take the bonus allowable as one part of an over-all picture in these several states and these states are all, if I may use the word--I had better not use the word--these states are all subject to the assignment of various types of allowables which are other than the regular allowable. In other words, they have various types of bonuses for various types of situations. They have bonus allowables for discoveries. They have bonus allowables if you produce a lot of salt water. They have county regular allowables and an amazing variety of special allowables.

The bonus allowable for discovery wells is one part

of the special array of special allowables which they assign in these states. These special allowables have depressed the regular allowables in these states by taking a large percentage of the total market for the oil in that state away from the regular wells, and that's the reason the regular allowable in Texas, for instance, is right there.

Now, by adding this extra green line, it may encourage the drilling of a wildcat well, but what is it doing for the development of an additional development well? The development wells are not getting the assignment of an allowable that's reasonable in some instances in some of these states. They've got to have a bonus to get any wells drilled, but I think that development has been hindered by the assignment of this bonus in some cases and by the assignment of this other array of bonuses of all sorts; because we know that so many special allowables are assigned that the few wells that are left on a prorated basis have their allowables assigned so low that it hurts them.

(Whereupon, Commission's Exhibit No. 15 was marked for identification.)

Q Would you refer to Exhibit No. 15 and identify it, please, and explain what it shows?

A Yes. Exhibit No. 15 shows the assignment of regular allowable to a 40-acre tract during the month of May, 1966,

in the States of New Mexico, Kansas, Louisiana, Texas and Oklahoma, allowable being shown on the left side of the chart, depth of the well being shown on the right side of the chart.

MR. PORTER: Mr. Nutter, to emphasize one point here, you are talking only about the regular allowable exclusive of bonus?

A This is the regular allowable assigned to a 40-acre tract in these various tracts.

GOVERNOR CAMPBELL: Exclusive of the bonus?

A Exclusive of the bonus. This is the regular field well allowable.

GOVERNOR CAMPBELL: Any kind of bonus?

A Any kind of bonus. We will see that New Mexico allowable for May, 1966 was at 45 barrels. This 45 barrels brings us from the depth of zero to 45 feet, then the depth factor goes up. The market demand factor was a bonus of ten this particular month and then it goes on a one barrel per one hundred foot basis there on out.

Louisiana depth factors are applied to, I believe it was 30, 33 or 38%. I don't remember what the market demand factor was for Louisiana for that month. Texas, I think it was 33%; anyway, these are the allowables that were assigned in these various states to a 40-acre well according to depth. This shows that New Mexico's allowable exceeded these other

states with the exception of the 5,000-foot depth was exceeded in Louisiana, and also in Kansas. We were ahead of all states from 7,000 feet on. Well, actually from 5,000 feet on, 6,000 feet, correction.

Q Do you have any explanation as to why the red line there in New Mexico is higher than that of the other states?

A Yes. As I mentioned before, we don't have all these special frills and fancies in the allowables, and this is straight allowable. Every well in the state, or speaking of Southeast New Mexico, every well is subject to the basic allowable without various types of bonuses, and for that reason New Mexico has been able to maintain a better straight allowable rate than some of these other states have been able to.

Q Looking again at that red line, does it indicate that anything should be corrected?

A Yes. This red line indicates one thing that is probably in error in the State of New Mexico. That is that our allowable is constant from a depth of zero to 5,000 feet. All of these other states have a break back in the 2,000 to 4,000-foot range. We certainly know that drilling costs for a 5,000-foot well are more than for a 2,500-foot well or 3,000 or 3,500-foot well.

I believe that this red line with its break way over here at 5,000 indicates that some adjustment should be made in the

depth factors in the State of New Mexico to make this break a curve rather than a severe breaking point at 5,000 feet.

Q Are you recommending that a study be made concerning the possible adjustment of the depth factors?

A I would recommend that the Commission consider having a study made of this allowable curve.

Q What would be the possible effect of the adoption of discovery allowable?

A To determine what the effect of the adoption of the allowable would be, I went through the nomenclature orders and determined the number of pools which had been created in this state from June 1st of 1964 to June the 1st of 1966. I took this two-year period on the assumption that a bonus allowable would be applicable for twenty-four months and tried to find out how many pools had been created, new pools, during that two-year period.

I then went to the proration schedule and found out how many top allowable wells were in each of those new pools. Many of the pools came off the list when you went to look for top allowable wells. Some were one-well pools with one top allowable well in them. Others are pools that have several wells in them but maybe just one or two top allowable wells.

I then took a 50% bonus allowable and applied it to the top allowable wells. Now I have no way of knowing if these top

allowable wells would be able to make a bonus allowable or not. They haven't been tested with a bonus allowable in mind; but I assume that these wells, these top allowable wells could make the bonus allowable.

I came up with the following figures. If we had a six-well maximum, in other words, if we had a limit on the number of wells in a pool which could receive the bonus allowable for the present month and at a normal unit allowable of 45 barrels, we would have 2,268 barrels of bonus allowable assigned. If we had a twelve-well maximum, as they do in Kansas and Texas, and all the top allowable wells could make the bonus, we would have 3,753 barrels of bonus assigned per day.

If we had a bonus allowable similar to the one that they have in Oklahoma, which is assigned over a period of time but all the wells in the pool during that period of time share in the bonus, we would have a total assigned bonus allowable of 6,785 barrels per day for the month of July, 1966.

Now, you asked what the effect would be. When we're in the range of allowables that we're in at the present time, if you increase the normal unit allowable one barrel you get between two and three thousand barrels of additional oil produced. The higher your normal unit allowable goes the smaller this figure becomes. Right now we're just between two and three thousand, I believe it's actually closer to two

thousand, is the effect at 45 barrels. If you increase or lower the allowable by one barrel you make a change.

I, therefore, estimate that with the six-well maximum that we would affect the normal unit allowable by one barrel; with the twelve-well maximum we would affect the normal unit allowable for wells in the State of New Mexico in primary wells by two barrels. If we had the no-well limit similar to Oklahoma we would affect our normal unit allowables approximately three barrels.

Q Coming back to the red line in Exhibit 15 again, how would this red line be affected, in your opinion?

A The over-all effect, if you adopted the bonus allowable, would be the lowering of this line by the one, two or three barrels. This red line barrel is 45 at the present time, it would go to 44, 43, 42 with the same amount of market.

Q You have given reasons why New Mexico should not adopt the discovery allowable. What would you suggest as alternatives which the Commission could follow to enhance wildcat activity in the state?

A Calling attention to the fact this is still the con argument, general activity in this country is generally down, this is not only wildcat but development wells also. This is not only true in the prorated states, it's also true in the non-prorated states. The multiple completion of

wells has naturally increased production, production of natural gas limits, imports and numerous other causes have affected this drilling activity. Bonus allowables per se are no panacea solution in relation to wildcatting and development drilling and reserves.

I believe that the alternative would be, one, continue to offer stability in the state's allowable structure. This includes offering operators a good basic allowable which they can rely on to obtain a reasonable payout. Two, the continued elimination of frills and fancies for various and sundry and special groups of wells. Three, the continuation of the long-established policies of the Commission relating to favorable consideration in spacing proration and regulation, including the acceptance as new ideas are developed and techniques for the production of oil are improved.

I believe that if the Commission will offer the previously mentioned stability, that this, combined with the favorable success ratio we see on Exhibit 2, that we should see wildcatting improve when general conditions improve in this country. This will be followed by additional development drilling and the reserve picture should also be enhanced.

Q Were Exhibits 1 through 15 prepared by you or under your supervision?

A Yes, they were.

MR. HATCH: I would like to move at this time Exhibits 1 through 15 be admitted into evidence.

MR. PORTER: Without objection, Exhibits 1 through 15 will be admitted.

(Whereupon, Commission's Exhibits 1 through 15 were offered and admitted in evidence.)

CROSS EXAMINATION

BY MR. PORTER:

Q Mr. Nutter, you referred to maximum six wells, twelve wells or perhaps the Oklahoma plan which doesn't include a number of wells but just a time limit. Since we're talking about a bonus discovery allowable it would appear that the bonus is put there or offered for the discovery. Why should consideration be given to more than one well?

A Well, I believe that the reason they have done this, there's only one well is the discovery well, this is true. Now, what they have attempted to do in assigning the allowable to more than one well is work on this assumption that if you have one well receiving a bonus allowable and the other wells are not getting it, then the one that's receiving the bonus allowable will be draining the ones that are not getting it and you have a violation of correlative rights. So what they do, they assign the allowable to all the wells and then there's no violation of correlative rights.

Q Then doesn't that violate the correlative rights of wells that may be drilled later? I mean isn't this number of wells a very arbitrary thing?

A This is true, and we see it runs all the way in these three states that have it, it runs all the way up to an infinite number of wells, however many are in the pool. I believe that the answer to that, Mr. Porter, is that you don't protect it in primary drilling right here in the State of New Mexico without a bonus allowable. We don't protect the correlative rights of an undrilled well. The opportunity to produce his fair share is there to the owner of undrilled acreage. He hasn't taken advantage of that opportunity and when you have a field in which bonus allowable is assigned to all of the wells that are completed in that field at that time, then you don't have a violation of correlative rights because an undrilled well is subject to drainage at all times. This is the way this seeming violation of correlative rights is averted.

Q In the early part of your testimony you mentioned that New Mexico at one time had a bonus discovery allowable. How many wells did that apply to?

A I believe that applied to one well, that the bonus discovery allowable shall be for one well over and above the top unit allowable.

Q What was the bonus offered?

A Well, it was on a scale. Up to 1,000 feet deep, the well got 5,000 barrels; from 1,000 to 1,500 it got 7,500 barrels; from 1,500 to 2,000 it got 10,000 barrels; from 2,000 to 2,500 it got 12,500 barrels; from 2,500 to 3,000 it got 15,000 barrels; from 3,000 to 3,500 it got 17,500 barrels; from 3,500 to 4,000 it got 20,000 barrels; and below 4,000 feet deep it got five barrels for every extra foot drilled.

Q What were the provisions for producing this, was there a time limit on it? I notice that there was a definite amount of bonus assigned to the discovery well. What were the time limits to produce this?

A That was provided in this order as follows: "That such bonus discovery allowable shall be produced at a daily rate not greater than the figure obtained by dividing the total bonus discovery allowable by the number of days in the current year."

Q Did they have an alternative plan?

A "That such bonus discovery allowable shall be produced within a two-year period."

Q In other words, they had an option of producing it within a one-year or within a two-year period?

A That is correct.

Q If they didn't produce it, then the bonus was lost

at the end of that time?

A It was lost.

Q Then, as you indicated, this order was rescinded in 1949. Do you recall the findings upon which this decision was based?

A Yes. The first finding was that the Commission had jurisdiction. The second finding, "That Order No. 573, effective as of June 1, 1944 and known as the 'Bonus Discovery Allowable Order' has failed to accomplish its intended purposes and should be rescinded."

Q Of course, that indicates that that order as it existed, apparently had not accomplished its purpose, it does not mean that some other order --

A That's right. That was talking about Order 573 had not accomplished its purpose.

MR. PORTER: Does anyone else have a question of Mr. Nutter? Mr. Morris.

CROSS EXAMINATION

BY MR. MORRIS:

Q Just a couple of questions.

A Which hat are these addressed to? You don't have to answer that, I'll try to figure it out.

Q Mr. Nutter, if a discovery bonus were adopted, what would be the Commission's idea of a definition of a discovery

well?

A I don't know what the Commission's idea would be.

Q I am thinking of it in comparison to how the Commission has defined a wildcat well. That is a well drilled more than one mile from existing production. Now, assume with me that there was an initial, that there was a bonus discovery applicable to five wells. Five wells were grouped within a given area, all being drilled less than one mile from each other, and then you had a stepout for your sixth well and it was drilled, say two miles away from the nearest production --

A Yes.

Q -- but to the same formation, it would be drilled as a wildcat well, but would that well be considered a new discovery to be entitled to a bonus?

A This is one of the problems that comes up with the establishment of a bonus allowable. A well is drilled and completed--I've got the orders from the various states which have bonus allowables. They provide that you must file certain information with the Commission, logs and this type of data, and then a determination is made as to whether this is a discovery or not of a new common source of supply.

I am sure that in many cases what appears in all honesty to be a discovery turns out to be an extension of an existing pool. What you do in a case like this, if the well has

already received its bonus allowable by the time you find out that, it's already received it and produced it by the time you find out it was not a discovery, it was in fact an extension. I don't know how you would handle that. You can't make him put it back in the ground. Maybe he has already got a marginal well and you wouldn't want him to make up that overproduction by decreasing his current production if he's marginal, or maybe you would. I really don't know.

I don't know what criterion you should use to the distance from an existing well. Our rules today regard any well more than a mile away from a producing well as being a new wildcat.

Q This would certainly be one of the administrative problems that would have to be dealt with in almost every application of the bonus discovery allowable?

A Yes. This is one of the problems that does arise in these states where they have it. I have discussed it with the representatives of the agencies there and they have advised me that in some cases there get to be rather interesting hearings regarding the fact of whether this is a new discovery or not.

Q Do any of these other states have arbitrary rules as to how far away from existing production you have to be before you have a so-called discovery?

A Well, here in the State of Kansas on this order of Kansas, they state that you must file a plat showing where the wells are and you have got to show all, the radius of the area covered by the plat shall be no less than one and a half miles.

Now, I don't know if that means that you have to be one and a half miles away from an existing well to be eligible for it or not. In Texas you are required to file an area map with the scale being one inch to a thousand feet and show all the oil, gas and abandoned wells within at least two and a half miles in each direction. It varies from place to place.

Q Yes. In your studies, Mr. Nutter, have you concerned yourself only with oil wells or have you given consideration to both oil and gas?

A These allowable figures are oil figures. These wildcat wells are wildcats and they're without regard as to whether they are projected to gas-producing horizons or oil-producing horizons. The success ratio includes oil and gas wells as far as wildcatting is concerned, but the allowable comparisons are strictly oil.

MR. PORTER: Mr. Nutter, do you know of any state that grants a bonus for gas?

A No, sir. I have never even heard the subject mentioned.

MR. MORRIS: That's all I have.

MR. PORTER: Does anyone else have a question of the witness? Mr. Malone.

CROSS EXAMINATION

BY MR. MALONE:

Q Mr. Nutter, your answer to the last question raises the question with reference to your comparison of wildcat activity as to the definitions that those various states used in classifying the wildcat and whether that exhibit actually shows a comparable figure in determining what is a wildcat as between the various states.

A Mr. Malone, I don't believe it would be important if there was a difference between the wildcat in 1965 in New Mexico as compared to the wildcat in 1956 in New Mexico, the wildcat in Kansas compared to the wildcat in Kansas. Unless the state had changed its definition of wildcat during that intervening time there would be no difference.

This is not a comparison of actual wildcats in the given states. It's a comparison of that state's activity to 1956. Now, the figures are taken from the Oil and Gas Journal which compile very good figures. I think they're about the best available in the industry on wildcats. As I mentioned before, these figures are also reproduced in the API Annuals, the annual yearbooks of the API. I think that the Oil and Gas Journal probably takes its own definition of a wildcat

rather than relying on any different definition from one state to the other.

Q I had understood you to answer Governor Campbell's question as indicating this bar graph showed relative numbers of wildcats between the states. I misunderstood you apparently.

A It's the relative place on the index of each one of these states. We can't compare the number of wildcats that are drilled in New Mexico with the number of wildcats that are drilled in Texas. This New Mexico line is higher than the Texas line, but the Texas line is, well, let's just see where it is. I don't have the scale here. The Texas line is approximately fifty percent of 5,610 wells. New Mexico's line is seventy-four percent of 278 wells. So if we tried to compare the actual number of wildcats, I would have a bar graph way up there for Texas and way down here for New Mexico. That's the reason I adopted an index system for this exhibit, Mr. Malone.

MR. MALONE: Thank you very much.

MR. PORTER: Does anyone else have a question of Mr. Nutter?

CROSS EXAMINATION

BY GOVERNOR CAMPBELL:

Q Mr. Nutter --

A Yes, sir.

Q -- you have made reference to one administrative problem relating to the identification of what is, in fact, a discovery well. Do you see any other serious administrative problems with regard to discovery allowables in the allocation of production in New Mexico?

A If it has been established that you do have a discovery well, I think that the assignment of the allowable, the actual mechanics of the assignment of the allowable would be relatively simple, and there shouldn't be any great problem there.

Q So you don't see any other problem than the administrative problem of defining what is a discovery?

A Then making your definition, and if you turned out to be wrong what you would do about that later.

MR. PORTER: Just say too bad. Any further questions of the witness? He may be excused.

(Witness excused.)

MR. PORTER: At this time the Commission will recognize Mr. Jordan.

MR. JORDAN: In view of the previous testimony, although I have had Mr. Graham of this office make this study, I am going to call him as an adverse witness so I can cross examine him if he crosses me up.

MR. PORTER: Will the witness stand and be sworn,

please?

(Witness sworn.)

MR. JORDAN: By way of a brief opening statement, our testimony will be limited to the effect of wildcatting activity on state land and to our brief summary of the investigation into the effect of this bonus allowable in other states and the recent increase. I identify Mr. Graham here as an employee of ours.

RAY GRAHAM

called as a witness, having been first duly sworn, was examined and testified as follows:

DIRECT EXAMINATION

BY MR. JORDAN:

Q Mr. Graham, what is your job with the State Land Office?

A Assistant Director of the Oil and Gas Division for the State Land Office.

Q How long have you been employed in that capacity?

A Two years.

Q In view of this Commission setting here have you made a study concerning the activity, drilling activity of wildcat wells in the State of New Mexico?

A Yes, I have.

Q Would you summarize that study very briefly,

Mr. Graham, as to the state land with regard to the percentage of the entire state under oil and gas lease and number of state wells drilled, number of acres sold and so forth, during the past years from 1956 through present time?

A This study covered a period of 1956 or 1957 up to and including 1965. Some years the figure was not available. In 1957 the percent of the entire State of New Mexico which was under oil and gas lease, this includes federal, fee, Indian and state land, was 34%; 1959, 34.8%; 1960, 35%; 1961 was 34%, and it decreased in 1964 to 30.6%, and 1965 to 29% of the entire state was under oil and gas lease.

I have a breakdown of the figures of state lands and these are the lands under the jurisdiction of the Commissioner of Public Lands that were sold, the number of acres sold and the price per acre. In 1956 the Land Office sold 199,000 acres for an average of $36.80 per acre. In 1960 it was 147,772 acres sold for $30.65 per acre. 1964 we sold 181,000 acres for an average price of $31.70 per acre. In 1965 the State Land Office sold 279,000 acres and the average price per acre decreased to $22.60 per acre.

This reflects in our total bonuses received for our state oil and gas leases; in 1957 we received six and a quarter million dollars bonus; in 1960 a little over four and a quarter million dollars; in 1964, five million six hundred thousand

dollars; and in 1965 we received five million eight hundred forty-seven thousand dollars in bonuses. Again, this is reflected, we have to sell more acreage at a lower price to maintain our bonus income and keep that up to a fairly constant level.

The annual delay rentals for oil and gas leases is on the decline for the last nine years. In 1957 our delay rentals amounted to two million two hundred thousand dollars, 1960 they were two million two hundred twenty-two thousand dollars. In 1964, one million nine hundred forty-four thousand dollars; in 1965 our delay rental only amounted to one million seven hundred sixty-nine thousand dollars. So this indicates a decrease in the revenue for the Land Office; our only area which is holding up is again in the bonuses received, and here we have to sell more acreage at a cheaper price to maintain this bonus income.

The number of waterflood units that we have in the state producing secondary oil in 1953 started out with three waterflood units. That increased to ten in 1960, to 41 in 1964 and in 1965 that figure stood at 50 waterflood unit agreements in the state. The number of acres in those corresponding years in 1958, 6,000 acres committed; in 1960, 52,700 acres; in 1964, 189,000 acres committed, and in 1965, 212,000 acres committed to secondary recovery units. This

secondary recovery is where we feel like that most or a considerable amount of our oil is coming from. We don't feel like it's coming from the primary recovery, or too much of it.

The number of exploratory wells drilled in New Mexico in 1957 was 267 wells; 1958, 325; 1960, 250 wells; 1962 it jumped to 342 wells; 1964 it decreased to 260 wells; 1965 there were only 234 wells, exploratory wells drilled in New Mexico. All of these figures on the wells are taken from the Oil and Gas Journal and American Petroleum Institute records.

The footage drilled on the exploratory wells not available for 1957, but in 1958, 1,700,000 feet were drilled, a total. In 1960 it increased to 1,847,000; the total footage decreased in 1962 to 1,774,000; decreased in 1964 to one and a half million feet; in 1965 it again fell off to one and one quarter million feet.

The average depth of the exploratory wells drilled in New Mexico has been fairly constant, or possibly on the increase; 1957, 4,687 feet was the average depth; in 1958, 5,319 feet; 1960 the average depth decreased to 4,900 feet; 1962 is on the increase again to 5,100 feet; 1964, 5,797 feet; and 1965, the average depth increased to 5,916 feet.

The number of field wells drilled in New Mexico over a period of 1957 to 1965 has also decreased; 1957, 1,862 wells; field wells drilled in New Mexico in 1960, 1,544 wells; in

1962 there was 1,345 wells; 1964, 1,214 wells; and 1965 only 1,137 wells.

The monthly average of drilling rigs operating in New Mexico has been on the decrease since 1957. In 1957 we had an average of 142 rigs operating each month in New Mexico. In 1960 it decreased to 139 rigs per month; 1962 there were an average of 107 rigs operating. In 1964, average of 112 rigs operating each month. We don't have any available figures for 1965.

Q Mr. Graham, then summarizing this, the wildcat activity is down in New Mexico as far as the state lands are concerned, is that correct?

A Yes, it is.

Q Over the period of years. Now, have you made inquiry of the other states as to their experience with this discovery bonus with regard to the older ones and with regard to the new changes?

A Yes, I contacted the officials of Kansas, Oklahoma and Texas in regard to their discovery allowables, and Oklahoma and Texas officials were reluctant to give us their comments as to the effectiveness of this discovery allowable. We did get a comment from the Kansas officials. Mr. William Mitchell, in a letter under date of July 7, 1966, states, and I quote, "There is no question but what bonus allowables have

been an effective tool in securing financing for additional drilling of wells. This has been particularly true the last several months during the tight money situation in the United States. Most people are willing to take a long gamble if they feel proration is not too restrictive with respect to recovery there. Discovery allowables are not a panacea, but they do provide a working tool for securing wildcat finance. This is important in Kansas because our wildcatting is confined to small pimples of oil in scattered locations. It is interesting to note that for the first four months of 1966, wildcatting increased 24.6% over the corresponding period for 1965. However, development wells were 18% below the same comparitive period of 1965. This still indicates an increase of approximately 6% in drilling activity during the first four months of 1966 over 1965."

Q Did you make inquiry of Louisiana?

A No, I did not contact the State of Louisiana. They do not have a discovery allowable; however, there is a bill pending before its state legislature to exempt discovery wells from production limitations until drilling costs have been recovered. According to an article in the June 20 issue of the Oil and Gas Journal, of the newsletter, and I quote, "Chances are almost nil that Louisiana will soon grant a discovery allowable or similar wildcat incentive. Conservation

Department is giving no support to an incentive bill by Senator Howard Jones. Bill would free discovery wells from proration until drilling costs recouped. Without Department support the bill has little chance of passage."

Q While the wildcat activity is down in the State of New Mexico, and especially with regard to state land, your report indicated that activity in waterflood is up and continues to rise. Now, bearing in mind that the waterfloods have a liberal allowable attributed to them, do you think that has had any inducement in the increase of the number of waterflood units?

A Yes, I believe it has.

MR. JORDAN: We have no further questions.

MR. PORTER: Does anyone have a question of Mr. Graham? You didn't have any exhibits?

MR. JORDAN: No, we did not. I have a statement from the staff, it's a consensus of the staff's opinion here. This has not been cleared by our Commissioner. This is our recommendation we have made for the first time.

GOVERNOR CAMPBELL: Will you give him a chance to cross examine you, Oscar?

MR. JORDAN: This is our recommendation to him.

MR. PORTER: The witness may be excused.

(Witness excused.)

MR. JORDAN: This is our recommendation to the Commissioner as well as to the Commission.

MR. HAYS: Furnish me with a copy of it, will you?

MR. JORDAN: "The members of the staff of the Commissioner of Public Lands, at the request ot members of industry, have compiled certain factual information concerning drilling of wildcat wells. This information, coupled with other information compiled by industry and the Oil Conservation Commission staff, indicates clearly that fewer wildcat wells are being drilled and that discovery of new reserves is not keeping pace with production, that is, the reserves are being dwindled away.

"The office of Commissioner of Public Lands is, as you know, a revenue-producing office. However, it is interested in revenue over the long haul, and although its royalties are placed in a permanent fund and are therefore a reserve, it is realized that new discoveries of oil and gas on state land are necessary to keep pace with the growth of the state, which, in turn, makes greater demands for funds for operations of its schools and other institutions. It therefore is interested in considering any proposal which would induce wildcat drilling and discovery of new reserves. It is also aware that reserves are necessary from a military standpoint and that they cannot be found overnight.

"In the past, incentives have been offered by the State Land Office to drilling of wildcat wells in the form of bonus acreage, that is, the office has approved units of considerable acreage which would extend leases beyond their normal terms should oil or gas be discovered upon the unit. A recent example of this is the unit located in the St. Augustine Plains.

"Along this line, the staff of the Land Office would recommend that some consideration be given to a bonus allowable, possibly on a limited trial basis, although it is aware that there is at least one major legal problem and that there are many administrative problems which would flow from such a practice, such as determining whether the practice effects conservation and whether or not a particular well is a new discovery or merely a part of an existing pool respectively.

"It is our opinion that one of the real reasons for lack of activity in drilling wildcat wells is the uncertainty of price and of market volume due to federal intervention in the price regulatory and in the import areas. In this connection, we are all aware of what happened to wildcat drilling during the time imports were increased out of balance with domestic production a few years ago, and at the recent IOCC meeting in Tulsa we detected what we deemed to be a veiled threat in the speech of Mr. Cordell Moore, Assistant Secretary of the United States Department of the Interior, in that he indicated that

the industry would have to furnish petroleum products to other industries to compete with foreign industries; otherwise, he indicated that the importation of cheaper oil in greater volumes would be a necessity. It has always been our opinion, contrary to the Government's position, that the controls, to be effective, must be at the consuming end rather than at the producing end. However, the fact is that the controls are at the producing end, and so far there has been little we have been able to do about getting relief in that area. Therefore, we must do what we can, under the circumstances, and one of the actions we might take is to give some consideration to a bonus allowable for new discoveries. Some of these other actions we might also give consideration to are a possible tax break for new oil and gas, a shorter term state lease, and, of course, the acreage bonus, which the Land Office has been using as a practical matter and which was previously mentioned herein.

"It is our understanding that increased bonuses offered in other states triggered the request that this office look into the possibility of proposing a bonus allowable for new discoveries, the thought being that the other states are luring exploratory money out of the State of New Mexico.

"We, of the Commissioner's staff, although mindful of the fact that a similar bonus allowable proposal was tried in New Mexico in about 1944 and discontinued in about [illegible], feel that

further experimentation in this area is justified in seeking a solution to the declining reserves in New Mexico. We would, however, recommend that the tax break, short lease, and acreage bonus be given more consideration, for the reason that these actions, unlike the bonus allowable, will avoid any possible contamination of our conservation laws from a legal standpoint. We would also be open to entertain any suggestions which members of the industry, or others concerned, might wish to propose, which might help solve the declining reserves problem in New Mexico.

"Based upon the information which we now have, we conclude that reserves are declining, that such is caused primarily by federal price and import controls, and that something must be done to stimulate wildcat drilling.

"In view of the action taken in other states, we recommend another look be taken at discovery bonus in New Mexico. However, we would recommend that other methods, one of which we are now using to stimulate wildcat drilling be further explored, for the reason that they will not contaminate our conservation laws. We would also entertain suggestions as to other methods of stimulating exploratory drilling."

MR. PORTER: Thank you, Mr. Jordan. Mr. Durrett, I believe you indicated that Standard would have one short witness.

MR. DURRETT: Yes, we have one short witness. Standard of Texas would call Mr. Paul Hull to the stand. We would like to request that the record show that Mr. Hull has been previously sworn and testified in this hearing and that his qualifications as a geological engineer and as an expert witness have been accepted.

MR. PORTER: Let the record reflect this fact.

PAUL HULL

called as a witness, having been previously duly sworn, was examined and testified as follows:

DIRECT EXAMINATION

BY MR. DURRETT:

Q Mr. Hull, would you please once again state your name and position for the record?

A My name is Paul Hull. I'm supervising proration engineer for Standard of Texas.

Q You have heard testimony in this hearing today concerning the allowable situation and discovery allowables in the States of Texas, Oklahoma, Kansas, Louisiana and New Mexico; in which of these states does Standard of Texas operate?

A Standard of Texas operates in Texas, Oklahoma and in Southeast New Mexico.

Q Would you very briefly give the Commission some idea of the size of your operations in each of these states?

A Our company operates somewhat over 100,000 barrels per day of production in Texas, something on the order of 5,000 barrels per day in Oklahoma; in New Mexico a significant portion of our interest is in the non-operated joint ventures, but our total interest is on the order of 15,000 barrels per day.

Q Does Standard of Texas consider allowables as part of the economics of exploratory projects?

A Yes, sir, we certainly do.

Q Would you please state to the Commission, under the existing allowables in all of the three states that you operate in, what consideration would be given to drilling in New Mexico by Standard?

A With the present allowable system in each of the three states where we operate, Standard of Texas, in evaluating exploratory prospects in these three states, would be able to drill a prospect with somewhat higher risk in the State of New Mexico than we can in the other two states because of the more favorable allowable treatment.

Q Do you feel that you could drill higher risk situations with a discovery allowable?

A The risk which we could incur would be increased slightly. The increase would probably be negligible. We say this because as a major operator we are looking for relatively

large reservoirs. If we are successful in our search, then the discovery allowable becomes a rather insignificant part of the total income over the life of the field because there will be a relatively large number of wells drilled. Of course, it would depend to some extent on the type of discovery allowable that was adopted, but in any event, for a truly large field the discovery allowable would play a minor factor in the total profit picture. If, unfortunately, as has been our more recent experience, the discovery turns out to be somewhat less than what we had hoped for, the present allowable, without a discovery bonus, would probably be adequate to take care of the well.

Q Mr. Hull, you have been present this morning and heard Mr. Nutter's testimony concerning the bonus situation and the allowable situation. Do you have any specific remarks or comments you would like to make concerning anything he discussed?

A Well, I might comment on just one or two items. One of his comments, when he was wearing the pro hat, was that the decrease of reserves in the state was a result of not enough wildcat drilling. Certainly this is a factor. Another factor, I think, is that it's historical in any oil province that the number of major discoveries decreases with time so that another factor in this decrease in reserves is

the fact that we are discovering smaller and smaller fields as time goes on.

I think that it's very pertinent, that Mr. Nutter's comment that New Mexico and Louisiana have led in exploratory activity relatively is very pertinent and points out that exploratory drilling is a factor of the risk or potential success ratio probably to a greater extent than to the existence of discovery allowables. Certainly Louisiana has a very high success ratio and this has encouraged their activity. New Mexico has a higher success ratio than the other states that we operate in.

Mr. Nutter proposed that in the alternative to a bonus allowable for discoveries that there should be at least a study of depth factors, we would concur in that and we would like to suggest that that study could also well encompass the factors for the various spacings. We are very cognizant of the Commission's policy of encouraging wider spacings, we appreciate it a great deal.

We feel that this policy could be strengthened by providing a greater difference in the allowable, particularly at the greater depths, a greater difference in the allowable for 80-acre spacing and for 160-acre spacing compared to 40-acre spacing. For instance, in a well, that well at 13,000 feet, which is as deep as the present depth schedule goes, a

well on 80-acre spacing in New Mexico receives only 113% as large an allowable as one on 40-acre spacing. In Texas the differential is 150%. This is just one example here.

The result of this is that in a question between drilling developing a field on 80-acre spacing and 40-acre spacing in New Mexico, that second well on the 80 acres will increase the total allowable by 87 barrels. In Texas it will increase it only by 50 barrels. This is one of the factors that we certainly have to evaluate in the economics of an exploratory prospect because if we have to drill wells that we feel are unnecessary to provide adequate drainage this cuts down our incentive for drilling.

Q Mr. Hull, what do you feel is the proper incentive to encourage drilling and production?

A Well, we certainly don't wish to take an adamant stand against discovery allowables, but we feel for operators in the same position as Standard, that the one factor that would encourage us more than anything would be strengthening of the wide space policy that the Commission has exhibited for the last several years.

Q Would you have a recommendation to make to the Commission that it might adopt in the event that it does adopt some kind of a discovery allowable?

A Yes, sir. We were impressed with Mr. Nutter's

example of applying a percentage bonus to the normal allowable. This would imply that spacing would still be a factor; this is one of the problems that I think is incurred in the states where spacing is not a factor in the discovery allowable. It conflicts with the policy of wide spacing if spacing is not a factor in discovery allowable, so we would recommend that any discovery allowable adopted recognize spacing.

Q Do you have any further remarks to present to the Commission concerning this problem?

A I believe not.

MR. DURRETT: That will conclude our direct examination of Mr. Hull.

MR. PORTER: Does anyone have a question of the witness?

GOVERNOR CAMPBELL: I have a question.

CROSS EXAMINATION

BY GOVERNOR CAMPBELL:

Q Mr. Hull, it has been said many times, I don't know, I have never seen real figures to substantiate it, but it's sort of legend in the oil industry that a great deal of the wildcat activity has been carried on by the independent operators. Does your company--you say you are comparing only your situation, you say?

A Yes, sir.

Q Does your company actually set out to drill a great many wildcat wells itself?

A Yes, sir. From the standpoint of our over-all budget I would certainly say that we don't drill as high a percentage of wildcats as many independents, but we do carry on an active exploratory drilling program.

Q Do you think that it is true that a large percentage of the wildcat wells are drilled by smaller independent operators as distinguished from the larger producing companies?

A I think that is true. One reason that it is true is that the independent is able to drill at least what appears to be a smaller prospect than a major is able to drill. We have some minimum size that we place on our prospects, and if it's smaller than that we farm it out to your independent.

Q Do you think this should be a factor in the decision of the Commission as to whether or not we should have a discovery allowable?

A You mean the fact that many wildcats are drilled by independents?

Q Yes, and that the position of larger companies who are not as deeply involved in this might not be as significant as the attitude of the people who really drill the wildcat wells. Maybe that's not a fair question. Maybe that's

something for us to decide. I will withdraw it as far as you are concerned.

MR. PORTER: Does anyone else have a question of the witness? The witness may be excused.

(Witness excused.)

MR. PORTER: At this time we are going to recess the hearing until 2:30. There are a number of people, including the Chairman of the Commission, who have other commitments during the interim, 1:30 meetings and so forth, so we will not reconvene until 2:30, at which time Mr. Kellahin, would you be ready to present your testimony at 2:30?

The hearing is recessed.

(Whereupon, a recess was taken until 2:30 o'clock P.M.)

AFTERNOON SESSION

MR. PORTER: The hearing will come to order, please. Mr. Kellahin.

MR. KELLAHIN: If the Commission please, Jason Kellahin, representing Cities Service Oil Company. I have one witness I would like to have sworn.

(Witness sworn.)

R. E. ADAMS

called as a witness, having been first duly sworn, was examined and testified as follows:

DIRECT EXAMINATION

BY MR. KELLAHIN:

Q Would you state your name, please?

A R. E. Adams.

Q By whom are you employed and what position?

A Cities Service Oil Company as proration coordinator.

Q Where are you located?

A Bartlesville, Oklahoma.

Q Have you ever testified before the Oil Conservation Commission and made your qualifications a matter of record?

A Yes, I have.

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

MR. PORTER: Yes.

Q (By Mr. Kellahin) In connection with the Commission Case 3425, have you made any kind of a study of the proposal made by the Commission for a bonus or discovery allowable?

A Yes, I have.

Q In connection with that, did you prepare a statement making recommendations to the Commission?

A I did.

Q Would you present that, please?

A Cities Service Oil Company recommends the establishment of a fixed and predetermined total amount of bonus discovery allowable, commensurate with depth, limited as to the number of participating wells, and applicable to each newly discovered pool in the same well bore. It is further recommended that the bonus discovery allowable be produced at a restricted rate in addition to the well's top unit allowable.

As a guide line to these general recommendations, it is specifically proposed that the bonus discovery allowable be established as that amount of oil that would be produced in a two-year period at a rate of 1/2 a normal unit allowable of 40 barrels as multiplied by the 80-acre proportional factor. It is also proposed that the number of participating wells be limited to 4 and that in producing the bonus allowable the well be restricted to a rate not to exceed twice its top unit allowable. Reasons for these proposals are as follows:

Establishment of a fixed and predetermined total amount of bonus discovery allowable:

1. To a prospective investor a total amount of bonus oil would have more significance and be more meaningful than the tabulation of a depth bracket allowable. This gives a figure to look at in addition to the top unit allowable.

2. Each qualified well is guaranteed its total amount of bonus allowable if it is able to produce it. This is an advantage not to be found in the rules of other states. When discovery allowables are limited both by time and the number of wells, whichever limitation occurs first, many new fields have lost their discovery rights after only a few months of production due to accentuated drilling. In other cases development has been purposely delayed until the time limit expired in order to maintain discovery status.

3. Offsets to a discovery well are assured of a full bonus allowable unless there should occur semi-wildcat drilling more remote from the well. This provides an opportunity for better evaluation and planned development.

4. A further justification for Management approval of exploratory drilling is provided for.

5. Correlative rights will be protected. By the assignment of the full bonus allowable prior to the completion of any non-qualified wells there will be no discrimination in allowable as between wells. The unproduced bonus allowable would be in the same category as valid underage which might accrue to any well.

6. The graduation of the pool depth range with its established acreage proportional factors to our knowledge

is generally considered to be reasonable, equitable and fair. It is a recognition of drilling and production costs as related to well depths. A bonus discovery allowable can logically be tied in with this established criteria.

7. Objectiveness is emphasized and not partially hidden in an allowable schedule.
8. Factors which have caused some recent revisions of discovery allowable rules in other states are eliminated.

Limitation of the number of participating wells to 4

1. This is a practical limitation as it permits all offset requirements to be met around a discovery well making a perfect place for demarcation.
2. In actuality only one well should be entitled to a bonus discovery allowable. If more than one well is to receive it, four is the next logical cut off point.
3. Any increase in this number of qualified wells would be only a subterfuge to obtain higher and unwarranted allowables on development wells.
4. Relatively few large fields have been discovered in the past few years. An unorthodox number of wells could lead to a question of discrimination between pools.
5. The more wells that are qualified for a bonus discovery allowable in any one pool, the more the purpose of establishing such a bonus is subjugated. Anyone who can

participate with a discovery well is not going to use that money for exploratory work of his own.

6. In this state a promiscuous number of wells participating in bonus discovery allowables would have an impact on establishing the normal unit allowable.

Restriction of producing rate

1. This restriction is incorporated in our proposal solely as a waste prevention measure which would permit the bonus allowable to be produced within a reasonable length of time.

I have attached to this statement what the proposed bonus discovery allowable would be under those recommendations.

(Whereupon, Cities Service Exhibit No. 1 was marked for identification.)

Q This is embodied in what has been marked as Exhibit No. 1?

A Yes, sir.

Q Before we get to that, what other states have a bonus allowable?

A Well, other states which have a bonus allowable to my knowledge, and there are possibly others, are Arkansas, North Dakota, Oklahoma, Texas and Kansas. In Arkansas remuneration is made by means of a severance tax credit after proper certification as to a discovery allowable, seventy-five

credit is given to taxes due to either five or ten years, ten years being applicable when the discovery is deeper than any other well in the county in which it is located.

Mr. Nutter, I think, discussed the allowables in Texas and Kansas and North Dakota, provides for maximum of 200 barrels per well per day for exploration of eighteen months, but this is really meaningless in North Dakota, as they have no market demand statutes and they can produce whatever they can sell. In Mississippi there is a provision that if you make proper certification as to costs of the discovery well, you will be exempt from proration restrictions until all the costs are recovered.

Q You made a comparison of your proposal as against the results in Texas and Louisiana?

A I made a tabulation of the comparison of allowables according to the pool depth range for 40 and 80-acre spacing in New Mexico, showing the proposed discovery allowable and the current allowable in Texas under their present proration factor of 33.3% for 40-acre, 40, 80, 160-acre wells and their discovery allowable, and also a tabulation of the Louisiana allowables for on-shore.

(Whereupon, Cities Service Exhibit No. 2 was marked for identification.)

Q Is that shown on Exhibit No. 2?

A Yes, sir.

Q Your proposed discovery allowable, is that a cumulative figure or is that -- how did you figure that column?

A That's just a fixed figure. As I explained in this statement, I assume that the unit, the normal unit allowable be 40 barrels, and I took half of that for a two-year period over applying the 80-acre proportional factor I got a cumulative figure that's shown in the proposed discovery allowable.

Q The other figures shown on your exhibit are daily current production figure?

A Current daily calendar-day production figures.

Q Your discovery figure is the total production figure?

A Total production figure.

Q Of the bonus?

A Yes.

Q Not of the basic allowable?

A Yes. It's in addition to the normal unit allowable that might be assigned.

Q And you would request that the bonus be in addition to the normal unit allowable?

A Yes.

Q You heard the testimony this morning in regard to reserves. Do you feel that the granting of a bonus allowable

will result in any increase in the discovered reserves in New Mexico?

A That question can probably be answered in several parts. As far as chief operators in New Mexico are concerned, I believe that they'll drill their best prospects first regardless what state they're in. On the other hand, if one of those operators should have a prospect that had equal chances in some other states as compared to New Mexico, he would pick New Mexico if that offered a better remuneration.

On the other hand, I think that for people that are independents or people that are promoting wells, that might actually accentuate drilling as far as their operations are concerned, because I believe it would certainly make it easier to obtain capital for those wells.

Q It would be an advantage, then, to the independent?

A I believe it would, but it's something that you just have to try out, in my opinion, and I don't think you will ever be able to put the results on a curve in later years. I don't think you would ever know what advantage is gained from it.

Q Would your company, considering the risk was involved, take into account the bonus allowable?

A I think they probable would, whether they intentionally did it or not, I think that would be in their

mind.

Q Well, it would be a part of the ultimate recovery to be considered, is that correct?

A Yes, it would be.

Q Were Exhibits 1 and 2 prepared by you?

A Yes, sir.

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

MR. PORTER: If there is no objection, the exhibits will be admitted.

(Whereupon, Cities Service Exhibits Nos. 1 and 2 were offered and admitted in evidence.)

MR. PORTER: Does anyone have a question of Mr. Adams?

CROSS EXAMINATION

BY MR. PORTER:

Q One of your recommendations was that it be limited to four wells in a pool, and I believe that you indicated somewhere in your recommendations here that this would allow all of the offsets, the first well drilled to drill a well?

A Under normal conditions that would be the case. It wouldn't hold true in every case, but most of New Mexico leases, I think, are probably 160 acres, and it wouldn't; there certainly could be exceptions to that.

Q But you wouldn't limit the bonus to just the offset?

A Whoever drilled the first four wells, yes, sir.

MR. PORTER: Anyone else have a question of the witness? He may be excused.

(Witness excused.)

MR. PORTER: This concludes the testimony of all those who indicated earlier at the outset of the case that they would present testimony. Is there any further testimony to be offered in the bonus allowable case? Anyone like to state a position in the case?

MR. ANDERSON: R. M. Anderson, Sinclair Oil and Gas Company. Sinclair believes that in order for New Mexico to maintain its competitive position with other states, that it will be necessary for New Mexico to adopt a discovery allowable of some type at this time. There are other important factors that enter into drilling of exploration wells beside allowable. The witnesses this morning have mentioned some of them, such as drilling costs and payout time and the availability of unexplored areas and things of this nature.

So all things being equal, with the other states increasing their discovery allowables at this time, it appears like New Mexico is going to have to do something similar.

Sinclair would recommend as a possibility that the

adoption of a discovery allowable consisting of one additional unit allowable for all wells completed in a new pool effective from the date of discovery for a period of two years might be a reasonable discovery allowable comparable with the discovery allowable of Texas and some of the other states.

We feel that if the well is a deep well and qualifies after completion for temporary or permanent 80-acre rules and 80-acre allowables, that this one additional unit allowable should be added on top of the 80-acre allowable during this two-year period.

MR. PORTER: Mr. Whigham.

MR. WHIGHAM: Carl Whigham, representing Texaco, Incorporated. With regard to Case 3425, Texaco has considered the possible effects that a discovery allowable would have on exploration activity in New Mexico and has concluded that a discovery allowable incentive or bonus would be desirable. Texaco's position is that an operator who steps out with an active exploration program or project should be offered the incentive that a discovery allowable or discovery bonus would offer, so, therefore, Texaco recommends that the New Mexico Oil Conservation Commission establish a bonus allowable.

We do make this recommendation subject to certain limitations. We would not favor a bonus quite as high as the one just recommended by Sinclair. We have considered several

limitations that the various states have. Texaco would be in concurrence with a bonus allowable that would extend over a period up to twenty-four months. These are maximum figures, up to twenty-four months, and up to including the first ten wells. We would also recommend a maximum daily allowable of 750 barrels for the deepest depth bracket under consideration.

MR. PORTER: Mr. Morris.

MR. MORRIS: This statement is made on behalf of both Shell Oil Company and Tidewater Oil Company. Those companies feel that the allowable system in New Mexico has worked well in the past, that the depth factors have provided and will continue to provide the incentive for the drilling of both exploratory and development wells, and that it wouldn't be a mistake to put all of our emphasis on exploratory wells with at least the possibility, if not the probability, of detriment to the whole allowable system by putting emphasis upon discovery allowables, which could work to a reduction of the normal unit allowables.

The management of these companies wishes to express the view that a discovery allowable would be of little or no consequence in their determination of whether to drill or not to drill an exploratory well in New Mexico. Basically their position is that there simply is no need for a discovery allowable in this state at this time and that to have one would

unnecessarily complicate what now is a very smooth-working, satisfactory allowable system and one that has been looked to by the other states as being a very satisfactory allowable system.

I would also like to point out that there appear to me to be a number of details that would have to be worked out in the form of a definite proposal before any discovery allowable could be adopted, and I am referring now to the problem of administering what would be or would not be considered a discovery well. Certainly if every well that qualified as a wildcat under present Commission definition would be a discovery well, I think that the confusion that would result from that is apparent and certainly the administration of it would be a great burden to this Commission and would not be something that could be taken lightly.

It should also be realized that the confusion over what will be considered a discovery well will prompt a vast hearings, if not unnecessary litigation, arising out of this Commission, because if the discovery allowable is set high enough it would certainly be worth it to the operators affected to litigate the issue of whether a well is or is not a discovery well and entitled to a discovery allowable.

In summary, the Shell and Tidewater companies do not feel that there is any need for a bonus discovery allowable, at

least at this time.

MR. PORTER: Mr. Tomlinson.

MR. TOMLINSON: Bill Tomlinson for the Atlantic-Richfield Company. We agree that the primary factor in drilling wildcats is availability of good, drillable prospects. However, to the extent that additional allowable will help, and it will sometimes help, we urge you to reconsider or to give further consideration to the adoption of this bonus discovery allowable.

GOVERNOR CAMPBELL: Does that mean that you are for it?

MR. TOMLINSON: We want a discovery allowable.

MR. PORTER: Mr. Kellahin.

MR. KELLAHIN: Jason Kellahin. Penroc Oil Corporation is one of those independents who feel that the granting of a discovery allowable would be beneficial to the state and encourage the drilling of wildcats. It would also be of benefit to the independents in obtaining finances. They urge that the Commission do adopt some form of bonus or discovery allowable.

I would like to introduce Mr. Ed Thompson, who is the executive vice president of the Permian Basin Petroleum Association, who would like to make a statement, if he is still here. I guess Mr. Thompson had to leave.

MR. PORTER: Mr. Hoover.

MR. HOOVER: Don Hoover with Gulf, Gulf Oil Corporation believes that the current allowables are adequate and the setting of a bonus discovery allowable would not encourage exploration to a substantial extent. A comparison of the Texas discovery allowable and the Southeast New Mexico 80-acre allowable for a 45-barrel unit shows that the New Mexico allowables equal or exceed the Texas discovery allowable in most depth ranges and that by not being limited in time, the New Mexico situation is actually more attractive.

MR. PORTER: Mr. Reed.

MR. REED: Charles Reed, I'm an independent, and this statement is made on my own behalf. I have recently become quite concerned about the economy of the State of New Mexico, which is highly dependent upon the revenue derived from the oil and gas industry. The testimony presented this morning clearly indicates a reduction of exploratory activity and a decrease of oil and gas revenue within our state. These conditions will ultimately result in a gradual decline of our industry and a loss of income to the State of New Mexico.

The majority of the exploratory wells are now being drilled by independents who depend upon a sound financing

program and a fair return of their investment. I can assure you that an independent with a discovery bonus on the initial well will do more exploratory drilling and will result in significant recoveries.

It is my recommendation for a bonus allowable for the initial discovery well based on depth factor.

MR. PORTER: You would confine your recommendation to the one initial discovery well?

MR. REED: Yes, sir, that would be my recommendation.

MR. PORTER: Mr. Hocker.

MR. HOCKER: R. L. Hocker for Amerada Petroleum Corporation. You might characterize this as a large independent.

MR. PORTER: At one time it was the largest operator in New Mexico.

MR. HOCKER: Yes, I realize. We would like to take the position that would encourage the development of wildcat drilling. We also should be careful not to encourage too close or dense spacing by drilling unnecessary wells or incentive that might be caused by discovery wells. There are two different things that could happen. It could be granted to just one well, in which case the discovery allowable just to one well, I don't believe this would occur, but if discovery allowable is granted to more than one well I favor

Mr. Hull's proposition that the allowable be a percentage based upon not only depth but spacing when it's established for the field. That's not very concrete, but it's something I wanted to point out to you.

MR. PORTER: Anyone else have a statement? I believe we have some correspondence, Mr. Hatch.

MR. HATCH: Yes, sir. I have a telegram dated July 7, 1966 addressed to the Oil Conservation Commission, attention Pete Porter. "Aztec Oil and Gas Company favors the allowable. Believe this might develop further exploration in New Mexico. District Superintendent, Aztec Oil and Gas."

Another telegram dated July 11th, 1966, addressed to the New Mexico Oil Conservation Commission, attention Pete Porter. "Reference to Case 3425 on July 15th, 1966 docket. We favor the adoption by the New Mexico Oil Conservation Commission of a bonus discovery allowable on a basis equitable to all producers. Obviously wildcat drilling in Southeastern New Mexico is not keeping pace with the oil-related economical barometers, and such a bonus should result in the increase in wildcat drilling. Hannigan Petroleum Corporation by Robert E. Hannigan."

Another telegram dated July 11, 1966 addressed to the New Mexico Oil Conservation Commission. "Understand that hearing Wednesday you will discuss merits of discovery

allowable for New Mexico. Feel this would be excellent shot in arm for whole state oil business. Now they will make decision on practical conservation. Moran Oil Drilling Corporation, a State of New Mexico Corporation with no out-of-state production and darn little in New Mexico. R. M. Moran. P. S. If you really want to help oil business in New Mexico you will give immediate consideration to dire need of many oil companies for unpotable flood water in Southeastern New Mexico."

Another telegram dated July 11, 1966, addressed to the Oil Conservation Commission, Pete Porter. "A decision by your committee for discovery allowable in new oil field will help promote New Mexico economy. John Watson."

A letter from Pan American Petroleum Corporation dated July 8th, 1966. "Pan American Petroleum Corporation also believes that the existing allowable system in the State of New Mexico is satisfactory and that the adoption of a bonus discovery allowable is unnecessary and would not stimulate oil and gas exploration in the state. Signed W. B. Grisham."

A letter dated July 8, 1966, addressed to Mr. A. L. Porter, New Mexico Oil Conservation Commission. "Dear Mr. Porter: Union-Texas Petroleum, Division of Allied Chemical Corporation, the District Office in Midland, Texas, for operation of producing properties located in Southeast,

New Mexico and West Texas, endorses the motion by the Oil Conservation Commission of New Mexico to adopt a bonus discovery allowable. It is felt that this would be healthy for the oil industry in New Mexico and would promote a more active and continuing exploration program. Union-Texas Petroleum, by R. L. Stopher, District Production Superintendent."

Another letter dated July 8, 1966, Del-Lea, Incorporated, addressed to New Mexico Oil Conservation Commission, reference to the Case Number 3425. "Gentlemen: It is our thought that should a bonus discovery allowable be adopted, due consideration should be given to the distance that the discovery well is located from the closest previous production. We are sure that the State of New Mexico officials, institutions, and citizens are interested in seeing remote areas tested. Often times these tests cost several times the amount of a test which is classified as a wildcat, but is located near existing servicing centers. An increase in allowable for a rank wildcat would somewhat compensate for the increased cost mentioned above and for marketing production discovered at a great distance from existing transportation facilities. Del-Lea, Incorporated, by the president,"

Letter dated June 30, 1966, Skelly Oil Company, addressed to New Mexico Oil Conservation Commission, "If the Commission adopts a bonus discovery allowable in the State of New Mexico,

we would recommend that in Southeast New Mexico the existing unit allowable be multiplied by one and one half times the basic unit allowable, and in Northwest New Mexico the present allowable be multiplied by one and one half times the basic unit allowable applicable to wells of zero to 5,000 feet, and applying the depth factor below 5,000 feet with a ten-well maximum of twenty-four months, whichever comes first for a discovery allowable rule.

"We do not know whether this would have an effect of encouraging any additional development, but we would have no objection to this proposal or one similar thereto. Signed George W. Selinger."

Another telegram dated July 13th, 1966 addressed to A. L. Porter, Junior, Oil Conservation Commission, Santa Fe. "Regarding hearing on discovery allowable, we believe present system to be ample and just with incentive enough for wildcatting. Ashmun and Hilliard by H. T. Hilliard."

That's all of the correspondence.

MR. PORTER: Thank you, Mr. Hatch. If there's nothing further to be offered in this case, the Commission will take it under advisement.

I N D E X

STATE OF NEW MEXICO)
) ss
COUNTY OF BERNALILLO)

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 Hearing before the New Mexico Oil Conservation Commission was reported by me; and that the same is a true and correct record of the said proceedings, to the best of my knowledge, skill and abiiity.

Witness my Hand and Seal this 3rd day of August, 1966.

NOTARY PUBLIC

My Commission Expires:

June 19, 1967.

BEFORE THE OIL CONSERVATION COMMISSION
OF THE STATE OF NEW MEXICO

CASE No. 3425
Order No. R-3105

IN THE MATTER OF THE HEARING CALLED BY THE OIL CONSERVATION COMMISSION ON ITS OWN MOTION TO CONSIDER ALL ASPECTS OF THE POSSIBLE ADOPTION OF A BONUS DISCOVERY ALLOWABLE FOR THE STATE OF NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on July 13, 1966, at Santa Fe, New Mexico, before the Oil Conservation Commission of New Mexico, hereinafter referred to as the "Commission."

NOW, on this 26th day of August, 1966, the Commission, a quorum being present, having considered the testimony presented and the exhibits received at said hearing, 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 there is reason to believe that a discovery allowable will stimulate the search and exploration for new sources of oil within the boundaries of New Mexico.

(3) That the adoption of the rules hereinafter set out, and of related Commission Form C-109, all as hereinafter set out, is in the interest of conservation.

IT IS THEREFORE ORDERED:

(1) That Section "G" of the Rules and Regulations of the Commission entitled "OIL PRORATION AND DISTRIBUTION" is hereby amended to include Rule 509 as follows:

RULE 509. OIL DISCOVERY ALLOWABLE

In addition to the normally assigned allowable, an oil discovery allowable may be assigned to a well completed as a bona fide discovery well in a new common source of supply. Said oil discovery allowable shall be in the amount of 5 barrels for each foot of depth of said well from the surface of the ground to the top of the perforations in the new pool or the depth of the casing shoe, whichever is higher. In counties where there is no other current oil production, and in any county when the discovery is the deepest oil production in the county, the oil discovery allowable shall be 10 barrels per foot of depth.

A multiply completed well shall be eligible to receive an oil discovery allowable for each new oil pool discovered, provided that the discovery allowable for the uppermost pool shall be based on the depth from the surface of the ground to the top of the perforations, and the discovery allowable for each lower pool shall be based on the distance from the bottom of the perforations in the next higher newly discovered oil pool to the top of the perforations in said lower pool or to the casing shoe, if applicable.

Oil discoveries made in old producing wells drilled deeper or previously abandoned dry holes shall receive discovery allowables in accordance with the above, except that the depth measurement shall be from the point actual formation drilling was commenced rather than from the surface of the ground. However, any abandoned dry hole which is re-entered and drilled deeper and a discovery made within one year from the date of abandonment, may receive a discovery allowable based on the depth as measured from the surface of the ground.

Date of discovery to determine the well which should properly receive the oil discovery allowable for any new pool shall be the date the well is completed and new oil is run into stock tanks, provided however, any operator drilling through and discovering a new oil pool in the course of drilling to a lower horizon may file an affidavit of such discovery within seven days after drill stem tests were made of said pool, accompanying said affidavit with all available pool data. If, prior to completion of said well, another operator claims discovery of a similar pool and there are reasonable grounds to believe the pools are one and the same, no discovery allowable will be assigned to either well

until after the initial well for which the affidavit was filed has been completed. If at that time the operator of the initial well makes formal application for the discovery allowable in said pool, it will be determined after hearing which well shall receive the discovery allowable.

To obtain an oil discovery allowable, the owner of a discovery well shall file two copies of Commission Form C-109, Application for Discovery Allowable and Creation of a New Pool, with the appropriate District Office of the Commission and one with the Santa Fe office. Each copy of said form shall be accompanied by the following:

1. A map depicting all wells within a two-mile radius of the discovery well. All producing oil and gas wells and the formations from which they are producing or have produced are to be clearly shown as well as all dry holes and the depths to which they were drilled. Maps shall be on a scale one inch equals 1,000 feet and shall also indicate the names of all lessees of record in the depicted area.

2. A complete electrical log of the subject well with the tops and bottoms of producing formations in the subject well and in nearby wells identified thereon.

3. If application is based on horizontal separation, a sub-surface structural map of the producing formation(s) for which the discovery allowable is sought, showing seismic or geological interpretation of the subject structure and any troughs, faults, pinch-outs, etc., which separate the subject well from nearby wells producing from the same formation(s).

4. A geological cross-section prepared from electrical logs of the subject well and nearby wells establishing horizontal as well as vertical separation from other wells depicted on the plat which are producing or have produced from the discovery formation(s).

5. A summary of all available reservoir data including bottom hole pressure data, fluid levels, core analyses, reservoir liquid characteristics and any other

pertinent data of the subject reservoir as well as other nearby reservoirs which may help establish whether the subject well is in fact a discovery.

If, in the opinion of the Commission staff, good cause exists to bring the pool on for hearing as a discovery, and no objection has been received from any other operator, the pool will be placed on the first available hearing docket for inclusion by the staff in its regular pool nomenclature case. If the staff is not in agreement with the applicant's contention that a new pool has been discovered, or if another operator objects to the creation of a new pool and the assignment of an oil discovery allowable, the applicant will be so notified, and he will be expected to present the evidence supporting his case at the nomenclature hearing.

Effective date of a well's discovery allowable will be 7:00 a.m. on the first day of the month next succeeding the month in which the Commission approves the discovery.

The total discovery allowable attributable to each zone in the well shall be produced over a two-year period commencing with the time of authorization. The well's daily allowable for each pool receiving the discovery allowable shall not exceed the daily top unit allowable for the pool plus the total pool discovery allowable divided by 730 days (731 days if a leap year is included).

A discovery well shall be permitted to produce only that volume of gas equivalent to the applicable limiting gas-oil ratio for the pool multiplied by the top unit allowable for the pool plus the daily oil discovery allowable. In addition to all other statewide rules not specifically excepted herein, the provisions of Commission Rule 502 relating to daily tolerance, monthly tolerance, and underproduction and overproduction, shall apply to oil discovery allowables as well as to regular allowables for discovery wells.

Nothing herein contained shall be construed as prohibiting the Commission from curtailing the discovery allowables of wells during times of depressed market demand, provided however, such discovery allowables shall be reinstated for production at the earliest possible date. Further, when it appears reservoir damage or waste might result from production of the oil discovery allowable within the normal two-year period, the Commission may, after notice and hearing, extend said period.

(2) That Section "M" of the Rules and Regulations of the Commission entitled "REPORTS" is hereby amended to include Rule 1109 as follows:

RULE 1109: APPLICATION FOR DISCOVERY ALLOWABLE AND CREATION OF A NEW POOL (Form C-109)

Form C-109, when applicable, shall be filed in accordance with Rule 509.

(3) That Form C-109, Application for Discovery Allowable and Creation of a New Pool, (a copy of which is attached hereto and made a part hereof as Exhibit "A") is hereby approved.

(4) That Rule 1100-D of the Commission Rules and Regulations is hereby amended to include Form C-109, Application for Discovery Allowable and Creation of a New Pool.

(5) That the provisions of this order shall be limited to oil pools discovered after September 1, 1966.

(6) 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.

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

Jack M Campbell
JACK M. CAMPBELL, Chairman

Guyton B. Hays
GUYTON B. HAYS, Member

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

esr/

C-109
Rev. C-109
Adopted 9-1-66

NEW MEXICO OIL CONSERVATION COMMISSION

APPLICATION FOR DISCOVERY ALLOWABLE AND CREATION OF A NEW POOL

Note: This form is to be filed and attachments made in accordance with the provisions of Rule 509. If discovery is claimed for more than one zone, separate forms must be filed for each.

OPERATOR	ADDRESS	
LEASE NAME	WELL NO.	COUNTY

WELL LOCATION

UNIT LETTER_____; WELL IS LOCATED_____FEET FROM THE_____LINE AND_____FEET FROM THE_____LINE OF SECTION_____, TOWNSHIP_____, RANGE_____, NMPM

SUGGESTED POOL NAMES (List in order of preference)

1._____ 2._____ 3._____

NAME OF PRODUCING FORMATION	PERFORATIONS		DATE OF FILING FORM C-104
WAS "AFFIDAVIT OF DISCOVERY" PREVIOUSLY FILED FOR THIS WELL IN THIS POOL?	IF YES, GIVE DATE OF FILING	DATE WELL WAS SPUDDED	DATE COMPL. READY TO PROD.

TOTAL DEPTH	PLUGGED BACK DEPTH	DEPTH CASING SHOE	TUBING DEPTH	ELEVATION (State whether Gr., DF, RKB, RT, etc.

OIL WELL POTENTIAL(TEST TO BE TAKEN ONLY AFTER ALL LOAD OIL HAS BEEN RECOVERED)

_____BBLS, OIL PER DAY BASED ON_____BBLS IN _____HOURS;_____BBLS WATER PER DAY BASED ON_____BBLS IN_____HOURS; GAS PRODUCTION DURING TEST:_____MCF; GAS-OIL RATIO:_____ METHOD OF PRODUCING:_____ CHK. SIZE_____

NEAREST PRODUCTION TO THIS DISCOVERY (INCLUDES PAST AND PRESENT OIL OR GAS PRODUCING AREAS AND ZONES WHETHER THIS DISCOVERY IS BASED ON HORIZONTAL OR VERTICAL SEPARATION):

POOL NAME	NAME OF PRODUCING INFOR.	TOP OF PAY	BOTTOM OF PAY	CURRENTLY PRODUCING?
HORIZONTAL DISTANCE AND DIRECTION FROM SUBJECT DISCOVERY WELL TO THE NEAREST WELL IN THIS POOL		VERTICAL DISTANCE FROM SUBJECT DISCOVERY ZONE TO PRODUCING INTERVAL THIS POOL		

NEAREST COMPARABLE PRODUCTION (INCLUDES PAST AND PRESENT OIL OR GAS PRODUCTION FROM THIS PAY OR FORMATION ONLY):

POOL NAME	TOP OF PAY	BOTTOM OF PAY	CURRENTLY PRODUCING?
HORIZONTAL DISTANCE AND DIRECTION FROM SUBJECT DISCOVERY WELL TO THE NEAREST WELL IN THIS COMPARABLE POOL			

IS "COUNTY DEEP" DISCOVERY ALLOWABLE REQUESTED FOR SUBJECT DISCOVERY WELL?	IF YES, GIVE NAME, LOCATION, AND DEPTH OF NEXT DEEPEST OIL PRODUCTION IN THIS COUNTY

IS THE SUBJECT WELL A MULTIPLE COMPLETION?	IS DISCOVERY ALLOWABLE BEING REQUESTED FOR ANY OTHER ZONE(s)?	IF YES, NAME ALL SUCH FORMATIONS

LIST ALL OPERATORS OWNING LEASES WITHIN ONE MILE OF THIS WELL (ATTACH ADDITIONAL SHEET IF NECESSARY)

NAME	ADDRESS

ATTACH EVIDENCE THAT ALL OF THE ABOVE OPERATORS HAVE BEEN FURNISHED A COPY OF THIS APPLICATION. ANY OF SAID OPERATORS WHO INTENDS TO OBJECT TO THE DESIGNATION OF THE SUBJECT WELL AS A DISCOVERY WELL ELIGIBLE TO RECEIVE A DISCOVERY ALLOWABLE MUST NOTIFY THE APPROPRIATE DISTRICT OFFICE AND THE SANTA FE OFFICE OF THE COMMISSION OF SUCH INTENT IN WRITING WITHIN TEN DAYS AFTER RECEIVING A COPY OF THIS APPLICATION.

REMARKS:

CERTIFICATION

I HEREBY CERTIFY THAT ALL RULES AND REGULATIONS OF THE NEW MEXICO OIL CONSERVATION COMMISSION HAVE BEEN COMPLIED WITH RESPECT TO THE SUBJECT WELL, AND THAT IT IS MY OPINION THAT A BONA FIDE DISCOVERY OF A HITHERTO UNKNOWN COMMON SOURCE OF OIL SUPPLY HAS BEEN MADE IN SAID WELL. I FURTHER CERTIFY THAT THE DISCOVERY ALLOWABLE FOR THE SUBJECT WELL, IF AUTHORIZED, WELL BE PRODUCED FROM THE SUBJECT ZONE IN THIS WELL ONLY. FURTHER, THAT THE INFORMATION GIVEN HEREIN AND ATTACHED HERETO IS TRUE AND COMPLETE TO THE BEST OF MY KNOWLEDGE AND BELIEF.

Signature Position Date

Exhibit "A" Order No. R-3167

Norman L. Stevens, Jr.
SUITE 604
SECURITY NATIONAL BANK BUILDING
Roswell, New Mexico 88201

505 622-1461

July 20, 1966

Mr. D. S. Nutter, Chief Engineer
New Mexico Oil Conservation Commission
P. O. Box 2088
Santa Fe, New Mexico

Dear Mr. Nutter:

I wish to take this opportunity to compliment you and your staff on the thorough presentation that you made on June 13, 1966 before the Commission on the possibility of establishing a Bonus Allowable for the State of New Mexico.

I was very favorably impressed with your delivery and research.

Very truly yours,

Norman L. Stevens, Jr.

NLS/dn

'66 JUL 21 PM 1

CLASS OF SERVICE
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WESTERN UNION
TELEGRAM

W. P. MARSHALL, PRESIDENT

1201 (1-60)

SYMBOLS
DL = Day Letter
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(07)

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LA135 SSJ259

1966 JUL 7 PM 4 11

L HBA063 PD=HOBBS NMEX 7 406P MST=

OIL CONSERVATION COMMISSION, ATTN PETE PORTER=

STATE LAND OFFICE BLDG SANTA FE NMEX=

:AZTEC OIL AND GAS COMPANY FAVORS ALLOWABLE BELIEVE THIS MIGHT DEVELOPE FURTHER EXPLORATION IN NEW MEXICO=

LESTER DUKE DISTRICT SUPT AZTEC OIL & GAS=

Case 3425

MAIN OFFICE O

'66 JUL 8 AM 10 5

THE COMPANY WILL APPRECIATE SUGGESTIONS FROM ITS PATRONS CONCERNING ITS SERVICE

CLASS OF SERVICE
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WESTERN UNION
TELEGRAM

W. P. MARSHALL, PRESIDENT

(48)

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LA114 SSA195

1966 JUL 11 PM 2 38

L RWA058 PD=ROSWELL NMEX 11 14PP MST=

NMEX OIL CONSERVATION COMM=

ATTN PETE PORTER NMEX STATE LAND OFFICE

SANTA FE NMEX=

RE CASE 3425 ON JULY 13 1966 DOCKET WE FAVOR TO THE ADOPTION BY THE NMEX OIL CONSERVATION COMMISSION OF A BONUS DISCOVERY ALLOWABLE ON A BASIS EQUITABLE TO ALL PRODUCERS OBVIOUSLY WILDCAT DRILLING IN SOUTHEASTERN NMEX IS NOT KEEPING PACE WITH THE OIL RELATED ECONOMICAL BAROMETERS AND SUCH A BONUS SHOULD RESULT IN AN INCREASE IN THE RATE OF WILD CAT DRILLING=

HANAGAN PETROLEUM CORP B ROBERT E HANAGAN=

THE COMPANY WILL APPRECIATE SUGGESTIONS FROM ITS PATRONS CONCERNING ITS SERVICE

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WESTERN UNION
TELEGRAM

W. P. MARSHALL, PRESIDENT

1201 (4-60)

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LA153 SSB321

L HBA060 LONG NL PD=HOBBS NMEX 11= 1966 JUL 11 PM 4 25

NEW MEXICO OIL CONSERVATION COMMISSION=

SANTA FE NMEX=

UNDERSTAND AT HEARING WEDNESDAY YOU WILL DISCUSS MERITS OF DISCOVERY ALLOWABLE FOR NEW MEXICO. FEEL THIS WOULD BE EXCELLENT SHOT IN ARM FOR WHOLE STATE OIL BUSINESS. KNOW YOU WILL MAKE DECISION BASED ON PRACTICAL CONSERVATION

MORAN OIL PRODUCING & DRILLING CORP.

A STATE OF NEW MEXICO CORPORATION WITH NO OUT OF

THE COMPANY WILL APPRECIATE SUGGESTIONS FROM ITS PATRONS CONCERNING ITS SERVICE

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WESTERN UNION
TELEGRAM

W. P. MARSHALL, PRESIDENT

1201 (4-60)

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STATE PRODUCTION AND DARNLITTLE IN NEW MEXICO.

R N MORAN.

P.S. IF YOU REALLY WANT TO HELP OIL BUSINESS IN NEW MEXICO YOU WILL GIVE IMMEDIATE CONSIDERATION TO DIRE NEED OF MANY OIL COMPANIES FOR UNPOTABLE FLOOD WATER IN S.E. N.MEX...

THE COMPANY WILL APPRECIATE SUGGESTIONS FROM ITS PATRONS CONCERNING ITS SERVICE

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WESTERN UNION
TELEGRAM

W. P. MARSHALL, PRESIDENT

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1966 JUL 11 AM 8 48

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L HBA003 PD=HOBBS NMEX 11 823A MST=

=OIL CONSERVATION COMMITTEE, PETE PORTER=

SANTA FE NMEX=

A DECISION BY YOUR COMMITTEE FOR DISCOVERY LIABLE IN
NEW OIL FIELD WILL HELP PROMOTE NEW MEXICO ECONOMY=

JOHN WATSON=

MAIN OFFICE OIL C

'66 JUL 11 AM 9 47

THE COMPANY WILL APPRECIATE SUGGESTIONS FROM ITS PATRONS CONCERNING ITS SERVICE

FORM 446 8-63

PAN AMERICAN PETROLEUM CORPORATION

OIL AND GAS BUILDING P. O. BOX 1410
FORT WORTH, TEXAS—76101

WILLIAM V. GRISHAM
DIVISION ENGINEER

July 8, 1966

File: GHF-245-986.510.1

Subject: New Mexico Oil Conservation Commission Hearings, July 13, 1966, Cases 3424 and 3425

Mr. A. L. Porter, Jr.
Secretary-Director
New Mexico Oil Conservation Commission
P. O. Box 871
Santa Fe, New Mexico

Dear Sir:

Pan American Petroleum Corporation supports the amending of Rule 701-E-4 of the New Mexico Oil Conservation Commission Rules and Regulations to permit assignment of waterflood basic area allowable factors equal to the normal unit allowable times the appropriate proportional depth factor, whenever the normal unit allowables exceed the Southeast and Northwest waterflood basic area allowables of 42 BOPD and 70 BOPD, respectively.

Pan American Petroleum Corporation also believes that the existing allowable system in the State of New Mexico is satisfactory, and that the adoption of a bonus discovery allowable is unnecessary and would not stimulate oil and gas exploration in the State.

Yours very truly,

W. V. Grisham

CFH:df

Allied Chemical Corporation
UNION TEXAS PETROLEUM DIVISION
1300 WILCO BUILDING • MIDLAND, TEXAS 79701 • AREA CODE 915, 682-0515

July 8, 1966

Case file

Mr. A. L. Porter, Jr.
Secretary-Director
New Mexico Oil Conservation Commission
P. O. Box 2088
Santa Fe, New Mexico

Re: Case No. 3425

Dear Mr. Porter:

Union Texas Petroleum, a Division of Allied Chemical Corporation, with a District office in Midland, Texas for operation of producing properties located in Southeast New Mexico and West Texas endorses the motion by the Oil Conservation Commission of New Mexico to adopt a bonus discovery allowable.

It is felt that this will be healthy for the oil industry in New Mexico and will promote a more active and continuing exploration program.

Yours very truly,

UNION TEXAS PETROLEUM

R. L. Stover

R. L. Stover
District Production Superintendent

RLS:ms

DEL-LEA, INC.
P. O. BOX 1889
HOBBS, NEW MEXICO 88240

TWO O FIVE BLDG.
205 NORTH LINAM

AREA CODE 505
EXPRESS 3-3144

'66 JUL 11 AM 7 3

July 8, 1966

New Mexico Oil Covservation Commission
P. O. Box 2088
Santa Fe, New Mexico 87501

Re: Case No. 3425
Docket 17-66
Regular Hearing July 13, 1966

Attention: Mr. A. L. Porter, Jr.
Secretary-Director

Gentlemen:

Our first thought regarding the possible adoption of a bonus discovery allowable is that we had rather see a general price increase of oil and gas production. However, since this is not the matter under consideration, although an increase in State-wide allowable could conceivably forestall a price increase, we will limit our remaining remarks to a phase of the captioned case which could be possibly overlooked.

It is our thought that should a bonus discovery allowable be adopted, due consideration should be given to the distance that the discovery well is located from the closest previous production. We are sure that the State of New Mexico officials, institutions, and citizens are interested in seeing remote areas tested. Oftentimes these tests cost several times the amount of a test which is classified as a Wildcat but is located near existing servicing centers.

An increase in allowable for a rank Wildcat would somewhat compensate for the increased cost mentioned above and for marketing production discovered at a great distance from existing transportation facilities.

Anticipation of the recent increase in bonus allowables for discovery wells in Texas may have contributed to the mass exodus by some of the companies recently. Recently, we have heard of some of the independents' considering moving to States with larger discovery allowables.

Yours very truly,

DEL-LEA, INC.

J. Don Hudgens,
President

cc: Governor Campbell
Commissioner Hays

'66 JUL 3 PM 12 02

SKELLY OIL COMPANY

P. O. Box 1650
TULSA, OKLAHOMA 74102

PRODUCTION DEPARTMENT
C. L. BLACKSHER, VICE PRESIDENT
W. P. WHITMORE, MGR. PRODUCTION
W. C. CARSON, MGR. TECHNICAL SERVICES
ROBERT G. HILTZ, MGR. JOINT OPERATIONS
GEORGE W. SELINGER, MGR. CONSERVATION

June 30, 1966

Re: Case No. 34-25
Hearing - July 13, 1966

Mr. A. L. Porter, Jr.
New Mexico Oil Conservation Commission
P. O. Box 2088
Santa Fe, New Mexico 87501

Dear Mr. Porter:

If the Commission adopts a bonus discovery allowable for the state of New Mexico, we would recommend that in Southeast New Mexico the existing unit allowable be multiplied by one and one-half (1½) times as the basic unit allowable, and in Northwest New Mexico the present allowable be multiplied by one and one-half (1½) times as the basic unit allowable applicable to wells of 0-5,000 feet and applying the depth factor below 5,000 feet, with a 10-well maximum of 24 months, whichever comes first, for a discovery allowable rule.

We do not know whether this would have an affect of encouraging any additional development, but we would have no objections to this proposal or one similar thereto.

Respectfully,

George W. Selinger

GWS:br
Attach. (1)

P. O. Box 1650

June 6, 1966

Mr. Joe Ramey
New Mexico Oil Conservation Commission
Box 1980
Hobbs, New Mexico

Dear Mr. Ramey:

Regarding your inquiry as to establishing a discovery allowable for New Mexico in order to encourage [illegible] drilling activity, we are herewith attaching a brief survey of the four states that now have discovery allowables. [illegible] because of the individual state's peculiar [illegible] method of allocation, and it is our [illegible] that the present basic unit allowable be multiplied by one and one-half times and apply the depth factor in order to establish the [illegible].

This would mean that in S.E. New Mexico where the present allowable is 45 barrels, one and one-half times would approximate 70 barrels as the basic unit allowable; and in the N.W., one and one-half times the present allowable of 70 barrels would approximate 105 barrels as the basic unit allowable. This would apply to wells from 0 to 5,000' and then apply the depth factor.

As to the number of wells and time limit, we would recommend 10 wells with a maximum of 24 months with no limit on the number of reservoirs for dual or multiple completions, so to encourage completely the discovering of more than one horizon in the field.

We would be glad to help in any other way that we can.

Yours very truly,

[illegible]

[illegible]

SUMMARY OF DISCOVERY ALLOWABLES

TEXAS (Onshore) - Depth bracket allowable exempt from market demand factor. 10
Maximum number of wells in reservoir 2½ months
Maximum time
No limit on number of reservoirs

KANSAS - Depth bracket based on 1-1/2 times basic. 10
Maximum number of wells 18 months
Maximum time
Limit of two reservoirs one well bore

OKLAHOMA - Depth bracket based on 12½% of 10-acre allowable exempt from market demand factor. No Limit
Maximum number of wells Varies with Depth
Maximum time (2½ days - 2,000', 100% days - 10,000' and upward.)

Limited to one reservoir in a well bore

NORTH DAKOTA - Allowable of 200 bbl/day exempt from market demand factor.
Maximum number of wells 1
Maximum time 12 months

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W. P. MARSHALL, PRESIDENT

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D MDA022 PD=MIDLAND TEX 13 940A CST= 1966 JUL 13 AM 9 21

A L PORTER JR=

OIL CONSERVATION COMMISSION SANTA FE NMEX=

REGARDING HEARING ON DISCOVERY ALLOWABLE WE BELIEVE PRESENT SYSTEM TO BE AMPLE AND JUST WITH INCENTIVE ENOUGH FOR WILDCATTING=

ASHMUN AND HILLIARD H T HILLIARD=

MAIN OFFICE OCC
'66 JUL 13 AM 10 04

THE COMPANY WILL APPRECIATE SUGGESTIONS FROM ITS PATRONS CONCERNING ITS SERVICE

'66 JUL 12 PM 12 51

Tidewater Oil Company

July 12, 1966

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

ATTENTION: Mr. A. L. Porter, Jr., Secretary - Director

Re: Case 3425, July 13, 1966
Proposed Adoption of
A Discovery Allowable
Program for the State of
New Mexico

Gentlemen:

Please enter this as Tidewater's statement in the record of the subject hearing.

Very truly yours,

TIDEWATER OIL COMPANY

John S. Cameron Jr.

JOHN S. CAMERON, JR.

JSC:mls
Att.

STATEMENT OF TIDEWATER OIL COMPANY
For Discovery Allowable Hearing, Case 3425
Before New Mexico Oil Conservation Commission
July 13, 1966

Tidewater Oil Company is of the opinion that the present allowable program in New Mexico is completely sufficient and adequate for continued emphasis on drilling in New Mexico. We feel that the adoption of a discovery allowable program will have very little or no effect on future exploration in New Mexico by Tidewater. After discussions with representatives of a number of major companies and independent operators who continually explore in New Mexico, we have found that in no instance has the absence of a discovery allowable program been an influencing factor in a decision to drill a wildcat prospect in New Mexico

Actually, the adoption of a discovery allowable program might result in present field allowables being reduced at some future time if it became necessary to reduce the total New Mexico oil allowable. Tidewater has a major asset in its present producing leases in New Mexico and could not support a program that might reduce present field allowables to preserve a discovery allowable program. New Mexico now enjoys considerably better allowable treatment for wells of comparable depth to that existing in Texas even considering the recent changes made in Texas.

Tidewater does not believe that a discovery allowable program for New Mexico would appreciably benefit exploratory operations in New Mexico, therefore we see no need to adopt such a program at this time.

Sunray DX Oil Company

Production Department

William R. Lear
Manager, Unitization
and Conservation

July 19, 1966

PG-6

Mr. A. L. Porter
New Mexico Oil Conservation Commission
P. O. Box 2088
Santa Fe, New Mexico

Re: New Mexico Rules
and Regulations

Dear Mr. Porter:

We had planned to appear at the hearing called to consider changes in the waterflood allowable rules and adoption of a discovery allowable but had a mix-up concerning the date of the hearing.

It is our belief that the waterflood allowable rules should be amended to give waterfloods an allowable equal to the Southeast New Mexico allowable when it goes above 42 barrels per day. The 42 barrels per day minimum for waterfloods should be retained when the Southeast New Mexico allowable goes below 42 barrels of oil per day. Similar treatment, of course, should be accorded Northwest New Mexico. This "floor" is necessary to orderly planning and development of waterfloods.

The lack of a discovery allowable has not discouraged us from exploring for oil in the State of New Mexico in the past and we do not anticipate that the adoption of a discovery allowable would cause us to intensify our drilling program in New Mexico. However, we do believe that the existence of a discovery allowable can cause an increase in drilling activity.

Please accept our apology for not being present and making a statement at the hearing.

Very truly yours,

SUNRAY DX OIL COMPANY

William R. Loar

William R. Loar

RCS/rwd

DRAFT

STATEMENT OF OIL CONSERVATION COMMISSION

July 14, 1966

Re: Bonus Allowable Drilling Incentive

The members of the staff of the Commissioner of Public Lands, at the request of members of industry, have compiled certain factual information concerning drilling of wildcat wells. This information, coupled with other information compiled by industry and the Oil Conservation Commission staff, indicates clearly that fewer wildcat wells are being drilled and that discovery of new reserves is not keeping pace with production, that is, the reserves are being dwindled away.

The office of Commissioner of Public Lands is, as you know, a revenue-producing office. However, it is interested in revenue over the long haul, and although its royalties are placed in a permanent fund and are therefore a reserve, it is realized that new discoveries of oil and gas on state land are necessary to keep pace with the growth of the state, which, in turn, makes greater demands for funds for operations of its schools and other institutions. It therefore is interested in considering any proposal which would induce wildcat drilling and discovery of new reserves. It is also aware that reserves are necessary from a military standpoint and that they cannot be found overnight.

In the past, incentives have been offered by the State Land Office to drilling of wildcat wells in the form of bonus acreage, that is, the office has approved units of considerable acreage which would extend leases beyond their normal terms should oil or gas be discovered upon the unit. A recent

example of this is the unit located in the St. Augustine Plains.

Along this line, the staff would recommend that some consideration be given to a bonus allowable, at least on a trial basis, although it is aware that there are many administrative problems which would flow from such a practice, such as determining whether or not a particular well is a new discovery or merely a part of an existing pool.

It is our opinion that one of the real reasons for lack of activity in drilling wildcat wells is the uncertainty of price and market due to federal intervention in the price regulatory ~~area~~ and in the import area. We are all aware of what happened to wildcat drilling during the time imports were increased out of balance with domestic production a few years ago, and at the recent IOCC meeting in Tulsa I detected a veiled threat in the speech of Mr. Cordell Moore, Assistant Secretary of the United States Department of the Interior, in that he indicated that the industry would have to furnish petroleum products to other industries in the United States at a price which would enable the other industries to compete with foreign industries; otherwise, he indicated that the importation of cheaper oil would be a necessity. It has always been our opinion, contrary to the Government's position, that the controls ~~should~~ be at the consuming end rather than at the producing end. However, the fact is that the controls are at the producing end, and so far there has been little we have been able to do about getting relief in that area. Therefore, we must do what we can, under the circumstances, and one of the actions we might take is to give some consideration to a bonus allowable for new discoveries.

Docket No. 17-66

DOCKET: REGULAR HEARING - WEDNESDAY - JULY 13, 1966

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

ALLOWABLE: (1) Consideration of the oil allowable for August, 1966.

(2) Consideration of the allowable production of gas for August, 1966, from thirteen prorated pools in Lea, Eddy, and Roosevelt Counties, New Mexico. Consideration of the allowable production of gas from nine prorated pools in San Juan, Rio Arriba and Sandoval Counties, New Mexico, for August, 1966.

CASE 3424: In the matter of the hearing called by the Oil Conservation Commission on its own motion to consider the amendment of Rule 701 E 4 of the Commission Rules and Regulations to permit the assignment of allowables to waterfloods in Southeast New Mexico equal to the normal unit allowable times the appropriate proportional depth factor when the normal unit allowable exceeds the Southeast New Mexico Area Allowable Factor of 42. The area allowable factor would remain as the governing allowable factor when the normal unit allowable is less than 42 barrels per day. A similar revision with respect to the Northwest Area Allowable Factor of 70 will also be considered.

CASE 3425: In the matter of the hearing called by the Oil Conservation Commission on its own motion to consider all aspects of the possible adoption of a bonus discovery allowable for the state of New Mexico. Although testimony both pro and con the discovery allowable will be presented by the Commission staff, the Commission invites and will entertain full discussion and testimony from the industry as to the advantages and disadvantages of a discovery allowable and the advisability of the adoption thereof, as well as suggested rules relating to the administration of a bonus discovery allowable, the amount of the allowable, the length of time and the number of wells to which it should apply, and any other pertinent facts relating thereto.

CASE 3426: Application of Penroc Oil Corporation for an unorthodox gas well location and for the amendment of Order R-2581, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks authority to drill a second well in Section 19, Township 21 South, Range 24 East, Indian Basin-Upper Pennsylvanian Gas Pool, Eddy County, New Mexico, said well to be located at an unorthodox location for said pool 660 feet from the South and East lines of Section 19. Applicant further proposes that the allowable for the 640-acre unit comprising all of said Section 19 could be produced from either or both of the wells on the unit in any proportion. Applicant further requests an amendment to Order No. R-2581, which force-pooled all mineral interests in the Upper Pennsylvanian formation underlying said Section 19, to permit the allocation of well costs among the interest owners in said unit and the recovery thereof out of production from both wells, together with cost of operation thereof.

CASE 3427: Southeastern New Mexico nomenclature case calling for an order for the extension of certain pools in Lea and Roosevelt Counties, New Mexico:

a) EXTEND the North Bagley-Middle Pennsylvanian Pool to include therein:

TOWNSHIP 11 SOUTH, RANGE 33 EAST, NMPM
SECTION 15: SW/4

b) EXTEND the Flying "M"-San Andres Pool to include therein:

TOWNSHIP 9 SOUTH, RANGE 33 EAST, NMPM
SECTION 28: NE/4

c) EXTEND the Justis-Blinebry Pool to include therein:

TOWNSHIP 24 SOUTH, RANGE 37 EAST, NMPM
SECTION 34: E/2 NE/4

d) EXTEND the Morton-Lower Wolfcamp Pool to include therein:

TOWNSHIP 15 SOUTH, RANGE 35 EAST, NMPM
SECTION 6: SW/4

e) EXTEND the Todd-San Andres Pool to include therein:

TOWNSHIP 7 SOUTH, RANGE 36 EAST, NMPM
SECTION 30: W/2

~~(a)~~ In addition to its normally assigned allowable, an oil discovery allowable may be assigned to a well completed as a bona fide discovery well in a new common source of supply. Said oil discovery allowable shall be in the amount of _____ barrels for each foot of depth of said well from the surface of the ground to the top of the perforations in the new pool or the depth of the casing shoe, whichever is higher,

A multiply completed well shall be eligible to receive an oil discovery allowable for each new oil pool discovered, provided that the discovery allowable for the uppermost pool shall be based on the depth from the surface of the ground to the top of the perforations, and the discovery allowable for each lower pool shall be ~~based~~ upon the distance from the ~~bottom~~ top of the perforations in the next higher oil pool to the top of the perforations in ~~the uppermost pool~~ said lower pool or to the casing shoe, if applicable.

Oil discoveries made in old ~~wells~~ producing wells drilled deeper or previously abandoned dry holes shall receive discovery allowables ~~based on depth~~ in accordance with the above, except that the initial ~~point of~~ depth measurement ~~shall~~ be from the point actual formation

drilling was commenced, provided however, any abandoned well which is re-entered and drilled deeper, and a discovery is made within one year from the date of abandonment, may receive a discovery allowable based ~~upon~~ on the depth as measured from the surface of the ground.

Date of discovery to determine which well should properly receive the oil discovery allowable for any new pool shall be the date the well is completed and new oil is run into stock tanks, provided however, any operator drilling through and discovering a ~~zone~~ new oil ~~discovered~~ pool in the course of drilling a deeper well may file ~~a request for~~ an affidavit of such discovery within seven days after drill stem tests were made ~~of said pool~~, accompanying said affidavit with ~~copies~~ all data available on the pool. In the event another operator claims discovery of ~~the same~~ ~~said~~ a similar ~~which~~ pool and there are reasonable grounds to believe they are the same pool, no discovery allowable ~~will be recognized~~ will be assigned until after the initial ~~first~~ well for which the affidavit was filed has been completed, at which time it will be determined after hearing which well should receive the discovery allowable.

To obtain an oil discovery allowable the owner of a discovery well shall file ~~three~~ two copies of ~~the~~ Commission Form C-109, Application for Discovery Allowable and Creation of a New Pool, with the appropriate District Office of the Commission and one with the Santa Fe office. Each copy of said form shall be accompanied by the following:

1. ~~A~~ map depicting all wells within a 2-mile radius of the discovery well. All producing oil and gas wells ~~are to be shown~~ and the formations from which they are producing or have produced ~~to~~ are to be clearly shown as well as all dry holes and the depths to which they were drilled. Maps ~~should be~~ shall be on a scale one inch equals 1,000 feet and shall also indicate the names of all lessees of record in the depicted area.

2. A complete electrical log of the subject well with the tops and bottoms of all producing formations in the subject well and in nearby wells ~~of~~ identified thereon.

If application is based upon horizontal separation,

3. ~~A~~ a sub-surface structural map of the producing formation(s) for which the discovery allowable is sought, showing seismic or geological interpretation of the subject structure and ~~of~~ any troughs, faults, pinch-outs, etc., which separate the subject well

from nearby wells producing from the same formation(s).

4. A geological cross-section prepared from ~~logs of~~ electrical logs of the subject well and nearby wells ~~proving~~ establishing horizontal as well as vertical separation from other wells ~~of~~ depicted on the plat which are producing or have produced from the discovery formation(s).

5. A summary of all available reservoir data including bottom hole pressure data, fluid levels, core analyses, ~~&~~ reservoir liquid characteristics (on the subject reservoir as well as nearby reservoirs), and any other pertinent data which may help establish whether the subject well is ~~a bo~~ in fact a discovery.

~~If~~ If, in the opinion of the Commission staff, good cause exists to bring the ~~gas~~ pool on for hearing as a discovery, ~~or~~ the pool will be placed on the ~~docket~~ first pool nomenclature docket ~~and the case presented~~ for inclusion by the staff in its regular pool nomenclature ~~hearing~~ case hearing. If the staff is not in agreement with the applicant's contention that a new pool has been discovered or if another operator objects to the creation of the new pool and the assignment of an oil discovery allowable, the applicant will be so notified, and he will be expected to present the evidence supporting his case

(and no objection has been received from any offset operators;)

at the nomenclature hearing.

Effective date of ~~the discovery~~ a well's discovery allowable will ~~be~~ 7:00 am on the first day of the month ~~in~~ next succeeding the month in which the Commission approves the discovery.

The total discovery allowable ~~as extent for each pool in~~ attributable to each pool in the well may be produced over a two year period, the well's daily allowable for each zone receiving the discovery allowable not to exceed top unit allowable for the pool plus the total pool discovery allowable divided by 730 (731 if a leap year is included). ~~Rule Commission Rule 502~~ The provisions of ~~Rule~~ Commission Rule 502 relating to daily tolerance, monthly tolerance, and underproduction and overproduction, shall apply to oil discovery allowables ~~and~~ as well as to regular allowables ~~on~~ for discovery wells. ~~In no discovery well the provision of Commission Rule 502 relating shall be permitted to produce~~

~~In addition to~~

A discovery well shall be permitted to produce only that volume of gas equivalent to the applicable limiting gas-oil ratio for the pool multiplied by the top unit allowable for the pool plus the daily oil discovery allowable. In addition to ~~any~~ all ~~applicable~~ statewide rules not specifically excepted herein,

Nothing herein contained shall be construed as prohibiting the Commission from ~~limiting the~~ subjecting the discovery allowable of wells to curtailment during times of extreme market demand curtailment, provided however, such discovery allowables shall be reinstated for production at the earliest possible date. Further, nothing contained herein shall be construed as prohibiting, for good cause shown, the extension of time ~~beyond~~ in which to produce the oil discovery allowable beyond the normal ± 2-year period when it appears reservoir damage or waste might result from production of said allowable within that time.

Ex. 1, 2, [illegible]

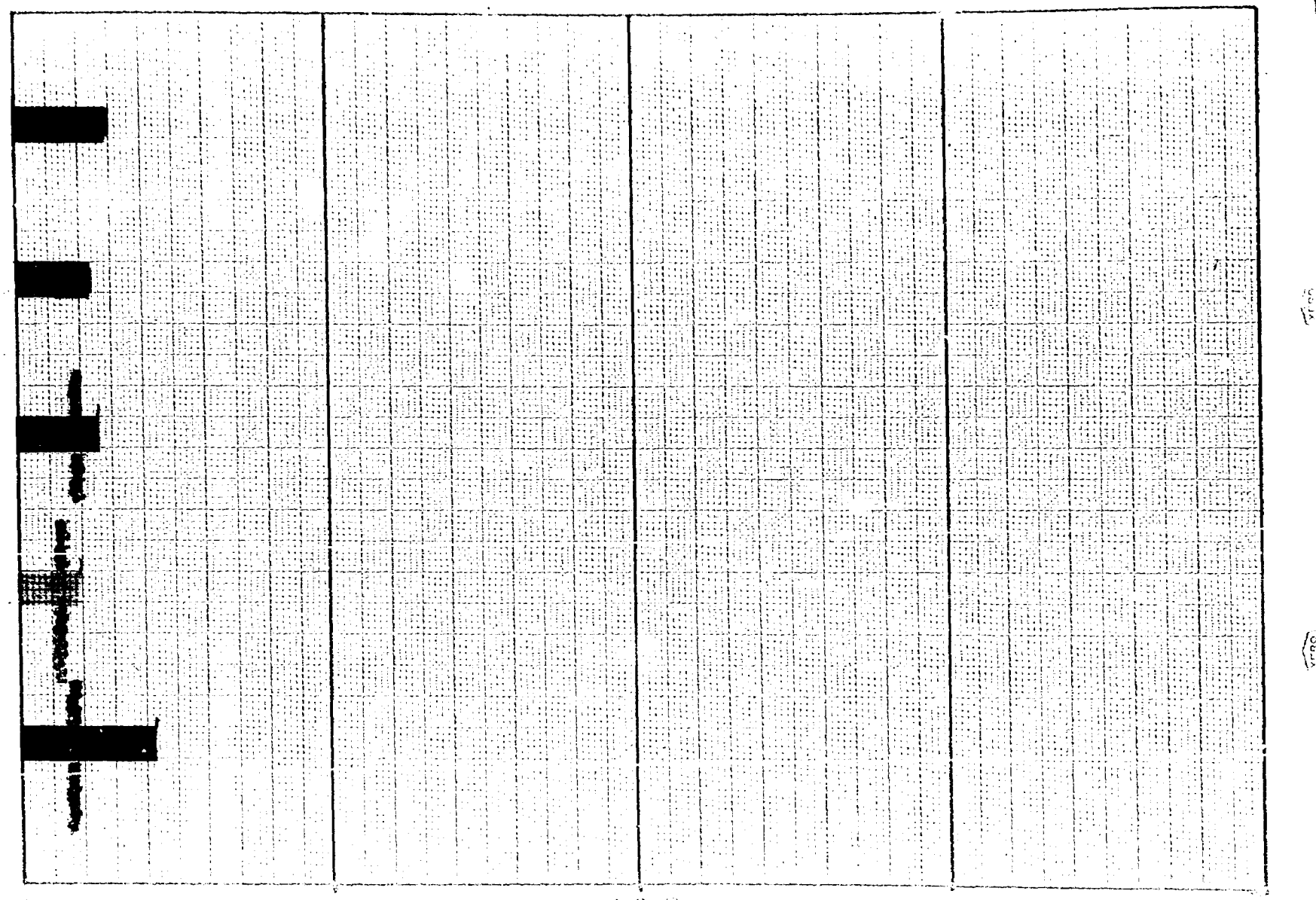
A[illegible] THE [illegible]

Ex 1: [illegible] of [illegible] & [illegible] in [illegible], [illegible] Texas, & Louisiana, 19[illegible]-65

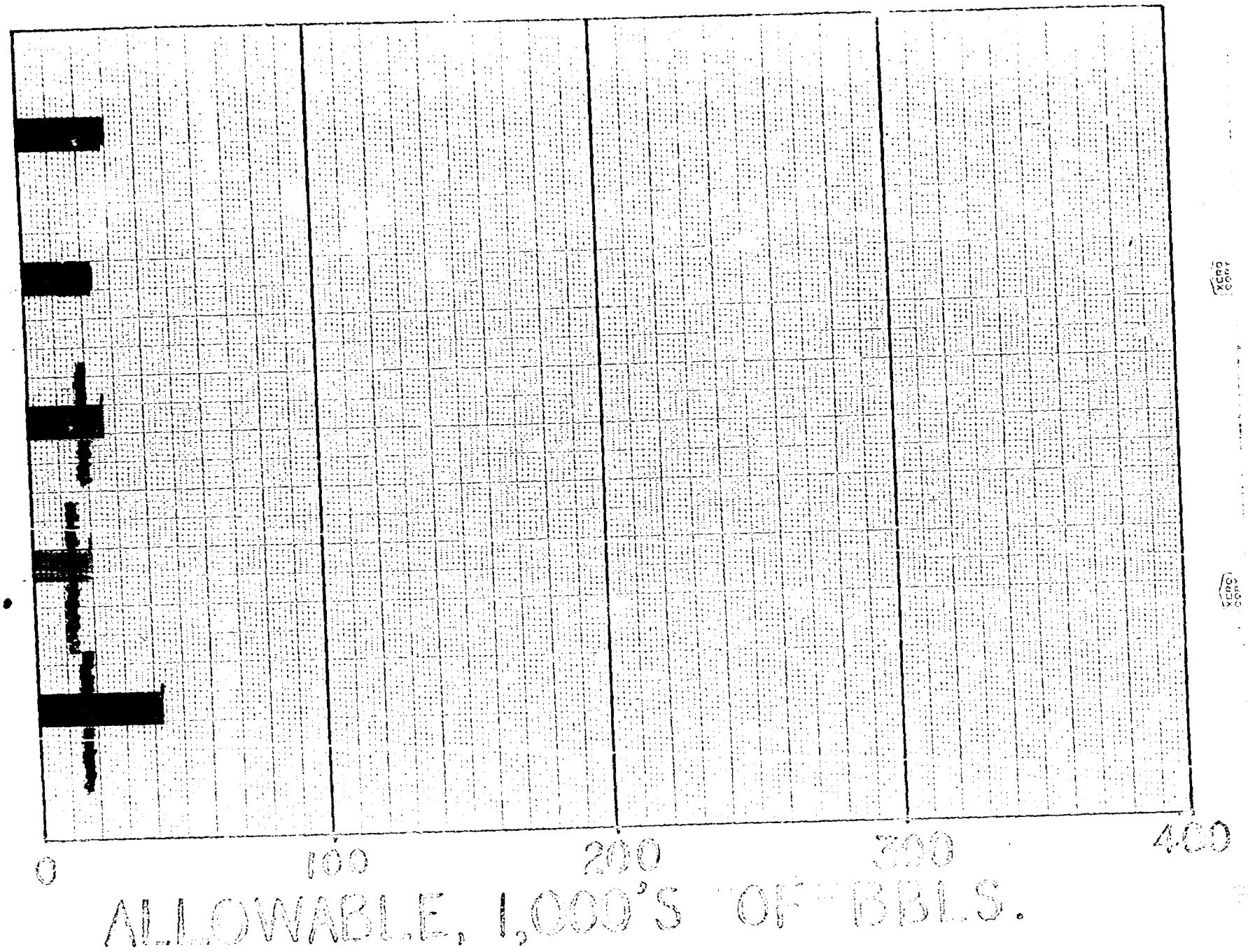
Ex 2: [illegible] of [illegible] vs. U.S. as a whole (1950-65)

Ex 15: Comparison of [illegible] of regular [illegible] 40[illegible] [illegible], May 1966, [illegible] [illegible]

2500', 2 YRS.

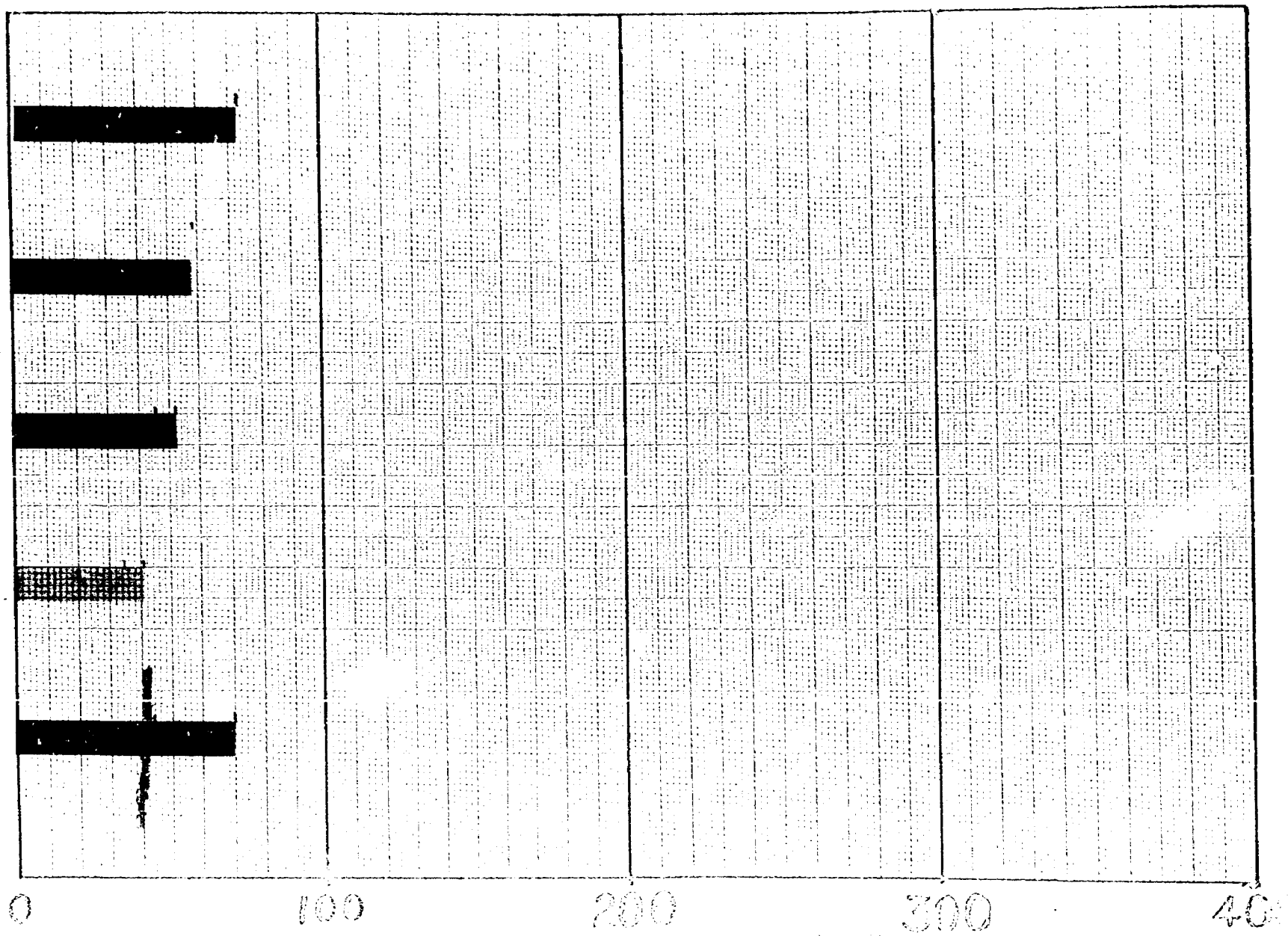


2500', 2 YRS.

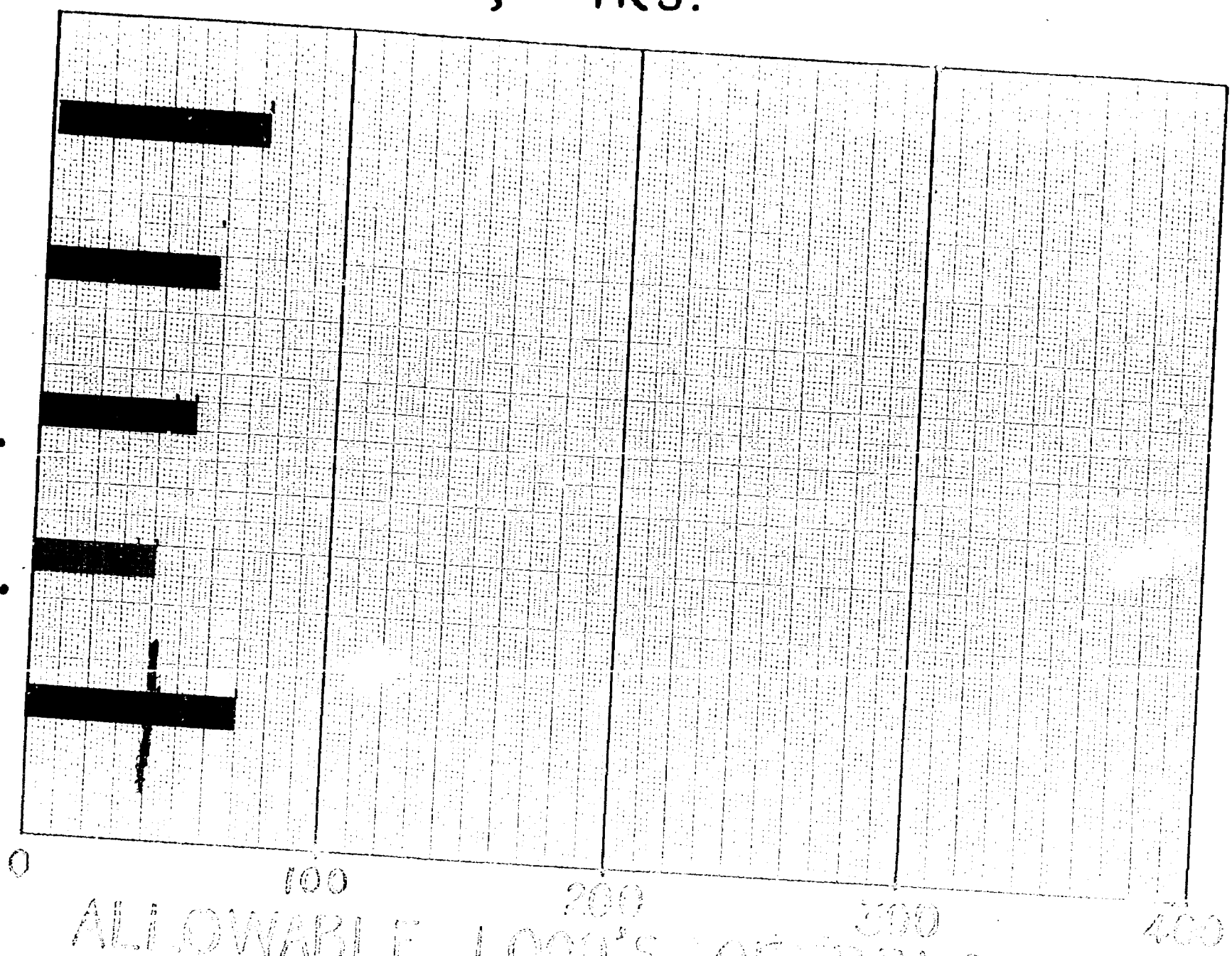


ALLOWABLE, 1,000'S OF BBLS.

2500', 5 YRS.

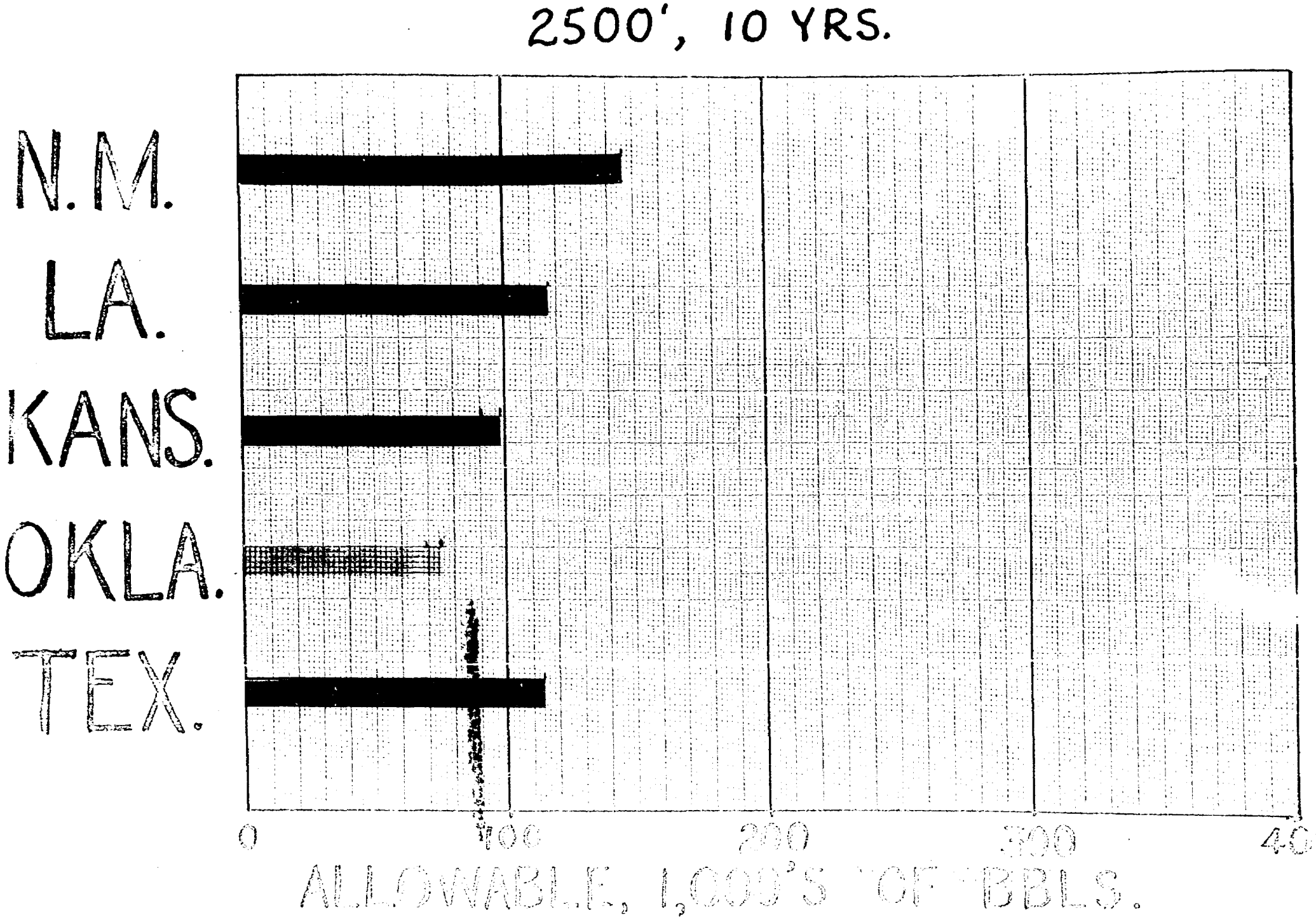


2500', 5 YRS.



ALLOWABLE, 1,000'S OF BBLS.

BEFORE THE
OIL CONSERVATION COMMISSION
Santa Fe, New Mexico
Exhibit No. 1
Case No. 3[illegible]


2500', 10 YRS.
N.M.
LA.
KANS.
OKLA.
TEX.
0
100
200
300
400
ALLOWABLE, 1,000'S OF BBLS.

1.

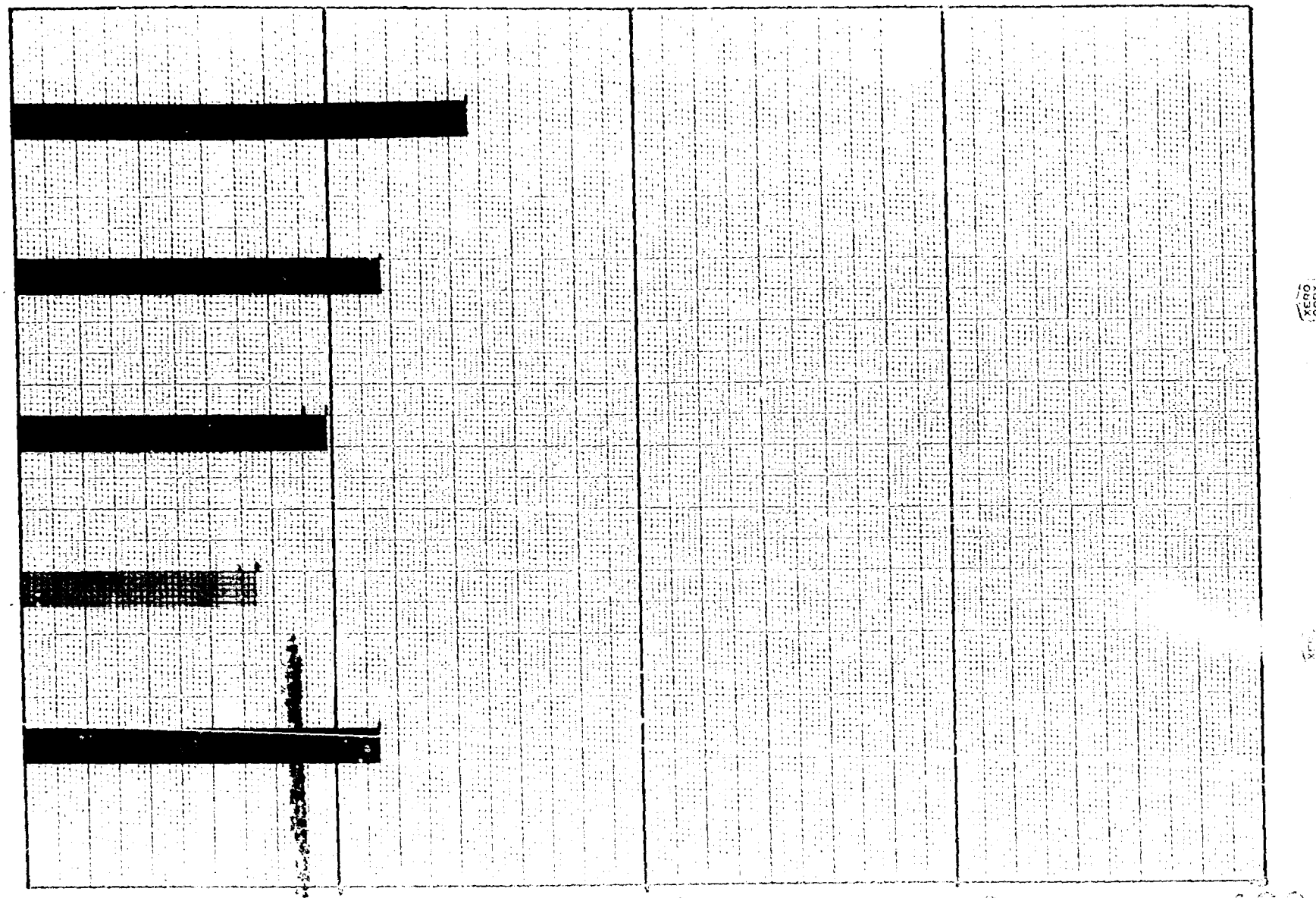
1.

NS.

LA.

EX.

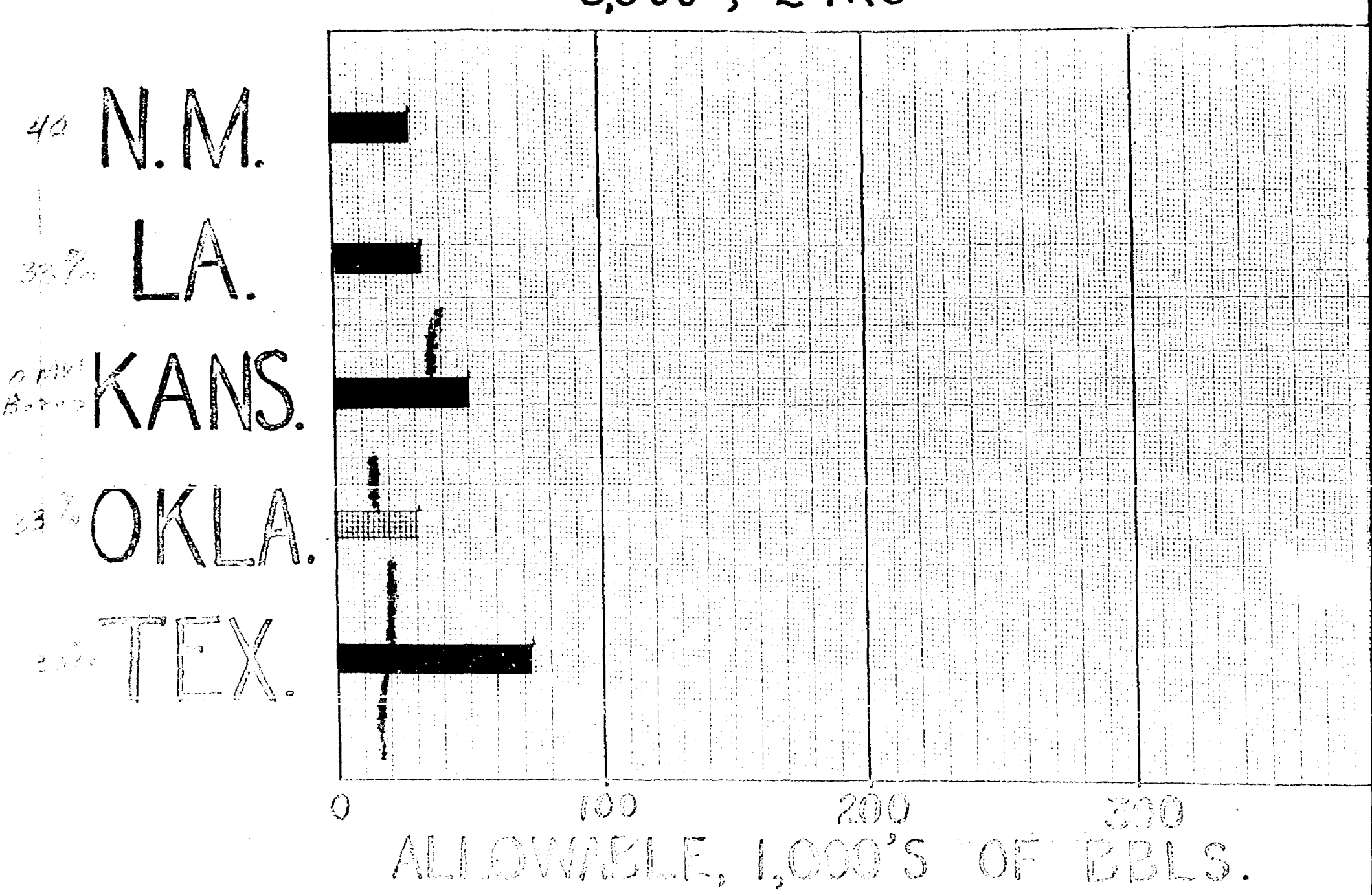
2500', 10 YRS.



ALLOWABLE, 1,000'S OF BBLS.

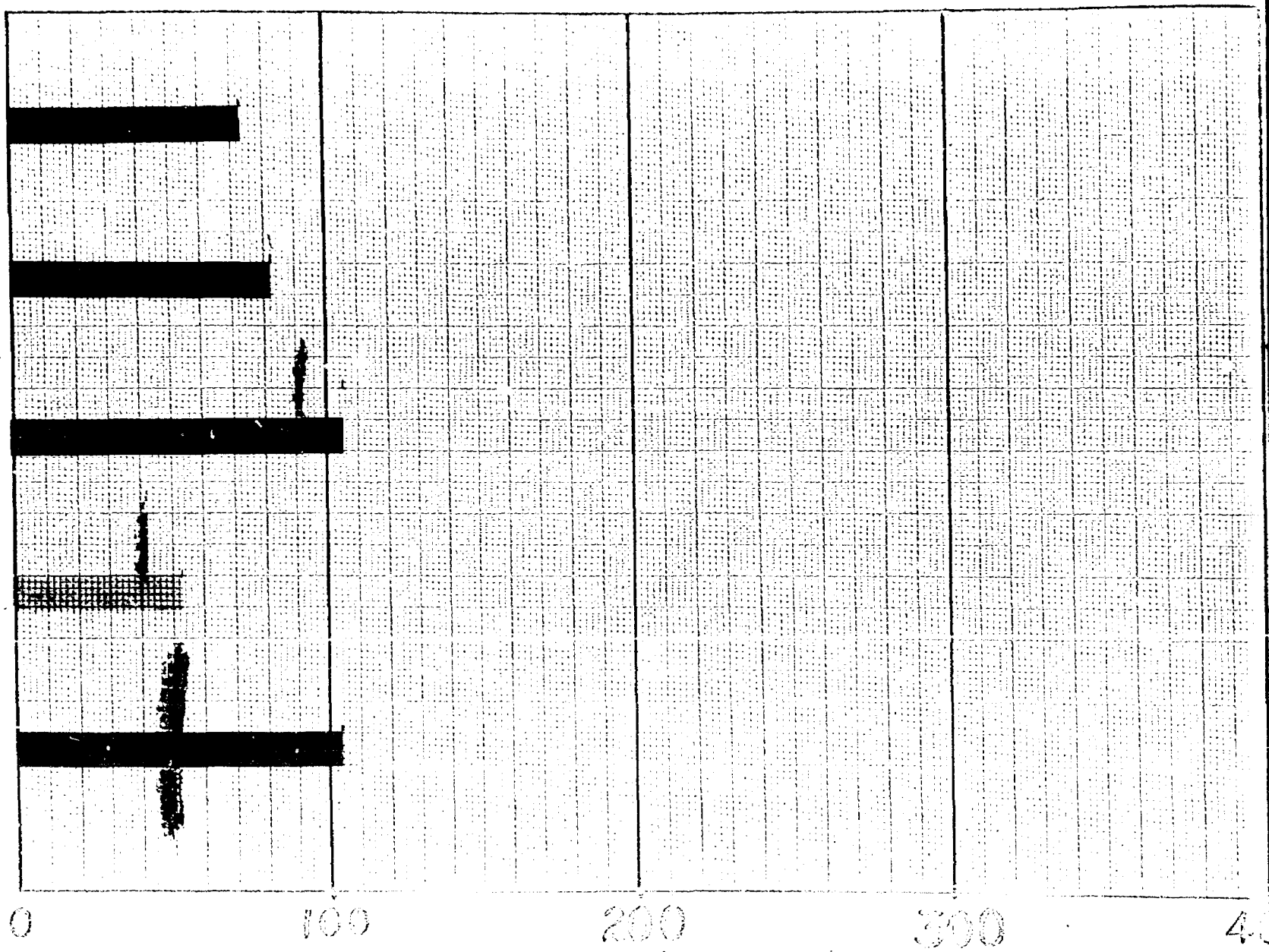
5

BEFO...
OIL CONSE..VATION C... ..ISS ON
Santa Fe, New ...
...... Exhibit No. 5
Case No. ......


5,000', 2 YRS.
40 N.M.
35.7 LA.
KANS.
OKLA.
TEX.
0
100
200
300
ALLOWABLE, 1,000'S OF BBLS.

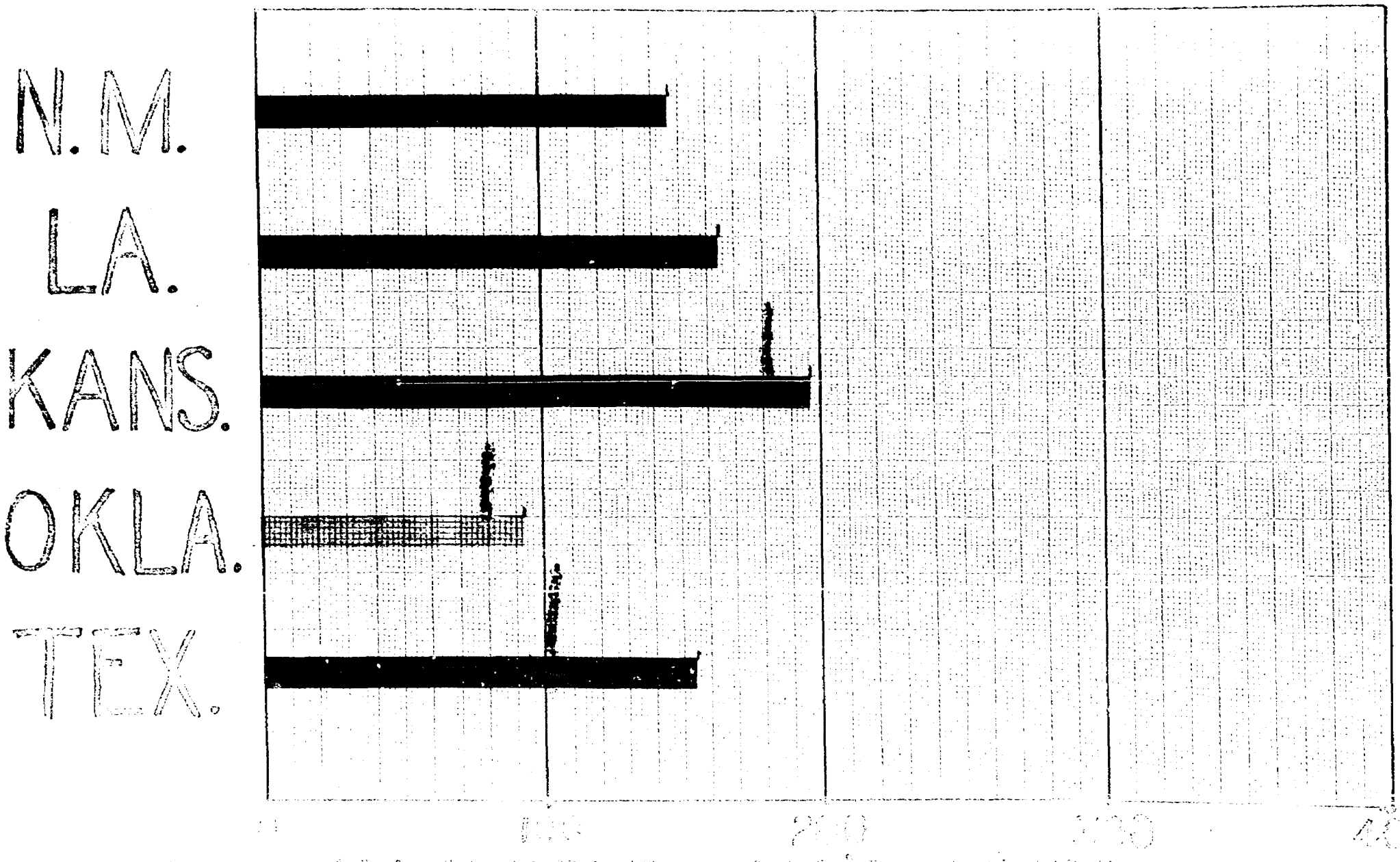
BEFORE THE
OIL CONSERVATION COMMISSION
Santa Fe, New Mexico
Exhibit No. 6
Case No. 3425

5,000', 5 YRS.



BEFORE THE
OIL CONSERVATION COMMISSION
Santa Fe, New Mexico
OCC Exhibit No. 7
Case No. 3[illegible]

5,000', 10 YRS.



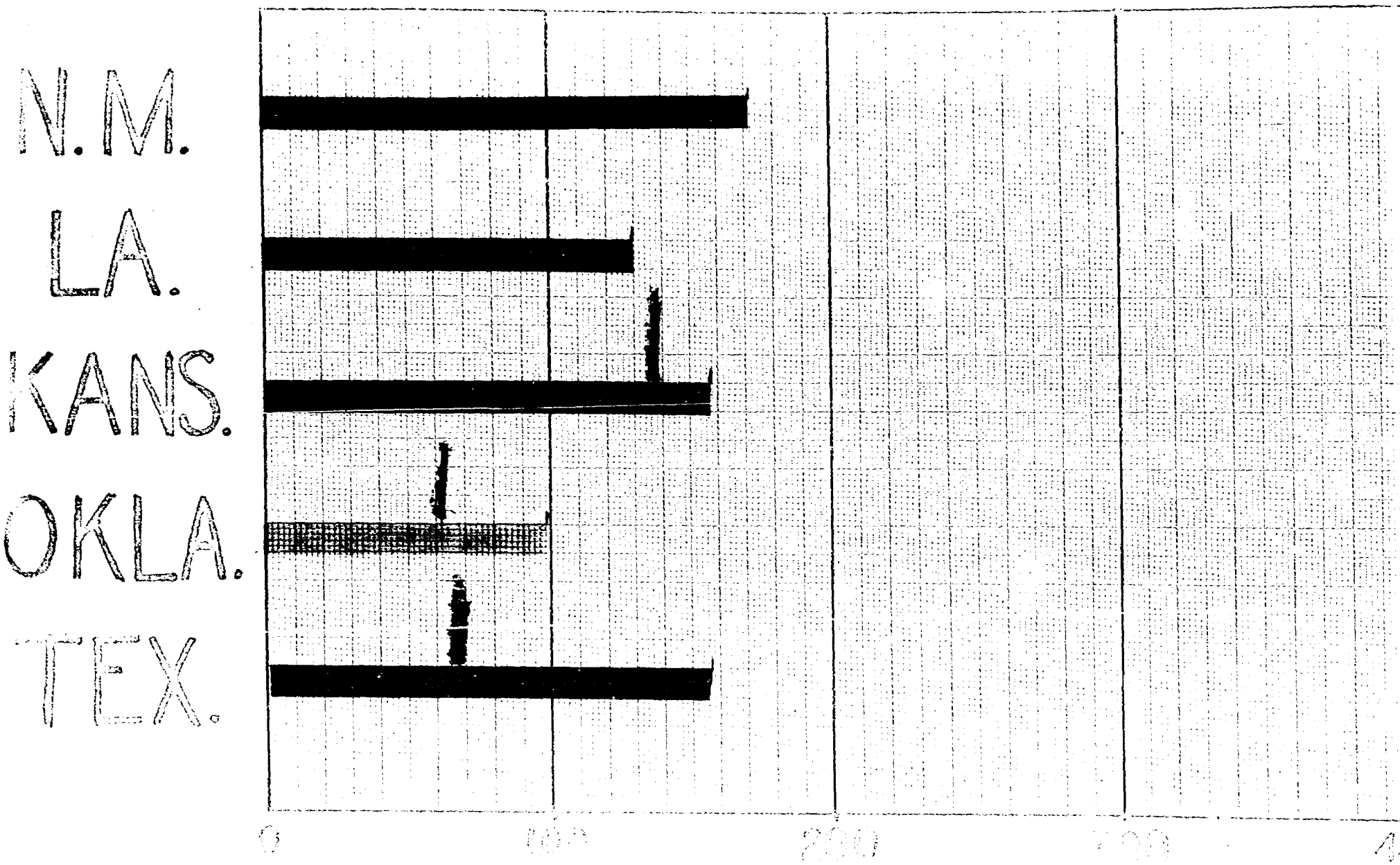
BEFORE THE
OIL CONSERVATION COMMISSION
Santa Fe, New Mexico
OCC Exhibit No. 2
Case No. 3423

7,500', 2 YRS.

ALLOWABLE, 1,000'S OF BBLS.

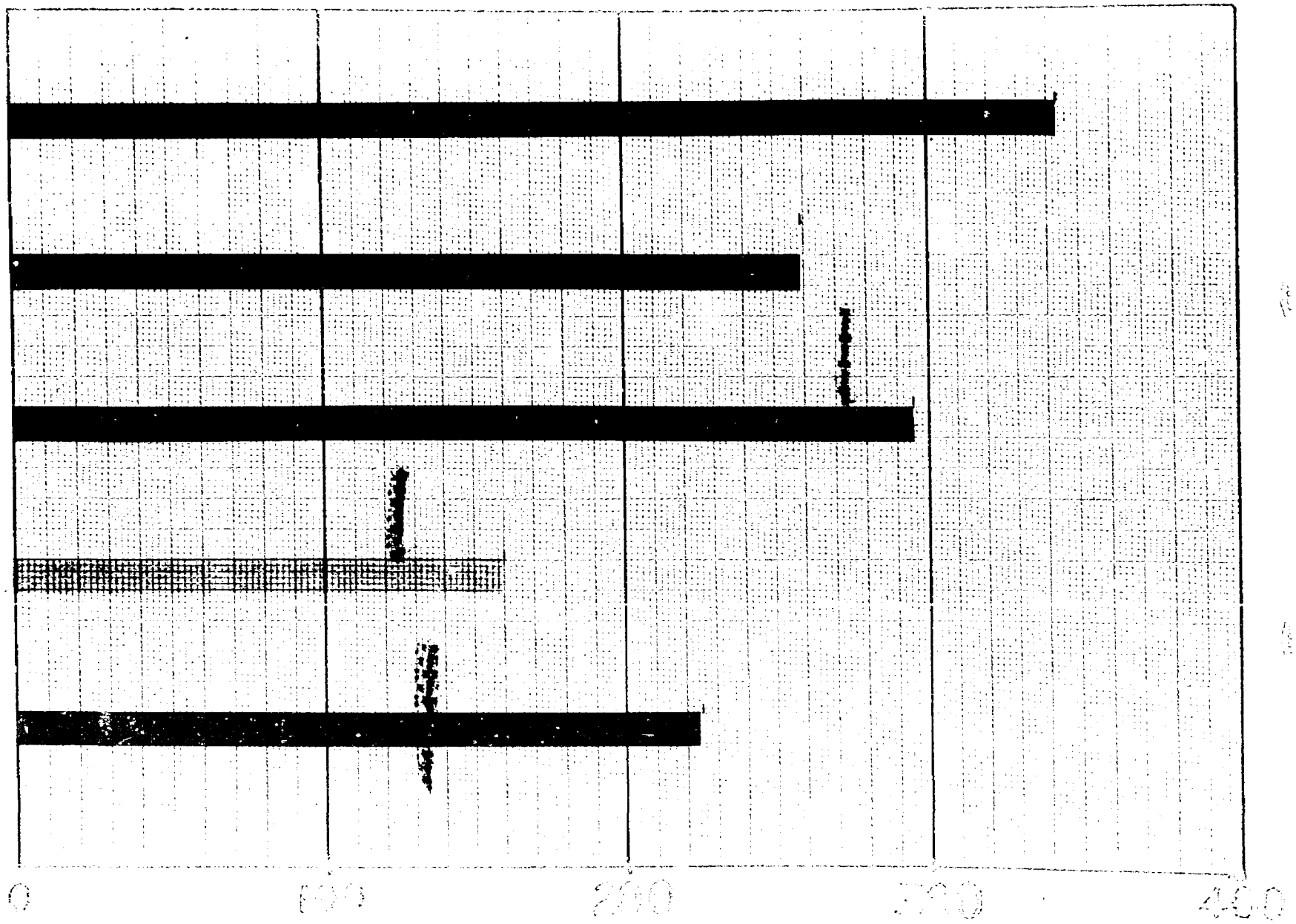
BEFORE THE
OIL CONSERVATION COMMISSION
Santa Fe, New Mexico
CCC Exhibit No. 7
Case No. 2717

7,500', 5 YRS.



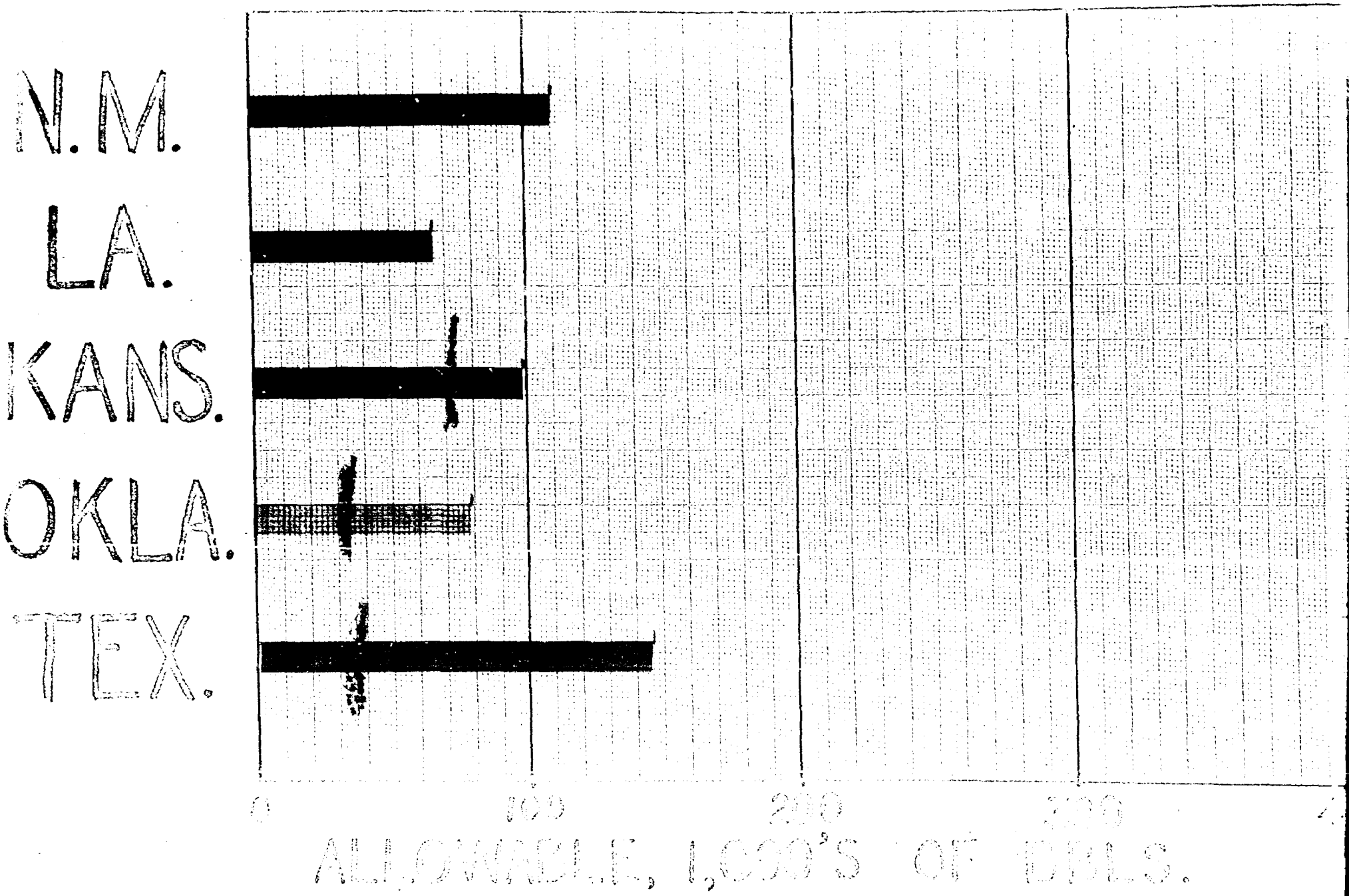
BEFORE THE
OIL CONSERVATION COMMISSION
Santa Fe, New Mexico
OCC Exhibit No. 10
Case No. 3402

7,500', 10 YRS.



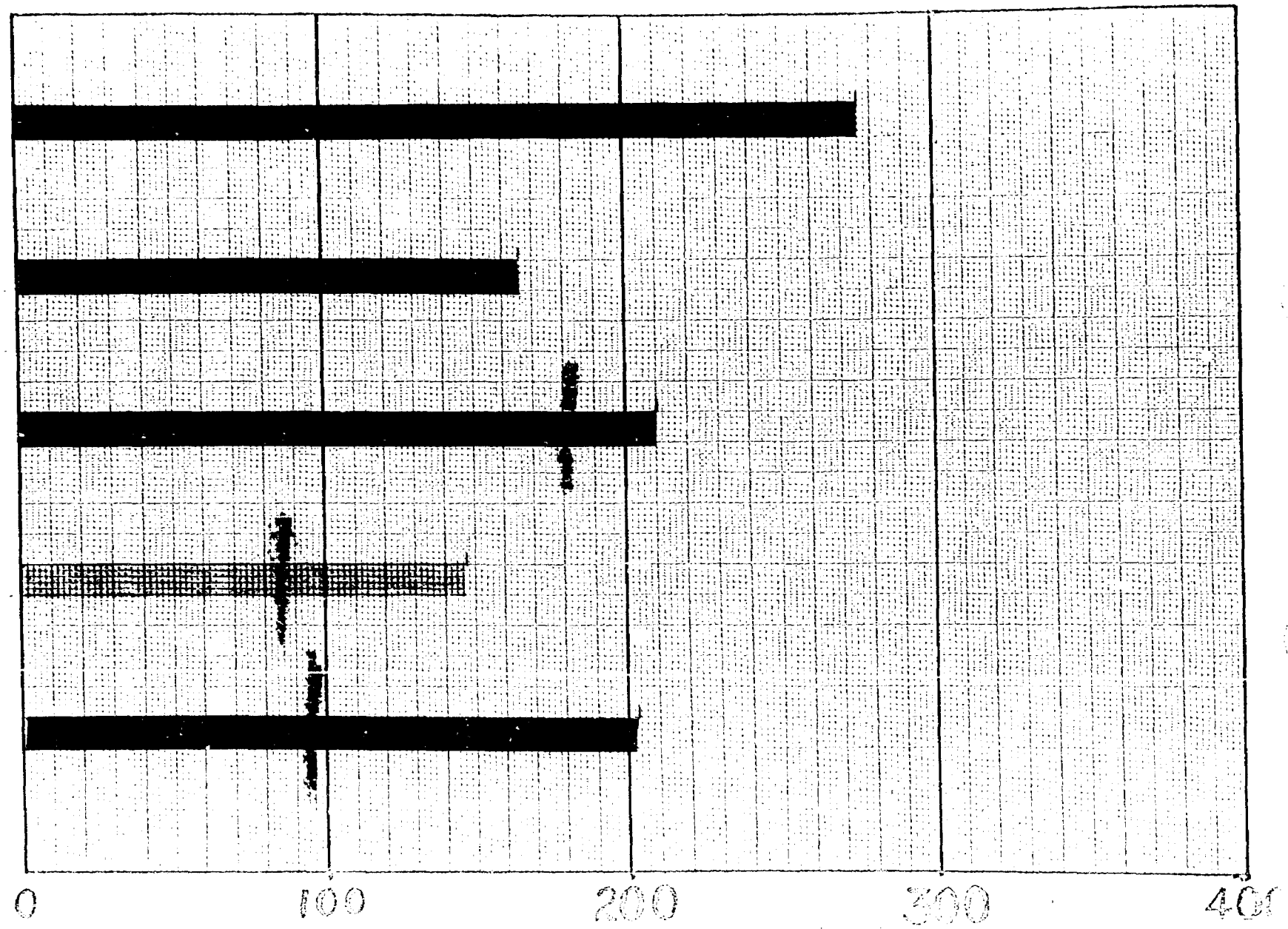
BEFORE THE
OIL CONSERVATION COMMISSION
Santa Fe, New Mexico
OCC Exhibit No. 11
Case No. 8425

10,000', 2 YRS.



BEFORE THE
OIL CONSERVATION COMMISSION
Santa Fe, New Mexico
OCC Exhibit No. 12
Case No. 3425

10,000', 5 YRS



BEFORE THE
OIL CONSERVATION COMMISSION
Santa Fe, New Mexico
OCC Exhibit No. 12
Case No. 2723

Case 3425: In The Matter of The Hearing Called by The Oil Conservation Commission to Consider All Aspects of The Possible Adoption of a Bonus Discovery Allowable For The State of New Mexico

Statement of Cities Service Oil Company

Cities Service Oil Company recommends the establishment of a fixed and predetermined total amount of bonus discovery allowable, commensurate with depth, limited as to the number of participating wells, and applicable to each newly discovered pool in the same well bore. It is further recommended that the bonus discovery allowable be produced at a restricted rate in addition to the well's top unit allowable.

As a guide line to these general recommendations, it is specifically proposed that the bonus discovery allowable be established as that amount of oil that would be produced in a two-year period at a rate of 1/2 a normal unit allowable of 40 barrels as multiplied by the 80-acre proportional factor. It is also proposed that the number of participating wells be limited to 4 and that in producing the bonus allowable the well be restricted to a rate not to exceed twice its top unit allowable. Reasons for these proposals are as follows:

Establishment of a fixed and predetermined total amount of bonus discovery allowable:

1. To a prospective investor a total amount of bonus oil would have more significance and be more meaningful than the tabulation of a depth bracket allowable. This gives a figure to look at in addition to the top unit allowable.

2. Each qualified well is guaranteed its total amount of bonus allowable if it is able to produce it. This is an advantage not to be found in the rules of other states. When discovery allowables are limited both by time and the number of wells, whichever limitation occurs first, many new fields have lost their discovery rights after only a few months of production due to accentuated drilling. In other cases development has been purposely delayed until the time limit expired in order to maintain discovery status.

3. Offsets to a discovery well are assured of a full bonus allowable unless there should occur semi-wildcat drilling more remote from the well. This provides an opportunity for better evaluation and planned development.

4. A further justification for management approval of exploratory drilling is provided for.

5. Correlative rights will be protected. By the assignment of the full bonus allowable prior to the completion of any non-qualified wells there will be no discrimination in allowable as between wells. The unproduced bonus allowable would be in the same category as valid underage which might accrue to any well.

6. The graduation of the pool depth range with its established acreage proportional factors to our knowledge is generally considered to be reasonable, equitable and fair. It is a recognition of drilling and production costs as related to well depths. A bonus discovery allowable can logically be tied in with this established criteria.

7. Objectiveness is emphasized and not partially hidden in an allowable schedule.

8. Factors which have caused some recent revisions of discovery allowable rules in other states are eliminated.

Limitation of the number of participating wells to 4

1. This is a practical limitation as it permits all offset requirements to be met around a discovery well making a perfect place for demarcation.

2. In actuality only one well should be entitled to a bonus discovery allowable. If more than one well is to receive it, four is the next logical cut off point.

3. Any increase in this number of qualified wells would be only a subterfuge to obtain higher and unwarranted allowables on development wells.

4. Relatively few large fields have been discovered in the past few years. An unorthodox number of wells could lead to a question of discrimination between pools.

5. The more wells that are qualified for a bonus discovery allowable in any one pool, the more the purpose of establishing such a bonus is subjugated. Anyone who can participate with a discovery well is not going to use that money for exploratory work of his own.

6. In this state a promiscuous number of wells participating in bonus discovery allowables would have an impact on establishing the normal unit allowable.

Restriction of producing rate

1. This restriction is incorporated in our proposal solely as a waste prevention measure which would permit the bonus allowable to be produced within a reasonable length of time.

A tabulation of the proposed bonus discovery allowable is attached to this statement.

PROPOSED BONUS DISCOVERY ALLOWABLE

NEW MEXICO

Pool Depth Range	Bonus Discovery Allowable Total Barrels
0 to 5000 feet	14,600
5000 to 6000 feet	33,580
6000 to 7000 feet	40,150
7000 to 8000 feet	48,910
8000 to 9000 feet	58,400
9000 to 10000 feet	69,350
10000 to 11000 feet	82,490
11000 to 12000 feet	97,090
12000 to 13000 feet	113,150
13000 to 14000 feet	131,400
14000 to 15000 feet	151,110
15000 to 16000 feet	172,280
16000 to 17000 feet	194,910
17000 to 18000 feet	219,000

The proposed bonus discovery allowable is that amount of oil that would be produced in a 2-year period at a rate of 1/2 a normal unit allowable of 40 barrels with 80-acre proportional factor.

COMPARISON OF ALLOWABLES
JULY, 1966

DAILY CALENDAR DAY ALLOWABLE

	New Mexico			**Texas			
Pool Depth Range	40-Ac.	80-Ac.	*Proposed Discovery	40-Ac.	80-Ac.	160-Ac.	Discovery
0 - 2000	45	45	14600	25	43	79	40
2000 - 3000	45	45	14600	26	45	83	60
3000 - 4000	45	45	14600	28	48	88	80
4000 - 5000	45	45	14600	31	53	96	100
5000 - 6000	60	105	33580	34	57	103	120
6000 - 7000	80	125	40150	37	61	110	140
7000 - 8000	105	150	48910	40	66	118	160
8000 - 8500	135	180	58400	44	72	127	180
8500 - 9000	135	180	58400	47	76	134	180
9000 - 9500	170	215	69350	52	83	145	200
9500 - 10000	170	215	69350	57	91	157	200
10000 - 10500	210	255	82490	64	100	171	210
10500 - 11000	210	255	82490	71	110	187	225
11000 - 11500	255	300	97090	79	122	207	255
11500 - 12000	255	300	97090	87	134	226	290
12000 - 12500	304	349	113150	96	145	245	330
12500 - 13000	304	349	113150	104	157	263	375
13000 - 13500	360	405	131400	112	168	281	425
13500 - 14000	360	405	131400	121	181	301	480
14000 - 14500	420	465	151100	133	200	333	540
14000 - 15000	420	465	151100				
15000 - 16000	485	530	172280				
16000 - 17000	555	600	172280				
17000 - 18000	630	675	219000				
18000 - 19000							
19000 - 20000							
20000 - 21000							

* Amount of oil that would be produced in 2-year period at rate of 1/2 of normal unit allowable of 40 bbls. with 80-ac. proportional

** Texas - 1965 Yardstick - 33.3% Proration Factor.

COMPARISON OF ALLOWABLES
JULY, 1966

DAILY CALENDAR DAY ALLOWABLE

New Mexico			**Texas				Louisiana
40-Ac.	80-Ac.	*Proposed Discovery	40-Ac.	80-Ac.	160-Ac.	Discovery	
45	45	14600	25	43	79	40	28
45	45	14600	26	45	83	60	33
45	45	14600	28	48	88	80	40
45	45	14600	31	53	96	100	47
60	105	33580	34	57	103	120	56
80	125	40150	37	61	110	140	65
105	150	48910	40	66	118	160	75
135	180	58400	44	72	127	180	84
135	180	58400	47	76	134	180	84
170	215	69350	52	83	145	200	96
170	215	69350	57	91	157	200	96
210	255	82490	64	100	171	210	109
210	255	82490	71	110	187	225	109
255	300	97090	79	122	207	255	121
255	300	97090	87	134	226	290	121
304	349	113150	96	145	245	330	134
304	349	113150	104	157	263	375	134
360	405	131400	112	168	281	425	151
360	405	131400	121	181	301	480	151
420	465	151100	133	200	333	540	169
420	465	151100					169
485	530	172280					195
555	600	172280					226
630	675	219000					254
							286
							324
							370

be produced in 2-year period at rate of 1/2 of normal unit allowable of 4[illegible] bbls. with 80-ac. proportional factor 33.3% Proration Factor.

NEW MEXICO OIL CONSERVATION COMMISSION

APPLICATION FOR DISCOVERY ALLOWABLE AND CREATION OF A NEW POOL

Form C-109
Adopted 9-1-65

NOTE: This form is to be filed and attachments made in accordance with the provisions of Rule 509. If discovery is claimed for more than one zone, separate forms must be filed for each.

Operator		Address	
Lease Name		Well No.	County

Well Location

Unit Letter _____ ; _____ Feet from The _____ Line and _____ Feet From the _____ Line of Section _____, Township _____, Range _____, NMPM

Suggested Pool Names *(List in order of preference)*

1. 2. 3.

Name of Producing Formation	Perforations	Date of Filing Form C-104

Was "Affidavit of Discovery" Previously Filed For This Well in this Pool?	If Yes, Give Date of Filing	Date Well was Spudded	Date Compl. Ready to Prod.

Total Depth	Plugged Back Depth	Depth Casing Shoe	Tubing Depth	Elevation *(Gr., DF, RKB, RT, etc.)*

Oil Well Potential *(Test to be taken only after all load oil has been recovered)*

_____ Bbls, Oil Per Day Based On _____ Bbls In _____ Hours; _____ Bbls Water Per Day Based On _____ Bbls In _____ Hours; Gas Production During Test: _____ MCF; Gas-Oil Ratio: _____ Method Of Producing: _____ Chk. Size _____

NEAREST PRODUCTION TO THIS DISCOVERY *(Includes past and present oil or gas producing areas and zones whether this discovery is based on horizontal or vertical separation):*

Pool Name	Name of Producing Formation	Top of Pay	Bottom of Pay	Currently Producing?

Horizontal Distance and Direction from Subject Discovery Well to the Nearest Well in this Pool	Vertical Distance from Subject Discovery Zone to Producing Interval this Pool

NEAREST COMPARABLE PRODUCTION *(Includes past and present oil or gas production from this pay or formation only):*

Pool Name	Top of Pay	Bottom of Pay	Currently Producing?

Horizontal Distance and Direction from Subject Discovery Well to the Nearest Well in this Comparable Pool

Is "County Deep" Discovery Allowable Requested for Subject Discovery Well?	If Yes, Give Name, Location, and Depth of Next Deepest Oil Production in this County

Is the Subject Well Multiple Completion?	Is Discovery Allowable Requested for other Zone(s)?	If Yes, Name all Such Formations

LIST ALL OPERATORS OWNING LEASES WITHIN ONE MILE OF THIS WELL *(Attach additional sheet if necessary)*

NAME	ADDRESS

Attach evidence that all of the above operators have been furnished a copy of this application. Any of said operators who intends to object to the designation of the subject well as a discovery well, eligible to receive a discovery allowable, must notify the appropriate District Office and the Santa Fe Office of the Commission of such intent in writing within ten days after receiving a copy of this application.

Remarks:

CERTIFICATION

I hereby certify that all rules and regulations of the New Mexico Oil Conservation Commission have been complied with, with respect to the subject well, and that it is my opinion that a bona fide discovery of a hitherto unknown common source of oil supply has been made in said well. I further certify that the discovery allowable for the subject well, if authorized, will be produced from the subject zone in this well only. Further, that the information given herein and attached hereto is true and complete to the best of my knowledge and belief.

Signature _____ Position _____ Date _____

In addition to its normally assigned allowable, an oil discovery allowable may be assigned to a well completed as a bona fide discovery well in a new common source of supply. Said oil discovery allowable shall be in the amount of 5 barrels for each foot of depth of said well from the surface of the ground to the top of the perforations in the new pool, or the depth of the casing shoe, whichever is higher. ~~except~~ In counties where there ~~has been no previous~~ is no other current oil production, and in presently producing counties when the discovery is the deepest oil production ~~to date,~~ in the county, the oil discovery allowable shall be 10 barrels per foot of depth.

A multiply completed well shall be eligible to receive an oil discovery allowable for each new oil pool discovered, provided that the discovery allowable for the uppermost pool shall be based on the depth from the surface of the ground to the top of the perforations, and the discovery allowable for each lower pool shall be based ~~upon~~ on the distance from the bottom of the perforations in the next higher oil pool to the top of the perforations in said lower pool, or to the casing shoe, if applicable.

Oil discoveries made in old producing wells drilled deeper or previously abandoned dry holes shall receive discovery allowables in accordance with the above, except that the initial depth measurement shall be from the point actual formation drilling was commenced. ~~provided~~ However, any abandoned well which is re-entered and drilled deeper, and a discovery ~~is~~ made within one year from the date of abandonment, may receive a discovery allowable based on the depth as measured from the surface of the ground.

29200	43800	58400	73000	87600
14600	29200	29200	29200	39420
14600	14600	29200	43800	48180

102200	116800	131400	146000	153300
51830	68620	87600	110230	136510
50370	48180	43800	35770	16790

164250	186150	211700	240900	273750
136510	165710	165710	197100	197100
27740	20440	45990	43800	76650

310250	350400	394200
233600	233600	272290
76650	116800	121910

730 × 20 = 14600

730 × 40 = 29200

730 × 60 = 43800

730 × 80 = 58400

730 × 100 = 73000

730 × 120 = 14600 + 730 = 87600

730 × 140 = 29200 + 730 = 102200

730 × 160 = 43800 + 730 = 116800

730 × 180 = 58400 + 730 = 131400

730 × 200 = 146000

730 × 210 = 7300 + 1460 = 153300

730 × 225 = 3650 + 1460 + 1460 = 164250

730 × 255 = 3650 + 3650 + 1460 = 186150

730 × 290 = 65700 + 1460 = 211700

730 × 330 = 21900 + 2190 = 240900

730 × 375 = 3650 + 5110 + 2190 = 273750

730 × 425 = 3650 + 1460 + 2920 = 310250

730 × 480 = 58400 + 2920 = 350400

730 × 540 = 29200 + 3650 = 394200

136510 + 29200 = 165710

100	133	177	233	300	377
× 40	× 40	× 40	× 40	× 40	× 40
4000	5320	7080	9320	12000	15080

467	567	675	800	933
× 40	× 40	× 40	× 40	× 40
18680	22680	27000	32000	37320

730 × 40 = 29200

730 × 54 = 29200 + 7300 = 36500 ~~+ 146000 = 182500~~

730 × 54 = 29200 + 7300 = 36500 + 3650 = 39420

730 × 71 = 7300 + 730 = 51100 + 5110 = 56210

730 × 94 = 29200 + 65700 = 94900 + 2920 = 97820

730 × 120 = 14600 + 730 = 87600

730 × 151 = 730 × 100 + 730 × 50 + 730 × 1 = 73000 + 36500 + 730 = 110230

730 × 187 = 730 × 100 + 730 × 80 + 730 × 7 = 73000 + 58400 + 5110 = 136510

730 × 227 = 730 × 200 + 730 × 20 + 730 × 7 = 146000 + 14600 + 5110 = 165710

730 × 270 = 730 × 200 + 730 × 70 = 146000 + 51100 = 197100

730 × 320 = 730 × 200 + 730 × 100 + 730 × 20 = 146000 + 73000 + 14600 + 2190 = 233600

730 × 373 = 730 × 300 + 730 × 70 + 730 × 3 = 219000 + 51100 + 2190 = 272290

DEPTH	TEXAS DAILY	2-YR TOTAL	N.M. DAILY (@40)	2-YR TOTAL	DISC'Y ALLOW @ 5B/Ft		N.M. 2-YR TOTAL INCL. DISC'Y ALLOW
0 - 1000	20	14600	40	29200	5000	*	34200
1000-2000	40	29200	40	29200	10000	*	39200
2000-3000	60	43800	40	29200	15000	*	44200
3000-4000	80	58400	40	29200	20000		49200
4000-5000	100	73000	40	29200	25000		54200
5000-6000	120	87600	54	39420	30000		69420
6000-7000	140	102200	71	51830	35000		86830
7000-8000	160	116800	94	68620	40000		108620
8000-9000	180	131400	120	87600	45000	*	132600
9000-10000	200	146000	151	110230	50000	*	160230
10000-10500	210	153300	187	136510	52500	*	189010
10500-11000	225	164250	187	136510	55000	*	191610
11000-11500	255	186150	227	165710	57500	*	223210
11500-12000	290	211700	227	165710	60000	*	225710
12000-12500	330	240900	270	197100	62500	*	259600
12500-13000	375	273750	270	197100	65000		262100
13000-13500	425	310250	320	233600	67500		301100
13500-14000	480	350400	320	233600	70000		303600
14000-14500	540	394200	373	272290	72500		344790

* indicates depths at which N.M. allowable including discovery allowable exceeds Texas discovery allowable

DEPTH	TEXAS DAILY	2-YR TOTAL	N.M. DAILY (@ 40)	2-YR TOTAL	DISC'Y ALLOW @ 5B/ft		N.M. 2-YR TOTAL INCL. DISC'Y ALLOW
0 - 1000	20	14600	40	29200	5000	*	34200
1000-2000	40	29200	40	29200	10000	*	39200
2000-3000	60	43800	40	29200	15000	*	44200
3000-4000	80	58400	40	29200	20000		49200
4000-5000	100	73000	40	29200	25000		54200
5000-6000	120	87600	54	39420	30000		69420
6000-7000	140	102200	71	51830	35000		86830
7000-8000	160	116800	94	68620	40000		108620
8000-9000	180	131400	120	87600	45000	*	132600
9000-10000	200	146000	151	110230	50000	*	160230
10000-10500	210	153300	187	136510	52500	*	189010
10500-11000	225	164250	187	136510	55000	*	191610
11000-11500	255	186150	227	165710	57500	*	223210
11500-12000	290	211700	227	165710	60000	*	225710
12000-12500	330	240900	270	197100	62500	*	259600
12500-13000	375	273750	270	197100	65000		262100
13000-13500	425	310250	320	233600	67500		301100
13500-14000	480	350400	320	233600	70000		303600
14000-14500	540	394200	373	272290	72500		344790

* indicates depths at which N.M. allowable including discovery allowable exceeds Texas discovery allowable

	Tex Daily Allow	2-YR TOTAL Allow	NM Allow @ 40	2YR TOTAL ~~2920~~	Diff	Diff/ft
0-1000	20	14600	40	29200 ✓	+ 14600	
1000-2000	40	29200	40	29200 ✓	0	
2000-3000	60	43800	40	29200 ✓	- 14600	4.9
3000-4000	80	58400 ✓	40	29200	- 29200	7.3
4000-5000	100	73000 ✓	40	29200	- 43800	8.8
5000-6000	120	87600 ✓	54	39420	- 48180	8.0
6000-7000	140	102200 ✓	71	51830	- 50370	7.2
7000-8000	160	116800 ✓	94	68620	- 48180	6.0
8000-9000	180	131400	120	87600 ✓	- 43830	4.9
9000 10000	200	146000	151	110230 ✓	- 35770	3.6
10000-10500	210	153300	187	136510 ✓	- 16790	1.6
10500-11000	225	164250	187	136510 ✓	- 27740	2.5
11000-11500	255	186150	227	165710 ✓	- 20440	1.8
11500-12000	290	211700	227	165710 ✓	- 45990	3.8
12000-12500	330	240900	270	197100 ✓	- 43800	3.5
12500-13000	375	273750 ✓	270	197100	- 76650	5.9
13000-13500	425	310250 ✓	320	233600	- 76650	5.7
13500-14000	480	350400 ✓	320	233600	- 116800	8.3
14000-14500	540	394200 ✓	373	272290	- 121910	8.4
						17922

Form C-109
Adopted 9-1-66

NEW MEXICO OIL CONSERVATION COMMISSION

APPLICATION FOR DISCOVERY ALLOWABLE AND CREATION OF A NEW POOL

Note: This form is to be filed and attachments made in accordance with the provisions of Rule 509. If discovery is claimed for more than one zone, separate forms must be filed for each.

OPERATOR		ADDRESS	
LEASE NAME		WELL NO.	COUNTY

WELL LOCATION

UNIT LETTER _____; WELL IS LOCATED _____ FEET FROM THE _____ LINE AND _____ FEET FROM THE _____ LINE OF SECTION _____, TOWNSHIP _____, RANGE _____, NMPM

SUGGESTED POOL NAMES (LIST IN ORDER OF PREFERENCE)

1. _____ 2. _____ 3. _____

NAME OF PRODUCING FORMATION	PERFORATIONS		DATE OF FILING FORM C-104
WAS "AFFIDAVIT OF DISCOVERY" PREVIOUSLY FILED FOR THIS WELL IN THIS POOL?	IF YES, GIVE DATE OF FILING	DATE WELL WAS SPUDDED	DATE COMPL., READY TO PROD.

TOTAL DEPTH	PLUGGED BACK DEPTH	DEPTH CASING SHOE	TUBING DEPTH	ELEVATION (State whether GR, DF, RKB, RT, etc)

OIL WELL POTENTIAL (TEST TO BE TAKEN ONLY AFTER ALL LOAD OIL HAS BEEN RECOVERED)

_____ BBLS. OIL PER DAY BASED ON _____ BBLS IN _____ HOURS; _____ BBLS WATER PER DAY BASED ON _____ BBLS IN _____ HOURS; GAS PRODUCTION DURING TEST: _____ MCF; GAS-OIL RATIO: _____ METHOD OF PRODUCING: _____ CHK. SIZE _____

NEAREST PRODUCTION TO THIS DISCOVERY (INCLUDES PAST AND PRESENT OIL OR GAS PRODUCING AREAS AND ZONES WHETHER THIS DISCOVERY IS BASED ON HORIZONTAL OR VERTICAL SEPARATION):

POOL NAME	NAME OF PRODUCING FORMATION	TOP OF PAY	BOTTOM OF PAY	CURRENTLY PRODUCING?

HORIZONTAL DISTANCE AND DIRECTION FROM SUBJECT DISCOVERY WELL TO THE NEAREST WELL IN THIS POOL	VERTICAL DISTANCE FROM SUBJECT DISCOVERY ZONE TO PRODUCING INTERVAL THIS POOL

NEAREST COMPARABLE PRODUCTION (INCLUDES PAST AND PRESENT OIL OR GAS PRODUCTION FROM THIS PAY OR FORMATION ONLY):

POOL NAME	TOP OF PAY	BOTTOM OF PAY	CURRENTLY PRODUCING?

HORIZONTAL DISTANCE AND DIRECTION FROM SUBJECT DISCOVERY WELL TO THE NEAREST WELL IN THIS COMPARABLE POOL

IS "COUNTY DEEP" DISCOVERY ALLOWABLE REQUESTED FOR SUBJECT DISCOVERY WELL?	IF YES, GIVE NAME, LOCATION AND DEPTH OF NEXT DEEPEST OIL PRODUCTION IN THIS COUNTY

IS THE SUBJECT WELL A MULTIPLE COMPLETION?	IS DISCOVERY ALLOWABLE BEING REQUESTED FOR ANY OTHER ZONE(S)?	IF YES, NAME ALL SUCH FORMATIONS

LIST ALL OPERATORS OWNING LEASES WITHIN ONE MILE OF THIS WELL (ATTACH ADDITIONAL SHEET IF NECESSARY)

NAME	ADDRESS

ATTACH EVIDENCE THAT ALL OF THE ABOVE OPERATORS HAVE BEEN FURNISHED A COPY OF THIS APPLICATION. ANY OF SAID OPERATORS WHO INTENDS TO OBJECT TO THE DESIGNATION OF THE SUBJECT WELL AS A DISCOVERY WELL ELIGIBLE TO RECEIVE A DISCOVERY ALLOWABLE MUST NOTIFY THE APPROPRIATE DISTRICT OFFICE AND THE SANTA FE OFFICE OF THE COMMISSION OF SUCH INTENT IN WRITING WITHIN TEN DAYS AFTER RECEIVING A COPY OF THIS APPLICATION.

REMARKS:

CERTIFICATION

I HEREBY CERTIFY THAT ALL RULES AND REGULATIONS OF THE NEW MEXICO OIL CONSERVATION COMMISSION HAVE BEEN COMPLIED WITH WITH RESPECT TO THE SUBJECT WELL AND THAT IT IS MY OPINION THAT A BONA FIDE DISCOVERY OF A HITHERTO UNDISCOVERED SOURCE OF OIL SUPPLY HAS BEEN MADE IN SAID WELL. I FURTHER CERTIFY THAT THE DISCOVERY ALLOWABLE FOR THE SUBJECT WELL, IF AUTHORIZED, WILL BE PRODUCED FROM THE ASSIGNED ZONE IN THIS POOL ONLY. FURTHER, THAT THE INFORMATION GIVEN ABOVE IS AND ATTACHED HERETO IS TRUE AND COMPLETE TO THE BEST OF MY KNOWLEDGE AND BELIEF.

_____ Signature _____ Title _____ Date

Adopted 9-1-66

NEW MEXICO OIL CONSERVATION COMMISSION

APPLICATION FOR DISCOVERY ALLOWABLE AND CREATION OF A NEW POOL

Note: This form is to be filed and attachments made in accordance with the provisions of Rule 509. If discovery is claimed for more than one zone, separate forms must be filed for each.

OPERATOR	ADDRESS	
LEASE NAME	WELL NO.	COUNTY

WELL LOCATION

UNIT LETTER_____; WELL IS LOCATED_____FEET FROM THE_____LINE AND_____FEET FROM THE_____LINE OF SECTION_____, TOWNSHIP_____, RANGE_____, NMPM

SUGGESTED POOL NAMES (List in order of preference)

1._____ 2._____ 3._____

NAME OF PRODUCING FORMATION	PERFORATIONS	DATE OF FILING FORM C-104

WAS "AFFIDAVIT OF DISCOVERY" PREVIOUSLY FILED FOR THIS WELL IN THIS POOL?	IF YES, GIVE DATE OF FILING	DATE WELL WAS SPUDDED	DATE COMPL. READY TO PROD.

TOTAL DEPTH	PLUGGED BACK DEPTH	DEPTH CASING SHOE	TUBING DEPTH	ELEVATION (State whether Gr., DF, RKB, RT, etc.

OIL WELL POTENTIAL(TEST TO BE TAKEN ONLY AFTER ALL LOAD OIL HAS BEEN RECOVERED)

_____BBLS, OIL PER DAY BASED ON_____BBLS IN _____HOURS; _____BBLS WATER PER DAY BASED ON_____BBLS IN_____HOURS; GAS PRODUCTION DURING TEST:_____MCF; GAS-OIL RATIO:_____ METHOD OF PRODUCING:_____ CHK. SIZE _____

NEAREST PRODUCTION TO THIS DISCOVERY (INCLUDES PAST AND PRESENT OIL OR GAS PRODUCING AREAS AND ZONES WHETHER THIS DISCOVERY IS BASED ON HORIZONTAL OR VERTICAL SEPABATION):

POOL NAME	NAME OF PRODUCING INFOR.	TOP OF PAY	BOTTOM OF PAY	CURRENTLY PRODUCING?

HORIZONTAL DISTANCE AND DIRECTION FROM SUBJECT DISCOVERY WELL TO THE NEAREST WELL IN THIS POOL	VERTICAL DISTANCE FROM SUBJECT DISCOVERY ZONE TO PRODUCING INTERVAL THIS POOL

NEAREST COMPARABLE PRODUCTION (INCLUDES PAST AND PRESENT OIL OR GAS PRODUCTION FROM THIS PAY OR FORMATION ONLY):

POOL NAME	TOP OF PAY	BOTTOM OF PAY	CURRENTLY PRODUCING?

HORIZONTAL DISTANCE AND DIRECTION FROM SUBJECT DISCOVERY WELL TO THE NEAREST WELL IN THIS COMPARABLE POOL

IS "COUNTY DEEP" DISCOVERY ALLOWABLE REQUESTED FOR SUBJECT DISCOVERY WELL?	IF YES, GIVE NAME, LOCATION, AND DEPTH OF NEXT DEEPEST OIL PRODUCTION IN THIS COUNTY

IS THE SUBJECT WELL A MULTIPLE COMPLETION?	IS DISCOVERY ALLOWABLE BEING REQUESTED FOR ANY OTHER ZONE(s)?	IF YES, NAME ALL SUCH FORMATIONS

LIST ALL OPERATORS OWNING LEASES WITHIN ONE MILE OF THIS WELL (ATTACH ADDITIONAL SHEET IF NECESSARY)

NAME	ADDRESS

ATTACH EVIDENCE THAT ALL OF THE ABOVE OPERATORS HAVE BEEN FURNISHED A COPY OF THIS APPLICATION. ANY OF SAID OPERATORS WHO INTENDS TO OBJECT TO THE DESIGNATION OF THE SUBJECT WELL AS A DISCOVERY WELL ELIGIBLE TO RECEIVE A DISCOVERY ALLOWABLE MUST NOTIFY THE APPROPRIATE DISTRICT OFFICE AND THE SANTA FE OFFICE OF THE COMMISSION OF SUCH INTENT IN WRITING WITHIN TEN DAYS AFTER RECEIVING A COPY OF THIS APPLICATION.

REMARKS:

CERTIFICATION

I HEREBY CERTIFY THAT ALL RULES AND REGULATIONS OF THE NEW MEXICO OIL CONSERVATION COMMISSION HAVE BEEN COMPLIED WITH RESPECT TO THE SUBJECT WELL, AND THAT IT IS MY OPINION THAT A BONA FIDE DISCOVERY OF A HITHERTO UNKNOWN COMMON SOURCE OF OIL SUPPLY HAS BEEN MADE IN SAID WELL. I FURTHER CERTIFY THAT THE DISCOVERY ALLOWABLE FOR THE SUBJECT WELL, IF AUTHORIZED, WILL BE PRODUCED FROM THE SUBJECT ZONE IN THIS WELL ONLY. FURTHER, THAT THE INFORMATION GIVEN HEREIN AND ATTACHED HERETO IS TRUE AND COMPLETE TO THE BEST OF MY KNOWLEDGE AND BELIEF.

Adopted 9-1-65

NEW MEXICO OIL CONSERVATION COMMISSION

APPLICATION FOR DISCOVERY ALLOWABLE AND CREATION OF A NEW POOL

Note: This form is to be filed and attachments made in accordance with the provisions of Rule 509. If discovery is claimed for more than one zone, separate forms must be filed for each.

OPERATOR	ADDRESS	
LEASE NAME	WELL NO.	COUNTY

WELL LOCATION

UNIT LETTER_____; WELL IS LOCATED_____FEET FROM THE_____LINE AND_____FEET

FROM THE_____LINE OF SECTION_____, TOWNSHIP_____, RANGE_____, NMPM

SUGGESTED POOL NAMES (List in order of preference)

1._____ 2._____ 3._____

NAME OF PRODUCING FORMATION	PERFORATIONS	DATE OF FILING FORM C-104

WAS "AFFIDAVIT OF DISCOVERY" PREVIOUSLY FILED FOR THIS WELL IN THIS POOL?	IF YES, GIVE DATE OF FILING	DATE WELL WAS SPUDDED	DATE COMPL. READY TO PROD.

TOTAL DEPTH	PLUGGED BACK DEPTH	DEPTH CASING SHOE	TUBING DEPTH	ELEVATION (State whether Gr., DF, RKB, RT, etc.

OIL WELL POTENTIAL(TEST TO BE TAKEN ONLY AFTER ALL LOAD OIL HAS BEEN RECOVERED)

_____BBLS. OIL PER DAY BASED ON_____BBLS IN _____HOURS; _____BBLS WATER PER DAY BASED ON_____BBLS

IN_____HOURS; GAS PRODUCTION DURING TEST:_____MCF; GAS-OIL RATIO:_____ METHOD OF PRODUCING:_____ CHK. SIZE _____

NEAREST PRODUCTION TO THIS DISCOVERY (INCLUDES PAST AND PRESENT OIL OR GAS PRODUCING AREAS AND ZONES WHETHER THIS DISCOVERY IS BASED ON HORIZONTAL OR VERTICAL SEPARATION):

POOL NAME	NAME OF PRODUCING INFOR.	TOP OF PAY	BOTTOM OF PAY	CURRENTLY PRODUCING?
HORIZONTAL DISTANCE AND DIRECTION FROM SUBJECT DISCOVERY WELL TO THE NEAREST WELL IN THIS POOL		VERTICAL DISTANCE FROM SUBJECT DISCOVERY ZONE TO PRODUCING INTERVAL THIS POOL		

NEAREST COMPARABLE PRODUCTION (INCLUDES PAST AND PRESENT OIL OR GAS PRODUCTION FROM THIS PAY OR FORMATION ONLY):

POOL NAME	TOP OF PAY	BOTTOM OF PAY	CURRENTLY PRODUCING?
HORIZONTAL DISTANCE AND DIRECTION FROM SUBJECT DISCOVERY WELL TO THE NEAREST WELL IN THIS COMPARABLE POOL			

IS "COUNTY DEEP" DISCOVERY ALLOWABLE REQUESTED FOR SUBJECT DISCOVERY WELL?	IF YES, GIVE NAME, LOCATION, AND DEPTH OF NEXT DEEPEST OIL PRODUCTION IN THIS COUNTY

IS THE SUBJECT WELL A MULTIPLE COMPLETION?	IS DISCOVERY ALLOWABLE BEING REQUESTED FOR ANY OTHER ZONE(s)?	IF YES, NAME ALL SUCH FORMATIONS

LIST ALL OPERATORS OWNING LEASES WITHIN ONE MILE OF THIS WELL (ATTACH ADDITIONAL SHEET IF NECESSARY)

NAME	ADDRESS

ATTACH EVIDENCE THAT ALL OF THE ABOVE OPERATORS HAVE BEEN FURNISHED A COPY OF THIS APPLICATION. ANY OF SAID OPERATORS WHO INTENDS TO OBJECT TO THE DESIGNATION OF THE SUBJECT WELL AS A DISCOVERY WELL ELIGIBLE TO RECEIVE A DISCOVERY ALLOWABLE MUST NOTIFY THE APPROPRIATE DISTRICT OFFICE AND THE SANTA FE OFFICE OF THE COMMISSION OF SUCH INTENT IN WRITING WITHIN TEN DAYS AFTER RECEIVING A COPY OF THIS APPLICATION.

REMARKS:

CERTIFICATION

I HEREBY CERTIFY THAT ALL RULES AND REGULATIONS OF THE NEW MEXICO OIL CONSERVATION COMMISSION HAVE BEEN COMPLIED WITH RESPECT TO THE SUBJECT WELL, AND THAT IT IS MY OPINION THAT A BONA FIDE DISCOVERY OF A HITHERTO UNKNOWN COMMON SOURCE OF OIL SUPPLY HAS BEEN MADE IN SAID WELL. I FURTHER CERTIFY THAT THE DISCOVERY ALLOWABLE FOR THE SUBJECT WELL, IF AUTHORIZED, WILL BE PRODUCED FROM THE SUBJECT ZONE IN THIS WELL ONLY. FURTHER, THAT THE INFORMATION GIVEN HEREIN AND ATTACHED HERETO IS TRUE AND COMPLETE TO THE BEST OF MY KNOWLEDGE AND BELIEF.

Form C-107
Adopted 9-1-66

NEW MEXICO OIL CONSERVATION COMMISSION

APPLICATION FOR DISCOVERY ALLOWABLE AND CREATION OF A NEW POOL

Note: This form is to be filed and attachments made in accordance with the provisions of Rule 509. If discovery is claimed for more than one zone, separate forms must be filed for each.

OPERATOR	ADDRESS	
LEASE NAME	WELL NO	COUNTY

WELL LOCATION

UNIT LETTER _____; WELL IS LOCATED _____ FEET FROM THE _____ LINE AND _____ FEET

FROM THE _____ LINE OF SECTION _____, TOWNSHIP _____, RANGE _____ NMPM

SUGGESTED POOL NAMES (LIST IN ORDER OF PREFERENCE)

1. _____ 2. _____ 3. _____

NAME OF PRODUCING FORMATION	PERFORATIONS		DATE OF FILING FORM C-104
WAS "AFFIDAVIT OF DISCOVERY" PREVIOUSLY FILED FOR THIS POOL?	IF YES, GIVE DATE OF FILING	DATE SPUDDED	DATE COMPL., READY TO PROD.
TOTAL DEPTH	P.B.T.D.	DEPTH CASING SHOE	TUBING DEPTH	ELEVATION (State whether GR, DF, RKB, RT, etc.)

OIL WELL POTENTIAL: (TEST TO BE TAKEN ONLY AFTER ALL LOAD OIL RECOVERED)

_____ BBLS OIL PER DAY BASED ON _____ BBLS IN _____ HRS. AND _____ BBLS WATER PER DAY BASED ON _____ BBLS IN _____ HRS. GAS PRODUCTION DURING TEST. _____ MCF; GOR _____ CHOKE SIZE _____

NEAREST PRODUCTION TO THIS ~~POOL~~ DISCOVERY: (INCLUDES PAST AND PRESENT OIL AND GAS PRODUCING AREAS AND ZONES WHETHER THIS DISCOVERY IS BASED ON HORIZONTAL OR VERTICAL SEPARATION).

POOL NAME	NAME OF PRODUCING FORMATION	TOP OF PAY	BOTTOM OF PAY	CURRENTLY PRODUCING?
HORIZONTAL DISTANCE AND DIRECTION FROM SUBJECT DISCOVERY WELL TO THE NEAREST WELL IN THIS POOL		VERTICAL DISTANCE FROM SUBJECT DISCOVERY ZONE TO PRODUCING INTERVAL THIS POOL		

NEAREST COMPARABLE PRODUCTION (INCLUDES PAST AND PRESENT OIL OR GAS PRODUCTION FROM THIS FORMATION) ONLY.

POOL NAME	TOP OF PAY	BOTTOM OF PAY	CURRENTLY PRODUCING?
HORIZONTAL DISTANCE AND DIRECTION FROM SUBJECT DISCOVERY WELL TO THE NEAREST WELL IN THIS POOL			

IS THIS WELL A MULTIPLE COMPLETION?	IS A DISCOVERY ALLOWABLE BEING REQUESTED FOR ANY OTHER ZONE(S)?	IF YES, NAME OF FORMATION(S) ~~BEING~~ REQUESTED

IS "COUNTY DEEP" DISCOVERY ALLOWABLE REQUESTED FOR SUBJECT DISCOVERY WELL?	IF "YES" GIVE NAME, LOCATION AND DEPTH OF NEXT DEEPEST OIL PRODUCTION IN THIS COUNTY

NAMES OF ALL OPERATORS OWNING LEASES WITHIN ONE MILE OF DISCOVERY WELL. ADDRESS
(ATTACH ADDITIONAL SHEET IF NECESSARY)

ATTACH EVIDENCE THAT ALL OF THE ABOVE OPERATORS HAVE BEEN FURNISHED A COPY OF THIS APPLICATION.

ANY OF SAID OPERATORS WHO INTENDS TO OBJECT TO THE DESIGNATION OF THE ABOVE-DESCRIBED WELL AS A DISCOVERY WELL ELIGIBLE TO RECEIVE A DISCOVERY ALLOWABLE MUST NOTIFY THE ~~SANTA FE~~ APPROPRIATE DISTRICT OFFICE ~~OF THE COMMISSION~~ AND THE SANTA FE OFFICE OF THE COMMISSION OF SAID INTENT WITHIN TEN DAYS AFTER RECEIVING A COPY OF THIS APPLICATION.

REMARKS:

~~THIS APPLICATION WILL BE SET FOR~~ CERTIFICATION

I HEREBY CERTIFY THAT ALL RULES AND REGULATIONS OF THE NEW MEXICO OIL CONSERVATION COMMISSION HAVE BEEN COMPLIED WITH WITH RESPECT TO THE SUBJECT WELL. FURTHER, ~~CERTIFY~~ THAT IT IS MY OPINION THAT A BONA FIDE DISCOVERY OF A HITHERTO UNKNOWN COMMERCIAL SOURCE OF OIL SUPPLY HAS BEEN MADE IN THE SUBJECT WELL AND THAT SAID WELL IS CAPABLE OF PRODUCING IN EXCESS OF THE UNIT ALLOWABLE FOR A WELL OF THIS DEPTH. I FURTHER CERTIFY THAT THE INFORMATION GIVEN ABOVE IS TRUE AND COMPLETE TO THE BEST OF MY KNOWLEDGE AND BELIEF.

Signature _____ Position _____ Date _____

NEW MEXICO OIL CONSERVATION COMMISSION

APPLICATION FOR DISCOVERY ALLOWABLE AND CREATION OF A NEW POOL

Note: This form is to be filed and attachments made in accordance with the provisions of Rule 509. If discovery is claimed for more than one zone, separate forms must be filed for each.

OPERATOR	ADDRESS	
LEASE NAME	WELL NO.	COUNTY

WELL LOCATION

UNIT LETTER_____; WELL IS LOCATED_____FEET FROM THE_____LINE AND_____FEET

FROM THE_____LINE OF SECTION_____, TOWNSHIP_____, RANGE_____, NMPM

SUGGESTED POOL NAMES (List in order of preference)

1._____ 2._____ 3._____

NAME OF PRODUCING FORMATION	PERFORATIONS	DATE OF FILING FORM C-104

WAS "AFFIDAVIT OF DISCOVERY" PREVIOUSLY FILED FOR THIS WELL IN THIS POOL?	IF YES, GIVE DATE OF FILING	DATE WELL WAS SPUDDED	DATE COMPL. READY TO PROD.

TOTAL DEPTH	PLUGGED BACK DEPTH	DEPTH CASING SHOE	TUBING DEPTH	ELEVATION (State whether Gr., DF, RKB, RT, etc.

OIL WELL POTENTIAL(TEST TO BE TAKEN ONLY AFTER ALL LOAD OIL HAS BEEN RECOVERED)

_____BBLS, OIL PER DAY BASED ON_____BBLS IN _____HOURS; _____BBLS WATER PER DAY BASED ON_____BBLS

IN_____HOURS; GAS PRODUCTION DURING TEST: _____MCF; GAS-OIL RATIO:_____ METHOD OF PRODUCING:_____ CHK. SIZE _____

NEAREST PRODUCTION TO THIS DISCOVERY (INCLUDES PAST AND PRESENT OIL OR GAS PRODUCING AREAS AND ZONES WHETHER THIS DISCOVERY IS BASED ON HORIZONTAL OR VERTICAL SEPARATION):

POOL NAME	NAME OF PRODUCING INFOR.	TOP OF PAY	BOTTOM OF PAY	CURRENTLY PRODUCING?
HORIZONTAL DISTANCE AND DIRECTION FROM SUBJECT DISCOVERY WELL TO THE NEAREST WELL IN THIS POOL		VERTICAL DISTANCE FROM SUBJECT DISCOVERY ZONE TO PRODUCING INTERVAL THIS POOL		

NEAREST COMPARABLE PRODUCTION (INCLUDES PAST AND PRESENT OIL OR GAS PRODUCTION FROM THIS PAY OR FORMATION ONLY):

POOL NAME	TOP OF PAY	BOTTOM OF PAY	CURRENTLY PRODUCING?
HORIZONTAL DISTANCE AND DIRECTION FROM SUBJECT DISCOVERY WELL TO THE NEAREST WELL IN THIS COMPARABLE POOL			

IS "COUNTY DEEP" DISCOVERY ALLOWABLE REQUESTED FOR SUBJECT DISCOVERY WELL?	IF YES, GIVE NAME, LOCATION, AND DEPTH OF NEXT DEEPEST OIL PRODUCTION IN THIS COUNTY

IS THE SUBJECT WELL A MULTIPLE COMPLETION?	IS DISCOVERY ALLOWABLE BEING REQUESTED FOR ANY OTHER ZONE(s)?	IF YES, NAME ALL SUCH FORMATIONS

LIST ALL OPERATORS OWNING LEASES WITHIN ONE MILE OF THIS WELL (ATTACH ADDITIONAL SHEET IF NECESSARY)

NAME	ADDRESS

ATTACH EVIDENCE THAT ALL OF THE ABOVE OPERATORS HAVE BEEN FURNISHED A COPY OF THIS APPLICATION. ANY OF SAID OPERATORS WHO INTENDS TO OBJECT TO THE DESIGNATION OF THE SUBJECT WELL AS A DISCOVERY WELL ELIGIBLE TO RECEIVE A DISCOVERY ALLOWABLE MUST NOTIFY THE APPROPRIATE DISTRICT OFFICE AND THE SANTA FE OFFICE OF THE COMMISSION OF SUCH INTENT IN WRITING WITHIN TEN DAYS AFTER RECEIVING A COPY OF THIS APPLICATION.

REMARKS:

CERTIFICATION

I HEREBY CERTIFY THAT ALL RULES AND REGULATIONS OF THE NEW MEXICO OIL CONSERVATION COMMISSION HAVE BEEN COMPLIED WITH RESPECT TO THE SUBJECT WELL, AND THAT IT IS MY OPINION THAT A BONA FIDE DISCOVERY OF A HITHERTO UNKNOWN COMMON SOURCE OF OIL SUPPLY HAS BEEN MADE IN SAID WELL. I FURTHER CERTIFY THAT THE DISCOVERY ALLOWABLE FOR THE SUBJECT WELL, IF AUTHORIZED, WILL BE PRODUCED FROM THE SUBJECT ZONE IN THIS WELL ONLY. FURTHER, THAT THE INFORMATION GIVEN HEREIN AND ATTACHED HERETO IS TRUE AND COMPLETE TO THE BEST OF MY KNOWLEDGE AND BELIEF.

_____

Signature Position

Adopted 3-1-66

NEW MEXICO OIL CONSERVATION COMMISSION

APPLICATION FOR DISCOVERY ALLOWABLE AND CREATION OF A NEW POOL

Note: This form is to be filed and attachments made in accordance with the provisions of Rule 509.
If discovery is claimed for more than one zone, separate forms must be filed for each.

OPERATOR	ADDRESS	
LEASE NAME	WELL NO.	COUNTY

WELL LOCATION

UNIT LETTER _____; WELL IS LOCATED _____ FEET FROM THE _____ LINE AND _____ FEET

FROM THE _____ LINE OF SECTION _____, TOWNSHIP _____, RANGE _____, NMPM

SUGGESTED POOL NAMES (LIST IN ORDER OF PREFERENCE)

1. _____ 2. _____ 3. _____

NAME OF PRODUCING FORMATION	PERFORATIONS	DATE OF FILING FORM C-105

WAS "AFFIDAVIT OF DISCOVERY" PREVIOUSLY FILED FOR THIS WELL IN THIS POOL?	IF YES, GIVE DATE OF FILING	DATE WELL WAS SPUDDED	DATE COMPL., READY TO PROD

TOTAL DEPTH	PLUGGED BACK DEPTH	DEPTH CASING SHOE	TUBING DEPTH	ELEVATION (SHOW WHETHER GR, DF, RKB, RT, etc)

OIL WELL POTENTIAL (TEST TO BE TAKEN ONLY AFTER ALL LOAD OIL HAS BEEN RECOVERED)

_____ BBLS. OIL PER DAY BASED ON _____ BBLS IN _____ HOURS; _____ BBLS WATER PER DAY BASED ON _____ BBLS

GAS-OIL METHOD OF GRV.

IN _____ HOURS; GAS PRODUCTION DURING TEST: _____ MCF; RATIO: _____ PRODUCING: _____ SIZE _____

NEAREST PRODUCTION TO THIS DISCOVERY (INCLUDES PAST AND PRESENT OIL OR GAS PRODUCING AREAS AND ZONES WHETHER THIS DISCOVERY IS BASED ON HORIZONTAL OR VERTICAL SEPARATION):

POOL NAME	NAME OF PRODUCING FORMATION	TOP OF PAY	BOTTOM OF PAY	CURRENTLY PRODUCING?

HORIZONTAL DISTANCE AND DIRECTION FROM SUBJECT DISCOVERY WELL TO THE NEAREST WELL IN THIS POOL	VERTICAL DISTANCE FROM SUBJECT DISCOVERY ZONE TO PRODUCING INTERVAL THIS POOL

NEAREST COMPARABLE PRODUCTION (INCLUDES PAST AND PRESENT OIL OR GAS PRODUCTION FROM THIS PAY OR FORMATION ONLY):

POOL NAME	TOP OF PAY	BOTTOM OF PAY	CURRENTLY PRODUCING?

HORIZONTAL DISTANCE AND DIRECTION FROM SUBJECT DISCOVERY WELL TO THE NEAREST WELL IN THIS COMPARABLE POOL

IS COUNTY DEEPEST DISCOVERY ALLOWABLE REQUESTED FOR SUBJECT DISCOVERY WELL?	IF YES, GIVE NAME, LOCATION AND DEPTH OF NEXT DEEPEST OIL PRODUCTION IN THIS COUNTY

IS THE SUBJECT WELL A MULTIPLE COMPLETION?	IS DISCOVERY ALLOWABLE BEING REQUESTED FOR ANY OTHER ZONE(S)?	IF YES, NAME ALL SUCH FORMATIONS

LIST ALL OPERATORS OWNING LEASES WITHIN ONE MILE OF THIS WELL (ATTACH ADDITIONAL SHEET IF NECESSARY)

NAME	ADDRESS

ATTACH EVIDENCE THAT ALL OF THE ABOVE OPERATORS HAVE BEEN FURNISHED A COPY OF THIS APPLICATION. EACH OF SAID OPERATORS WHO INTENDS TO OBJECT TO THE DISCOVERY STATUS OF THE SUBJECT WELL AS A DISCOVERY WELL ELIGIBLE TO RECEIVE A DISCOVERY ALLOWABLE MUST NOTIFY THE AZTEC DISTRICT OFFICE AND THE SANTA FE OFFICE OF THE COMMISSION OF SUCH INTENT IN WRITING WITHIN TEN DAYS AFTER RECEIVING A COPY OF THIS APPLICATION.

REMARKS:

CERTIFICATION

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. 177
Order No. 831

IN THE MATTER OF THE MANEDED APPLICATION
OF THE OIL CONSERVATION COMMISSION UPON
ITS OWN MOTION TO RESCIND, REVISE, CHANGE
OR AMEND ORDER NO. 573, WHICH BECAME
EFFECTIVE AS OF JUNE 1, 1944 AND GENERALLY
KNOWN AS THE "BONUS DISCOVERY ALLOWABLE ORDER",
AND TO RESCIND, REVISE OR AMEND SECTION 4 OF
ORDER 798, EFFECTIVE NOVEMBER 19, 1948, WHICH
AMENDS AND SUPERSEDES PREVIOUS STATEWIDE
PRORATION ORDER NO. 637.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 10:00 o'clock a.m., on the 5th day of May, 1949, at Santa Fe, New Mexico before the Oil Conservation Commission of the State of New Mexico, hereinafter referred to as the "Commission".

NOW, on this 22nd day of July, 1949, the Commission having before it the testimony adduced at the hearing of said cause and being fully advised in the premises,

FINDS:

1. That due public notice of said cause having been given as required by law, the Commission has jurisdiction of the case.

2. That Order No. 573, effective as of June 1, 1944 and known as the "Bonus Discovery Allowable Order" has failed to accomplish its intended purposes and should be rescinded.

3. That Section 4 of Order No. 798, effective November 19, 1948 is meaningless except in relation to the "Bonus Discovery Allowable Order" and should be rescinded and striken from said Order No. 798.

IT IS THEREFORE ORDERED:

That Commission Order No. 573, effective as of June 1, 1944 and known as the "Bonus Discovery Allowable Order" be and the same hereby is rescinded, subject to the further provisions of this order;

IT IS FURTHER ORDERED:

That Section 4 only and without effect on any other section or part thereof of Order No. 798, which became effective November 19, 1948, be and the same hereby is rescinded and striken from said Commission Order No. 798, subject to the further provisions of this order.

IT IS FURTHER ORDERED:

That all bonus discovery allowables heretofore granted shall remain in effect the same as if this order had not been entered, and shall be fully exempt from the effect hereof.

IT IS FURTHER ORDERED:

That Order No. 573 and Section 4 of Order No. 798 shall remain in effect as to all wells commenced but not completed before this date. A well shall be deemed to be commenced within the meaning of this order when Form C-101 (Notice of Intention to Drill) has been filed and approved.

IT IS FURTHER ORDERED:

That persons eligible to claim a bonus discovery allowable as to wells already completed but who have failed to do so, may be entitled to the benefits of Order No. 573 and Section 4 of Order No. 798 by filing application therefore within 15 days from this date.

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

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

THOMAS J. MABRY, Chairman

GUY SHEPARD, Member

R. R. SPURRIER, Secretary

Railroad Commission of Texas

OIL AND GAS DIVISION

AUSTIN, TEXAS

ARTHUR H. BARBECK
Chief Engineer

June 29, 1966

Mr. A. L. Porter, Jr.
Post Office Box 2088
Santa Fe, New Mexico 87501

Dear Pete:

In accordance with our conversation pertaining to discovery allowables in Texas, I am enclosing our application form for discovery and new field designation and the latest order of the Commission amending Statewide Rule 42C pertaining to extension of the number of wells and the period of discovery in Texas in an effort to encourage exploration.

With kindest personal regards,

Arthur

Arthur H. Barbeck
Chief Engineer

AHB/LJ

'66 JUL 1 AM 11

How Canada stimulated its producing industry

PERSONS CONCERNED with declining reserves of oil and gas in the United States would do well to make a careful study of what's happening just across the border in Canada.

A couple of years ago Alberta, the chief producing province, was similarly worried about future reserves, even though its ratio of producibility to current demand was much higher than in the U.S.

After intensive deliberation, Alberta inaugurated a whole new conservation concept, to be phased in over a period of several years.

THE RESULTS have been amazing, even though the new program was launched little more than a year ago and will not be fully effective for 2 or 3 years more.

Wildcat drilling has increased, reserves show a big gain, pressure-maintenance schemes to maximize ultimate recovery have been stimulated, and there is new interest in heavy crudes once considered uneconomic.

At the same time many operators' costs per barrel have been lowered and there are claims of huge savings for the industry as a whole, largely because there are fewer wells on production but greater output per well.

These were the objectives Alberta sought. Its method was to shift its proration base from a well to a reserve, abandon old spacing concepts, remove the economic floor under marginal operations, and reward discovery and efficiency.

The results were quicker and greater than anticipated. Other factors may have contributed, but the new conservation concept is being given the major part of the credit.

At the outset there were fears that the new system would squeeze independents and small operators out of the industry, deny a market to fields with small reserves, and cause premature abandonment of older wells. So far these have not happened, though some critics are unconvinced.

The new policy seems almost too successful, threatening Alberta with an embarrassment of petroleum riches. Its reserves/production ratio is at a new high, and its producing capacity has grown much faster than market demand.

Some predict that the province will have to backtrack and slow down new development by restoring market protection to older fields. But others believe that the increased efficiency will lower costs so much that Canadian crude will find far greater markets.

IN THE U.S. a similar revolution in conservation and production concepts would not be as easy to achieve and might not yield such great results, nationwide.

But Canada's experience is enlightening and should be watched very closely. Our neighbor may be able to give us some pointers on how to increase reserves in this country.

Pete
I'm sure you know about [illegible] just in case! Regards to family
[illegible]

March 14, 1960

MEMORANDUM TO ALL OIL AND GAS OPERATORS IN TEXAS:

IN RE - APPLICATIONS FOR DISCOVERY ALLOWABLE AND NEW FIELD DESIGNATION.

COMPLETE EVIDENCE PROVING CLEARLY THAT THE WELL IS A DISCOVERY MUST BE RECEIVED IN AUSTIN PRIOR TO THE ASSIGNMENT OF A DISCOVERY ALLOWABLE.

THE EVIDENCE MUST PROVE DEFINITELY THAT THE NEW RESERVOIR IS EFFECTIVELY SEPARATED FROM ANY OTHER RESERVOIR HERETOFORE PRODUCTIVE. EVIDENCE OTHER THAN HORIZONTAL DISTANCE IS REQUIRED.

These applications should include the following data:

1. Area map, scale one inch equals 1,000', including all oil, gas and/or abandoned wells within at least 2 1/2 miles in each direction from the subject well. Producing interval of surrounding oil and/or gas wells must be shown. All nearby fields, past or present, should be identified clearly with correct field name, producing formations and average depth of the producing intervals. Total depth must be shown on all dry holes which are used as evidence of separation. Maps should be on white paper with all pertinent data shown legibly.

2. Complete electrical log of subject well with the subject formation and all nearby producing formations identified clearly thereon.

3. If application is based on structural differences, include a sub-surface structure map contoured on top of the producing formation; said map must be signed by the engineer or geologist preparing such map.

4. If application is based on faulting, pinch-outs or vertical separation of small magnitude, include a geological cross-section prepared from electrical logs. (Not tracings of logs)

5. If application is based on reservoir pressure differentials, include reservoir pressure measurements or calculations other than drill stem test pressures.

6. If application is based on differences in fluid levels, include detailed core data or drill stem test data from comparable formations. Fluid level data should be of recent date.

RAILROAD COMMISSION OF TEXAS

Chairman

Commissioner

Commissioner

ATTEST:

Secretary

Please return - Attention: Gordon R. McNutt

COPY

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. 55

ORDER NO. 573

THE APPLICATION OF FRED TURNER, JR., FOR AN ORDER AUTHORIZING A BONUS ALLOWABLE TO BE GRANTED TO ANY OPERATOR WHO MAKES A DISCOVERY OF A NEW OIL POOL OR A NEW PRODUCING HORIZON IN AN EXISTING OIL FIELD OR AN EXTENSION OF AN EXISTING OIL POOL BY DRILLING TWO MILES OR MORE FROM ANY COMMERCIALLY PRODUCTIVE OIL WELL.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at ten o'clock A.M., August 4, 1944, at Santa Fe, New Mexico, before the Oil Conservation Commission of New Mexico, hereinafter referred to as the "Commission".

NOW, on this 6th day of September, 1944, the Commission having before it for consideration the testimony adduced at the hearing of said case and being fully advised in the premises, the Commission finds:

F I N D I N G S

1. That the bonus discovery allowable provided for herein is reasonable and in the public interest in that it tends to foster the discovery of new reserves to replenish diminished reserves of State and Nation.

IT IS THEREFORE ORDERED:

That the Order herein shall be known as the:

BONUS DISCOVERY ALLOWABLE ORDER

1. That a bonus discovery allowable shall be granted to any operator who makes a discovery of a new oil pool or a new producing horizon in an existing oil field or an extension of the discovered portion of a known oil pool where such discovery is two miles or more from any commercially productive oil well.

2. That such bonus discovery allowable shall be for one well, over and above the top unit allowable of the proration unit upon which such discovery well is located, and for an amount of oil in accordance with depth measured to the top of the producing formation as follows:

Up to	1000'	—	5000 bbls
1000	- 1500		7500 "
1500	- 2000		10000 "
2000	- 2500		12500 "
2500	- 3000		15000 "
3000	- 3500		17500 "
3500	- 4000		20000 "

and 5 bbls. per ft. of depth below 4000'.

3. That such bonus discovery allowable shall be produced at a daily rate not greater than the figure obtained by dividing the total bonus discovery allowable by the number of days in the current year.

4. That such bonus discovery allowable shall be produced within a two year period. Said period shall begin to run with the first sale of oil from said discovery well.

5. A. That application for the bonus discovery allowable provided for herein shall be in quadruplicate upon Form C-102 and shall be accompanied in quadruplicate by the following:

(1) Necessary production and geological data of such discovery well.

(11) Plat of area for three miles around such discovery well.

(111) And in addition thereto where the discovery is in a new producing horizon in an existing oil field, appropriate evidentiary matters in support of such fact..

B. When such application is approved by the Commission, through its Director, two shall be retained by the Commission, one transmitted to the applicant and one to the Lea County Proration Office.

6. That the Order herein shall be applicable to any such discovery made since June 1, 1944.

7. That the Order herein supersedes any order with which it is in conflict.

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

OIL CONSERVATION COMMISSION

(SGD) John J. Dempsey
JOHN J. DEMPSEY, CHAIRMAN

(SGD) H. R. Rodgers,
H. R. RODGERS, MEMBER

(SGD) John H. Kelly
JOHN H. KELLY, SECRETARY

(SEAL)

THE STATE CORPORATION COMMISSION

OF THE STATE OF KANSAS

Before Commissioners: William L. Mitchell, Chairman
James O. Greenleaf
Harry G. Wiles

In the matter of the General Rules and Regulations for the Conservation of Crude Oil and Natural Gas.	)))	DOCKET NO. 34,780-C (C-1825) CONSERVATION DIVISION

O R D E R

Now, on this 26th day of May, 1966, the above-entitled matter comes before the Commission for further consideration, and the Commission, having examined the application filed herein, and its files and records, and being advised in the premises, finds:

1. An application, filed herein by Texaco, Inc., on April 26, 1966, requested an amendment to Commission Rule 82-2-109-B (1), adopted in this docket on July 23, 1965. Said Rule provides for grant of discovery oil allowables to wells drilled in new and separate common sources of oil supply under conditions set out therein.

2. After due notice, a public hearing on said application was held at the Ramada Inn in Hays, Kansas, on Thursday, May 26, 1966, for the purpose of receiving testimony, suggestions and recommendations with respect to amending said Rule.

3. The Commission, having heard the evidence and being advised in the premises, finds that the following amendment to said Rule should be adopted:

Rule 82-2-109-B (1)

DISCOVERY OIL ALLOWABLE

An oil discovery allowable equal to one and one-half (1 1/2) times the current daily allowable assigned to a similar well, either as set out in Rule 82-2-109, paragraph "B", or the regular allowable as established by a Special Pool Basic Proration Order, may be granted to wells in pools hereafter discovered. Such discovery allowable shall continue as to wells in any such newly discovered pool for a period of eighteen (18) months from the date hereinafter provided for it to commence or until a total of eleven (11) producing wells shall have been completed in any such newly discovered pool, or until development has connected such newly discovered pool with another known common source of supply producing from the same geological formation (reservoir), whichever first occurs.

Provided, however, the following additional provisions shall apply:

1. A newly discovered pool shall not be recognized as such until after the filing of an application and notice and hearing thereon before the Corporation Commission, and such determination by the Commission. Information in support of the application shall be in conformance with that

required in Appendix "A", Affidavit for Discovery Allowable. Before additional wells in such newly discovered pool may be granted a discovery allowable, an affidavit shall be filed with the Conservation Division of the Commission in compliance with the Affidavit For Discovery Allowable set out in Appendix "A" hereto. In the event the affidavit for subsequently developed wells entitled to the discovery oil allowable does not clearly show to the satisfaction of the Conservation Division that the subject well is producing from the same common source of supply (reservoir) as the discovery well, the matter shall be properly noticed and set for hearing before the Commission. In the event a protest is filed with the Commission by an interested party within 10 days from the date such affidavit is mailed under provisions of paragraph 1 (i) of Appendix "A", then the matter will be properly noticed and set for hearing before the Commission.

2. Over and under production of the discovery oil allowable shall be subject to the same restrictions and procedures as followed for standard oil allowables.

3. Discovery allowables are subject to adjustment for gas-oil ratio provisions in any combination pool.

4. Discovery allowables are subject to temporary reduction consistent with market demand determination. In the event such reduction is required, the Commission may extend the time for production of the discovery allowable.

5. Discovery allowables may be obtained for each newly discovered pool in the same well bore, provided that such well is completed as authorized by the Commission under Rule 82-2-600-B in such manner that production from a newly discovered pool is not commingled with production from any pool in the well bore.

6. A discovery allowable for a newly discovered pool may be obtained by the operator of any one of the first ten (10) wells completed in said pool. The discovery allowable period for such pool shall commence on the date of completion of the well to which a discovery allowable is first assigned, or on such other date as the Commission may for good cause determine.

7. For the purpose of this rule, the completion date of a well shall be the date of the state supervised productivity test.

APPENDIX "A"

AFFIDAVIT FOR DISCOVERY ALLOWABLE

An operator desiring to avail himself of the provisions of this rule shall file an affidavit with the Conservation Division, 500 Insurance Building, Wichita, Kansas, after completion of a well, containing the following information, records, reports and data:

1. The affidavit shall show:

   a. Exact location of the well (legal description).
   b. Lease name.
   c. Geological name of the producing formation.
   d. Top and bottom depths of the producing formation.
   e. Results of a State supervised production test, showing volumes of oil, gas and water.
   f. Any other pertinent data such as bottom hole pressures, core data, etc., which may help determine the validity of the request.
   g. Date of first production.
   h. Date of first oil sales and the purchaser to whom delivered.

i. The names and addresses of each operator or lessee of record within one-half (1/2) mile of the lease upon which the subject well is located together with a statement of the date a copy of this affidavit was mailed to each.

2. An electric log or logs of the well in question, if taken.

3. A geological log or report of the well in question, giving full detail of the formations penetrated, drill stem tests, casing and cementing, perforations if any, and well stimulation procedures.

4. A map of the area surrounding the subject well, showing the location of all wells whether producing or dry holes, the total depth of such wells, the name of the producing formation and the top and bottom of such formation. The map shall cover an area sufficient to show the producing formation in the subject well, is not in communication with any other known common source of supply (reservoir), but in no event shall the map cover an area with a radius of less than one and one-half (1 1/2) miles with the subject well as the center thereof.

5. A geological contour map on a geological marker that will reflect the expected attitude of the formation from which the well is producing.

6. The affidavit shall include the following statement:

"It is the opinion of the operator that said well is capable of producing at the discovery allowable rate without causing waste."

IT IS, THEREFORE, BY THE COMMISSION ORDERED: That Rule 82-2-109 B (1) set out in Finding (3) of this order be and it is hereby adopted as an amendment to said Rule adopted by order herein dated July 23, 1965.

IT IS FURTHER BY THE COMMISSION ORDERED: That said amended Rule 82-2-109 B (1) set out in Finding (3) of this order be effective on and after May 26, 1966, superseding on that date Rule 82-2-109 B (1) as adopted by order herein dated July 23, 1965, and that such amendment shall not be effective as to wells drilled and discovery allowables granted prior to May 26, 1966.

The Commission retains jurisdiction of the subject matter and the parties for the purpose of entering such further order or orders as from time to time it may deem proper.

BY THE COMMISSION IT IS SO ORDERED.

Mitchell, Chm.; Greenleaf, Com.; Wiles, Com.

Raymond B. Harvey, Secretary

JRT:fp

Form No. 1000 (4-1-'61) *File in Duplicate*

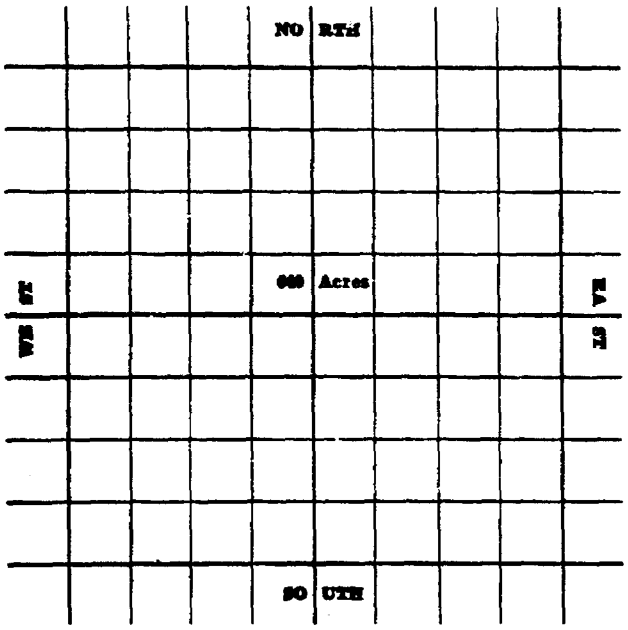
NOTIFICATION OF INTENTION

( ) **TO DRILL**

( ) **TO DEEPEN**

( ) **TO PLUG BACK**

Outline Lease Boundary On Plat Below
Check Spacing Requirements



INSTRUCTIONS: (Please follow) Rule 203 No. 44297

(1) Indicate by (X) the type of operations contemplated.
(2) Use separate cards for each well.
(3) File cards with Corp. Comm. prior to commencement of Operations.
(4) Outline lease boundaries on plat & spot well accurately therein.
(5) File Plugging Bond with Corp. Comm. prior to drilling.
(6) Consult Rules pertaining to Logs, Blow Out Preventers & Surface Casing.
(7) Use Form No. 1001 to report Intention to Plug a well.

Date ...., 19..........

County ....

Section .... Township .... Range ....

Well Located .... ¼ .... ¼ .... ¼
(10 acres) (40 acres) (160) acres

WELL is to be DRILLED .... Ft. North of / South ¼ Sec. Line .... Ft. East of / West ¼ Sec. Line

Operator ....

Lease Name .... Well No. ....

Date Operation to begin ....

Type of Equipment to be used ....

Estimated Total Depth .... Formation ....

Correspondence: regarding this well should be addressed to:

Name ....

Address ....

City .... State ....

Form No. 1001 (1948)

NOTIFICATION OF INTENTION TO PLUG

INSTRUCTIONS (Please follow these instructions):

(1) Use a separate card for each well you intend to plug.
(2) Fill out this card and file with the Corporation Commission at least 5 days prior to the commencement of plugging operations.
(3) Give advance notice to District Field Supervisor of the exact date plugging operations are to commence.
(4 Consult Corporation Commission Order No. 19334 for additional information concerning the plugging of wells.
(5) For Notification of Intention to Drill, use Form No. 1000.

Date ______________________, 19_____

County ______________________________

Section__________ Township__________ Range__________

Location__________ ¼__________ ¼__________ ¼
(10 acres) (40 acres) (160 acres)

Operator ______________________________

Lease Name______________________ Well No.__________

Correspondence regarding this Well should be sent to:

Address______________________________

City______________________________

Permit No. of firm engaged to plug Well: No.__________

Date you wish to begin plugging______________________

OPERATORS OF OFFSET LEASES
NOTIFIED OF INTENTION TO PLUG:

Operator ______________________________

Lease located____¼ ____¼ ____¼ Sec.______ T______ R______

Operator ______________________________

Lease located____¼ ____¼ ____¼ Sec.______ T______ R______

Operator ______________________________

Lease located____¼ ____¼ ____¼ Sec.______ T______ R______

Operator ______________________________

Lease located____¼ ____¼ ____¼ Sec.______ T______ R______

I, the undersigned, in compliance with the provisions of the Corporation Commission's orders, certify that the operators of the offset leases listed above have been notified of the intention to plug the wells described hereon.

____
(Name Typed or Printed)

____
(Signature of Operator's Agent)

FORM 1029
PRODUCTION

OKLAHOMA CORPORATION COMMISSION
OIL & GAS CONSERVATION DEPARTMENT

PRODUCTION OR POTENTIAL TESTS
(Witness Required)

NAME OF OPERATOR_____

OFFICE ADDRESS_____

POOL NAME_____ FORMATION_____ DEPTH_____

SPACING ORDER NO._____ ACRES_____

POOL NO._____ PIPE LINE_____

NAME OF LEASE_____

LOCATION OF LEASE_____ ¼ SEC._____ TWP._____ RGE._____

WELL NO.	DATE OF FIRST PRODUCTION	WELL POTENTIAL 24-HOUR RATE	D A T E O F T E S T FROM	TO
_____	_____	_____BBLS.	_____	_____
_____	_____	_____BBLS.	_____	_____
_____	_____	_____BBLS.	_____	_____
_____	_____	_____BBLS.	_____	_____
_____	_____	_____BBLS.	_____	_____
_____	_____	_____BBLS.	_____	_____
_____	_____	_____BBLS.	_____	_____
_____	_____	_____BBLS.	_____	_____
_____	_____	_____BBLS.	_____	_____
_____	_____	_____BBLS.	_____	_____

LEASE POTENTIAL_____BBLS.

WE, THE UNDERSIGNED, SWEAR (OR AFFIRM) THE INFORMATION DISCLOSED HEREON TO BE TRUE AND CORRECT.

SIGNATURE_____ SIGNATURE_____
OFFICIAL WITNESS REPRESENTING REP. OF OPERATOR OF WELL TESTED

NAME OF OPERATOR_____

SUBSCRIBED AND SWORN TO BEFORE ME THIS _____ DAY OF_____ 196____

MY COMMISSION EXPIRES_____ _____
NOTARY PUBLIC

INSTRUCTIONS:

(1) TESTS MUST BE WITNESSED BY OFFSET OPERATOR (PAGE 23, PAR. 20 (B), ORDER #37113)
(2) IT IS THE RESPONSIBILITY OF OPERATOR TO PROCURE WITNESS.
(3) TESTS TAKEN FOR DURATION OF NOT LESS THAN 6 OR MORE THAN 24 HOURS.
(4) USE SEPARATE SHEET FOR EACH LEASE.
(5) TESTS SHOULD BE AT A RATE EQUAL TO ALLOWABLE OR GREATER.
(6) NEW WELLS TO BE TESTED BETWEEN 7TH AND 30TH AFTER COMPLETION.

NOTE TO OPERATOR:

(1) FILE FORM 1030, COMPLETION NOTICE, AND WELL RECORD, FORM 1002A.
(2) EFFECTIVE DATE OF TESTS ON OLD WELLS AND RETESTS IS THE DATE REPORT WAS RECEIVED BY THE DEPARTMENT. SPOT TESTS MAY BE REQUIRED AT ANY TIME BY DEPARTMENT.
(3) FALSIFICATION OF REPORTS SUBJECT TO PENALTY, O.S.L. 1933.

FORM 1030

CORPORATION COMMISSION
COMPLETION NOTICE

DATE_____ 19____

TO: OIL & GAS CONSERVATION DEPARTMENT
OKLAHOMA CORPORATION COMMISSION
OKLAHOMA CITY, OKLAHOMA.

Gentlemen:

To establish allowable we submit the following:

Pool Name_____ Pool No. _____

Lease Name_____ Well No. _____

Location of Well _____ Of Section_____

Township _____ Range _____ County_____

Spacing Order No._____ No. of Acres_____

Number of Producing Wells on Lease_____

Producing Zone_____ Depth_____ _____

Type Well Oil _____ Gas_____

Date of First Production_____

Name and Address of Producer_____

_____

Name and Address of Purchaser_____

_____

Please establish or correct the allowable pipe line runs from this lease and advise the Purchaser accordingly.

Yours very truly,

_____

1-27-65

FORM 1026
(OLD FORM 6)

OKLAHOMA CORPORATION COMMISSION
OIL AND GAS CONSERVATION DEPARTMENT

8-16-60
(cc)

GAS/ OIL RATIO TEST

POOL_____ POOL NO._____ FORMATION_____ DEPTH_____

OPERATOR_____

BUSINESS ADDRESS_____

FARM NAME_____ WELL NO._____ LOCATION_____

SECTION_____ TWP._____ RGE._____ COUNTY_____

STARTING DATE_____ TIME_____ M. ENDING DATE_____ TIME_____ M.

YEAR 196___

NUMBER OF HOURS WELL PRODUCED DURING TEST_____

PRESSURE

TRAP_____ TUBING_____ CASING_____ CHOKE SIZE_____

OIL PRODUCTION

DATE OF FIRST PROD._____

TANK SIZE	TANK NUMBER	GAUGE START FT.	GAUGE START IN.	GAUGE START BBLS.	GAUGE END FT.	GAUGE END IN.	GAUGE END BBLS.	GROSS PROD.	WATER PROD	NET PROD.

PIPE LINE CO._____ OIL PROD. DURING TEST_____

GAS PRODUCTION

METER TYPE_____ (FLANGE) (PIPE TAP)_____ ORIFICE WELL TESTER_____

SIZE RUN_____ SIZE OF TESTER_____

SIZE OF PLATE_____ SIZE OF PLATE_____

24 HR. COEFF._____ PRESSURE (LBS) (IN.H20) (IN.HG.)

DIFFERENTIAL_____ 24 HR. COEFF._____

PRESSURE_____ (LBS.) (IN. HG.) GAS GRAVITY_____

OIL PROD. 24 HR. RATE_____

GAS PROD. 24 HR, RATE_____

GAS OIL RATIO_____

IF WELL HAS BEEN DUALLY COMPLETED, GIVE ZONES_____

REMARKS_____

WE, THE UNDERSIGNED, CERTIFY THAT THE INFORMATION IS TRUE AND CORRECT.

_____ WITNESS

_____ REP. OF OPERATOR

_____ WITNESS

_____ REP, OF CORPORATION COMMISSION

DATE_____

TO:_____

_____

_____

OPERATOR_____

ADDRESS_____

_____

The_____net allowable for the leases mentioned below should be corrected as shown:

LEASE	NO.OF WELL	POOL NO.	POOL NAME	CORRECTED NET ALLOWABLE FROM	TO

REMARKS:_____

_____

_____

Yours very truly,

DRD:s

FORM 1008

OKLAHOMA CORPORATION COMMISSION
OIL & GAS CONSERVATION DEPARTMENT

OPERATORS ANNUAL UNALLOCATED LEASE REPORT

NAME OF OPERATOR _____

MAILING ADDRESS _____

NAME OF PURCHASER _____

MAILING ADDRESS _____

DATE OF TEST _____ 19 _____

(1) PURCHASER'S LEASE NO.	(2) LEASE NAME	(3) DESCRIPTION SEC. TWP. RGE. COUNTY	(4) PROD. FORMATION	(5) PRODUCING INTERVAL FROM TO	(6) NO. OF PROD. WELLS	(7) LEASE POTENTIAL B.P.D.

I solemnly swear or affirm that I am the representative of the operator named on this report, and that no non-producing well is listed hereon, and that the amount of oil indicated above was ascertained by actual test,

_____
REPRESENTATIVE OF OPERATOR

Subscribed and sworn to before me this the _____ day of _____ 19 _____

My Commission expires _____ 19 _____

_____
NOTARY PUBLIC

I N S T R U C T I O N S

Order No. 53403

26. (A) The operators of unallocated wells producing on a lease basis with a daily allowable computed by multiplying the number of producing wells times unallocated daily allowable will furnish information for all unallocated oil wells on Form 1008 (Operators Annual Unallocated Lease Report) during the month of January. The Form will be completed in duplicate and filed with the Oil & Gas Conservation Department, one copy to be approved and forwarded to the indicated purchaser. Any change in lease status during the calendar year will be corrected by submitting in duplicate new Form 1008.

(B) All purchasers or takers from unallocated wells producing on a lease basis will use approved Form 1008 received from the Oil & Gas Conservation Department to establish daily lease allowable by multiplying indicated number of producing oil wells times unallocated daily allowable, as set out in Market Demand Order for each allocation period.

FORM NO. 1006
O#44297 (10-1-61)

BOND NO. _____

OKLAHOMA CORPORATION COMMISSION
OIL & GAS CONSERVATION DEPARTMENT
SURETY BOND FOR DRILLING, PRODUCING AND PLUGGING OF OIL AND GAS WELLS, STATE OF OKLAHOMA

Know All Men By These Presents,

That we (as Principal) _____

Mailing Address _____

and

(As Surety) _____

Mailing Address _____

as surety, authorized to do business in the State of Oklahoma are held and firmly bound unto the State in the penal sum as indicated, lawful money of the United States, for which payment, well and truly to be made, we bind ourselves, and each of us, and each of our heirs, executors, administrators or successors, and assigns jointly and severally, firmly by these presents.

The condition of this obligation is that whereas the above bounden principal proposed to drill a well or wells for oil or gas upon the following described land situated within the State of Oklahoma, to wit:

_____

(May be used as blanket bond in the amount of $10,000 by inserting in lieu of single well location the words: "For all wells to be drilled within the State of Oklahoma".)

_____

_____

_____

NOW, THEREFORE, if the above bounden principal shall comply with all of the provisions of the laws of the State of Oklahoma, and the General Rules and Regulations, and special orders of the Corporation Commission of Oklahoma, especially with reference to the drilling, producing and plugging of said well, or wells, and filing with the Oil and Gas Conservation Department of the Corporation Commission of Oklahoma all required notices, records and reports, then this obligation shall be null and void; otherwise the same shall be and remain in full force and effect.

Penal sum of

_____

PROVIDED, HOWEVER, the aggregate liability of the surety hereunder shall in no event exceed the sum of this bond.

Witness our hands and seals, this _____ day of _____

_____

_____

Principal

Witness our hands and seals, this _____ day of _____

_____

_____

Surety

(If the principal is a corporation, the bond should be executed by its duly authorized officers, with the seal of the corporation affixed. When principal or surety executes this bond by agent, power of attorney or other evidence; such evidence of authority must accompany the bond).

Approved _____

Date

Form 1025

OKLAHOMA CORPORATION COMMISSION - OIL & GAS CONSERVATION DEPARTMENT

PACKER LEAKAGE TEST

Field Name | County

Operator | Address

Lease | Well Number | Location

TEST NO. 1

Well Shut In Date	Well Shut In Time	Completion Producing (Indicate Casing or Tubing)	Reservoir	Completion Shut In (Indicate Casing or Tubing)	Reservoir

DATA ON PRODUCING COMPLETION

Stabilized Shut In Pressure Prior to Test (P.S.I.)	Producing Completion—Well Opened Date	Producing Completion—Well Opened Time	Choke Size (Inches)	Stabilized Flowing Pressure During Test (P.S.I.)

Time Required For Stabilization of Flowing Pressure (Hrs)	Stabilized Shut In Pressure At End of Test (P.S.I.)	Time Required For Obtaining This Stabilized Shut In Pressure (HRS)

DATA ON SHUT IN COMPLETION

Stabilized Shut In Pressure Prior To Test (P.S.I.)	Shut In Pressure During Test: Minimum (P.S.I.)	Shut In Pressure During Test: Maximum (P.S.I.)	Stabilized Shut In Pressure at the End of Test: (P.S.I.)

Length of Time Required For Obtaining Stabilized Pressure at End of Test (HRS.)	Maximum Pressure Change of Shut-In Completion During Test Increase (P.S.I.)	Maximum Pressure Change of Shut-In Completion During Test Decrease (P.S.I.)

TEST NO. 2

Well Shut In Date	Well Shut In Time	Same Well-Bore as Test No. 1 But With: Completion Producing (Indicate Casing or Tubing)	And	Completion Shut In (Indicate Casing or Tubing)

DATA ON PRODUCING COMPLETION

Stabilized Shut in Pressure Prior to Test (P.S.I.)	Producing Completion—Well Opened: Date	Producing Completion—Well Opened: Time	Choke Size (Inches)	Stabilized Flowing Pressure During Test (P.S.I.)

Time Required for Stabilization of Flowing Pressure (HRS)	Stabilized Shut in Pressure at End of Test (P.S.I.)	Time Required for Obtaining This Stabilized Shut In Pressure (HRS)

DATA ON SHUT IN COMPLETION

Stabilized Shut In Pressure Prior to Test (P.S.I.)	Shut In Pressure During Test: Minimum (P.S.I.)	Shut In Pressure During Test: Maximum (P.S.I.)	Stabilized Shut In Pressure At The End of Test (P.S.I.)

Length of Time Required For Obtaining Stabilized Pressure at End of Test (Hrs)	Maximum Pressure Change of Shut In Completion During Test: Increase (P.S.I.)	Maximum Pressure Change of Shut In Completion During Test: Decrease (P.S.I.)

Class of Completion Testing, Whether Oil Well or Gas Well: Tubing	Class of Completion Testing, Whether Oil Well or Gas Well: Casing	Was The Commission Notified of Test 24 hours Prior to The Shut In of Both Completions At The Start of Test (Yes or No)

Executed this the _____ day of _____, 19___.

State of _____)

County of _____)

_____
Signature of Affiant

Before me, the undersigned authority, on this day personally appeared _____ known to me to be the person whose name is subscribed to the above instrument, who being by me duly sworn on oath states, that he is duly authorized to make the above report and that he has knowledge of the facts stated therein, and that said report is true and correct.

Subscribed and sworn to before me this _____ day of _____, 19_____.

SEAL

_____

My commission expires _____

Notary Public in and for _____

County, _____

FORM 1007

OKLAHOMA CORPORATION COMMISSION - OIL & GAS CONSERVATION DEPARTMENT

OPERATORS ANNUAL

UNALLOCATED GAS WELL REPORT

OPERATOR_____ADDRESS_____

LEASE NAME_____WELL NUMBER_____

LOCATION_____SECTION_____TOWNSHIP_____RANGE_____COUNTY_____

GAS PURCHASER (S)_____ADDRESS_____

_____ _____

LIQUID PURCHASER_____ADDRESS_____

FORMATION_____PRODUCING INTERVAL FROM_____FT. TO_____FT.

CALCULATED OPEN FLOW POTENTIAL_____M.C.F. DATE_____

SHUT IN DEAD WEIGHT GAUGE PRESSURE_____P. S. I. A. DATE_____

GAS SOLD DECEMBER 19___ _____M.C.F. LIQUIDS SOLD DECEMBER19__ _____BBLS.

AVERAGE LIQUID GRAVITY_____GAS LIQUID RATIO_____M. C. F. PER BBL.

SPACING _____C. C. ORDER NUMBER_____

STATUS (CHECK ONE) PRODUCING_____ SHUT IN_____.

WELL RECORD FILED (FORM NO. 1002A) YES_____ NO_____

REMARKS_____

_____

_____

_____

_____
SIGNATURE

INSTRUCTIONS (FORM NO. 1007)

THIS REPORT IS TO BE FILED IN TRIPLICATE DURING THE MONTH OF FEBRUARY FOR EACH UNALLOCATED GAS WELL SHOWING DECEMBER STATUS.

EXCERPT, CORPORATION COMMISSION ORDER NUMBER 60050

26 (a) The operators of unallocated gas wells producing on a daily maximum allowable computed as 25% of the calculated open flow potential per day, will furnish information for all unallocated gas wells on Form 1007 (Operators Annual Unallocated Gas Well Report) during the month of February. The form will be completed in triplicate and filed with the Oil & Gas Conservation Department, one copy to be approved and forwarded to the indicated purchasers. Any change in well status during the calendar year will be corrected by submitting in duplicate New Form 1007.

(b) All purchasers or takers from unallocated gas wells will use approved Form 1007 received from the Oil and Gas Conservation Department to establish daily well allowable.

Form 1024

OKLAHOMA CORPORATION COMMISSION - OIL & GAS CONSERVATION DEPARTMENT

PACKER SETTING REPORT

I, _____ (Name of party making affidavit), being of lawful age and having full knowledge of the facts hereinbelow set out do state:

That I am employed by _____ in the capacity of _____,

that on _____, 19____ I personally supervised the setting of a _____ (Make & type of packer)

in _____ (Operator of well) _____ (Lease Name),

Well No. _____ located in the _____ field, _____

county, state of _____, at a subsurface depth of _____ feet,

said depth measurement having been furnished me by _____;

That the purpose of setting this packer was to effect a seal in the annular space between two strings of pipe where the packer was set so as to prevent the commingling, in the bore of this well, of fluids produced from a stratum below the packer with fluids produced from a stratum above the packer; that this packer was properly set and that it did, when set, effectively and absolutely seal off the annular space between the two strings of pipe where it was set in such manner as that it prevented any movement of fluids across the packer.

Executed this the _____ day of _____, 19

State of _____ }
County of _____ }

_____
Signature of Affiant

Before me, the undersigned authority, on this day personally appeared _____ known to me to be the person whose name is subscribed to the above instrument, who being by me duly sworn on oath states, that he is duly authorized to make the above report and that he has knowledge of the facts stated therein, and that said report is true and correct.

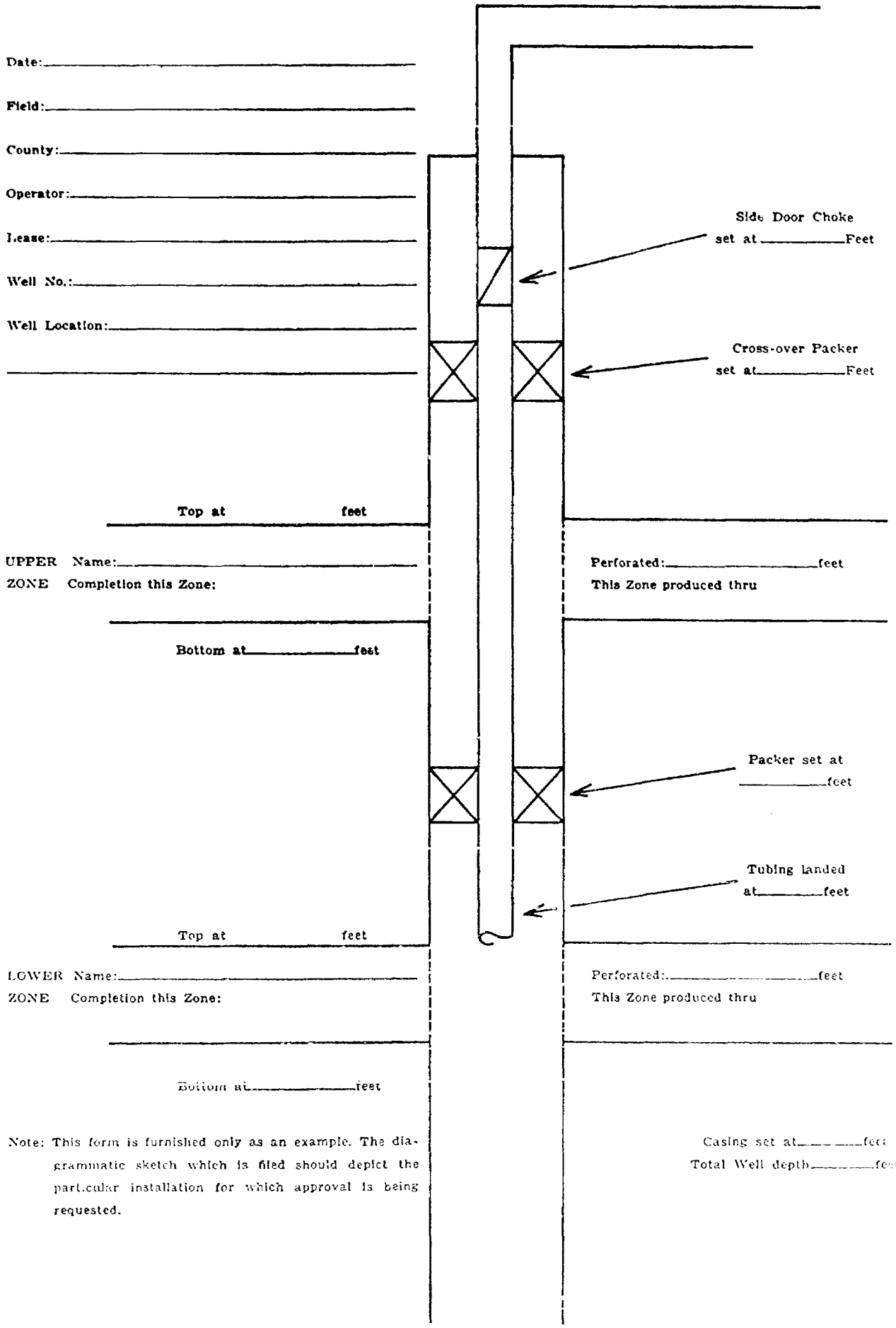
Subscribed and sworn to before me this _____ day of _____, 19 _____.

SEAL

_____
Notary Public in and for _____
County, _____

My commission expires _____

DIAGRAMMATIC SKETCH SHOWING MULTIPLE COMPLETION INSTALLATION



Note: This form is furnished only as an example. The diagrammatic sketch which is filed should depict the particular installation for which approval is being requested.

Form 1023

OKLAHOMA CORPORATION COMMISSION - OIL & GAS CONSERVATION DEPARTMENT
APPLICATION FOR MULTIPLE COMPLETION
RULE 211, CC #44297

Field Name _____ County _____ Date _____

Operator _____ Lease _____ Well No. _____

Location of Well _____

1. The reservoirs herein requested to be used for multiple completion have heretofore been approved for multiple completion by Commission Order #_____ after notice and hearing?

2. Is this well within the Geographic limits defined in above order for each zone_____

3. The following facts are submitted:

	Upper Zone	Intermediate Zone	Lower Zone
a. Name of reservoir			
b. Top and bottom of pay section (perforations)			
c. Type of production (Oil or Gas)			
d. Method of Production (Flg. or Art. Lift)			

4. The following are attached. (Please mark YES or NO)

_____ a. Electrical log or other acceptable log with tops and bottoms of producing zones and perforated intervals shown and marked.

_____ b. Packer Setting Report.

_____ c. Diagrammatic Sketch of Multiple Completion Installation.

_____ d. Packer Leakage Test.

_____ e. Plat showing the location of all wells on applicant's lease, all offset wells on offset leases and the names and addresses of operators of all leases off-setting applicant's lease.

5. List all offset operators to the lease on which this well is located together with their correct mailing address.

6. _____ The operators listed in Item 5 above have been notified and furnished a copy of this application. (Yes or No)
Date furnished _____

7. _____ Waivers consenting to such multiple completion from each of the above offset operators attached. (Yes or No)

8. _____ Copies of letters requesting such waivers from each of these offset operators attached, in lieu of waivers. (Yes or No)

Executed this the _____ day of _____, 19____.

_____
Signature of Affiant

State of _____
County of _____

Before me, the undersigned authority, on this day personally appeared _____ known to me to be the person whose name is subscribed to the above instrument, who being by me duly sworn on oath states, that he is duly authorized to make the above report and that he has knowledge of the facts stated therein, and that said report is true and correct.

Subscribed and sworn to before me this _____ day of _____, 19_____.

SEAL

My commission expires _____

_____
Notary Public in and for _____
County, _____

INSTRUCTIONS:
1. Should all necessary waivers not accompany application, the Oil & Gas Conservation Dept. Corp. Comm. shall hold such application for a period of fifteen (15) days from date of receipt in suspense. If, after said 15 day period, no protest or request for hearing is received in the above cause, the application will then be approved.
2. File In Duplicate.
3. Allowable Computed from date application received by Oil & Gas Conservation Dept. – when approved.

REPORT FORMS LIST

COMPLETE LIST OF FORMS AUTHORIZED BY OKLAHOMA CORPORATION COMMISSION OIL & GAS CONSERVATION DEPARTMENT (AS OF JUNE 10, 1966)

O#44297

FORM NO. — REPORTS, REQUIREMENTS AND AUTHORITY

No. 1000 NOTICE OF INTENTION TO DRILL (Rule 203)
Operator shall file notice prior to drilling operations.

No. 1001 NOTIFICATION OF INTENTION TO PLUG (Rule 602)
Owner or operator will file notice five (5) days prior to plugging operations. (Notify Field Supervisor, Rule 603).

No. 1002A WELL RECORD (Well Log) (Rule 204)
Operators shall file a complete well record after well completion.

No. 1003 PLUGGING RECORD (Rule 605)
Operator will file report after plugging operations.

No. 1004 REPORT OF GAS WELLS (Rules 402 & 702)
Purchasers shall make monthly reports of gas volumes and potential capacity of gas wells.

No. 1005 SEMI-ANNUAL SHUT-IN PRESSURE OF GAS WELLS (Rule 402-B)
Purchasers or operators shall report shut-in pressures taken during April and October.

No. 1006 PLUGGING BOND FOR OIL & GAS WELLS (Rule 201)
Operators, prior to drilling oil or gas wells, will furnish bond or acceptable list of producing properties in Oklahoma.

No. 1007 OPERATORS ANNUAL UNALLOCATED GAS WELL REPORT (Current Gas Allocation Order)
Operators are required to file annual report on all Unallocated Gas Wells.

No. 1008 OPERATORS ANNUAL UNALLOCATED OIL LEASE REPORT (Current Oil Allocation Order)
Operators are required to file annual report on all Unallocated Oil Leases

No. 1009 APPLICATION TO COMMINGLE (Rule 309, CCO#44297)

No. 1010 APPLICATION FOR CANCELLED UNDERAGE (Allocated Oil Pool)
Rule 11 - Current Oil Allocation Order.

No. 1011 MULTI-ZONE LEASE RUN REPORT (Current Oil Allocation Orders)
Operators having leases producing from two or more zones will make report to pipe line or transporter on this form each month.

No. 1012 WATER FLOOD PRODUCTION REPORT (Current Oil Allocation Order)
Operators authorized water floods make report monthly as required by Corporation Commission order.

No. 1013 SALT WATER EXEMPTION AFFIDAVIT (Current Oil Allocation Order)
Operators in unallocated pools may be permitted to produce and run 100% Table A for wells producing 75 per cent or more of salt water by filing Form 1013 twice yearly, as required by allocation orders.

No. 1014 APPLICATION FOR PERMIT TO USE EARTHEN PITS (Rule 811)
To be filed in triplicate.

No. 1016 (Rev.) BACK PRESSURE TEST FOR GAS WELLS (Rule 402 (a))
Operators and purchasers of gas will make test on new wells.

No. 1017 GUYMON DELIVERABILITY TEST (Order 17867)
Operators and takers of gas in the Guymon-Hugoton Field will report deliverability tests taken May 1st to October 30th.

No. 1018 DELIVERABILITY GAS TEST - KEYES FIELD (Order 30312)
Operators and purchasers of gas in the Keyes Field will take tests and report as required by Order #30312.

No. 1019 ACREAGE STATEMENT FOR WELLS - GUYMON-HUGOTON FIELD (Order No. 17867)
Operators will report attributable acreage as required by O#17867.

No. 1021 REPORT OF COMPANIES PURCHASING OR PAYING GROSS PRODUCTION TAX. (Crude Oil) (Rule 702 (c))
Purchasers paying gross production tax will make monthly report by counties of crude oil purchased.

FORM NO.	REPORTS, REQUIREMENTS AND AUTHORITY
No. 1023	APPLICATION FOR MULTIPLE COMPLETION (Rule 211, CC #44297) Operator to file Application as required by special field rules.
No. 1024	PACKER SETTING AFFIDAVIT (Dual Completion) PERTINENT FIELD RULES Operators will make report as required by special field rules.
No. 1025	PACKER LEAKAGE TEST (Dual Completion) PERTINENT FIELD RULES Operators will make report as required by special field rules.
No. 1026	GAS/OIL RATIO TEST (Rule 301 & Special Pool Rules) Operators will take G-O-R tests during the period and in the manner prescribed by pertinent field rules.
No. 1027	BOTTOM HOLE PRESSURE RECORD (Rule 301 & Special Pool Rules) Operators will take bottom hole pressure tests in the manner and during the period prescribed by special pool rules.
No. 1029	PRODUCTION OR POTENTIAL TESTS (Rules 301, 302 & Allocation Orders) (Use Form 1054 for test when required) Operators, allocated pools, will conduct production or potential tests during the period and in the manner required by current allocation order.
No. 1030	COMPLETION NOTICE (Letter) Rule 306 & Current Allocation Orders) Operators of allocated wells will notify Oil & Gas Conservation Department date of completion of new wells in order that proper allowable may be assigned, using Form 1030.
No. 1031	AFFIDAVIT FOR CREDIT (Load or Frack Oil)(Current Allocation Orders) Operators desiring credit for oil (Not produced on the lease) used in completing a well, will furnish data on Form 1031 in duplicate to Oil & Gas Conservation Department.
No. 1034	NOMINATION AND PURCHASERS REPORT (Rules 303 & 701) Purchasers will furnish monthly nomination data and crude oil stocks to Oil & Gas Conservation Department prior to market demand hearing, as required.
No. 1052	IBM OPERATORS STATEMENT, BOOK #1 & 2 (Rule 306 (e)) This IBM statement will be furnished operators monthly, indicating status of allocated leases and current allowable. (Operators will inform Oil & Gas Conservation Department of errors).
No. 1053	IBM PURCHASERS REPORT, BOOK #1 & 2 (Rule 306 (e)) Statement will be furnished to purchasers monthly, indicating net current allowable and lease status of allocated pools. Purchasers or takers are instructed to run only the amount of oil indicated thereon, or as changed, authorized in writing by Oil & Gas Conserbation Department. NOTE: Purchasers are directed to return original copy of this form on which has been indicated the amount of oil run from various leases shown thereon.
No. 1054	IBM PRODUCTION AND POTENTIAL TEST FORM (Rules 301 & 302) (Current Allocation Orders) (Form used semi-annually for production test). Operators will report the potential or production test of allocated wells as required by market demand order. Operators will return one copy only immediately after completion of test of wells listed on this form. For subsequent tests use Form 1029.

APPLICATION FOR DISCOVERY ALLOWABLE AND NEW FIELD DESIGNATION

(To be filed with AUSTIN office of Railroad Commission of Texas)

RRC Dist.: _____ County: _____ Survey: _____ Sec. No. _____

Operator: _____ Lease: _____ Well No. _____

Address: _____

Suggested Field Names (In order of preference): Name of Producing Zone: _____

1. _____

2. _____ Type of Production: Oil _____ Gas _____
(Indicate one only)

3. _____

Top of Pay: _____ Perf. from _____ to _____

Date of Board of Water Engineers' Letter: _____

Date Commission Form 3 or GWT-1 (Potential Test) Filed: _____

Nearest Production (oil and/or gas, past or present) to this well:

a. Field: _____ Oil or Gas (state which) _____

b. Reservoir Name & Depth Interval: _____

c. Distance and direction from this well: _____

Nearest Comparable Production (oil and/or gas, past or present) to this well.

a. Field: _____ Oil or Gas (state which) _____

b. Reservoir Name & Depth Interval: _____

c. Distance and direction from this well: _____

ALL OFFSET OPERATORS MUST BE NOTIFIED IN WRITING BY THE APPLICANT.

If this is a newly discovered reservoir on a known producing multi-reservoir structure, all operators in field or fields involved must be notified.

Date the operators were notified of this application: _____, 19_____

If application is filed without letters of waiver from offset operators, said application will be held for ten (10) days from date of receipt in the Austin Office. If no protest is received within that period, the application will then be processed.

_____
(Name and Title)

STATE OF TEXAS)
COUNTY OF _____)

BEFORE ME, the undersigned authority, on this day personally appeared _____ known to me to be the person whose name is subscribed to the above application, who being by me duly sworn on oath states that he has knowledge of the facts stated therein and that said application is true and correct.

SUBSCRIBED AND SWORN To before me, this _____ day of _____, 19_____

(seal)

_____
Notary Public in and for _____ County, Texas

(This space to be filled in by Commission Engineering Department)

RECOMMENDATION:

1. Field Name _____
2. Type of Separation _____
3. NPX _____

Approved: Denied: Set for Hearing:

COMMISSION ACTION

Approved	Denied	Set for Hearing
Chairman	Chairman	Chairman
Commissioner	Commissioner	Commissioner
Commissioner	Commissioner	Commissioner
Date:		

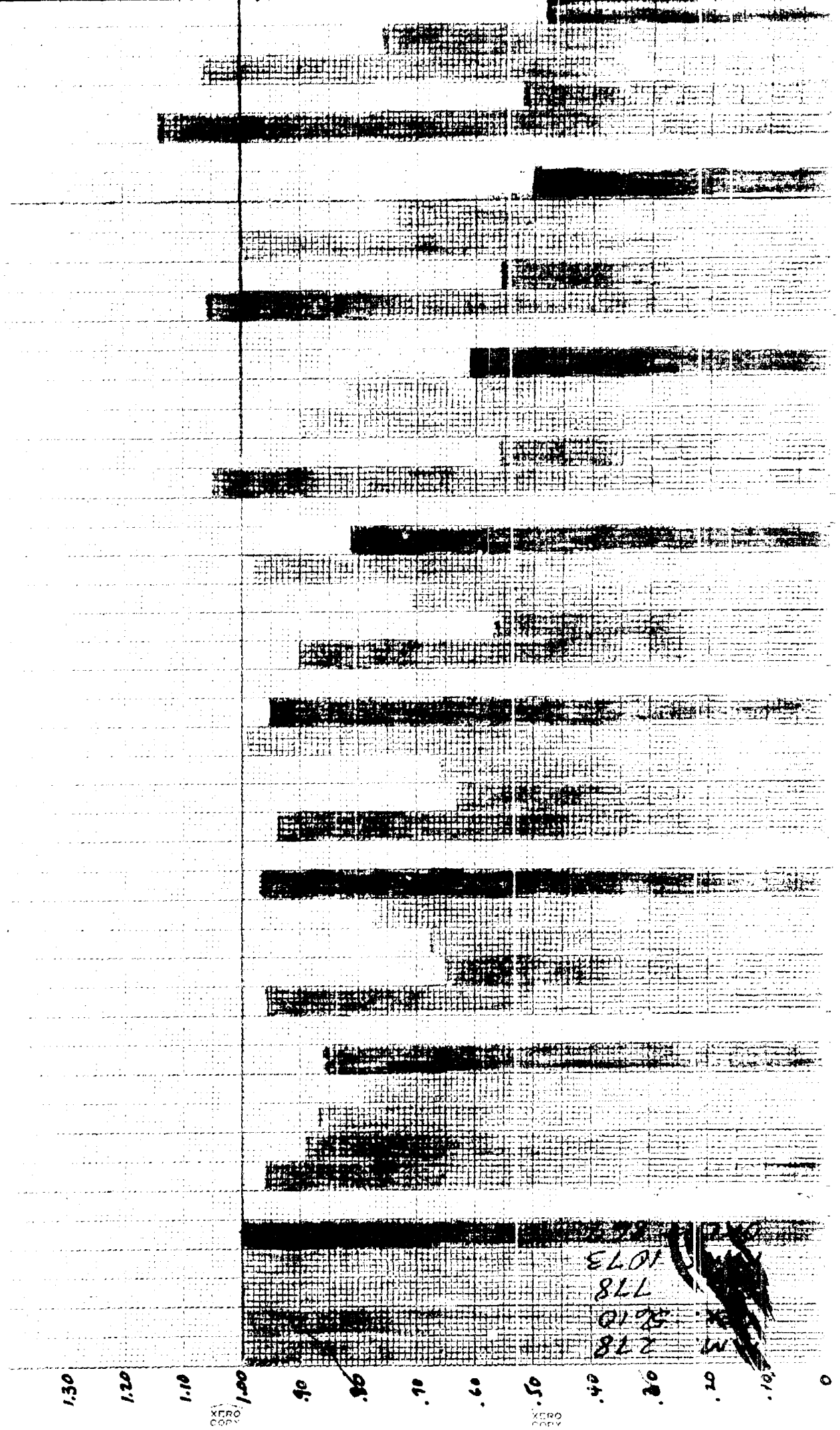
(This space for Commission Proration Analyst)

NPX Assigned: _____ Amount _____ Effective Date _____ Supplement No.

Field Designation: _____

Analyst: _____

REV. ATTACHMENT "A" 3-14-60
(ORDER NO. 20-29,540 6-1-54.)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THE STATE CORPORATION COMMISSION

OF THE STATE OF KANSAS

Before Commissioners: William L. Mitchell, Chairman
James O. Greenleaf
Harry G. Wiles

In the matter of the General Rules and Regulations for the Conservation of Crude Oil and Natural Gas.	)))	DOCKET NO. 34,780-C (C-1825) CONSERVATION DIVISION

O R D E R

Now, on this 23rd day of July, 1965, the above-entitled matter comes before the Commission on its own motion for further consideration, and the Commission finds:

1. K.S.A. 55-603 and 55-604 were amended by the enactment of House Bill No. 675 of the 1965 Legislature. This amendment became effective July 1, 1965, and empowers this Commission to grant temporary bonus or discovery allowables to wells drilled in a new and separate common source of oil supply, and to make and enforce rules, regulations and orders providing therefor.

2. After due notice, a public hearing was held at the Lassen Hotel in Wichita, Kansas, on Friday, July 23, 1965, for the purpose of receiving testimony, suggestions and recommendations with respect to formulation of said rules and regulations.

3. The Commission, after hearing the evidence and being advised in the premises, finds that the following rule should be adopted and that the temporary order issued in this docket on June 8, 1965, should be amended in accordance therewith:

Rule 82-2-109-B (1)

DISCOVERY OIL ALLOWABLE

An oil discovery allowable equal to one and one-half (1 1/2) times the current daily allowable assigned to a similar well, either as set out in Rule 82-2-109, paragraph "B", or the regular allowable as established by a Special Pool Basic Proration Order, may be granted to wells in pools hereafter discovered. Such discovery allowable shall continue as to wells in such newly discovered pools for a period of twelve (12) months from the date of the completion of the first well or until a total of five (5) producing wells shall have been completed in such newly discovered pools, or until development has connected such newly discovered pools with another known common source of supply producing from the same geological formation (reservoir), whichever period is the lesser.

Provided however the following additional provisions shall apply:

1. A newly discovered pool shall not be recognized as such until after the filing of an application and notice and hearing thereon before the Corporation Commission, and such determination by the Commission. Information in support of the application shall be in conformance with that required

in Appendix "A", Affidavit for Discovery Allowable. Before additional wells in such newly discovered pool may be granted a discovery allowable, an affidavit shall be filed with the Conservation Division of the Commission in compliance with the Affidavit For Discovery Allowable set out in Appendix "A" hereto. In the event the affidavit for subsequently developed wells entitled to the discovery oil allowable does not clearly show to the satisfaction of the Conservation Division that the subject well is producing from the same common source of supply (reservoir) as the discovery well, the matter shall be properly noticed and set for hearing before the Commission. In the event a protest is filed with the Commission by any interested party within 10 days from the date such affidavit is mailed under provisions of paragraph 1 (i) of Appendix "A", then the matter will be properly noticed and set for hearing before the Commission.

2. Over and under production of the discovery oil allowable shall be subject to the same procedures as followed for normal oil allowables.

3. Discovery allowables are subject to adjustment for gas-oil ratio provisions in any combination pool orders subsequently adopted for such newly discovered pools by the Commission.

4. Discovery allowables are subject to temporary reduction consistent with market demand determination. In the event such reduction is required, the Commission may extend the time for production of the discovery allowable.

5. If a discovery well is completed in more than one common source of supply, then only one discovery allowable shall be granted to the discovery well and subsequent wells thereafter completed in the discovery pool. In addition, where there is good evidence of production in a formation not completed as producing in the discovery well, no subsequent discovery allowable shall be granted to any well in the discovery pool producing from such formation.

6. For the purpose of this rule, the completion date of a well shall be the date of the state supervised productivity test.

APPENDIX "A"

AFFIDAVIT FOR DISCOVERY ALLOWABLE

An operator desiring to avail himself of the provisions of this rule shall file an affidavit with the Conservation Division, 500 Insurance Bldg., Wichita, Kansas, after completion of a well, containing the following information, records, reports and data:

1. The affidavit shall show:

   a. Exact location of the well (legal description).

   b. Lease name.

   c. Geological name of the producing formation.

   d. Top and bottom depths of the producing formation.

   e. Results of a State supervised production test, showing volumes of oil, gas and water.

   f. Any other pertinent data such as bottom hole pressures, core data, etc., which may help determine the validity of the request.

   g. Date of first production.

h. Date of first oil sales and the purchaser to whom delivered.

i. The names and addresses of each operator or lessee of record within one-half (1/2) mile of the lease upon which the subject well is located together with a statement of the date a copy of this affidavit was mailed to each.

2. An electric log or logs of the well in question, if taken.

3. A geological log or report of the well in question, giving full detail of the formations penetrated, drill stem tests, casing and cementing, perforations if any, and well stimulation procedures.

4. A map of the area surrounding the subject well, showing the location of all wells whether producing or dry holes, the total depth of such wells, the name of the producing formation and the top and bottom of such formation. The map shall cover an area sufficient to show the producing formation in the subject well is not in communication with any other known common source of supply (reservoir), but in no event shall the map cover an area with a radius of less than one and one-half (1 1/2) miles with the subject well as the center thereof.

5. A geological contour map on a geological marker that will reflect the expected attitude of the formation from which the well is producing.

6. The affidavit shall include the following statement:

"It is the opinion of the operator that said well is capable of producing at the discovery allowable rate without causing waste."

IT IS, THEREFORE, BY THE COMMISSION ORDERED: That Rule 82-2-109-B (1) set out in Finding (3) of this order be and it is hereby adopted as an amendment to said Rule adopted by order herein dated June 8, 1965, which became effective July 1, 1965.

The Commission retains jurisdiction of the subject matter and the parties for the purpose of entering such further order or orders as from time to time it may deem proper.

BY THE COMMISSION IT IS SO ORDERED.

Mitchell, Chm.; Greenleaf, Com.; Wilcs, Com.

RAYMOND B. HARVEY
Raymond B. Harvey, Secretary

JRT:mk

1965 TEXAS OFFSHORE YARDSTICK ALLOWABLES*

Depth - Feet	40 Acres	80 Acres	160 Acres
0 - 2,000	200	330	590
2,000 - 3,000	220	360	640
3,000 - 4,000	245	400	705
4,000 - 5,000	275	445	785
5,000 - 6,000	305	490	865
6,000 - 7,000	340	545	950
7,000 - 8,000	380	605	1,050
8,000 - 9,000	420	665	1,150
9,000 - 10,000	465	730	1,260
10,000 - 11,000	515	800	1,380
11,000 - 12,000	565	875	1,500
12,000 - 13,000	620	950	1,625
13,000 - 14,000	675	1,030	1,750
14,000 - 15,000	735	1,115	1,880

1965 TEXAS ONSHORE YARDSTICK ALLOWABLES*

	1965 Depth Yardstick B/D				
Depth - Feet	10 Ac.	20 Ac.	40 Ac.	80 Ac.	160 Ac.
0 - 2,000	21	39	74	129	238
2,000 - 3,000	22	41	78	135	249
3,000 - 4,000	23	44	84	144	265
4,000 - 5,000	24	48	93	158	288
5,000 - 6,000	26	52	102	171	310
6,000 - 7,000	28	57	111	184	331
7,000 - 8,000	31	62	121	198	353
8,000 - 8,500	34	68	133	215	380
8,500 - 9,000	36	74	142	229	402
9,000 - 9,500	40	81	157	250	435
9,500 - 10,000	43	88	172	272	471
10,000 - 10,500	48	96	192	300	515
10,500 - 11,000	-	106	212	329	562
11,000 - 11,500	-	119	237	365	621
11,500 - 12,000	-	131	262	401	679
12,000 - 12,500	-	144	287	436	735
12,500 - 13,000	-	156	312	471	789
13,000 - 13,500	-	169	337	506	843
13,500 - 14,000	-	181	362	543	905
14,000 - 14,500	-	200	400	600	1,000

*Market Demand Factor for June 1966 is 34.5%.

FIGURE 1

LOUISIANA OIL WELL DEPTH YARDSTICK

Depth - Feet	Base Allowable		Depth Bracket Allowable* May, June 1966 - B/D	
	Onshore	Offshore	Onshore	Offshore
0 - 2,000	80	193	29	70
2,000 - 3,000	95	214	34	77
3,000 - 4,000	114	238	41	86
4,000 - 5,000	134	265	48	95
5,000 - 6,000	159	296	57	106
6,000 - 7,000	186	331	67	119
7,000 - 8,000	214	379	77	136
8,000 - 9,000	239	416	86	150
9,000 - 10,000	274	463	99	167
10,000 - 11,000	310	512	112	185
11,000 - 12,000	347	559	125	201
12,000 - 13,000	383	605	138	218
13,000 - 14,000	431	668	155	240
14,000 - 15,000	483	734	174	264
15,000 - 16,000	557	830	201	299
16,000 - 17,000	645	942	232	339
17,000 - 18,000	726	1,053	261	378
18,000 - 19,000	816	1,167	294	420
19,000 - 20,000	927	1,307	334	471
20,000 - 21,000	1,057	1,469	381	530

*The depth bracket allowables shown for May and June 1966 correspond to a market-demand fraction of 0.36.

FIGURE 2

OKLAHOMA MAXIMUM PER-WELL ALLOWABLE - ALLOCATED POOLS*

Depth Interval - Feet	10 Acres	20 Acres	40 Acres	80 Acres
0 To 1,000				
1000 " 2,000	24	42	53	-
2000 " 3,000	30	45	57	-
4,000	35	49	61	-
5,000	40	53	65	79
6,000	47	60	75	94
7,000	57	70	88	110
8,000	67	80	101	126
9,000	77	95	119	149
10,000	90	113	141	176
11,000	115	144	180	225
12,000	153	191	239	299
13,000	203	254	317	398
14,000	253	316	395	494
15,000	303	379	473	593

*Market Demand Factor for May 1966 is 38%.

FIGURE 3

NEW MEXICO OIL WELL DEPTH YARDSTICK

Depth - Feet	Proportional Factor 40 Ac.	80 Ac.
0 - 5,000	1.00	2.00
5,000 - 6,000	1.33	2.33
6,000 - 7,000	1.77	2.77
7,000 - 8,000	2.33	3.33
8,000 - 9,000	3.00	4.00
9,000 - 10,000	3.77	4.77
10,000 - 11,000	4.67	5.67
11,000 - 12,000	5.67	6.67
12,000 - 13,000	6.75	7.75
13,000 - 14,000	8.00	9.00
14,000 - 15,000	9.33	10.33
15,000 - 16,000	10.78	11.78
16,000 - 17,000	12.33	13.33
17,000 - 18,000	14.00	15.00

Monthly, the New Mexico Oil Commission determines the market demand for oil and establishes a normal base allowable for a 40-acre unit, which is multiplied by the proportional factor to determine the allowable for each well. The allowable for wells drilled on more or less than standard spacing is determined by multiplying the standard allowable by the fraction of assigned acres divided by standard spacing. Two base allowables are established, one for the northwest portion of the State in the San Juan Basin area, and the other for the remainder of the State. For June 1966, the two allowables are 70 barrels per day and 45 barrels per day, respectively.

FIGURE 4

KANSAS PROPORTIONATE FACTORS

Depth - Feet	Factor	10 Acres or More Min. Allow./Well B/D
0 - 4,000	1.00	25
4,000 - 4,500	1.24	31
4,500 - 5,000	1.48	37
5,000 - 5,500	1.72	43
5,500 - 6,000	1.92	48
6,000 - 6,500	2.08	52
6,500 - 7,000	2.24	56
6,000 or deeper	2.40	60

Wells in fields with special "Basic Proration Orders," which define spacing, are generally granted oil allowables in accordance with the following table.

Spacing (Acres)	Daily Allowable Barrels Per Well Per 100 Feet of Depth
40	1.00
80	1.25
160	1.50

FIGURE 5

SPECIAL DISCOVERY ALLOWABLES
EXEMPTED FROM MARKET DEMAND FACTOR

Depth Interval - Feet	Texas		Oklahoma	
	B/D	Months Allowed	B/D	Days Allowed
0 - 1,000	40	24	20	200
1,000 - 2,000	40	24	25	270
2,000 - 3,000	60	24	30	340
3,000 - 4,000	80	24	35	410
4,000 - 5,000	100	24	40	480
5,000 - 6,000	120	24	47	570
6,000 - 7,000	140	24	57	660
7,000 - 8,000	160	24	67	770
8,000 - 8,500	180	24	77	880
8,500 - 9,000	180	24	77	880
9,000 - 9,500	200	24	90	1,000
9,500 - 10,000	200	24	90	1,000
10,000 - 10,500	210	24	115	1,030
10,500 - 11,000	225	24	115	1,030
11,000 - 11,500	255	24	153	1,050
11,500 - 12,000	290	24	153	1,050
12,000 - 12,500	330	24	203	1,050
12,500 - 13,000	375	24	203	1,050
13,000 - 13,500	425	24	253	1,050
13,500 - 14,000	480	24	253	1,050
14,000 - 14,500	540	24	303	1,050
14,500 - 15,000	540	24	303	1,050

raised to 12%
recently

FIGURE 6

KANSAS DISCOVERY ALLOWABLES

(Exempt from Market-Demand Considerations)

Depth - Feet	Factor	10 Acres or More Min. Allow./Well B/D	Discovery Allowable B/D	Discovery Allowable Months Allow.
0 - 4,000	1.00	25	38	12
4,000 - 4,500	1.24	31	47	12
4,500 - 5,000	1.48	37	56	12
5,000 - 5,500	1.72	43	65	12
5,500 - 6,000	1.92	48	72	12
6,000 - 6,500	2.08	52	78	12
6,500 - 7,000	2.24	56	84	12
7,000 or deeper	2.40	60	90	12

Wells in fields with special "Basic Proration Orders," which define spacing, are generally granted oil allowables in accordance with the following table.

Spacing (Acres)	Daily Allowable Barrels Per Well Per 100 Feet of Depth	Discovery Daily Allowable Barrels Per Well Per 100 Feet of Depth	Months Allowed
40	1.00	1.50	12
80	1.25	1.88	12
160	1.50	2.25	12

FIGURE 6-A

COMPARISON OF PERMITTED PRODUCTION OVER A TEN-YEAR PERIOD

(Five Largest Market-Demand States)

Assumptions:

10,000' Well
40-Acre Spacing
Market-Demand Factor

Kansas	- 1 B/D per 100' of Depth
Louisiana	- 33%
New Mexico	- Unit Allowable--40 B/D
Oklahoma	- 33%
Texas	- 30%

State	Exempted Production (Barrels)	Market-Demand Production (Barrels)	Total Production (Barrels)
Kansas			
365 Days x 150 B/D 3,287 Days x 100 B/D	54,750	328,700	54,750 328,700 383,450
Louisiana			
3,652 Days x 90 B/D		328,680	328,680
New Mexico			
3,652 Days x 150.8 B/D		550,721	550,721
Oklahoma			
1,000 Days x 141 B/D 2,652 Days x 46.5 B/D	141,000	123,500	141,000 123,500 264,500
Texas			
730 Days x 200 B/D 2,922 Days x 51.6 B/D	146,000	151,000	146,000 151,000 297,000

FIGURE 7

NW NM	Tocito Dome Penn D	9/13	334	
SE NM	Winchester WC	1/1	170	85
	Big Eddy Strawn	2/2	331	331
	~~Scarborough~~	~~4/54~~	~~128~~	
	Todd San Andres	4/14	90	
	E Bagley Penn	1/1	170	85
	Buckeye Abo	5/5	170	425
	S Flying M Penn	1/1	170	85
	Stateline Ellenburger	9/11	330	1485
	Baugh Dev	3/3	301	453
	Nonombre Upper Penn	1/2	346	173
	Chaveroo SA	124/137	45	
	Lusk SR	4/6	45	92
	Morton Ranch WC	1/4	256	128
	S Button Mesa SA	2/2	45	46
	N Sawyer Dev	1/1	301	151
	Osudo WC	1/3	211	106
	N Bagley Middle Penn	1/2	215	108
				3753

No well limit	6785
12 well Max	3753
6 well Max	2268

Oil Pools created June 1, 1964 to June 1, 66

NW	Tocito Dome Penn D	R 2758	8/3/64	2.77	
	N. Many Rocks Up	R 2795	10/29/64		
	Devil Lakes Menefee	R 2916	6/1/65		
	S San Luis MV	R 2975	10/7/65		
SE	Winchester WC	R 3067	6/1/66	9112	
	Big Eddy Strawn	R 3064	5/4/66	8.67	
	Palmillo-BS	R 3051	4/1/66	6422	
	S. Kennitz Upper WC	R 3043	3/1/66	7857	
	Llano Penn	"	"	10080	
	S Corbin Strawn	"	"	12342	
	Young BS	R 3021-A	2/1/66	4.00	
	Caprock WC	R 3014	1/1/66	8701	
	Young WC	R 3021	1/1/66	5.67	
	Scarborough Yates-SR	R 2999	12/1/65	128BOPD	
	W. Bronco Dev	R 2998	12/1/65	12223	
	Todd-San Andres	R 1670-G	10/29/65	2.00	
	E. Bagley Penn	R-2985	11/1/65	9982	
	Buckeye Abo	"	"	9010	
	E. Hightower Upper Penn	"	"	9484	
	W. McMillan SR	R 2979	10/4	0.5000	
	S Hagerman Penn	R 2967	10/1	9067	
	~~Bishop Canyon SA~~				
	Burtner WC	R 2946	9/1/65	9722	
	Milnesand Abo	"	"	8880	
	Hallene Ellenburger	R 2943	8/1	330	12086
	Bough Dev	R 2938	8/1	11940	
	Saunal WC	"	"	10800	
	Tulk Penn	"	"	9856	
	Nonombre Upper Penn	R 2929	6/1	7.67 10344	
	Nonombre Lower Penn	"	"	7.67 10694	
	Chaveroo SA	R 2923	7/1	4299	
	N. Halfway Yates	"	"	2632	
	Lusk-SR	R 2911	6/1	3848	
	McMillan WC	"	"	8179	

S Teilk WC	R 2879		9610	
Morton Lower WC	R 2872	3/5	5.67	
Bunker Hill Q	R ~~3209~~ 2870	3600	3/1	
Dagger Draw Up Pa	"	7759	"	
Empire Q	"	1282	"	
Parrish Ranch Up Pa	"	7744	"	
Twin Lakes SA	"	2569	"	
S Button Mesa SA	R 2833	4177	1-1-65	
Morton Permo Penn	R 2833	10383	1-1-65	
N Sawyer DEV.	"	11344	1-1-65	
~~Osudo Strawn~~	~~R-2822~~	~~5.67~~		
" Wolfcamp	R 2821	5.67	12-2-64	
W. Bagley Penn	R-2804	10007	12-1-64	
Knowles Abo	R-2781	9054	11-1-64	
Leslie Spr SA	R -	1498	"	
W. Lusk Strawn	"	11334	"	
E. McMillan SR-Q	"	1344	"	
E. Lovington Tubb	"	6439	"	
Lusk WC	R-2771	10672	10-1	
S Lea BS	R2760	10064	9-1	
Race Track SA	"	2186	"	
E Vacuum WC	"	9883	"	
Osudo Lower BS	R2757	5.67	8-3-64	
" Upper "	R2756	3.33	"	
Antelope WC	R 2742	10357	8-1	
N. Bagley Middle Pa	R2726	9362	7-1	
S Dundee A Abo	R2705	9148	6-1	

John Roberts Administrator
Oil & Gas Cons Div
Kansas Corp Comm
Wichita

Stat Min 25

Min 35 — 10 ac or any other spacing
40 16/100'
10 barrel bonus

4–45 31 5 b bonus if you use depth factor (10 acre sp)

.25 a 80
160

35 no spg or depth 25 + 10

less than 3500 25 + 10 no spcg + depth all in book + 5

40 acre 1 B/100 + 10 market demand
80 1.25 B/100 + 25
160 1.50 B/100 + 25

1 1/2 × normal allowable

N.M. O.C.C.
P.O. Box 2088
Santa Fe, N.M.

[redacted]

Re: Case 3424

[redacted]

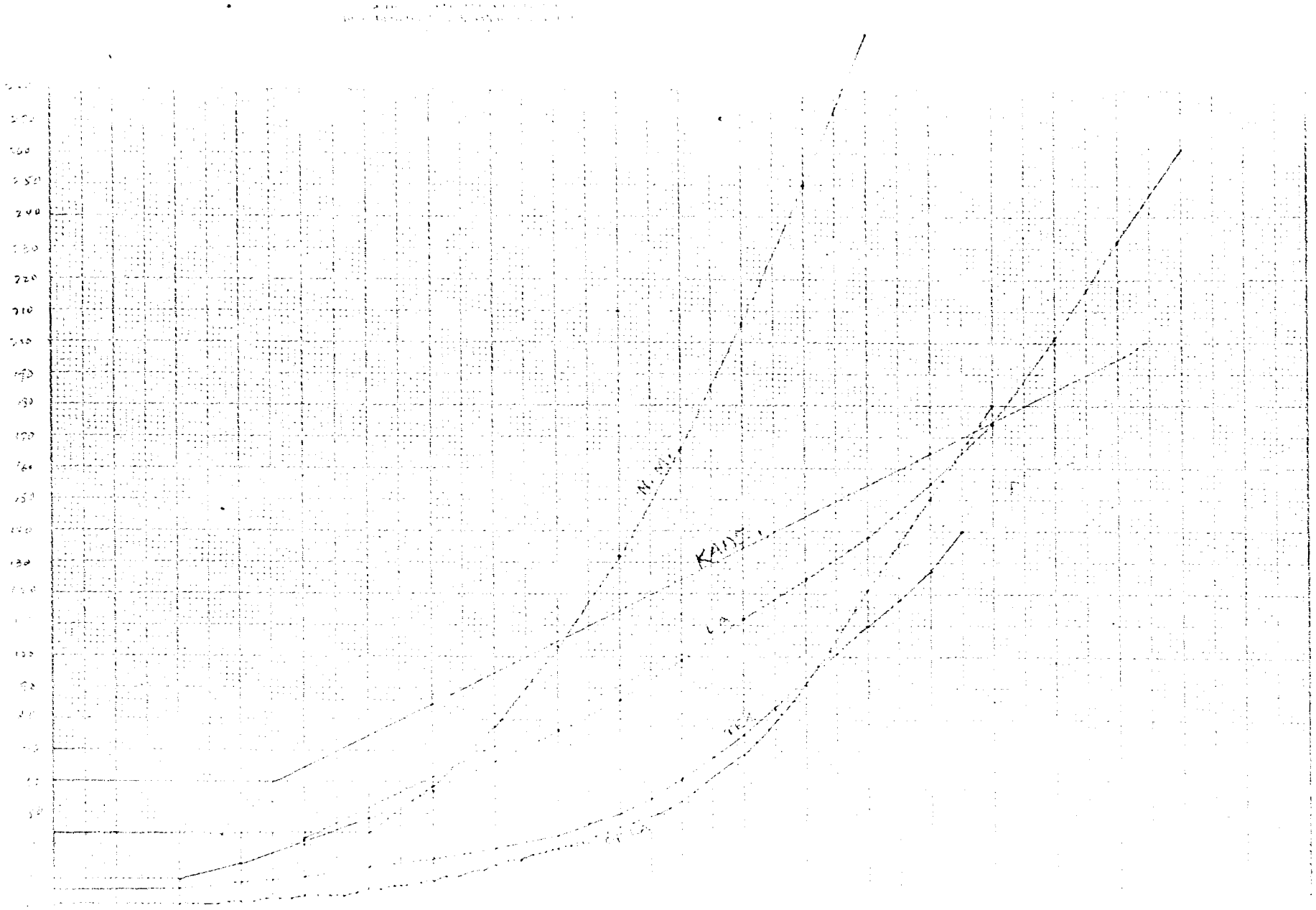
~~Case 3424~~

To date no waterflood in District II has been restricted by the 42 BOPD Area Allowable Factor currently in effect under ~~[illegible]~~ Rule 701. At this time then, no benefit would come to the operators by adopting the NUA as the allowable factor. An increase in the allowable factor based on high normal unit allowables would seem to be in opposition to Finding ~~[illegible]~~ No 7 Order No R 1525. ~~[illegible]~~ However Finding No 6 appears to call for a ~~[illegible]~~ higher ~~[illegible]~~ allowable factor.

~~[illegible]~~

[illegible], I'm agin it.

V T K
R L S



Not avail
/

	47	48	49	50	51	52
K NMK	2694	3284	3387	4010		4571
La Ala	1626	2325	2371	2453		2385
NM	562	604	501	607		1053
Okla	3846	4293	4352	5459		5781
Tex	9301	12251	13665	16585		16845
	~~5702~~					

	53	54	55	56	57
K	4783	4722	4958	4941	4232
La	2828	3611	4019	3875	3856
NM	1418	1126	1663	1904	2129
Okla	7593	8786	8411	8056	6235
Tex	17003	18865	14981	21519	21352

	58
K	4022
La	N.A.
NM	1910
Okla	6354
Tex	18065

Success ratio of wildcat wells 1965

Kans.	555	dry out of	639	87%	13			
La	661	" " "	712	93%	7			
NM	162	" " "	204	79.5%	20.5 SE	124/159	23.9	76.1
Okla	319	" " "	418	76.4%	23.6			
Tex	2526	" " "	3012	84.0%	16			

wildcats drilled Total U.S.

1956

57

58

59

May 1966 Okla. 38% * Market Demand Factor
allowance for 40 acres on P 32 & 33 of Red Book

May 1966 La. 1 on shore Depth Bracket allowance = 0.36

0-2000	29
2-3000	34
3-4	41
4-5	48
5-6	57
6-7	67
7-8	77
8-9	86
9-10	99
10-11	112
11-12	125
12-13	138
13-14	155
14-15	174
15-16	201
16-17	232
17-18	261
18-19	294
19-20	334
20-21	381

Kans. 0-4 10 ac or more min. allow 25

4-4500	31
4500-5	37
5-5500	43
5500-6	48
6-6500	52
6500-7	56
7000 +	60

40 ac Texas may is 35% 1965 on shore yd stk allow

0-2000	74	26
2-3000	78	28
3-4000	84	30
4-5000	93	33
5-6000	102	36
6-7000	111	39
7-8000	121	43
8-8500	133	47
8.5-9000	142	50
9-9500	157	55
9,5-10000	172	61
10-10500	192	68
10.5-11000	212	75
~~11-11500~~	~~237~~	
11-11500	287	83
11500-12000	262	92
12000-12500	287	101
12500-13000	312	110
13000-13500	337	118
13500-14000	362	127
14000-14500	400	140

"Basic Proration Orders" in spacing orders generally set allowance for 40 ac wells at 1.00 BOPD/100' depth and discovery allowance @ 150 BOPD/100' depth for 18 mos.

57

37

38

40

42

44

44

44

44

45

45

19)765 (40

76

1964 Wildcats

Kans.	835	725	86.9
~~N.M.~~			
La	834	745	89.3
NM	249	206	82.8
	66	58	
	183	148	80.9
Okla	484	324	67.0
Tex	2972	2359	79.4

		N.M			U.S			
		DRY	HOLES	TOTAL	DRY		TOTAL	
NC	57	268	69.9	384	11897	80.9	14707	81.0
W.C.	56	212	76.3	278	10[illegible]52		13034	84.1
W.C.	58	222	83.5	266	8237	86.8	9588	
W.C.	59	216	83.1%	260	10073 ↔		8[illegible]7	86.8%
W.C.	60	212	84.9	250	8334	86.5	9635	
W.C.	63	251	79.0	318	7359	85.6	8607	
	62	249	84.5	295	7572	84.1	9003	
	61	222	76.0	292	7885	85.9	9191	
	64	206	82.8	249	7819	84.5	9258	
	65	162	79.4	204	7150	86.5	8265	

	NM 43	U.S 44
56	23.7 ✓	15.9
57	30.1	19.0
58	16.5	13.2
59	16.9	13.2
60	15.1	13.5
61	24.0	~~15.9~~ 14.1 ~~14.1~~
62	15.5	15.9
63	21.0	14.4
64	17.2	15.5
65	20.6	13.5
~~66~~	200.6	148.2
		~~14.1~~
		~~148.3~~
		148.2
	20.1	14.8

	NM			Tex	La.		
		NW	SE			Onsh	Onsh
56	278	106	172	5610	778	(79)	699
57	267	102	165	5004	679	91	588
58	266	103	163	3636	531	27	504
59	260	64	196	3525	513	15	498
60	250	70	180	3166	552	34	518
61	292	98	194	3139	700	52	648
62	295	81	214	3124	776	139	637
63	318	81	237	2936	834	178	656
64	249	66	183	2972	834	167	667
65	204	45	159	3012	712	131	581

~~etc~~

	Kans.		Okla
56	1073		867
57	849		747
58	844		854
59	1066	0.99	827
60	1056	0.98	700
61	886		529
62	791	0.74	433
63	812	0.76	416
64	835		484
65	639		418

	Red	Blue	Black	Yellow	Green
	NM	LA.	KANS	OKLA	TEK
56	1.00	1.00	1.00	1.00	1.00
57	96	87	0.79	86	89
58	96	68	78	97	65
59	94	66	99	95	63
60	90	71	98	81	57
61	1.05	90	82	61	56
62	1.06	1.00	74	50	56
63	1.14	1.07	76	48	52
64	.90	1.07	78	56	53
65	.74	.91	59	48	54

COMPARISON OF TWO-YEAR ALLOWABLES
NEW MEXICO VS. SEVERAL OTHER STATES
Spacing: 40 acres

	Depth Range										
	2500'			5000'			7500'			10	
	Discovery Allowable	Regular Allowable	Total Allowable	Discovery Allowable	Regular Allowable	Total Allowable	Discovery Allowable	Regular Allowable	Total Allowable	Discovery Allowable	Reg Allo
New Mexico /1	0	29,200	29,200	0	29,200	29,200	0	68,620	68,620	0	110,
Louisiana /2	0	23,360	23,360	0	32,850	32,850	0	51,830	51,830	0	66,
Texas /3	26,280	17,520	43,800	52,560	20,440	73,000	94,170	22,630	116,800	108,040	37,
Oklahoma /4	3,740	13,870	17,610	8,640	16,060	24,700	24,090	24,820	48,910	31,390	34,
Kansas /5	4,563	18,250	22,813	9,125	36,500	45,625	13,688	54,750	68,438	18,250	73,

1/ Based on an assumed average normal unit allowable of 40 BOPD.

2/ Based on an assumed average market demand factor of 33 percent.

3/ Based on an assumed average market demand factor of 30 percent. Discovery allowable applies for two years.

4/ Based on an assumed average market demand factor of 33 percent. Discovery allowable applies for from 340 to 1000 days, depending

5/ Based on the usual Basic Proration Order contained in special pool rules to allow 1 BOPD for each 100 feet for regular allowable BOPD for each 100 feet for discovery allowable. Discovery allowable applies for 365 days.

COMPARISON OF TWO-YEAR ALLOWABLES
NEW MEXICO VS. SEVERAL OTHER STATES
Spacing: 40 acres

	Depth Range											
	2500'			5000'			7500'			10,000'		
ry le	Regular Allowable	Total Allowable	Discovery Allowable	Regular Allowable	Total Allowable	Discovery Allowable	Regular Allowable	Total Allowable	Discovery Allowable	Regular Allowable	Total Allowable
	29,200	29,200	0	29,200	29,200	0	68,620	68,620	0	110,230	110,230
	23,360	23,360	0	32,850	32,850	0	51,830	51,830	0	66,430	66,430
	17,520	43,800	52,560	20,440	73,000	94,170	22,630	116,800	108,040	37,960	146,000
	13,870	17,610	8,640	16,060	24,700	24,090	24,820	48,910	31,390	34,310	65,700
	18,250	22,813	9,125	36,500	45,625	13,688	54,750	68,438	18,250	73,000	91,250

rage normal unit allowable of 40 BOPD.

rage market demand factor of 33 percent.

rage market demand factor of 30 percent. Discovery allowable applies for two years.

rage market demand factor of 33 percent. Discovery allowable applies for from 340 to 1000 days, depending on depth.

Proration Order contained in special pool rules to allow 1 BOPD for each 100 feet for regular allowable and 1.5 or discovery allowable. Discovery allowable applies for 365 days.

COMPARISON OF FIVE-YEAR ALLOWABLES
NEW MEXICO VS. SEVERAL OTHER STATES

Spacing: 40 acres

	Depth Range										
	2500'			5000'			7500'			10,000'	
	Discovery Allowable	Regular Allowable	Total Allowable	Discovery Allowable	Regular Allowable	Total Allowable	Discovery Allowable	Regular Allowable	Total Allowable	Discovery Allowable	Regular Allowabl
New Mexico/1	0	73,040	73,040	0	73,040	73,040	0	171,644	171,644	0	275,726
Louisiana /2	0	58,432	58,432	0	82,170	82,170	0	129,646	129,646	0	166,166
Texas /3	26,280	43,824	70,104	52,560	51,128	103,688	94,170	56,606	~~150,776~~	108,040	94,952
Oklahoma /4	3,740	34,694	38,434	8,640	40,172	48,812	25,410	62,084	87,494	43,000	85,822
Kansas /5	4,563	45,650	50,213	9,125	91,300	100,425	13,688	136,950	150,638	18,250	182,600

1/ Based on an assumed average normal unit allowable of 40 BOPD.

2/ Based on an assumed average market demand factor of 33 percent.

3/ Based on an assumed average market demand factor of 30 percent. Discovery allowable applies for two years.

4/ Based on an assumed average market demand factor of 33 percent. Discovery allowable applies for from 740 to 1000 days, depending o

5/ Based on the usual Basic Proration Order contained in special pool rules to allow 1 BOPD for each 100 feet for regular allowable an BOPD for each 100 feet for discovery allowable. Discovery allowable applies for 365 days.

COMPARISON OF FIVE-YEAR ALLOWABLES
NEW MEXICO VS. SEVERAL OTHER STATES

Spacing: 40 acres

Depth Range										
2500'		5000'			7500'			10,000'		
Regular Allowable	Total Allowable	Discovery Allowable	Regular Allowable	Total Allowable	Discovery Allowable	Regular Allowable	Total Allowable	Discovery Allowable	Regular Allowable	Total Allowable
73,040	73,040	0	73,040	73,040	0	171,644	171,644	0	275,726	275,726
58,432	58,432	0	82,170	82,170	0	129,646	129,646	0	166,166	166,166
43,824	70,104	52,560	51,128	103,688	94,170	56,606	150,776	108,040	94,952	202,492
34,694	38,434	8,640	40,172	48,812	25,410	62,084	87,494	43,000	85,822	128,822
45,650	50,213	9,125	91,300	100,425	13,688	136,950	150,638	18,250	182,600	200,850

erage normal unit allowable of 40 BOPD.

rage market demand factor of 33 percent.

erage market demand factor of 30 percent. Discovery allowable applies for two years.

erage market demand factor of 33 percent. Discovery allowable applies for from 340 to 1000 days, depending on depth.

ic Proration Order contained in special pool rules to allow 1 BOPD for each 100 feet for regular allowable and 1.5 for discovery allowable. Discovery allowable applies for 365 days.

COMPARISON OF TEN-YEAR ALLOWABLES
NEW MEXICO VS. SEVERAL OTHER STATES
Spacing: 40 acres

Depth Range

	2500'			5000'			7500'			10,00	
	Discovery Allowable	Regular Allowable	Total Allowable	Discovery Allowable	Regular Allowable	Total Allowable	Discovery Allowable	Regular Allowable	Total Allowable	Discovery Allowable	Regul Allow
New Mexico /1	0	146,080	146,080	0	146,080	146,080	0	343,288	343,288	0	551,45
Louisiana /2	0	116,864	116,864	0	164,340	164,340	0	259,292	259,292	0	332,33
Texas /3	26,280	87,648	113,928	52,560	102,256	154,816	94,170	113,212	207,382	108,040	189,90
Oklahoma /4	3,740	69,388	73,128	8,640	80,344	88,984	25,410	124,168	149,578	43,000	171,64
Kansas /5	4,563	91,300	95,863	9,125	182,600	191,725	13,688	273,900	287,588	18,250	365,20

1/ Based on an assumed average normal unit allowable of 40 BOPD.

2/ Based on an assumed average market demand factor of 33 percent.

3/ Based on an assumed average market demand factor of 30 percent. Discovery allowable applies for two years.

4/ Based on an assumed average market demand factor of 33 percent. Discovery allowable applies for from 340 to 1000 days, depending

5/ Based on the usual Basic Proration Order contained in special pool rules to allow 1 BOPD for each 100 feet for regular allowable BOPD for each 100 feet for discovery allowable. Discovery allowable applies for 365 days.

COMPARISON OF TEN-YEAR ALLOWABLES
NEW MEXICO VS. SEVERAL OTHER STATES
Spacing: 40 acres

Depth Range

	2500'		5000'			7500'			10,000'		
ery ble	Regular Allowable	Total Allowable	Discovery Allowable	Regular Allowable	Total Allowable	Discovery Allowable	Regular Allowable	Total Allowable	Discovery Allowable	Regular Allowable	Total Allowable
	146,080	146,080	0	146,080	146,080	0	343,288	343,288	0	551,452	551,452
	116,864	116,864	0	164,340	164,340	0	259,292	259,292	0	332,332	332,332
0	87,648	113,928	52,560	102,256	154,816	94,170	113,212	207,382	108,040	189,904	297,944
0	69,388	73,128	8,640	80,344	88,984	25,410	124,168	149,578	43,000	171,644	214,644
3	91,300	95,863	9,125	182,600	191,725	13,688	273,900	287,588	18,250	365,200	383,450

average normal unit allowable of 40 BOPD.

average market demand factor of 33 percent.

average market demand factor of 30 percent. Discovery allowable applies for two years.

average market demand factor of 33 percent. Discovery allowable applies for from 540 to 1000 days, depending on depth.

asic Proration Order contained in special pool rules to allow 1 BOPD for each 100 feet for regular allowable and 1.5
et for discovery allowable. Discovery allowable applies for 365 days.

SKELLY OIL COMPANY
P. O. Box 1650
TULSA, OKLAHOMA 74102

PRODUCTION DEPARTMENT
C. L. BLACKSHER, VICE PRESIDENT
W. P. WHITMORE, MGR. PRODUCTION
W. D. CARSON, MGR. TECHNICAL SERVICES
ROBERT G. HILTZ, MGR. JOINT OPERATIONS
GEORGE W. SELINGER, MGR. CONSERVATION

July 8, 1966

VIA AIR MAIL

Mr. Daniel Nutter
Oil Conservation Commission
P. O. Box 2088
Santa Fe, New Mexico 87501

Dear Dan:

I am almost afraid to add a supplement to what I told you, as it might add to further confusion. What I told you about the minimum allowable for the state of 35 barrels remains, and also the pools spaced on 40, 80 and 160 being given one barrel per 100' of depth, 1-1/4 barrel for 100' of depth, and 1-1/2 barrel per 100' of depth, respectively, plus 25 barrels for each.

What I neglected to tell you was that the allowable for wells in fields not spaced by order of the Commission, the following tabulation prevails:

4,000-4,500'	-	36 Barrels
4,500-5,000'	-	42 "
5,000-5,500'	-	48 "
5,500-6,000'	-	53 "
6,000-6,500'	-	57 "
6,500-7,000'	-	61 "
7,000-plus'	-	65 "

Yours very truly,

GWS:br

NM assume 40 BOPD

2 yr

2500' 730 x 40 = 29,200

5000 730 x 40 = 29,200

7500'
~~10,000~~ 730 x 94 = 68,620

10,000 730 x 151 = 110,230

5 yr 1826 x 40 = 73040

1826 x 40 = 73040

1826 x 94 = 171644

1826 x 151 = 275726

10 yr 3652 x 40 = 146,080

3652 x 40 146,080

3652 x 94 = 343288

365X x 151 55,452

La.

assume inkt factor of 33

2yr

2500 95 Bx .33 : 32 730 x 32 = 23360

5000 134 Bx .33 : 45 730 x 45 = 32850

7500 214 Bx .33 : 71 730 x 71 = 51830

10000 274 Bx .33 = 91 730 x 91 = 66430

5yr

2500 1826 x 32 = 58432

5000 1826 x 45 = 82170

7500 1826 x 71 = 129646

10000 1826 x 91 = 166166

10 yr

2500 3652 x 32 = 116864

5000 3652 x 45 = 164340

7500 3652 x 71 = 259292

1000 3652 x 91 = 332332

Taxes
assume Statutory min of 25

2yr 730 2500 (547 × 38) + (183 × 25) = 20786 + 4575 = 25361

5000 (547 × 75) + (183 × 50) = 41025 + 9150 = 50175

7500 (547 × 113) + (183 × 75) = 61811 + 13725 = 75536

10000 (547 × 150) + (183 × 100) = 82050 + 18300 = 99350

5yr 1826 2500 (547 × 38) + (1279 × 25) = 20786 + 31975 = 52761

5000 (547 × 75) + (1279 × 50) = 41025 + 63950 = 104975

7500 (547 × 113) + (1279 × 75) = 61811 + 95925 = 157736

10000 (547 × 150) + (1279 × 100) = 82050 + 127900 = 209950

10yr 3652 2,500 (547 × 38) + (3105 × 25) = 20786 + 77625 = 98411

5000 (547 × 75) + (3105 × 50) = 41025 + 155250 = 196275

7500 (547 × 113) + (3105 × 75) = 61811 + 232875 = 294686

10,000 (547 × 150) + (3105 × 100) = 82050 + 310500 = 392550

Okla
mkt factor of .339

2y 730

2500 (340 x 36) + (390 x 19) = 12240 + 7410 = 19650

5000 (480 x 48) + (350 x 22) = 23040 + 7700 = 30740

7500 730 x 81 = 59130

10000 730 x 108 = 78840

5y 1824

2500 (340 x 36) + (1486 x 19) = 12240 + 28234 = 40474

5000 (480 x 48) + (1346 x 22) = 23040 + 29612 = 52652

7500 (770 x 81) + (1056 x 34) = 62370 + 35904 = 98274

10000 (1000 x 108) + (826 x 47) = 108000 + 38822 = 146822

10y 3650

2500 (340 x 36) + (3312 x 19) = 12240 + 62928 = 75168

5000 (480 x 48) + (3172 x 22) = 23040 + 69784 = 92824

7500 (770 x 81) + (2882 x 34) = 62370 + 97988 = 160358

10000 (1000 x 108) + (2652 x 47) = 108000 + 124644 = 232644

Test
Answer 3077

2y 2500 730 x 60 = 43800

5000 730 x 100 = 73000

7500 730 x 160 = 116800

10000 730 x 200 = 146000

5y

2500 (730 x 60) + (1096 x 24) = 43800 + 26304 = 70104

5000 (730 x 100) + (1096 x 28) = 73000 + 30688 = 103688

7500 (730 x 160) + (1096 x 37) = 116800 + 40552 = 157352

10000 (730 x 200) + (1096 x 52) = 146000 + 57992 = 203992

10y 2500 (730 x 60) + (2922 x 24) = 43800 + 70128 = 113928

5000 (730 x 100) + (2922 x 28) = 73000 + 81816 = 154,816

7500 (730 x 160) + (2922 x 37) = 116800 + 108114 = 224,914

10000 (730 x 200) + (2922 x 52) = 146000 + 151944 = 297944

Regular Allowance

NM Same as other
LA " " "
Tex 2 yr " " "

5 yr 1
2500 1826 x 24 = 43824
5000 1826 x 28 = 51125
7500 1826 x 37 = 67562
10000 1826 x 52 = 94952

10 yr
2500 3652 x 24 = 87648
5000 3652 x 28 = 102256
7500 3652 x 37 = 135124
10000 3652 x 52 = 189904

Okla 2 yr
2500 730 x 19 = 13870
5000 730 x 22 = 16060
7500 730 x 34 = 24820
10000 730 x 47 = 34310

5 yr 2500 1826 x 19 = 34694
5000 1824 x 22 = 40172
7500 1824 x 34 = 62084
10000 1824 x 47 = 85822

10 yr 2500 3652 x 19 = 69388
5000 3652 x 22 = 80344
7500 3652 x 34 = 124168
10000 3652 x 47 = 171644

Tex 2 yr 2500 730 x 24 = 17520
5000 730 x 28 = 20440
7500 730 x 37 = 27010
10000 730 x 52 = 37960

Kans

2 yr
2500 730 x 25 = 18250
5000 730 x 50 = 36500
7500 730 x 75 = 54750
10000 730 x 100 = 73000

5 yr
2500 1826 x 25 = 45650
5000 1826 x 50 = 91300
7500 1826 x 75 = 136950
10000 1826 x 100 = 182600

10 yr
2500 3652 x 25 = 91300
5000 3652 x 50 = 182600
7500 3652 x 75 = 273900
10000 3652 x 100 = 365200

~~2500~~
2 YEARS

NM	~~29200~~	29,200 ✓	~~29200~~
LA	~~23360~~	23,360	~~23360~~
KANS	~~25361~~	(18250)	25,361
OKLA.	~~19650~~	(13,870)	19650
TEX.	~~43800~~	(17,520)	43,800

✓

2500
5 YEARS

NM	73,040	
LA	~~82170~~ 58,432	
KANS	~~35~~(45,650)	52761
OKLA	(34694)	40474
TEX	(43824)	70,104

2500
10 YEARS

NM	146,080	
LA	116,864	
KANS	~~98 47~~ (91300)	98,411
OKLA	(69,388)	75,168
TEX	(87648)	113,928

5000

2 YEARS

NM	29,200	
LA	32,850	
KANS	~~50175~~ (36,500)	50,175
OKLA	~~30740~~ (16,060)	30,740
TEX	7 (~~5 1125~~ 20,440)	73000

5000
5 YEARS

NM	73040	
LA	82,170	104,975
KANS	(91,300)	52,652
OKLA	(40,172)	
TEX	(51,125)	103,688

5000
5 YEARS

73040
82,170

(91,300)
(40,172)

104,975
52,652

(51,125)

103,688

5000
10 YEARS

NM	146,080	
LA	116,864	
KANS	(182,600)	196,275
OKLA	(80,344)	92,824
TEX	(102,256)	154,816

7500
2 YEARS

NM	68,620	
LA	51830	
K	(54750)	75,536
O	(24,820)	59,130
T	(27,010)	#116,800

7500
5 YEARS

NM	171,644	
LA	129,646	
K	(136,950)	157736
B	(62,084)	98,274
T	(67,562)	157,352

7500
10 YEARS

NM	343,288	
LA	259,292	
K	(273,900)	294,686
O	(124,168)	160,358
T	(135,124)	224,914

10000
2 YRS

NM	110,230	
LA	66430	
K	~~0~~ (73000)	99350
O	(34,310)	78840
T	(37960)	146000

10000
5 YRS

NM	275,726	
LA	~~58~~/66,166	
K	(182600)	209,950
O	(85,822)	146,822
T.	(94952)	202,992

10000
10 yrs

NM	551,452	
LA	332,332	
K	(365,200)	392,550
O	(171,644)	232,644
T	(189,904)	297,944

COMPARISON OF TEN-YEAR ALLOWABLES
NEW MEXICO VS. SEVERAL OTHER STATES
spacing: 40 acres

Depth Range

~~New Me~~	2500'			5000'			7500'			10,0…	
	Discy Allow	Reg Allow	Total Allow	Discy Allow	Reg Allow	Total Allow	Discy Allow	Reg Allow	Total Allow	Discy Allow	R… A…
New Mexico 1/	0	146,080	146,080	0	166,080	166,080	0	343,288	343,288	0	551…
Louisiana 2/	0	116,864	116,864 ~~164,340~~	0	164,340	164,340	0	259,292	259,292	0	332…
Texas 3/	26,280	87,648	113,928	52,560	102,256	154,816	94,170	113,212	207,382	108,040	189,…
Oklahoma 4/	3,740	69,388	73,128	8,640	80,344	88,984	25,410	124,168	149,578	43,000	171,…
Kansas 5/	4,563	91,300	95,863	9,125	182,600	191,725	13,688	273,900	287,588	18,250	365…

1/ Based on an assumed average normal unit allowable of 40 BOPD.
2/ Based on an assumed average market demand factor of 33 percent.
3/ Based on an assumed average market demand factor of 30 percent. Discovery allowable applies for tw…
Based on an assumed average market demand factor of 33 percent. Discovery allowable applies for from 340 f…
4/ Based on an assumed average depending on depth.
5/ Based on the usual Basic Proration Order contained in special pool rules to allow 1 BOPD for each 100 feet for regular allowable and 1.5 BOPD for each 100 feet for discovery allowable. Discovery allowable applies for 365 days.

COMPARISON OF TEN-YEAR ALLOWABLES
NEW MEXICO VS. SEVERAL OTHER STATES
spacing: 40 acres

← Depth Range

2500'			5000'			7500'			10,000'		
Discy Allow	Reg Allow	Total Allow	Discy Allow	Reg Allow	Total Allow	Discy Allow	Reg Allow	Total Allow	Discy Allow	Reg Allow	Total Allow
0	146,080	146,080	0	186,080	186,080	0	343,288	343,288	0	551,452	551,452
0	116,864	116,864 164,340	0	164,340	164,340	0	259,292	259,292	0	332,332	332,332
26,280	87,648	113,928	52,560	102,256	154,816	94,170	113,212	207,382	108,040	189,904	297,944
3,740	69,388	73,128	8,640	80,344	88,984	25,410	124,168	149,578	43,000	171,644	214,644
4,563	91,300	95,863	9,125	182,600	191,725	13,688	273,900	287,588	18,250	365,200	383,450

umed average normal unit allowable of 40 BOPD?
average market demand factor of 33 percent.
umed average market demand factor of 30 percent. Discovery allowable applies for two years.
med average market demand factor of 33 percent. Discovery allowable applies for from 340 to 1000 days,
n.
al Basic Proration Order contained in special pool rules to allow 180PD for each 100 feet
able and 1.5 BOPD for each 100 feet for discovery allowable. Discovery allowable
days.

COMPARISON OF FIVE-YEAR ALLOWABLES, NEW MEXICO VS. SEVERAL OTHER STATES

Spacing: 40 acres

	Depth Range 2,500'			5,000'			7,500'			
	Discovery Allowable	Req Allow	Total Allowable	Discy Allow	Req Allow	Total Allow	Discy Allow	Req Allow	Total Allow	Discy Allow
New Mexico [2] (~~Assume an average Normal Unit Allowable of 40 BOPD~~)	0	83,040	83,040	0	83,040	83,040	0	171,644	171,644	0
Louisiana [2] (~~Assume an average Mkt. Det Demand Factor of 33 per cent~~)	0	58,432	58,432	0	82,170	82,170	0	129,646	129,646	0
Texas [3] (~~Assume an average Market Demand Factor of 30 percent~~)	26,280	43,824	70,104	52,560	51,128	103,688	94,170	56,606	150,776	108,040
Oklahoma [4] (~~Assume an average Market Demand Factor of 35 percent~~)	3,740 ~~6,160~~	34,694 ~~10,2~~	38,434	8,640	40,172	48,812	25,410	62,084	87,494	43,000
Kansas [5] (~~Based on special "Basic Proration Orders" with 1 BOPD per 100 foot of depth regular allowable plus 1/5 BOPD per 100 foot of depth discovery allowable~~)	4,563	45,650	50,213	9,125	91,300	100,425	13,688	136,950	150,638	18,250

1/ Same as
2/ ten-year
3/ check.
4/
5/

COMPARISON OF FIVE-YEAR ALLOWABLES
NEW MEXICO VS. SEVERAL OTHER STATES
Spacing: 40 acres

Depth Range

	2,500'			5,000'			7,500'			10,000'		
	Discovery Allowable	Reg Allow	Total ~~Regular~~ Allowable	Discy Allow	Reg Allow	Total Allow	Discy Allow	Reg Allow	Total Allow	Discy Allow	Reg Allow	Total Allow
~~… average … Allowable … PD)~~	0	83,040	83,040	0	83,040	83,040	0	171,644	171,644	0	275,726	275,726
~~… verage Mar- … d Factor … ent)~~	0	58,432	58,432	0	82,170	82,170	0	129,646	129,646	0	166,166	166,166
~~… verage Mar- … Factor … ent)~~	26,280	43,824	70,104	52,560	51,128	103,688	94,170	56,606	150,776	108,040	94,952	202,992
~~… verage Market … ctor of 35~~	3,740 ~~6,460~~	34,694 ~~18,2~~	38,434	8,640	40,172	48,812	25,410	62,084	87,494	43,000	85,822	128,822
~~… ial "Basic … ers" with … 0 foot of … allowable … 0 per 100 feet of~~ … very allowable)	4,563	45,650	50,213	9,125	91,300	100,425	13,688	136,950	150,638	18,250	182,600	200,850

… ar
… -year
… eet.

COMPARISON OF TWO-YEAR ALLOWABLES
NEW MEXICO VS. SEVERAL OTHER STATES
Spacing: 40 Acres

Depth Range

	2,500'			5,000'			7,500'			10,0
	Discovery allowable	Regular allowable	Total allowable	Discovery allowable	Regular allowable	Total allowable	Discovery allowable	Regular allowable	Total allowable	Discov allowa
New Mexico [1]	0	29,200	29,200	0	29,200	29,200	0	68,620	68,620	0
Louisiana [2]	0	23,360	23,360	0	32,850	32,850	0	51,830	51,830	0
Texas [3]	~~17,520~~ ~~17,520~~ 26,280	~~26,280~~ 17,520	43,800	20 52,560	20,440	73,000	94,170	22,630	116,800	10[illegible]
Oklahoma [4]	3,740	13,870	17,610	8,640	16,060	24,700	24,090	24,820	48,910	31,3
Kansas [5]	4,563	18,250	22,813	9,125	36,500	45,625	13,688	54,750	68,438	18,25

1/
2/ Same as others
3/
4/
5/

COMPARISON OF TWO-YEAR ALLOWABLES
NEW MEXICO VS. SEVERAL OTHER STATES
Spacing: 40 Acres

Depth Range

2,500'			5,000'			7,500'			10,000'		
Discovery allowable	Regular allowable	Total allowable	Discovery allowable	Regular allowable	Total allowable	Discovery allowable	Regular allowable	Total allowable	Discovery allowable	Regular allowable	Total allowable
0	29,200	29,200	0	29,200	29,200	0	68,620	68,620	0	110,230	110,230
0	23,360	23,360	0	32,850	32,850	0	51,830	51,830	0	66,430	66,430
~~0~~ 20	~~26,280~~ 17,520	43,800	52,560	20,440	73,000	94,170	22,630	116,800	108,040	37,960	146,000
3,740	13,870	17,610	8,640	16,060	24,700	24,090	24,820	48,910	31,390	34,310	65,700
4,563	18,250	22,813	9,125	36,500	45,625	13,688	54,750	68,438	18,250	73,000	91,250

[illegible] an alter[illegible]

Texas
assume 80 %

10 years ~~2000'~~

2500' $3652(.30 \times \frac{78}{\cancel{80}}) + [730(60) - 730(.30 \times \frac{78}{\cancel{80}})]$

$3652(24) + 43800 - 730(24)$

$87648 + 43[illegible] = 17[illegible]$

$87,648 + 26,2[illegible] = 1[illegible]$

5000' $3652(.30 \times \frac{93}{100}) + [730(100) - 730(.30 \times 93)]$

$3652(24) + 73000 - 730(28)$

$102,256 + 73000 - 20440$

$102,256 + 52,560 = 154816$

7500' $3652(.30 \times 102) + [730(160) - 730(.30 \times 102)]$

$3652(31) + 116800 - 730(31)$

$113,212 + 116800 - 22630$

$113,212 + 94,170 = 207,382$

10,000' $3652(.30 \times 172) + [730(200) - 730(.30 \times 172)]$

$3652(52) + [illegible] - 730(52)$

$189904 + 146,000 - 37960$

$189904 + 108040 = 297,944$

---

5 ~~yrs~~ yrs. $1826(.30 \times 78) + [730(60) - 730(.30 \times 78)]$

$1826(24) + 26,280 = 43824 + \cancel{5128}\ 26,280 = 70104$

$1826(.30 \times 93) + [730(100) - 730(.30 \times 93)]$

$1826(28) + 52,560 = 51,128 + 52,560 = 103688$

$1826(.30 \times 102) + [730(160) - 730(.30 \times 102)]$

$1826(31) + 94,170 = 56,606 + 94,170 = 150776$

$1826(.30 \times 172) + [730(200) - 730(.30 \times 172)]$

$1826(52) + 108,040) = 94,952 + 108,040 = 202992$

2 yrs 2500' ~~26,280~~ ~~+7520 + 8760 = 26,280~~ 17,520 + 26,280 = 43,800

5000' ~~52,560~~ ~~20,440 + 32120 = 52,560~~ 20,440 + 52,560 = 73,000

7500' ~~94,170~~ ~~22,630~~ 22630 + 94170 = 116,800

10000' ~~108040~~ 37960 + 108,040 = 146,000

New Mexico
assume 40 BOPD

5 years	2500'	1826 days @ 40 = ~~83,040~~	
	5000'	1826 days @ 40 = ~~83,040~~	
	7500'	1826 days @ (40 x 2.33) = 171,644	
	10,000'	1826 days @ (40 x 3.77) = 275726	
10 years	2500'	3652 days @ 40 = 166,080	146080
	5000'	3652 days @ 40 = 166,080	14680
	7500'	3652 days @ (40 x 2.33) = 343,288	
	10,000'	3652 days @ (40 x 3.77) = 551,452	

2 yrs	2500	730 days @ 40 = 29,200	
	5000	730 days @ 40 = 29,200	
	7500	730 days @ (40 x 2.33)	68,620
	10,000	730 days @ (40 x 3.77)	110,230

Oklahoma

annual 33%

5 years 2500' $1826(.33 \times 57) + [340(30) - 340(.33 \times 57)]$

$1826(19) + (10200 - 6460)$

$34694 + (10200 - 6460) = 34694 + 3740 = 38434$

5000' $1826(.33 \times 65) + [480(40) - 480(.33 \times 65)]$

$1826(22) + (19,200 - 10560)$

$40172 + (19200 - 10560) = 40172 + 8640 = 48,812$

7500' $1826(.33 \times 101) + [770(67) - 770(.33 \times 101)]$

$1826(34) + (51590 - 26180)$

$62084 + (51590 - 26180) = 62084 + 25410 = 87494$

10,000' $1826(.33 \times 141) + [1000(90) - 1000(.33 \times 141)]$

$1826(47) + (90,000 - 47000) =$

$85822 + (90,000 - 47000) = 85822 + 43000 = 128,822$

10 yrs 2500' $3652(19) + 3740$

$69388 + 3740 = 73128$

5000' $3652(22) + 8640$

$80344 + 8640 = 88,984$

7500' $3652(34) + 25410$

$124168 + 25410 = 149578$

10,000' $3652(47) + 43000$

$171,644 + 43000 = 214,644$

2 yrs ~~5000' $730(67) - 48910$ Total, less $730(34)$ Req = 24090~~

2500' $730(19) + [340(30) - 340(19)] = 13870 + [10,200 - 6460] = 13870 + 3740 = 17,610$

5000 $730(22) + [480(40) - 480(22)] = 16060 + [19200 - 10560] = 16060 + 8640 = 24700$

7500' $730(34) + [730(67) - 730(34)] = 24820 + [48910 - 24820]$

$= 24820 + 24090 = 48910$

10000 $730(47) + [730(90) - 730(47)] = 34310 + [65700 - 34310]$

$= 34310 + 31390 = 65,700$

Louisiana
annual 33%

5 yrs 2500' 1826 (.33 x 95) = 1826 x 32 = 58,432

5000' 1826 (.33 x 134) = 1826 x 45 = 82,170

7500' 1826 (.33 x 214) = 1826 x 71 = 129,646

10,000 1826 (.33 x 274) = 1826 x 91 = 166,166

10 yrs 2,500' 3652 (.33 x 95) = 3652 x 32 = 116 864

5,000' 3652 (.33 x 134) = 3652 x 45 = 164 340

7,500' 3652 (.33 x 214) = 3652 x 71 = 259292

10,000' 3652 (.33 x 274) = 3652 x 91 = 332332

2 yrs 2500 ~~3652~~ 730 (.33 x 95) = 23,360

5000 730 (.33 x 134) = 32850

7500 730 (.33 x 214) = 51,830

10,000 730 (.33 x 274) = 66,430

Kansas

5 yrs 2500' $(1826 \times 25) + [1.5(365 \times 25) - (365 \times 25)]$

45,650 + 1.5(9125) − 9125

45,650 + 13688 − 9125

45,650 + 4563 = 50,213

5000' $(1826 \times 50) + [1.5(365 \times \frac{50}{25}) - (365 \times 50)]$

91,300 + 1.5(18250) − 18250

91,300 + 27,375 − 18250

91,300 + 9125 = 100,425

7500' $(1826 \times 75) + [1.5(365 \times 75) - (365 \times 75)]$

136950 + 1.5(27375) − 27375

136950 + 41,063 − 27375

136950 + 13688 = 150,638

10,000' $(1826 \times 100) + [1.5(365 \times 100) - (365 \times 100)]$

182600 + 1.5(36500) − 36500

182600 + 54750 − 36500

182600 + 18250 = 200,850

10 yrs 2500' $(3652 \times 25) + 4563$

91300 + 4563 = 95,863

~~5000' 182600 + 9125 =~~

5000' $(3652 \times 50) + 9125$

182600 + 9125 = 191,725

7500' $(3652 \times 75) + 13,688$

273,900 + 13688 = 287,588

10000' $(3652 \times 100) + 18250$

365200 + 18250 = 383,450

2 yrs 730(25) + ~~125~~ 4563 = 18250 + 4563 = 22813

730(50) + 9125 = 36500 + 9125 = 45625

730(75) + 13688 = 54750 + 13688 = 68438

730(100) + 18250 = 73000 + 18250 = 91250

Ols
pet

PRESS RELEASE

Railroad Commission Chairman Ben Ramsey announced that the Railroad Commission of Texas, at a formal conference held May 31, 1966, approved an amendment to its Rule 42 (c) of the General Rules of Statewide Application increasing the number of wells eligible to participate during the twenty-four month discovery period from five to ten wells. This action was taken as a result of the hearing held May 18, 1966, to consider this matter - Oil and Gas Docket No. 20-56,342. This order will apply to all future onshore discoveries and those fields onshore currently enjoying discovery allowable as of May 31, 1966.

RAILROAD COMMISSION OF TEXAS
OIL AND GAS DIVISION

OIL AND GAS DOCKET

NO. 20-56,342

IN RE: CONSERVATION AND PREVENTION OF WASTE OF CRUDE PETROLEUM AND NATURAL GAS IN THE S T A T E O F T E X A S

Austin, Texas

May 31, 1966

SPECIAL ORDER
AMENDING RULE 42 (c) OF THE GENERAL CONSERVATION RULES OF STATEWIDE APPLICATION, STATE OF TEXAS

WHEREAS, After due notice, the Railroad Commission of Texas held a hearing on May 18, 1966, to consider the adoption of an amendment to Rule 42 (c) of the General Conservation Rules of Statewide Application, State of Texas; and

WHEREAS, From testimony adduced into the record by numerous operators, it appeared to the Commission that an increased incentive for onshore exploration operations was considered desirable and was urged by all parties who participated in the hearing, and that a reasonable increase in the number of wells allowed to participate during the discovery allowable period was an acceptable means of increasing exploration operations; and

WHEREAS, From the testimony adduced into the record considered in conjunction with other pertinent facts and information available to the Commission from its own records and files, the Commission is of the opinion that the proposed increase in exploration incentives by increasing the number of wells allowed to participate during the discovery allowable period has merit and should be adopted.

THEREFORE, IT IS ORDERED By the Railroad Commission of Texas that effective May 31, 1966, RULE 42 (c) of the General Conservation Rules of Statewide Application, State of Texas, be and it is amended to hereafter read and provide as follows:

RULE 42 (c) (1): Each oil well drilled in a new field onshore or in a new oil producing reservoir onshore within the confines of an established field may receive, as a maximum daily, its discovery oil allowable, exempt from market demand limitation, for a period of twenty-four (24) months from the date of assignment of the oil allowable to such discovery well or until the eleventh (11th) oil well has been completed therein, whichever occurs first.

(2): Each oil well drilled in a new field offshore or in a new oil producing reservoir offshore within the confines of an established field may receive, as a maximum daily, its discovery oil allowable, exempt from market demand limitation, for a period of eighteen (18) months from the date of assignment of the oil allowable to such discovery well or until the sixth (6th) oil well has been completed therein, whichever occurs first.

IT IS FURTHER ORDERED That this amendment will apply to all future onshore discoveries and to all onshore fields that are currently enjoying discovery allowable status on the effective date of this order.

IT IS FURTHER ORDERED That this cause be held open on the docket for such other and further orders as may be necessary.

RAILROAD COMMISSION OF TEXAS

Chairman

Commissioner

Commissioner

ATTEST:

Secretary

State of Kansas

State Corporation Commission

TOPEKA, KANSAS

July 7, 1966

Mr. Ray Graham
State Land Office
Santa Fe, New Mexico

Dear Mr. Graham:

As you know the discovery allowable was first enacted by order of the Commission on July 23, 1965, with an effective date of July 1, 1965. This was pursuant to statutory changes made by the 1965 general session of the Kansas Legislature. On May 26, 1966, we amended the discovery allowable and you have copy of the amendment.

The reason for the change in the original discovery allowable rule was that the original rule was too restrictive, and after hearing, a new rule was adopted which essentially provides as follows:

1. Ten wells may benefit instead of four;

2. The allowable may be for a period of 18 months instead of 12;

3. Discovery allowable may be obtained for each newly discovered pool or source of supply in the same well bore;

4. Discovery allowable may be obtained by the operator of any one of the first 10 wells in a pool.

One of the administrative problems arising from the discovery allowables is a sorting out of the evidence with respect to new pools as distinguished from extensions of the old pools. Most operators feel that all new wells are located in discovery pools, although occasionally the evidence later indicates that they are merely extensions of existing pools.

There is no question but what bonus allowables have been an effective tool in securing financing for the additional drilling of wells. This has been particularly true the last several months during the tight money situation in the United States. Most people are willing to take a long gamble if they feel proration is not too restrictive with respect to recovering their initial investment. Discovery allowables are sure not a panacea, but they do provide a working tool for securing wildcat

financing. This is important in Kansas because our wildcat exploring is pretty much confined to small pimples of oil in scattered locations.

I would appreciate receiving any copy of any discovery allowable rule which you adopt.

It is interesting to note that for the first four months of 1966, wildcat drilling increased 23.6% over the corresponding period for 1965. However, development wells were 18% below the same comparative period for 1965. This still indicates an increase of approximately 6% in drilling activity during the first four months of 1966 over 1965.

With kindest personal regards and best wishes, I remain

Very truly yours,

William L. Mitchell, Chairman

WLM:tk

Reserves

	1961		1965	
✓ Kans	878	million	752	million
✓ Okla	1,787	"	1,517	"
La.	4,931	"	5,246	"
✓ Tex	14,850	"	14,303	"
N Mex	1,090	"	895	"

1. Let the record show that Ms. Nutter has already been sworn.

2. State your name and position again for the record please.

July 19, 1966 Reg. Hearing — Questions to be asked

Case 3424: Discovery Allowable — 1

For:

1. Swear the witness

2. Mr. Nutter, as a little background will you tell us why a discovery allowable is being considered by the Commission today?

3. You have prepared statements and exhibits as evidence both for and against a ~~to~~ discovery allowable.

4. Now, in your opinion why should a discovery allowable be adopted?

Ex. 1 — 10 year comparison of wildcatting activity.

5. Refer to red lines on exhibit No. 1: What do the red lines on exhibit No. 1 show?

6. What has been the result of this decrease in wildcat drilling activity?

Ex 2 Wildcat Success Ratio.

7. With relation to New Mexico's success ratio as depicted on exhibit No. 2, why would there be a decrease in reserves?

Exs. 3-14 Small exhibits

8. Refer to exhibits 3 through 14: represent Please tell the Commission what these are

9. Is there anything shown on exhibits 3 through 14 that would indicate the desirability or necessity of a discovery allowable?

10. Now refer specifically to exhibit No. 3 = Does exhibit no. 3 indicate the desirability or necessity of a discovery allowable?

[redacted] Does exhibit no. 4 show such a road?

Exhibits 3 - 14

[redacted] Does exhibit no. 5?
[redacted] Exhibit no. 6?
Exhibit no. 7?
Exhibit no. 8?
Exhibit no. 9?
Exhibit no. 10?
Exhibit no. 11?
Exhibit no. 12?
Exhibit no. 13?
Exhibit no. 14?

11. Summarizing exhibits 3 through 14, is there apparent any group of wells or period of time in which the necessity for a discovery allowable is indicated?

12. Does this situation improve when the comparison is made upon a 5 year basis?

64.3-14 → 13. What happens to the allowables in respect to a 10 year period?

Exhibits 1-2
Exhibits 3-14

14. Would you summarize briefly the reasons you have given why the commission should ~~adopt~~ consider adopting a discovery allowable?

15. Do you have any suggestions as to what could be offered in the way of a discovery allowable?

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against:

Exhibit 1 → 1. Refer to exhibit No. 1 again = In respect to the 5 producing states of N. M., La., Kan., Okla., and Tex. what does this exhibit show?

2. Why did you use 1956 as an index?

3. What does this exhibit show in the way of wildcat activity as between groups, such as New Mex. and La. as one group and Kan., Okla., and Texas as another?

4. Using this index, how many times has New Mex. or La. led the 5 states in wildcat activity?

5. Which states have led in wildcat activity during the last 5 years?

6. Is there any one thing that is peculiar to New Mex. and La. but not the other 3 states?

Exhibit 1

7. What has generally happened in the 3 states that do have a discovery allowable?

8. What has happened in Texas?

9. What has happened in Kan?

10. What has happened in Okla?

11. Your exhibit showed the years 1956 through 1965 = Do you have any recent figures relating to 1966?

12. Awhile ago in discussing the reason why a bonus should be adopted you mentioned that New Mexico has sustained a decrease in reserves = what is the reserve picture in relation to these other 4 states?

Ex. 1 →

13. In your opinion is there any indication the discovery allowable has helped wildcatting and reserves in the 3 states that have it?

Ex. 3-14 →

← Refer to exhibits 3 through 14 =
14. In your opinion is there any evidence that the discovery allowable has in fact hindered development?

Ex. 15 comparing 40 acre allowables

15. Refer to exhibit 15 = What does ~~this~~ exhibit 15 show?

16. I notice that the red line appears to be higher than the other lines = Can you explain the reason?

17. Does the red ~~line~~ line indicate anything that should be corrected?

18. Do you recommend that a study be made concerning possible adjustment of the depth factor?

19. What would ~~the~~ be the possible effect of the adaption of ~~the~~ a discovery allowable?

Ex. 15

20. How would the red line in exhibit 15 be affected in your opinion?

21. ~~the last pool~~
You have given reasons why New Mexico should not adopt a discovery allowable; what would you suggest as alternatives which the Commission could follow to enhance wildcat activity in the state?

21. Were these exhibits prepared by you or under your supervision?

22. Move that exhibits be admitted into evidence?

In the matter of the hearing called by the Oil Conservation Commission on its own motion to consider all aspects of the possible adoption of a ~~bonus~~ bonus discovery allowable for the State of New Mexico. Although testimony ~~to~~ both pro and con the ~~each~~ discovery allowable will be presented by the Commission staff, the Commission invites and will entertain full discussion and testimony from the industry as to the advantages and disadvantages of a discovery allowance and the advisability of the adoption thereof, as well as suggestions relating to the administration of a bonus discovery allowance, the amount of the allowance, the length of time and the number of wells to which it should apply, and any other pertinent facts relating thereto.