[redacted]

Case No.

2503

Petition, Transcript,

Bill Exhibits, Etc.

BEFORE THE
OIL CONSERVATION SOMMISSION
Santa Fe, New Mexico
August 15, 1962

IN THE MATTER OF:

Application of the Oil Conservation Commission, on its own motion, to consider the establishment of minimum gas allowables in the Blanco-Mesaverde, Aztec-Pictured Cliffs, Ballard-Pictured Cliffs, Fulcher Kutz-Pictured Cliffs, South Blanco-Pictured Cliffs, and West Kutz-Pictured Cliffs Gas Pools, San Juan, Rio Arriba and Sandoval Counties, New Mexico. Case 2503

BEFORE: Honorable Edwin L. Mechem
Mr. A. L. "Pete" Porter
Mr. E. S. "Johnny" Walker

TRANSCRIPT OF HEARING

MR. PORTER: We will proceed to Case 2503.

MR. PAYNE: Application of the Oil Conservation Commission, on its own motion, to consider the establishment of minimum gas allowables in the Blanco-Mesaverde, Aztec-Pictured Cliffs, Ballard-Pictured Cliffs, Fulcher Kutz-Pictured Cliffs, South Blanco-Pictured Cliffs, and West Kutz-Pictured Cliffs Gas Pools, San Juan, Rio Arriba and Sandoval Counties, New Mexico.

MR. PORTER: I would like to call for appearances at the beginning of the case, please.

MR. HOWELL: Ben Howell, Garrett, Whitworth and the firm of Seth, Montgomery, Federici and Andrews for El Paso Natural Gas Company.

MR. PORTER: Mr. Keleher.

MR. KELEHER: Pubco Petroleum Corporation; W. A. Keleher, Attorney; Frank Gorham, Executive Vice President.

MR. PORTER: Anyone else desire to make an appearance in this case? The Commission will have one witness. We will proceed with his testimony first.

(Witness sworn.)

ELVIS A. UTZ

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

DIRECT EXAMINATION

BY MR. PAYNE:

Q Will you state your name and position, please?

A Elvis A. Utz, Engineer with the Oil Conservation Commission.

Q Mr. Utz, have you made a study of the production and deliverability of wells in six of the prorated gas pools in Northwest New Mexico with a view toward recommending minimum

allowables?

A Yes, I have.

Q Is there any particular reason why you felt that minimum allowables might be necessary or desirable?

A Yes, there is.

Q Would you explain those to the Commission, please?

A The purpose of this testimony is to show the need of minimum allowables and the effect of the various minimum allowables for the South Blanco-Pictured Cliffs, West Kutz-Pictured Cliffs, Fulcher Kutz-Pictured Cliffs, Aztec-Pictured Cliffs, Ballard-Pictured Cliffs, and Blanco-Mesaverde.

The needed minimums is as follows: The New Mexico Statutes in 1953, 65-3-14 Paragraph (d) gives the Oil Commission the authority to establish minimums. Rule 11 of Order No. R-1670, the general gas proration order which was written several years ago recognizes the fact that minimum allowables may be advisable to prevent the premature abandonment of small wells which receive allowables based on the formulas which are too low to prevent premature abandonment. Wells which are plugged and abandoned because of extremely low allowables will certainly cause waste of gas which could be recovered.

2. To establish a producing level in the above-mentioned six prorated gas pools below which the wells in the pools would

not be subject to the proration requirements of Order No. R-1670 so long as the wells do not produce above the established level. These requirements consist of deliverability testing and over-production shut-in. Wells in this category would be classified as exempt marginal wells. The purchaser usually leaves this classification of well on the line continuously which in effect prorates them on 100% deliverability and eliminates the need of switching. This classification of wells will eliminate administrative expense for the Commission. Without a minimum, allowables must be calculated each month and reclassification accomplished periodically on many wells of questionable economic value. With a minimum these wells would remain constant in allowables and classification, and would not be subject to shut-in orders, which in many cases is damaging to the wells, particularly in respect to the wells which produce liquids.

Q Basically, then, it's your opinion that minimums are necessary in order that the operator will receive reasonable lifting cost and prevent premature abandonment?

A That is correct.

Q Now, what about the acreage factor in the formula, Mr. Utz? Isn't that sufficient to handle the problem?

A No, sir, it is not. The acreage factor in all the pools that I am recommending is substantially below the minimums that

I intend to recommend except in one pool in which I am not giving any testimony in regard to, which is Tapicito, the acreage factor in Tapicito is something close to 2500 MCF a month. For that reason I am not including it in this testimony.

Q You are not recommending a minimum allowable for Tapicito-Pictured Cliffs?

A Not at this time, no.

Q Now, turning to your study, Mr. Utz, what time period of production is used?

A The data on all my exhibits, including the graphs on the wall, are based on 1961 production. The wells that were on the line are connected on which we had deliverability tests at the end of 1961.

Q Do you have the total figure of wells that were considered?

A Yes, sir, they were, in all six pools there were 3979 wells considered.

Q You didn't consider any wells that were drilled in 1962, then, in arriving at your data?

A No. I couldn't very well do that because I had to draw the line somewhere and start making a study. There were approximately 250 wells connected since the first of the year. I don't believe that these 250 wells would change this picture enough

to be, hardly be able to tell it on the graphs.

Q What about subsequent production from the older wells, the wells that are already drilled?

A Well, of course, subsequent production, or the decrease in the ability to produce since the first of the year, would vary substantially in almost all cases, particularly in the area which we're concerned about here, the decrease could be substantial.

Q Would that increase or decrease, or not, effect the need for minimum allowable?

A Well, that would increase the need for minimum allowables and also increase the effect.

Q In making your study, what particular data did you use, Mr. Utz?

A Well, the data used was, as I have previously stated, 1961 production deliverability of the wells, the study was made on standard units as a matter of convenience as a matter of being able to make a study; as a matter of fact, trying to consider non-standard units would be almost impossible. The producing ability of the wells was taken into consideration first in making classifications which are shown on our exhibits.

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

Q Now, referring to your Exhibit No. 1, would you explain to the Commission what is reflected thereon?

A Exhibit No. 1 is the graph shown on the left which has South-Blanco-Pictured Cliffs portrayed and the Blanco-Mesaverde, which I will pass up and go on and pick up the Pictured Cliffs Pools first. The vertical scale is allowable in million cubic feet per month, 5, 10, 15, 20 million. The horizontal scale is the deliverability in million cubic feet per day. Those of you who may not be able to see it, there's a dot after the three, or between where there are any two numbers, which is a million cubic feet.

The graphs merely show the relationship between the minimums which I have made a study on and what I have chosen to call the zero minimum, which is actually prorating without any minimum at all on the basis of the formula as is done now.

In other words, the zero minimum curve, such as is shown here, is prorating on the 25-75 formula.

Now, this graph also shows the breaking point, and at this time I probably should clarify the meaning of breaking point. Even on the 25-75 formula with no minimums considered, we have a point below which all wells are on 100% deliverability or producing their maximum ability to produce gas into the line under existing conditions. Above that point the wells are prorated

on the basis of the formula. So the breaking point, to be brief, is the point at which wells go from 100% deliverability or their maximum ability to produce under existing conditions and are curtailed to some extent by the formula.

This breaking point is shown here which started at zero and comes up on a steep incline to a point where the formula takes over and then it's a smooth curve from there on out to the 25-75 formula. This curve is the uppermost curve that may be seen.

The next curve shown here is 1500 minimum, which, as you may see, is slightly below the zero minimum. The next one is 2,000 minimum, which is also a little bit further below. The reason these are farther below the zero minimum is because we have taken allowables from established minimums. We take allowables from somewhere, they have to come from somewhere because there's only so much demand from the pool, that allowable has to come from the better wells in the pool. It slides on down the scale to the wells which are affected by minimum assignments; this small flat curve here shows those wells which are assigned the minimum of two million in regard to South Blanco; so all the wells from the graphic standpoint that are affected by the minimums are the wells from the zero minimum breaking point, which is at this point up to the minimum, and then, of course, those that are

shown on the flat curve. As you can see readily on South Blanco, the effect is not too great.

West Kutz-Pictured Cliffs, I'll just go briefly through these because these are all exactly the same except for the show and affect. We note here we have a zero minimum, 1000, 1500 shown. The breaking point again goes up to a certain point here and then on the zero minimum goes directly over without any flat spot. The higher we go in minimums the higher the 100% deliverability wells, and in this case the more we have assigned the straight minimum either on a million, 1500 or 2000.

I will call your attention to the fact that on this graph that this pool is probably most affected by any minimum that we would put into effect. That is graphically shown by the spread between the various curves. The Fulcher Kutz would be the next most affected pool by minimums. Aztec-Pictured Cliffs, a thousand minimum would not be effective under the present conditions of development and market demand; 1500 and 2000 were. As we see, the curves are quite close together so the effect would not be very great. The Ballard-Pictured Cliffs, which has quite a number of wells in it, 932 I believe, had an effect for all three minimums studied. As we see, the thousand had very little effect. The 1500, quite more, and the 2000 still a little bit more.

This, as I previously stated, is an attempt to try to show what the effect would be graphically. The same data that is used to make the graphs I have tried to put in tabular form on subsequent exhibits. These exhibits will show the exact number of wells affected and the percentage, each group of wells to the total and the amount of allowable based on the conditions of this study which would be transferred from group 4 wells or the better wells in the pool; in other words, the wells above the flat area on the graph down to the wells in the flat area on the graph as well as the steep breaking point area.

Q Now, before you go into Exhibit 3, Mr. Utz, did you want to explain anything about the Blanco-Mesaverde and how it may differ from your proposal in the Pictured Cliffs Pools?

A Well, I may as well. On the Blanco-Mesaverde Pool, which is a deeper pool, I've shown the same type of graph except that only a three million minimum was shown on the graph simply because the 1000, 1500, 2000 or 2500 would not be effective at this time.

Q Now, the difference between the zero minimum line and the minimum allowable line as proposed becomes more pronounced as the pools become more depleted?

A Yes, sir, it certainly will.

Q Now, your Exhibit 3, which is your tabulation, is that

available for the people at the hearing?

A Yes, it's been available ever since this morning -- to some people since yesterday.

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

MR. PORTER: Before we get into the next exhibit, we are going to recess the hearing until 1:15.

(Whereupon, a recess was taken.)

MR. PORTER: The hearing will come to order, please. Mr. Payne, would you go ahead with your examination of Mr. Utz?

Q (By Mr. Payne) Mr. Utz, turning to Exhibit 3, which is the first page of your tabulation here, does that show the same information in a different manner as is contained on Exhibit 1?

A Yes, it does.

Q Would you explain it, please?

A I think probably the best way to explain the well groupings is to explain it in connection with the graph. The group 1 on the groupings on the left is grouping 1, 2, 3 and 4. The group 1 are the wells which are on 100% producing ability, and below the breaking point, as you will note by following across from left to right, there are the same number of wells in every group. That is the group of wells from zero deliverability up to the zero minimum breaking point in this area right in here.

Group 2 would be the wells with a producing ability of less than the minimum, but would be assigned more than the breaking point allowable up to the minimum.

Q You are just talking generally now rather than about the South Blanco-Pictured Cliffs?

A Yes, I'm talking generally because all the breakdowns are in the same grouping. That would be the group of wells from the zero minimum breaking point up to the minimum breaking point from whatever minimum is under consideration.

The group 3 would be the wells in their group which calculate less than the minimum allowable, but were taken into consideration, but are assigned the minimums so that we don't have wells assigned allowables less than the minimum. That is the group of wells that are on the horizontal curve.

Group 4 is the wells from where the curve breaks and goes up into the formula. In other words, group 4 is the wells that are prorated on the basis of the formula.

Q Now, taking it pool by pool, would you explain your exhibit?

A The first pool I'll take up is South Blanco. I'll try to be as brief as I can with these things, but I think necessarily it will have to take a little time as I go through them, so there may be questions, clarification questions even when I get

through. We know what the groups 1, 2, 3 and 4 are, and this is an effort to compare the same groupings of wells with the zero minimum as with various minimums that I took under consideration.

So the left-hand column, or the zero minimum column would be the breakdown in accordance with straight formula. It would be 199 wells or 21.4% of the wells on 100% producing ability. 733 or 78% of the wells would be on the basis of the formula. We have allowables calculated on that basis.

I think I may as well call your attention to the fact that there are 932 wells considered in all of these various breakdowns. The allowable which is an average monthly allowable for the period in 1961 is 3,346,678. Following to the right under 1000 minimum, 1000 minimum, South Blanco, would not be effective under the present conditions of market demand and development.

Q By effective, what do you mean, Mr. Utz?

A Well, there would be no wells in groups 2 and 3. No wells would be affected by a minimum.

Following to the right, the comparison between the zero minimum and 1500 minimum would be as follows: there would be six wells in group 2 and four wells in group 3. Now, to further explain the transfer of allowable, as I've attempted to show on these exhibits, you recall when I made the statement in relation to the graph that there was only so much allowable in the pool and

if we make a shift in allowable it has to come from somewhere. In this case, when we're shifting allowable downstairs to small wells in order to make them an economic venture to prevent premature abandonment, that allowable has to come from larger wells. In this case here I've shown by these arrows on the zero minimum column for group 4 where that allowable goes, and it comes from group 4 under zero minimums and goes to groups 2 and 3.

Now, the figures in the brackets show the volume of transfer and the percentage of the group 4 allowable which was transferred. Going forward with 1500 minimum, you will see that out of the 3,162,525 that there is none of that allowable transferred to group 2 and only 341 or .01% to group 3, group 3 being the wells which calculate less than the allowable when using the factors or less than the minimum when using the factors, but are assigned a minimum.

For the 2000 minimum, group 2, we have 146 wells or 15.7%, in group 2, or .8% in group 3. You transfer allowable, in this case there's no allowable transferred to group 2 when using a two million minimum and only 2,123 or .07% to group 3.

Q So, at the present time the effect on this pool would be slight?

A Very slight when using a two million minimum.

Q But you expect it to increase as the pool is depleted?

A Yes, it will increase as more wells fall into the minimum category. For West Kutz I'll try to run through it briefly with the note that when using zero minimum we have 23 wells below the breaking point. We have 156 wells that are on the formula. Using the 1000 minimum, we have 37 out of 179 wells, 79 wells or 20% in group 2 and 10% in group 3, that's approximately 30% of the wells affected by the 1000 minimum. The transfer of allowable from group 4 under zero minimum would be none to the group 2 and 2728 or 1.36% of the group 4 allowable to group 3.

Under 1500 it has considerably more effect. We would have 86 or 48% of the wells in group 2 being affected, 23 or 12.8% in group 4. In other words, we would have 26% of the wells, or 47 wells would still be on the formula. The transfer of allowable from group 4 would be in the order of 7.7% to groups 2 and 3. That's in percent of the 131,188.

2000 minimum, we have 111 wells in group 2, still just 23 in group 3, which would be 74.8% of the wells affected by minimums. We would still have 22 wells under the formula, or 12%. The transfer of allowable from group 4 in the zero minimum would be in the order of about 23.3% to groups 2 and 3.

Q In this particular pool the effect would be rather significant?

A Yes, it would.

Q Do you have any water problems in this pool?

A Yes, sir, we do have water problems on the west side of this pool, substantial water pools.

Q Is that one reason you have to keep the wells continuously on the line?

A That is one reason, it probably would prevent waste; I am quite sure it would if they produce the wells as much as they could continuously and not be subject to water. When you shut in a well that produces a high water content, it's usually necessary to get a swabbing rig on before you get it back on the line.

The Fulcher Kutz-Pictured Cliffs zero minimum we have 47 wells below the breaking point and 177 wells prorated on the formula out of 279 wells. Making a comparison for the 1000 minimum, group 2 and group 3 combined, we have 78 wells, or roughly 27% of the wells affected by minimums. The transfer of allowables would be in the order of 1.65% to group 3. None to group 2.

Under the 1500 minimum we have 128 wells in group 2 and 22 in group 3, or a total of 148 wells out of 279 that is affected by a 1500 minimum. Transfer of allowable out of 208,905, we have in the order of roughly 4% of that allowable that is transferred down to wells receiving either 100% of their deliverability or a minimum allowable.

Under two million we have about 68% of the wells affected by the minimum. The transfer of allowable would be in the order of roughly 16% from 42 wells or 15.2% of the wells. I would say that the effect of the two million minimum in the Fulcher Kutz would be significant.

Q You don't feel that 1500 minimum would be effective?

A Well, I'll say this, any minimum would be more effective than none.

Q But 2000 is more effective than 1500?

A That's right. Of course, that don't mean that if we get too low with the minimum we are going to prevent premature abandonment, which is what we are after.

Aztec-Pictured Cliffs, we have 50 wells under the breaking point and 370 wells prorated under the current formula out of 357 wells. There would be no effect on the 1000 minimum. The 1500 minimum we would have roughly 15.7% of the wells out of 357 affected by the minimums. The transfer of allowables from group 4 to groups 2 and 3 would be .08%.

Under the two million minimum we have 94 wells in group 2 and 9 in group 3. Out of the 357 wells there would be in the order of slightly over 1% allowable transfer. 79.5% of the wells would still be prorated under the formula.

Ballard-Pictured Cliffs, under zero minimums we have 83 wells

under the breaking point, 321 wells prorated out of 404 wells. The 1000 minimum comparison in groups 2 and 3, we have .8% of the wells affected by 1000 minimum. Transfer of allowable would be .03%.

Under 1500 minimum we have in the order of 98 wells out of 404, or about 24% of the wells affected by minimums. The transfer of allowable from 82.7% of the wells would transfer a half percent.

Under 2000 minimum we have about 35% of the wells affected by minimums in groups 2 and 3; the transfer of allowables from 40.5% of the wells would be in the order of 1.8% of their allowable.

Blanco-Mesaverde has a little different picture than the Pictured Cliffs Pools since the wells are usually better wells. Out of 1828 wells prorated in the pool, there are 393 wells, or 21.5% that are under the breaking point, using zero minimum. Any minimums up to 2500 would not be effective. This is the only pool which I consider a three million minimum. The other pools I calculated the effect of the minimums up to two million, full well knowing that I would not recommend any more than two million. However, since Mesaverde is deeper, they have liquid to contend with, the operating costs are higher. I thought it well to consider three million minimum.

They would be 2.8% of the wells affected by a minimum. That

transfer of allowable at this time would be .03% from 75% of the wells.

I believe that covers the tabular data of exhibits up through No. 8.

Q Would you now explain how you arrived at the 2000 figure and 3000 figure for the one pool based on your next exhibit, which is No. 9?

A No. 9 exhibit is an example of income from various minimum allowables. This exhibit pertains only to Pictured Cliffs. The gas is calculated at 11.5¢ per MCF, which is the figure given to me, which includes average liquids. This is an average figure that is being paid for Pictured Cliffs gas in the Basin.

I used 12.5% royalty since that is the nominal royalty, full well realizing it was brought out in the Basin-Dakota hearing that there are royalties paid in excess of this. But this is by far the most common royalty. I've calculated the operating costs of an average Pictured Cliffs well as being $50.00 a month. We have data in the records of various hearings which indicate that operating costs are in excess of $50.00 a month. We also have data that would indicate it's only $35.00 a month. So I've used fifty because I believe it's a good average.

Q Do you say that does include our value up here of the

gas, do you say that does include the liquids?

A Yes.

Q You recognize, of course, that some don't make any?

A That's true, some won't get this much out of their gas because some have less liquid content, to say the least.

Q Do these operating costs include well tests such as deliverability tests?

A Yes.

Q These wells are not going to have deliverability tests under this minimum, are they?

A No. They'll save themselves about $35.00 a year.

Q So that wouldn't significantly affect your figure?

A $35.00 a year. We are not talking about much money.

Q Did you consider in your figures here escalation clauses in the contracts?

A No, I did not, because, as I indicated at the Basin-Dakota hearing, that I have no way of second guessing the Federal Power Commission. It's my understanding that they have to approve all escalation clauses or escalation prices. They may not approve them, which would give a false figure if I used an escalation. However, I understand it probably will be another three years before there's another escalation into effect. I am not real sure about that time.

Q Have you ever considered the feasibility of doing this on a well by well basis?

A Yes, we have discussed that to quite some extent. In my opinion it's impractical, particularly as to the administration of assigning allowables. We would have as many minimum allowables as we had hearings for minimum allowables. There would be no particular rhyme or reason as to the volume of gas that we would assign. We would have to base it on the operator's testimony. As you well know, some of this testimony is a little hard to sift down. The companies --

MR. PORTER: Does that apply to yourself too?

A Take it any way you like. Some companies have higher operating costs than other companies. Some companies use administrative costs in their operating costs, some don't, so, when we started, when we would start having hearings on minimum allowables based on a company's operating costs, I think it would be most difficult to reach a decision. To say the least, we would have a terrific administrative load.

Q So you simply tried to take an average based on your general knowledge?

A I'm trying to take what I believe to be a reasonable average so that everybody will have a fair shake as much as possible.

Q Would you turn to Exhibit 10, please?

A No, I haven't finished with Exhibit 9 yet, Mr. Payne.

Q Go ahead.

A The columns, the first five columns is the calculation based on the breaking point. That's the point at which the wells begin receiving reduced allowables due to the formula. I used the breaking point because that is the low point at which a well is curtailed, everything below a breaking point you can't help them anyway because they are producing everything they can under existing producing conditions. So I thought it well to take a look at the economic point at which we start curtailing production by assigning low allowables.

The Aztec breaking point is 1010. At 11.5¢, 12.5% royalty and $50.00 operating costs, a person could expect $51.75 a month income. That only includes the two expense items. You have everything else that is to be included to be taken out of $51.75, such as taxes and any other expenses.

Ballard-Pictured Cliffs, 915 breaking point. It would give you a $42.17 a month income to take all other expenses out of it. Fulcher Kutz breaking point is 552, this is a deliverability figure, 552. You'd end up with $5.61 from a well that was capable where it began having reduced allowables due to the fomula.

South Blanco-Pictured Cliffs, the breaking point is 1468.

It received $97.89 on which to pay his bills. West Kuts had 464 breaking point. He's really in the money, $3.26. Now, I don't have to sit here and preach about how long that fellow is going to produce a well like that.

Then the three columns to the right, I have used the economics at a thousand, 1500 and 2000 minimums, which are the three minimums that I made a study on. With the 1000 minimum he'd have $50.63 to work with. 1500, a little over a hundred dollars. 2000 minimum, $151.25. In my opinion a person that can't expect $151.00 with which to keep a well on the line and pay for a little bit of profit if there is any, he's not getting very much. If you don't give him that much, in my opinion he wouldn't be a very good business man if he didn't plug the thing and forget it.

Now, Exhibit 10 is the same type of information except for the Blanco-Mesaverde. In this case I've used a figure given to me which includes liquids from the gas. Now, it's my understanding this .13¢ would not include tank liquids at the wellhead. I have not considered liquids in this exhibit because there are many Mesaverde wells that produce no liquids, they don't even have tanks set at the wellhead. Some produce a lot of liquids, so rather than to try to average the liquid production, I ignored it. A fellow has liquids, he's just in a little better shape.

I used 12.5% royalty. The breaking point for the Blanco-Mesaverde is 2817 MCF. At this breaking point, or at the point at which we would begin curtailing allowables, or production by assigning allowables, he would receive $220.00 for operating a Mesaverde well. These wells vary in depth from some as shallow as I believe 4500 feet on down to 56, 5700 feet.

The three million minimum, if we would assign a three million minimum to the wells that are capable of making it, he would receive $241.25 a month with which to pay his bills and keep the well on the line.

In conjunction with this exhibit, I have made a little comparison with oil well minimums. In early 1952, the Commission by Order R-98-A, established a ten barrel a month minimum allowable for oil wells. Let's take a look at the economics on a ten barrel a day. Did I say ten barrel a month? I mean ten barrel a day, to see what the minimum allowable as we have already established for oil wells would be.

Using $2.85 oil, his gross income would be $848.00 less royalty of $106.00 and a dime and less well operating costs of $254.00 a month, and this is a figure which was given to me from one company's production data, and it is an average. It runs, the wells run from 3,000 feet to 12,000 feet. The average per month operating costs for wells of this company was $254.00 a

month. That's the figure I used. I think it's a fair average. He would have a monthly income from a ten barrel well, or a minimum oil allowable well, of $488.74. That's substantially higher than my highest minimum here of $241.00.

Q That ten barrel figure is during times of purchaser prorationing, is that right?

A It's my understanding, according to the way I read the rupe, up to now it's only effective during times of purchaser prorationing, but it would be effective at any time we went below ten barrel a day normal unit allowable.

Q When you are on 100% acreage formula, as you are in oil, it wouldn't effect production any time except during purchaser prorationing, would it?

A Any time we went below, or down as low as ten barrel a day normal unit allowable, the minimum would be effective. You wouldn't go any lower than that because the minimum is established. In other words, everybody would get ten barrel a day.

Q Does the order establish it generally?

A Pardon?

Q Does the order that you were referring to establish it generally just across the board?

A The way I read it, it does.

Q Do you have anything else that you wish to produce,

Mr. Utz?

A I have some brief summarizing that I might do. As I stated before, consideration of all six of these pools, we took into consideration 3979 wells. Blanco-Mesaverde had 1828; Ballard, 404; Aztec, 357 wells; Fulcher Kutz, 279; West Kutz, 179 and South Blanco, 932.

Now, to give you the picture of the wells that would be affected for all six pools, group 1, as you may recall, is all wells below the breaking point, using no minimums. All of those wells in all six pools total 795 wells, or 20%. That group of wells would not be affected by minimums.

In group 2, which is the wells that are assigned something in excess of the breaking point up to whatever minimum we are considering, in this case I am using the minimums I intend to recommend, two million for Pictured Cliffs and three million for Blanco-Mesaverde. The wells which would be on 100% deliverability or 100% ability to produce would total 687 wells, or 17% of the wells.

Now, you add 20% to 17% and that gives you 37%, and that would be 37% of all the wells in these pools that would be on 100% deliverability. We have got a lot of people here that think we ought to have, we are going to have it on 37% of them.

In group 3 there would be 102 wells that would be affected

under the conditions for which I made my study, or 2.5% of the wells which would receive a minimum and have the ability to produce more than the minimum. That, due to the minimum, would be assigned allowable in excess of what the formula would calculate. I believe that's all I have.

Q Mr. Utz, the purpose of your minimums, recommended minimums, as I understand your testimony, is to prevent waste by granting the operator reasonable lifting cost, is that correct?

A Yes, that's true.

Q Were Exhibits 1 through 10 prepared by you or under your direction?

A Yes, they were.

MR. PAYNE: At this time we move for the introduction of Commission's Exhibits 1 through 10.

MR. PORTER: Any objection to the introduction of the exhibits? They will be admitted to the record.

(Whereupon, Exhibits 1 through 10 were admitted in evidence.)

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

CROSS EXAMINATION

BY MR. KELEHER:

Q Mr. Utz, is it my understanding that this testimony that you have just given and the recommendations are the

unanimous recommendation of the Staff? In other words, are you speaking on behalf of the entire Staff of the Commission?

A No, I couldn't say that I am. We're just individuals, Mr. Keleher, and I have my opinions, I think Mr. Nutter has his opinions, and I am sure the people in Aztec have theirs. Some think we cught to do it on an individual well basis. Others think that I am a piker for recommending two and three, it ought to be much higher.

Q Well, would it be correct to say, then, that this is your individual recommendation?

A Yes, I think it is. I made the study by myself. Of course, everyone on the Staff was conscious of the fact that the study was being made, and I talked it over with them, they are fully advised.

Q During the course of your testimony you referred to 65-3-14?

A Yes, sir.

Q And subdivision (d) of that statute provides as follows, I'm quoting now, "minimum allowable for some wells may be advisable from time to time, especially with respect to wells already drilled when this act takes effect, to the end that the production will repay reasonable lifting costs and thus prevent premature abandonment and resulting waste." End of quotation.

That's the statute as you recollect it?

A Yes, sir, that is it.

Q Would you say that you have injected into your study not only the reasonable lifting cost, but other factors?

A No, I don't think I've injected into the study any more than what I would consider a reasonable income in order to prevent premature abandonment. Just where you can go with this $50.00 and $100.00 that I used, Mr. Keleher, is the cost of turning the well on and off and going and looking after it, and your expenses, traveling expenses and so forth. In other words, it doesn't include any workover of any nature, swabbing, replacing tubing, or anything else.

Q Well, you have incorporated all those factors, then, into what you term reasonable lifting costs?

A That's incorporated into the figure that you ended up with there at the tail end.

Q You haven't included anything by way of profit? Once or twice you mentioned the profit.

A Well, there is profit in there too, if there is any. In other words, out of a two million minimum, $151.00 would include anything that he has to do, profit, taxes, probably includes some more lifting costs.

Q That would be the gross that the well owner received?

A That's what a man would have left in order to pay him to operate the well.

Q It's my recollection that you said that your study had been limited to 1961?

A That's true.

Q You made no projection into '62 or '63?

A No.

Q In the course of your testimony --

A In the first place, Mr. Keleher, I can't project in '62 and '63 because I haven't the slightest idea what the market demand is going to do, and that's a very important factor.

Q You don't have any opinion in regard to that?

A Oh, I could have an opinion, but it might be just as wrong as it could be. I would rather use factual data.

Q In the course of your testimony, Mr. Utz, you referred to plugging of wells, abandonment of wells prematurely in order to avoid waste. Do you have a record of the number of wells that have been abandoned?

A No.

Q Say in '61?

A No, I have no record of wells that have been abandoned. I know of quite a number that are sitting there wondering what the heck they are going to do with them. I know some operators

that have stated, and I think Mr. Arnold can verify this, if something isn't done about some allowable on their wells, well, they are going to plug and abandon them.

Q That is a threat rather than an actual fact, is it?

A Well, I have no way of knowing whether it's a threat or not, but I can say this, I believe if I was in their shoes I'd plug them.

Q Do you have any idea of the number of wells plugged, we'll say in 1961 or the year in which your study was made?

A I made no attempt to determine how many wells were plugged. As a matter of fact, I doubt at this time that there was very many plugged due to this. I do anticipate there will be many from now on out if we don't have a minimum.

Q Your thought, then, on premature abandonment is based on what you have heard rather than an actuality?

A Well, it's based on what we've heard from the operators, yes, plus the fact that we've used just a plain, old, common, ordinary horse sense and know that they're not going to let them sit there making them no money, that they'll recover what they can out of them. I think Pubco would do the same.

Q In the course of your testimony, you referred to shifting of allowables?

A Yes.

Q And transfer of allowables?

A Yes.

Q In substance and effect, isn't that use of those terms and the results changing the formula that presently exists in the San Juan Basin?

A Yes, I have made no attempt to say that there isn't a shift in the allowables. I'd be a little silly to try to tell anybody that there wouldn't be. It will affect the formula by removing some allowable from the formula calculation.

Q The end result would be a change in the formula, would it not, actually?

A It would be a modification of the distribution of allowables. It wouldn't change the formula. That is, that allowable would be left, would be calculated on the basis of the same formula. But there wouldn't be as much allowable to distribute with that formula. It will affect the well allowables.

MR. KELEHER: I think that's all.

MR. HOWELL: Ben Howell, representing El Paso Natural Gas Company.

MR. PORTER: Mr. Howell.

BY MR. HOWELL:

Q Now, Mr. Utz, the proposal which you have would, in

several of these pools, have about the same result, would it not, if you changed the percentage relationship between the 75-25 formula that now exists to a different percentage?

A Oh, generally speaking the shift in allowables would be to that end. It wouldn't be as consistent as a change in formula.

Q Well, if, for example, you were to change the allowable formula 50-50, that would result in a larger proportion going on an acreage basis and to each well, would it not?

A Oh, yes.

Q And that's what you are doing, in effect, by establishing a minimum. You are raising the figure that each well gets, if it can make?

A Yes, that is true, actually that's the whole purpose in it is to give them some more allowable so they can keep them on the line. Let's look at this, for example. I can see three formulas in that curve. I can see a hundred percent deliverability up to this point. I can see straight acreage out to here, and 25-75 if you want to put it that way.

Q And the over-all effect of the rule that would create minimum allowables would be to change the allocation and, in effect, change the formula?

A No, I wouldn't say it's changing the formula. I'm not

recommending any difference in the 25% formula. I am recommending that we give some of the wells in the pool enough allowable to prevent premature abandonment, which allowable would come from the better wells in the pool.

Q Well, you are recommending that the allocations resulting from the present 25-75% be changed so that certain wells will receive a larger allowable than they now do, at the expense of other wells?

A That's right.

Q And in that connection, Mr. Utz, have you made any studies of reserves of the pools or of the wells?

A No. That is, not for this particular thing here, in the past years I've made some reserve studies.

Q In connection with your testimony today, you haven't based any of this on any reserve studies, have you?

A No.

Q Now, the effect of your proposal would be to substantially increase the number of unprorated wells, would it not?

A You mean by non-prorated wells, the wells that are on 100% ability to produce?

Q Correct.

A Yes, sir, it will do that.

Q When a well is permitted to produce all that it can

make, it isn't any way limited by the proration formula, is it?

A Well, as long as it stays, as long as the producing conditions, pipeline pressures, market demand stay constant, no, it's not affected, but if the market demand goes down, it could be affected by the formula,if the line pressures are lowered it could be affected by the formula.

Q Now, looking at the South Blanco, let's take each of these pools just for a brief look. If you applied the two million monthly minimum, which you are recommending for the Pictured Cliffs, you would wind up with only 62.1% of the wells in that field to which the formula would be applicable, that's your testimony, isn't it, as shown by your exhibit?

A That's right. Then, of course, you can take 21.4% away from that, because that's the number of wells that would be affected under any formula. So we're talking about 41% of the wells to be prorated under the formula.

Q Now, going to the West Kutz, to apply the two million would leave only 12.4%, and the effect of the formula would be to change 70.8% from a status to which the formula is now applicable to one in which the formula wouldn't be applicable because the minimum would affect it, is that right?

A Where did you get the 70.8%?

Q I added 62% --

A Your groups 2 and 3?

Q I added your group 2 and group 3.

A That's true, we would have 12.5% of the wells under 100% or their ability to produce, which I believe you've chosen to call non-prorated wells. There would be your 70.8% which would be affected by the minimums, 12.4% would be on the basis of the formula.

Q In that West Kutz field you would have transferred from 22 wells, allowables which they would receive under the formula as it now exists and spread it among 134 other wells?

A That's right, to prevent premature abandonment and waste.

Q This would not have affected in any way the 23 wells in that pool that are below the breaking point at the present time?

A No, at current conditions it wouldn't affect them.

Q Turning to the Fulcher Kutz now, under your proposal of a two million minimum, the effect would be to leave only 15.2% of the wells in that pool to which the formula was applicable?

A That's right.

Q The other 84.8% would just be producing all they could produce?

A Oh, no. It would be 28 wells or 10% that would be

curtailed.

Q That would be 28 wells, but there would be 209 that would be producing all they could produce?

A Well, it would be groups 1, 1 and 2 would be producing all they could produce.

Q In each of the pools the effect of your proposal would be to increase the number of wells permitted unrestricted flow and to decrease the number of wells that are subjected to proration under the existing formula?

A Yes. I think that's a true statement.

Q Mr. Utz, with reference to your group 1 wells, I believe your testimony was that there was 795 wells of 20% of the group in group 1?

A That's right.

Q Now, of these 795 wells, not one would be affected by your proposal?

A That's true.

Q And these 795 wells are the poorest wells in the entire field in their ability to produce, aren't they?

A I don't think there's any argument there.

Q And yet, as of today, there are 795 wells that haven't been plugged and abandoned that are producing less revenue than you recommend as the minimum, isn't that correct?

A Yes, I think that would be true.

Q So there are at least enough stupid operators that haven't plugged these 795 wells that are keeping them going with no hope that anything that could be done will increase their production because they're making all they can make?

A Yes, they are making all they can make under the present conditions, but they still live like the farmers, they hope it will rain.

Q Well, speaking of hoping it would rain, I believe you've already testified that you didn't consider any price escalations. Would you assume that effective January 1st, 1964 a majority of the contracts in the Basin do provide for a penny price escalation?

A I knew it was a couple of years hence, two or three years.

Q Well, that's a year and a third.

A All right.

Q Neither you nor I know whether the Federal Power Commission is going to let that become effective. Assuming it does become effective, that would from 1964 on change the economics of these various pools, would it not?

A It would change the economics of a well that will produce the same amount of gas then as it does now.

Q That's correct, you've used an example of a well which you've related here to one well. Now, let's look at the Blanco-Mesaverde. On your final, I believe it's Exhibit 10, now, the effect of a price escalation would be, as I interpret it, and correct me if I'm wrong, if one cent price escalation did become effective as provided by contracts, that would add $28.17 to the income at the breaking point. The breaking point is 2817, if we had a penny on each one of the 2817 wells, have $28.17 additional income, wouldn't we?

A With a penny a thousand it would increase the income a thousand, and I didn't have a slide rule.

Q If that escalation becomes effective, your breaking point on the Mesaverde would actually be higher than the breaking point that you prescribe for the three million minimum, as it is there's only $20.80 difference between the two, isn't there?

A Oh, yes. Yes. Of course, this well that's capable of producing 2817 today, when the Federal Power Commission gets through kicking it around for a couple of years to decide whether or not they are going to let you raise the price of gas a penny, it probably wouldn't produce that much.

Q It might not, but if the rules stay the same, I think what they would have to do would be after five months, after a total of six months, that their suspension, they could suspend

for no longer than that, when the rate went in and it would be subject to later adjustment, I agree, but I think it would become effective, and if it's ever allowed, my point is that it would go back to the beginning point, would it not?

A Yes.

Q So it might come in later, but it would be effective as of the middle of 1963?

A I presume it would, yes.

Q Also, in that connection, Mr. Utz, I believe you testified that you gave no consideration to separator liquids, that is liquids that were recovered on the leases and are not paid by the gas purchasers as a part of the price of gas?

A No, I didn't consider them because I have no way of knowing, that is if we're going to set up a minimum, in my opinion it ought to be for the average well or at least it ought to be in the lower bracket of wells. If a man has a well that will produce a hundred barrels of liquid a day and very little gas, which they are in Blanco-Mesaverde, this would have no effect on it anyway.

Q Well, you are not --

A Since liquids are not prorated.

Q You are not quarreling with the estimate which I think was made as of today's projection of the September allowables up

in the northwest would be over 3,000 barrels of condensate per day produced? That is what we're talking about when we are talking about separator liquids, isn't it, the condensate that is listed on this report?

A It's my understanding that's what we're considering there is incidental liquid, non-prorated liquids.

Q That are taken out at the well head, and in all of your studies you have given no consideration to allotting any of that 3,175 barrels of condensate a day to any of the wells here?

A No, Mesaverde wells. No.

Q That's actually about one-eighth --

A Because, frankly, I don't know actually how much of that is Mesaverde. I would suspicion that just below 50% of it is.

Q It's, actually the condensates from the San Juan Basin are equal to about an eiththh of the crude production, aren't they? The figure roughly was 25,000 as against 3,000. That's, I think, roughly an eighth?

A Yes, that sounds about right.

Q In considering the costs of operation, Mr. Utz, what consideration did you give to the fact that there are concerns in the Basin which will contract to handle the costs of

operating a well for as low as $30.00 a month?

A Well, I think even that varies. It depends on the location of the well, the number of wells that the operator has, and the type of wells that he has. I think you are correct in that wells in the vicinity where they don't have to drive more than ten miles or such matter, maybe fifteen, straight dry gas wells, Pictured Cliffs wells, he has enough wells, it's my understanding he can get a deal like that. I'm talking about an average.

My opinion is on the low side, and if you, as a company, felt you could operate them that cheap, I expect you would be hiring these people because your operating costs are probably higher. I know some people's are.

Q We expect to put on testimony as to our costs, Mr. Utz. We won't keep it a secret, but that is, but there is a figure there with which you are familiar that is substantially lower than the figure which you used.

A It's lower than $50.00 a month, but from the figures that I had available to me, well, $50.00 seemed like a very reasonable average.

Q Taking the two pools which are the poorest pools in there, I believe everyone will concede that poverty exists more in the West Kutz and Fulcher-Kutz than any other portion of the

field.

A Yes, they're the pools that's most depleted.

Q Actually, aren't they reasonably close in and reasonably easy to get to, they are not in the outlying portions of the Basin, are they?

A No, they're pretty close in.

Q So that as to those wells in that pool, it would seem most likely that those low operating costs would be applicable, is that correct?

A Oh, of course, in West Kutz, in particular, well, I'll say both wells we have liquid problems, maybe some people operate them for $30.00 a month, but if you are going to properly take care of your liquids, well I doubt that you get a very good operation, a very efficient operation for $30.00 a month to keep your well free of liquid so it will produce into the line.

Q Referring to your Exhibit No. 9 as an example, of where you've used the example of income, let's take the horrible example of the West Kutz, which I believe is the lowest amount of profit that would be shown anywhere on your study, isn't that correct?

A Yes, that's true, that's a little lower than Fulcher-Kutz about two dollars and something.

Q Well, now, as to the West Kutz, or Fulcher-Kutz, either,

that amount of profit is applicable to the well that right now is being permitted to produce all that it can into the line, isn't it?

A Oh, I don't think, Mr. Howell, that I've claimed anywhere in my testimony that we could do anything for the wells that won't produce.

Q I'm sure you haven't, Mr. Utz, but the point that I want to develop here is that the well operator who is in the status that you are showing here can't be helped. The man who has a larger deliverability will receive additional allowables over and above this breaking point by application of the formula, will he not?

A Well, they won't raise very fast from this point up, I can tell you that, until his deliverability gets away on up in the neighborhood of almost twice as much as 464 before he receives any substantial increase in allowable. That shows it right over there.

Q But he does from this point on, if his well has the ability to produce more than this?

A He'll get a little bit more.

Q He gets increasing allowables as the deliverability of his well increases?

A Yes, I will say a fellow, well, I'll show you, we have

464 breaking points, let's take a fellow with a half a million. Zero, based on these figures here of 1961, this fellow would receive, let's see, about 2800 a month. If he has a 500 deliverability.

Q Well, he would receive 40% more than this figure you've used here, then he would receive substantially more than that, wouldn't he?

A Between 464 and 500 we are talking about a bunch of wells. I didn't bring my figures down, I could tell you exactly if I had my tab sheets down here, but there are, I am sure, quite a number of wells in that area because the deliverabilities of the wells in West Kutz are very low. There's very few of them that are as high as a million.

Q I'm sure that's correct, and I am not attempting to dispute with you about your testimony as to what you've said here, but I'm trying to bring out, and I hope you can help me clarify my mind on it, I'm trying to bring out the point which is that the 75-25 formula begins to allocate some allowables from this point on upward, any well that has the capacity.

A We're not in any dispute about whether it increases their allowable or not. I am saying I don't think it increases it enough. We are talking about, as long as we are talking about increasing allowables, I think we ought to consider the number of

wells that we're going to effect too. Those figures that I gave you up to this point right here, in other words, up to 400, include all but 22 wells out of 179. In other words, there's where your wells are in West Kutz, clear down there trying to produce nothing. 157 wells are below that breaking point right there have less than 400 MCF.

Q There are, right as of today, 23 wells in the West Kutz, are there not, that can't make that breaking point that are still being produced?

A Yes, but I've heard tell that 12 of them is going to be plugged real soon.

Q Now, the acreage factor of 25% in the typical San Juan Basin formula, does provide a minimum figure for each well, does it not?

A The 25% acreage?

Q Yes. A Such as it is.

Q You aren't contending that there is no minimum, it's your contention that it should be a higher minimum?

A That's true, I think it ought to be. I think the minimum ought to be high enough to pay a man to keep the well on the line to keep him from plugging it. At least it ought to be enough to encourage him to keep it on the line if it's capable of making it; all wells that can't produce that minimum, nobody

but the Lord can help them.

Q The effect of your proposal would be practically nil on the Mesaverde at this time, would it not?

A That's true. I think I said something in the order of three hundredths, yes, three hundredths of one percent.

Q In other words, certainly in that pool the acreage factor is producing a minimum which is very close to that which you think should be established as an artificial minimum?

A Under present conditions, or under 1961 conditions it was very close. I may as well point out at this time that I don't think we ought to let the horse out of the barn before we lock the gate. I think we should have had minimums when we wrote the order in the first place. As a matter of fact, I dare say if I had brought this case on two years ago there wouldn't have been any complaining.

Q Two years ago the same minimum of 25% acreage was as effective, it is effective today?

A Two years ago?

Q Yes.

A It was probably more effective.

Q I believe you've already testified that this proposal of yours has no effect upon the market, that it can't increase the market demand, that's beyond your powers there, or power of

any formula?

A I don't see how it would. I can see by virtue of these minimums El Paso might see fit to take some more, but I would doubt it.

Q What we're doing, we are not abolishing the group 1 wells, we might call that poverty, the poverty row down there, we are not abolishing or improving their condition a bit, are we?

A No, we're just adding to it, we are giving them a few more on 100% deliverability.

Q We're just spreading the poverty rather than leaving them in this same group?

A All this group would produce something more than what this formula gives them.

Q That would be at the expense of the better wells in the pool?

A I think if you are going to take it from somebody, I think that's where it ought to come from.

Q In answering my question, you do concede that's a reality, don't you?

A Oh, certainly. They have been enjoying prosperity for a long time now since March 1, 1951.

MR. HOWELL: That's all.

BY MR. KELEHER:

Q Do you have any figures showing how many wells have been permitted by the Commission to increase allowable production in 1961?

A How many wells have been --

Q Allowed under the statute, that 65-3-14, the Commission has the authority now.

A You mean that have been granted premature allowables?

Q Yes.

A Due to low acreage factor, there are 12 wells.

Q Twelve wells in 1961? A Yes.

Q Do you have any figure for prior years?

A That was granted before 1961, but they're still in effect, we assigned them 1400 minimum because some had 40 acres and some 80 acres, one or two had 120. No more acreage they could dedicate, and these were wells that were drilled prior to 160-acre spacing.

MR. KELEHER: That's all.

MR. PORTER: Mr. Keys.

MR. KEYS: I would like to make a couple of statements in regard to those so-called stupid operators and not plugging their wells.

MR. PORTER: We'll ask for statements in a few moments when we are through with the witness, Mr. Keys. Does anyone

have any questions of the witness? Mr. Payne.

REDIRECT EXAMINATION

BY MR. PAYNE:

Q Isn't it true that there are a number of wells in the San Juan Basin that aren't actually on the line but are not plugged?

A That's right. Yes. Just how many I don't know. I know there are some that are disconnected and some are even sitting on the line not producing, they just can't produce.

Q Isn't it also true that some operators may keep a well producing even though it's not economical to do so on that per well basis in order to hold the lease?

A That's right, if they don't have other production on the lease.

Q Is it your opinion that correlative rights, the protection thereof, is an absolute thing? In other words, doesn't the definition say insofar as practicable?

A Oh, yes, it certainly does.

Q Mr. Utz, as to this operating cost, do you have any opinion as to testimony we have heard in wide spaced cases as to operating costs as compared with your $50.00 figure?

A A lot higher.

Q The testimony in those cases rather than the 50?

A That's right.

MR. PAYNE: Thank you.

MR. PORTER: Anyone else have a question of Mr. Uts?

A One thing I might point out is that some of these wells that you mentioned that were tied to the line and not producing are not producing because the operator is just tired of spending money to go out there and swab them in, those are wells that we have shut in by shut in order and caused them to load up. Therefore, when they are released we cause them to have to go out there and swab them in so they'll start producing again.

Q (By Mr. Payne) That's what happens if you don't make exception to the 75-25 formula?

A That's right.

Q You have to keep reclassifying them, shutting them in and letting them make up the under production and over production and so forth?

A That's true. Another instance, we will be assigning allowables in the neighborhood of, oh, three or four hundred MCF a month based on the formula. A well just slightly under this would be classified this six months as a marginal well. Well, we classify every six months. So if the market demand goes down, which it has done in the last year or two, at the end of the six months' period, well, we look at him again for

classification and then we find that the market demand has gone down, so he's actually been a non-marginal well instead of a marginal well. What do we do, after we have gigged him by assigning him a measly 300 or 350 MCF a month. Then we turn around and slap him with overproduction and declare him over active and he has to be shut in.

Q Do you feel that the minimum that you have recommended would be enough to keep these wells on the line more or less continuously?

A Well, it's hard to say it would help the situation substantially. It's hard to say because it just depends on the conditions of the well, how much liquid they have got, the pressure and so forth.

MR. PAYNE: Thank you.

A But it would help it.

MR. PORTER: Any further questions of Mr. Utz? You may be excused.

(Witness excused.)

MR. PORTER: Mr. Howell, did you say that El Paso has some testimony to put on?

MR. HOWELL: We have testimony, but if the Commission please, I think that Mr. Rainey expected to commont on some testimony that may be put on by Pubco and it would be more logical

from the standpoint of our presentation to have them put theirs on first.

MR. PORTER: I hadn't had any indication. They made an appearance, but they didn't state they would put on any testimony.

MR. KELEHER: At this time I would like to read into the record Pubco's position. Pubco Petroleum Corporation strongly opposes establishment of minimum gas allowables in various gas pools in the San Juan Basin as recommended by the Oil Conservation Commission Staff for the following reasons: 1. The proration formula of 75% deliverability, 25% acreage protects correlative rights, provides for an equitable division of the market between wells based on each well's recoverable reserves.

2. The application of a minimum allowable will materially change the proration formula and therefore would not provide for equitable division of the market between wells based on each well's recoverable reserves.

3. The proration formula already provides for a marginal well classification and a space of 25% of total market in each pool to all wells and an acreage basis without regard to known differences in individual well reserves.

Before any action is taken by the Commission toward the establishment of a minimum gas allowable, it would be a flagrant

violation of correlative rights since it would artificially extend the producing life of those wells which should be abandoned at the expense of the average wells in the various pools.

It is further the opinion of Pubco that the only problem that exists today in the various pools in the San Juan Basin is an overall inadequate gas market, which, in our opinion, can not be remedied by an application of minimum allowables. We have a witness, Mr. Frank Gorham, I will ask him to be sworn and take the stand.

(Witness sworn.)

FRANK D. GORHAM, JR.

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

DIRECT EXAMINATION

BY MR. KELEHER:

Q State your name.

A Frank D. Gorham, Junior.

Q What official position, if any, do you occupy with the Pubco Petroleum Corporation?

A Executive Vice President of Pubco Petroleum Corporation.

Q You've testified previously before this Commission?

A Yes, I have.

Q And qualified as a witness?

A Yes, sir.

MR. KELEHER: Would the Commission forego the qualifications again?

MR. PORTER: Yes, sir, the Commission considers Mr. Gorham qualified.

Q (By Mr. Keleher) Mr. Gorham, in connection with the presentation of this case, have you had an occasion to make a study of it?

A Yes, I have.

Q And have you prepared exhibits?

A Yes, sir.

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

Q Have you prepared an exhibit showing the average market allocation, 1955 to 1962?

A Yes, sir. On the Exhibit No. 1 we have included several plates which involve all the various pools under discussion. As a matter of fact, an additional pool. The first plate of this exhibit shows the Blanco-Mesaverde Pool. On the left-hand side is the acreage allocation reading upward from zero to 5000 MCF per well per month. On the bottom scale are the years 1955 through 1961, the first six months of '62, and on the right-hand side of the graph is the average field production in MCF cubed

reading from the bottom from zero up to 20, and in reverse order you might say the number of wells in the field for those various years beginning at zero at the top and coming down to 2000.

Beginning with the average field production, I think it should be noted that back in 1955 the average field production for that year was approximately 975 billion cubic feet. It increased in 1957 up to someplace between 16 and 17 billion cubic feet, and then has decreased from 1957 to the present time. At the same time, or during this same period, the number of wells has increased from a total in 1955 of approximately 820 wells to the current date of approximately 1825 wells.

Also on this graph is shown the acreage allocation which is given to each well on an average monthly basis for each year beginning in 1955.

Down in the lower right-hand corner I have shown a comparison between 1957 and 1962 in the Blanco-Mesaverde Pool which shows a decrease in overall field production primarily due to lowering of nominations and the, in part, partly the impossibility of the wells' ability or capability to produce, the number of wells increased 55% and the acreage allocation, because of the decreased nominations and the increased number of wells, have decreased 58%.

Down at the bottom of the graph we are showing two lines,

one which was printed called minimum monthly sales required to offset operating costs. This computation was made as a result of a study of only four wells, as I recall, in the Blanco-Mesaverde Pool which we operate. During the last week we decided to make a complete and full study of our entire operation in the San Juan Basin, both as to Pictured Cliffs wells and to Mesaverde wells insofar as lifting costs are concerned.

The result of that study will actually be discussed in our Exhibit 3, but that red line does represent the amount of gas which we believe each Mesaverde well would have to receive on a monthly basis in order to offset lifting costs. I can proceed from the Blanco-Mesaverde to each pool if you wish, Mr. Keleher.

Q I would like to ask, Mr. Gorham, to what extent are we interested, Pubco interested in Blanco-Mesaverde pools?

A Pubco has a working interest in a total of 43 of the wells in the Blanco-Mesaverde Pool, and these wells are not consolidated, but are scattered throughout the entire Blanco-Mesaverde Pool.

Q Where did you get the data upon which these graphs have been prepared?

A All of the data that were used for these graphs were obtained from the Oil Conservation Commission proration schedules.

Q Is Pubco's position essentially any different from that

of any independent producers in the San Juan Basin?

A No, sir. At least I don't believe so. We operate a total, we don't operate, we operate or have a working interest in approximately 80 gas wells in the entire Basin, 40 of which are Mesaverde. We are an independent company and these wells are scattered throughout all of these fields.

Q By way of comparison, what can you say as to whether or not you are producing the same quantity of gas with almost twice as many wells as you did in 1957?

A Yes, sir. I think that is portrayed to some degree on the first graph that I was referring to in the Blanco-Mesaverde Pool. At that time Pubco had completed the majority of its Mesaverde wells during what appears on the graph to be a peak nomination period, and at that time with half of the number of wells that we have today, were producing slightly more gas than we are today.

Q Now, to what extent is Pubco capable of producing gas?

A In our opinion, based upon the deliverability calculations and the actual flow rate calculations which they are producing approximately twice the amount that we were producing in 1957.

Q Why aren't you producing twice the quantity of gas?

A Well, the reason we are not is because of a decrease

in nomination in the various pools, and at the same time there has been an increase in the number of wells serving that reduced market, resulting in a decreased nomination for each individual well.

Q Mr. Utz referred to what might be described as distressed areas in the San Juan field and indicated that some of the operators are hurting. Would you say whether or not Pubco is hurting also?

A Yes, sir, I would say that we're hurting, as far as I can tell we're all hurting.

Q But notwithstanding the fact that we are hurting, what is your position with reference to whether or not an administration order would permit the fair and just distribution and allocation of the gas?

A Well, I believe that an administrative order allocating minimum allowables would drastically change the proration formula under which we have been operating and have made our investments accordingly, and that in effect the proration formula would be changed in large amount. I show that on Pubco's Exhibit No. 2.

Q Now, direct your attention to Exhibit 1, just to go through those briefly, Mr. Gorham, and testify as to each one. You've already testified in regard to the Blanco-Mesaverde Pool. Now go to the South Blanco.

A Well, in the South Blanco-Pictured Cliffs Pool, the field production from 1957 to 1962 has decreased down to 81% of what it was in '57. The number of wells has increased 136%, excuse me, I made an error, the field production has increased 81%, the number of wells has increased 136%, the acreage allocation per well has decreased 26% because the field nominations have not kept pace with the number of wells completed in the pool.

Again, down on the bottom we have shown in a red line the amount of gas that we feel based on our detailed study is necessary to offset lifting costs in the South Blanco-Pictured Cliffs Pool.

Turning to the Ballard-Pictured Cliffs Pool, field production has remained almost static; during this particular period the number of wells increased 130%, the acreage allocation per well has decreased 61%, because the nominations have not kept pace with the increased number of wells.

Tapicito-Pictured Cliffs Pool was studied, however, since Mr. Utz does not make any recommendation here, I can pass that pool, if you wish. In the Fulcher Kutz-Pictured Cliffs Pool, here is an example where in our opinion the acreage allocation per well comes very close to the minimum amount of revenue required to operate the well. The field production has actually decreased 38.5%, I'm sure in part due to nomination and part due

to the fact the well can not continue to produce. The number of wells have remained almost static, 1.3% increase. The acreage allocation per well has decreased 27%, almost in line with the field production. Again, we have shown by a red line approximately 325 MCF which, based on our studies, is all that is necessary in order to offset lifting costs.

The West Kutz-Pictured Cliffs Pool field production has actually decreased 56.3%, the number of wells have remained almost static. The acreage allocation per well has decreased 43.5%, but again, however, the acreage allocation in our opinion is above that which is required in order to offset lifting costs.

In the Aztec-Pictured Cliffs Pool field, production has increased 5.5%, the number of wells have increased 54.7%, the acreage allocation per well was decreased by 34% because of the static market, the increased number of wells. However, the average field production, again in our opinion, is far in excess of that which is necessary to offset lifting costs.

Q You have referred to lifting costs several times in your testimony, Mr. Gorham. Will you state to the Commission your understanding of lifting costs and what is incorporated in the term lifting costs?

A All right. In regard to Pubco's analysis of lifting costs, Pubco has analyzed every well which it operates in the

field or has a working interest in which includes our Mesaverde and Pictured Cliffs wells. Exhibit No. 3 shows the amount necessary in our opinion that a well will have to produce monthly in order to continue operation. It is our opinion that for a Mesaverde well, 450 MCF, or is that 490, 490 MCF is required, and for a Pictured Cliffs well, 325 MCF. This is based on 13¢ for Mesaverde gas and .1175¢ for Pictured Cliffs formation gas, and in the case of the Mesaverde wells we made another study to see the overall effect of condensate or distillate insofar as Mesaverde wells were concerned that we operate.

Again, I would like to say that our wells are scattered through the Blanco-Mesaverde Pool. We have wells that make considerable condensate, some that don't make any. We found that of our total revenue on an average monthly basis that 5% of that revenue is attributed to condensate sales, so that for the Mesaverde wells which we would have received $64.00 for the amount of 490 MCF, we would receive an additional $3.00. For the Pictured Cliffs well, which we receive $39.00, we would for all practical purposes, for Pictured Cliffs wells have no recoverable liquids. Total value for Mesaverde of $67.00; Pictured Cliffs, $39.00, from which we have deducted base royalty of $8.00 in the case of Mesaverde, $5.00, Pictured Cliffs, less production taxes of $4.00, Mesaverde, $2.00 for the Pictured Cliffs, less operating

costs of $51.00 for the Mesaverde well and $30.00 for the Pictured Cliffs well.

Operating costs, those factors which we included in operating costs include maintenance, which accounted for approximately 12% of that figure. Operation, 74%, Ad Valorem taxes on well equipment of 11%, and miscellaneous charge of 3% in the Mesaverde, 1% maintenance in the Pictured Cliffs well, 91% operation, 7% Ad Valorem taxes, and 1% miscellaneous.

As I repeat, this study is an average of some 43 Mesaverde wells and some 37 Pictured Cliffs wells scattered through the Pictured Cliffs Pools.

Q In your opinion, it reflects the true condition existing there?

A In our opinion, this is the amount of money which an operator would be required to receive in order to offset lifting costs.

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

Q Have you had occasion to prepare an exhibit on gas allocation? A Yes, sir.

Q Do you have an exhibit which will be identified as Exhibit No. 2? A Yes, sir.

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

Q Will you state what that purports to show, Mr. Gorham?

A We made an analysis of the August, 1962 pool allocations in the various pools, to see what the effect of a 3000 MCF minimum would be on a Mesaverde well and the effect of a 2000 MCF minimum on a Pictured Cliffs well insofar as to how it would actually affect the formula.

Blanco-Mesaverde Pool, the 1962 pool allocation was 7,221,214 MCF. There are 1898 wells which, given a minimum of 3000 MCF per well, for that month would have taken 5,694,000, leaving the amount to be allocated under the proration formula of 1,527,214 MCF, or if one assumed that all wells could produce equally, an allocation of an additional 806 MCF per well per month, which calculates out, in our opinion, to an actual operating formula of 79% acreage and 21% deliverability rather than the formula which is now in effect of 75% deliverability and 25% acreage.

In the Aztec-Pictured Cliffs Pool, the August, 1962 pool allocation was 975,101 MCF, 365 wells at 2000 MCF would deduct 730,000 MCF, or leave an amount to be allocated of 245,101 MCF, changing the formula to 75% acreage and 25% deliverability.

The Ballard-Pictured Cliffs, the August, 1962 pool allocation was 923,590 MCF, 421 wells, which, if they were given 500, would deduct 842,000 MCF, leaving 81,590 MCF to be allocated under

the formula, which would result in a formula of 91% acreage, 9% deliverability.

In the Fulcher Kutz-Pictured Cliffs the August, '62 was 426,030, 310 wells at, they were given a 2000 MCF minimum. Obviously the wells would be on 100% acreage.

Skipping the Basin-Dakota; South Blanco-Pictured Cliffs, the August, 1962 pool allocation was 2,742,186 MCF. If 969 wells were given a minimum allowable of 2000 MCF, that would deduct 1,938,000, leaving a residue of 804,186 to be allocated under the formula, with an actual operating formula resulting in 71% acreage and 29% deliverability.

I will skip the Tapicito-Pictured Cliffs Pool because it's not under discussion. The West Kutz-Pictured Cliffs Pool, again the minimum allowable would be in excess of the allocation, the pool would be on 100% acreage basis.

Q Now, that table that you have just read from which will be identified as Exhibit No. 2, is based on the assumption that the proposed allocation would be made?

A Yes, sir. This is under the basis that a 3000 MCF minimum allowable were granted for the Mesaverde Pool and a minimum allowable of 2000 MCF for all of the Pictured Cliffs Pools.

Q Mr. Gorham, state to the Commission your opinion as to

whether or not the present formula adequately provides for a minimum allowable.

A Well, now, going back to our Exhibit No. 1, which shows the acreage allocation being actually given to the wells under the present formula, and using the minimum operating costs which we have computed, in my opinion all of the fields are being adequately protected by the formula in effect.

Q Would you state whether or not in your opinion the application of the minimum allowable suggested and recommended by some of the Staff would materially change the proration formula in favor of acreage?

A Yes, sir, I believe that in reciting each one of these pool changes, as we see it, in all cases the acreage allocation would result in wasting acreage in the actual operating formula to a great degree.

Q Would you state that in your opinion if the Commission adopted the proposed recommendation that the Commission would be obliged in substance and effect to take gas from one owner and distribute it to others?

A Yes, sir, I believe it was also pointed out by Mr. Utz to the effect that without question the gas allocated to these so-called minimum wells would have to come from the average well, which in our opinion would be an invasion of correlative

rights.

MR. KELEHER: At this time we would like to offer in evidence and have the acreage market marked Exhibit 1, Pubco's, and the gas allocation summaries identified as Exhibit 2, and the exhibit showing the minimum amount of production of gas and distillate on a monthly basis required to offset lifting costs identified as Exhibit 3 and have all three exhibits offered in evidence.

MR. PORTER: Any objection to the admission of the exhibits? Pubco's Exhibits 1, 2 and 3 will be admitted to the record.

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

MR. PORTER: We will take a short break.

(Whereupon, a recess was taken.)

AFTERNOON SESSION

MR. PORTER: The hearing will come to order, please. Does anyone have a question of Mr. Gorham? Mr. Payne.

CROSS EXAMINATION

BY MR. PAYNE:

Q Would you refer to your Exhibit 3, please, Mr. Gorham? You show 490 MCF as being the minimum sale required for continued operation in the Mesaverde, is that right?

A That is correct.

Q Does Pubco have any Mesaverde wells that averaged this well production?

A I believe that we have one. Our Zuder Federal No. 2-X.

Q Are you basing that on one well or well that produces more than this?

A No, sir, what we are basing this exhibit on is a detailed study of what we have here, our allocation of our direct charges, our lifting costs for every one of the wells in the pool, in fact every well we have in the San Juan Basin. We have a petroleum engineer and three switchers that service these wells, and the switchers' time to these wells is allocated on a monthly basis and the charge is made against that well and all of those charges were added up and divided by the number of wells.

Q In that case your exhibit assumes that your operating

costs are going to remain the same even when your well becomes depleted, isn't that correct?

A By depleted, you mean when they're through producing?

Q No, I don't mean when they are through producing.

A No?

Q No, I mean when they are at a lower stage of production don't they require more work on them at that point?

A Some do, some don't. It depends on the water problems, it depends on whether they are making liquids, it depends on whether El Paso is keeping them on with El Paso or Southern Union for a particular long period of time, or whether they are shut in or opened up materially.

Q Actually you don't have much expense with the wells at these particular figures since you have only one well producing this?

A That's in the Mesaverde Pool.

Q How many Pictured Cliffs wells that average 325?

A Well, I hope we don't have many, but, let's see. I believe our Scott Federal 17-3-21-3, some of our Buttrum wells, which incidently are some 90 miles from Aztec, fall in that category.

Q But in any event your exhibit does assume that operating costs will remain constant during the life of a well, or at

least the life from the point where yours are now, down to the minimum figure you have here?

A All I have shown here is what we believe to be the average amount of gas that an average well has to produce in order to offset lifting costs.

Q Let's go into the costs. I notice you have maintenance, operation, ad valorem taxes and miscellaneous.

A Yes.

Q Do you include any swabbing in your maintenance, for instance?

A Our lifting costs would probably, I can not answer that directly, but I'm quite sure, although not positive, that lifting costs include a certain amount of swabbing on those wells which were needed during the average period.

Q Did it include anything for, say, intermitters or free pistons?

A No. I'm sure they do not.

Q Because you don't have any wells that have those on, do you?

A Yes, we do.

Q Yet you didn't include it here, that's an operating cost, isn't it?

A Those wells happen to be in Colorado.

Q So you don't have any that are relative to this hearing?

A That is correct.

Q Your Exhibit No. 2, if you will refer to that one assumes, does it not, that every well in each of these pools would produce the proposed minimum allowable as recommended by Mr. Utz?

A Well, it's my understanding as per Mr. Utz' testimony that it varies from pool to pool by, on an average of some twenty to thirty percent of all of the wells in each pool are incapable of making the minimum allowable as it now exists.

Q Yes, but your exhibit here assumes that every one of them is going to be capable of making his proposed minimum allowable, doesn't it?

A Well, I would certainly assume that if the well can't make it, he shouldn't be given additional amounts to produce if he physically can't do so.

Q That's not what Mr. Utz formula proposed. Would you refer to his exhibits here and note, for instance, that in the Blanco-Mesaverde he shows 429 wells that would not be affected because they couldn't produce the proposed minimum?

A Which exhibit are you referring to?

Q Well, they're all on this tabular form. South Blanco is Exhibit 3.

A Yes.

Q Let's look at South Blanco here. Isn't it true that he shows 345 wells here that wouldn't make his proposed minimum and, therefore, wouldn't be affected and wouldn't affect any wells that have high deliverability because they're already producing what they can make?

A Well, the number of wells that fall into that category merely stresses the point that the formula itself is taking care of those wells which are producing on a full thirty-days' basis, and in reality the suggestion, as I see it, is a reallocation in those wells which should be under the proration formula of gas from the better wells or average wells to those wells which perhaps could produce slightly more than those which are on full thirty days a month.

Q Yes, but, for instance, look at his No. 1 group.

A Right.

Q Now, on your exhibit you have shown every one of those wells as being capable of producing the 2,000 minimum that he has recommended?

A Right.

Q But they can't produce that much. Therefore, they wouldn't be affected at all, nor would they affect any high deliverability wells, isn't that right?

A Well, I'm not certain whether they could or could not.

Q Anyway, that's what his tabulation shows, doesn't it?

A Apparently.

Q Isn't it also true that on your Exhibit 2 you used the month of August, 1962--

A Yes.

Q -- as a basis of this exhibit?

A That is correct.

Q Would you say that the month of August was representative of gas demand?

A Well, I merely have to quote from the September allocation which shows that in some pools there's an increase in nomination and a decrease in other pools, that without question the summer months have lesser nominations than the winter months, that is correct.

Q You are aware, are you not, that Mr. Utz, in his computation, used the average for the entire year 1961?

A That is correct, but in using 1961 I think that he should take into consideration the nominations which have occurred since 1955 projected through 1961, and it certainly indicates that those nominations on a per well basis are decreasing.

Q But you only projected yours for one month?

A Well, we used 1955 through '61.

Q That was on your Exhibit No. 1?

A That is correct.

Q Now, you've also assumed here, you've used the allowable assigned for the month of August?

A That is correct.

Q And you are aware, are you not, that the purchasers actually nominated some nine million rather than seven?

A No, I'm not aware of that.

Q Well, assuming that they did and they might very well produce more than the allowable assigned, might they not?

A Yes.

Q I mean that's not uncommon. Mr. Gorham, does Pubco have any wells in the Blanco-Mesaverde which you feel have already produced more gas than they could possibly have under the tract dedicated to them?

A No, sir.

Q You don't feel that you have any like that?

A No, sir.

MR. PAYNE: That's all, thank you.

MR. PORTER: Anyone else have a question? The witness may be excused.

(Witness excused.)

MR. PORTER: Mr. Howell.

MR. HOWELL: Has Mr. Keleher finished?

MR. KELEHER: Yes, I believe so.

MR. HOWELL: Well, I'll call Mr. Rainey.

(Witness sworn.)

DAVID H. RAINEY

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

DIRECT EXAMINATION

BY MR. HOWELL:

Q Will you state for the record your name and your employer and the position which you hold?

A I am David H. Rainey, I am Administrative Assistant in the Proration Department for El Paso Natural Gas Company.

Q You have testified, and your qualifications as an expert witness have been accepted by the Commission heretofore?

A Yes, sir.

Q I will ask you if you are familiar with the proposals which Mr. Utz has made in this case.

A Yes, sir, I am.

Q Will you tell the Commission what El Paso did and what you did in analyzing and studying these proposals?

A We made a detailed study of the various pools in the

San Juan Basin to determine what effect the proposed minimum of two million a month in the Pictured Cliffs and three million a month in the Mesaverde would have on those pools. Without going into a great number of details of the study, I will say that the figures shown by Mr. Utz in his Exhibits 3 through 10 where he shows a breakdown of the individual pools compare very favorably with what we came up with. There's not enough disparity to argue about as to the effect on individual wells within those pools. The number of wells that will be affected in various pools by the imposition of these minimums.

I might point out Mr. Utz kind of hurt my feelings talking about these stupid operators that are operating these poor wells when they ought to be abandoned. In the West Kutz Pool, for instance, actually as a practical matter, it was my understanding of his testimony that not just 23 wells, those that have producing ability less than the zero breaking point, but 134 wells, the 23 that have a producing ability less than the zero minimum and also all those that are not capable of producing the minimums that he's recommending here should be abandoned, which means there's 134 wells out of 179 wells in that pool ought to be abandoned because they are not making economic quantities of gas.

Unfortunately a great number of those wells are El Paso wells, but that is true in the other pools as well. For instance,

the Fulcher-Kutz, there are 209 out of 279 that according to his testimony of the two million minimum are not even capable of producing the minimum quantities that he says are necessary to make the wells economic production. I think that's about the extent of it.

I might point out because of Mr. Payne's questions of Mr. Gorham that we did calculate the average acreage factors for all the pools in the San Juan Basin for the first six months of 1962 in addition to calculating the same figures for the year 1961. As a matter of fact of actual practice, in all but I think one or two of the pools the acreage factors have been higher in 1962 than they were for the average for the year 1961.

Q What did your studies lead you to conclude with reference to the fact that the proposals made by Mr. Utz would have upon such matters as changing allowables from one operator to another operator and increasing the number of wells that are not actually subject to proration and changing the formula, which has been adopted for these several pools?

A It's my opinion that the formula will be substantially changed in the pools where there's any affect to be noticed at all. For instance, to go back to the two horrible examples, as we're prone to talk about them in West Kutz, there are in effect all but 22 wells of 179 which will become unprorated

under his proposal, whereas under current conditions there are only 23 wells that are unprorated under current conditions.

In the Fulcher-Kutz all but 42 wells out of 279 will become unprorated, whereas under present conditions there are only 47 marginal wells which are in effect unprorated in Fulcher-Kutz. There are some pools, it is true, where he points out there is practically no effect. South Blanco has very few wells in respect to the whole pool that are affected, and to my way of thinking there's so little effect there, there's no necessity of putting a minimum allowable in anyway.

Q As to these others, will that have the effect of possibly transferring the reserves underlying one well to another well, referring, if you will, to the exhibit covering the West Kutz?

A Yes, sir.

Q Will you note the last column where the two million minimum is set forth? Have you found that?

A Yes, sir.

Q Now, what would this proposal do to those 22 wells that lose some of their allowable?

A Well, as a practical matter, according to Mr. Utz' figures, 21.3% of the allowable which is assigned to the 134 wells in groups 2 and 3 come from the 22 wells that are so-called

good wells, or will be the only wells that will remain prorated in the pool.

Q Would a result of this proposal be in these two pools to have the majority of the pool producing all that the wells can make in a small proportion of the pool only subject to proration under a formula?

A Yes, sir, that's quite true.

Q Does that, in fact, nullify proration?

A To my mind it does. I think it's pretty clear that when 157 wells of 179 in one pool are unprorated and 137 wells out of 279 in another pool are unprorated, it pretty well nullifies the effects of proration entirely.

Q What effect would that have upon the correlative rights and of operators and producers in the pool?

A I think there would be considerable impairment of correlative rights with respect to the wells that are still prorated in those pools.

Q Now, Mr. Ra' y, have you given any consideration or made any studies in an attempt to determine the effect that the acreage factor has in providing a minimum?

A Yes, sir. We have made a tabulation, a lengthy tabulation, of all the pools. I have the figures for a twenty-four month period beginning just, coincidentally, I told them to

go back two years and tabulate these figures for me, so they went back a flat two years to September, 1960, and came up to August, 1962, and tabulated the acreage factors and A times D factors for all the pools in the San Juan Basin, and that twenty-four month average which we have obtained, and then I'll talk about the 1961 and '62 averages compared to it, show that based on El Paso's experience as to their operating costs of wells, and I dare say we operate more wells than anybody else in the San Juan Basin, that the minimum production which would be granted by the acreage factor to any well in the San Juan Basin is in the Fulcher-Kutz Pool; according to the twenty-four month average, which is 453 MCF per month, is something in excess of 100% profit over our actual operating expenses for lifting costs and overhead. It includes the overhead which we charge against those wells for that acreage factor alone, bearing in mind that there's some allowable granted to those wells because of their deliverability.

Q Would you comment a little bit more about the effect of applying the formula on the group of wells that fall in the category above the breaking point and below the recommended minimum allowable? Let's refer to Mr. Utz' Exhibit No. 9 which covers the various Pictured Cliffs pools, I believe.

A I think 9, excuse me, right, the summation.

Q The summation?

A Yes, sir. In the first place, our average lifting costs, and this is based on figures that the Accounting Department gave me, and the lifting costs included labor, taxes, insurance, material and supplies, general allocation, which is the overhead, it's a fixed figure for every well, on a group of Pictured Cliffs wells selected at random which they assure me are representative of the overall costs, average out for the period of the entire year of 1960, and a good portion of the year 1961, average out to about $20.00 per well.

If we add $30.00, assuming that those operating costs are representative at least for El Paso's wells, looking at the last figure at the bottom of the page for Mr. Utz' breakdown, and assuming that his operating costs of $30.00 is too high, based on El Paso's experience on a great number of the wells. You add $30.00 to each one of the figures at the bottom of the page, you get a fairly representative profit, a large percentage of profit over and above actualy lifting expenses.

Q And assuming that there's no change in the formula and no minimum established, would every well in, let's say the West Kutz Pool, looking at it, which has the capacity to make over 464 MCF in a month have an excess, even assuming Mr. Utz' figures of somewhere between $3.26 and $151.25 with the wells

falling in various spots along that range?

A Yes, sir, it's to be borne in mind that the 464 represents a well with a deliverability of only 14 MCF per day, which is a pretty poor well, admittedly, but there are a great number of wells in that pool that don't make a whole lot more than that; none of which are abandoned, I might add.

Q What is your opinion as to whether or not the present rules provide an adequate allowable to provide lifting costs to prevent premature abandonment?

A I think the acreage factor alone, based on El Paso's experience over a number of years, and operating expenses on wells, that the acreage factor alone grants considerably more to the operator than is necessary for actual operating expenses when you include lifting costs, taxes, insurance and things of that kind.

The rules of the gas pool rules for the pools in the San Juan Basin further have a provision that after notice and hearing an operator for good cause shown may be granted a special allowable to prevent premature abandonment.

If the Commission feels that there are enough wells in some of these pools that are getting to the point that they are in real danger of an operator having to abandon them rather than producing them at all, and it's been my experience that an

operator can make a little bit of profit, particularly out of these old wells, he's going to keep on producing them, because most of them paid out anyway if they were ever going to pay out to start with, that the operator has an opportunity to come in and ask for a special allowable to prevent premature abandonment.

If the Commission feels that the administrative burden or the possibility of a great number of hearings is too burdensome, I think provision could be made for administrative procedures to grant premature abandonment allowables, if you want to call them that, to operators for good cause shown, and the Commission could set up criteria to specify that the operator shall under sworn evidence presented to the Commission, with copies furnished to all the offset operators, prove in effect that he has to have more allowable and that the well is capable of making more gas to prevent premature abandonment.

As is the usual case with administrative procedure, if after twenty days the operator has shown by the evidence presented to them, they could administratively grant him such additional allowable as the operator or the Commission deems necessary. I think at the same time there should be probably some maximum made on this. I don't think it should be unrestricted. Some operators may have unusually high operating expenses, and it's my impression from testimony that I have heard here, that many

operators must be including interest on notes at the bank and things like that when they are talking about operating expenses, which I don't think are operating expenses. That's just the hazard of the business.

Q Mr. Rainey, would such a procedure of making a determination on a well by well basis under an administrative procedure established by the Commission, would that have the effect that you have testified this proposal has in transferring throughout the pool as a whole allowables from one group of wells to another group of wells?

A I doubt that it would be nearly of the same magnitude, no, sir. There are a great number of wells, based on Mr. Utz' figures of operating costs and so forth, that I don't believe the operator could prove he has to spend that much money on month in and month out to operate them. Consequently there probably wouldn't be anything like the number of wells thrown into a so-called minimum allowable, or special allowable category, as the blanket proposal here.

Q Do you know of your own knowledge whether there are variations within wells in the same pool as to difficulties of production and the costs resulting from intrusion of water or liquids into the well bore?

A Yes, sir, that's quite true. As a general practice,

El Paso attempts where there are water problems and the deliverability of the well will justify it, and we've put them on some awful small wells, attempts to put intermitters on the well or free pistons to lift the liquids out so that we don't have special operating expense such as swabbing or things of that kind. Occasionally we do have to swab wells, but as a practical matter, intermitters and free pistons and things of that kind are in the nature of workovers rather than operating expenses, and the operator puts an intermitter because of the beneficial results he's going to obtain by putting the intermitter on the well. We don't include that other than the maintenance on the equipment, we don't include that in operating expense, that's a workover expense as such.

Q In your opinion, would the proposed rules give any incentive to an operator to adopt recognized practices to improve the capacity of his well and ability of his well to deliver?

A Well, if the Commission is going to give him a bonus allowable, as it were, it doesn't seem to me that there's any incentive to keep the well in good operating condition as long as it can make the so-called minimum. He's going to let it rock along making the minimum unless he sees that he's going to get a substantial increase.

There are months that by virtue of the operation of the

minimum proposed here when so-called prorated wells, non-marginal wells may be receiving allowables under strict calculation of the formula less than some of these so-called minimum allowables or premature abandonment allowable wells. Now, just what effect that would have if you are going to put a floor under allowables, if the calculation of a well that's capable of making a great deal more than the minimum allowable, if the calculation comes out to less than that minimum, would the proposal be to assign an arbitrary two million to that whether he was entitled to it or not, I don't know. But in some months in these smaller, lower deliverability pools, that could happen.

Q Are there any other conclusions you would like to state as a result of the studies which were made?

A I believe not, other than just the basic conclusion that if a minimum is necessary, and El Paso does not want to go on record as being opposed, to prevent premature abandonment, I think the minimums proposed here are drastically too high and there are present mechanisms both as to the acreage factor in the present allocation formula and as to provisions in the field rules for granting special allowables if the operator can show that he's being hurt by the operation of the formula.

MR. HOWELL: That's all.

MR. PORTER: Anyone have a question of Mr. Rainey?

MR. PAYNE: Yes, sir.

MR. PORTER: Mr. Payne.

CROSS EXAMINATION

BY MR. PAYNE:

Q Mr. Rainey, I believe you testified El Paso probably operates more wells than anybody in the Basin, is that right?

A I think that's probably true.

Q Wouldn't it be true just as a rule of thumb that the more wells that an operator operated, the cheaper the per well cost?

A Yes, sir, that's true. I might add at this point, however, I don't have the specific consultants or engineers, or what have you, identified, but we made a check with them and as a practical matter there are consultants in the San Juan Basin area who will operate wells for $23.00 a month and make a profit on it, and they make no distinctions as to whether or not they're Pictured Cliffs or Mesaverde wells, for an additional $5.00 a month they'll file all the paper work on them.

Q By operating them, do you mean just turning them off and on?

A Presumably maintaining them. They take care of the wells, it's a contract job and they take care of the wells. These are the figures that were obtained some six or eight months

ago and some of them may have gone up since that time.

Q I take it that El Paso would have no objection on the well by well basis as long as the applicant proves his case?

A Yes, so long as he proves he's spending more money operating it, I think the Commission should look at it with a juandiced eye and make him give a detailed itemization of the costs if he's talking about $100.00 a month to take care of the wells. He can hire it done cheaper than that.

Q What if he's the type of operator that likes to stay on the well, so-to-speak, and maybe do things to it more than some other operator, you are going to let him have a minimum allowable and that's going to be more inequitable than have it across the board, based on an average?

A No, sir, I don't think so. I think if he can show and prove to the Commission's satisfaction that it's costing him that much money to operate and that the allowables granted to that well are not sufficient for him to continue to operate that well, I think the Commission can use its discretion and grant him a small profit, and I'm dubious about these hundred percent and three hundred percent profits that Mr. Utz is talking about over actual operating expenses, that it could be granted in that case.

Q Does El Paso have any wells in any of these six pools that are not producing now because they won't pay the lifting

costs?

A I don't know of my own knowledge, Mr. Payne. I know we have got a lot of wells on the line that aren't producing that are making around in the neighborhood of five and ten MCF a day.

Q Do you include administrative costs in this operating figure?

A Yes, sir. The overhead,which is administrative cost, it's a fixed figure charged to every well.

Q That's just based on total divided by number of wells?

A Presumably so, yes, sir. That's the only way I know how to arrive at it.

Q Would they do it by one particular area or company-wide basis?

A It appears to be on a company-wide basis because the figure is the same for the, both Mesaverde and Pictured Cliffs wells, that overhead cost.

Q The company is going to have a certain amount of overhead whether they have one well or one thousand?

A That's true, but if they can hire it done they are not going to have any overhead themselves, and these people are doing it at a profit at a figure substantially less than Mr. Utz' figures.

Q This is without regard to how close the wells are together?

A Some of these so-called consultants, or whatever you call them, engineers, charge no mileage, others charge upwards, some ten cents a mile, some fifteen cents a mile.

MR. PAYNE: That's all, thank you.

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

MR. KELEHER: I would like to ask one question.

MR. PORTER: Mr. Keleher.

BY MR. KELEHER:

Q Can you define for the Commission lifting costs and state whether or not in your opinion such costs include workovers for other capital investments?

A Lifting costs, the way El Paso defines them, and my understanding conforms with that, is the labor, maintenance, material that may from time to time may be necessary in maintaining the wells, and this overhead expense and a month to month operating continuing to operate the wells. Workovers, the installation of intermitters, free lift pistons and things of that kind are capital expense, it's not charged to operating costs, and to my mind should not be charged to operating costs because the operator works a well over, installs intermitters, free

pistons, what have you, with the expectation that the more efficient or additional production that he may get from that well because of the workover, or whatever other installation he may put on it, is going to justify the expense of that workover.

Q Those are capital investments which actually belong to the risk part of the business?

A Yes, sir.

MR. KELEHER: That's all.

MR. PORTER: Anyone else have a question? The witness may be excused.

(Witness excused.)

MR. HOWELL: That concludes our case.

MR. PORTER: Does anyone have any further testimony to present in this case? Anyone have a statement?

MR. HOWELL: I would like to make a brief closing statement, if I may. On behalf of El Paso Natural Gas Company, our position is that we certainly are opposed to premature abandonment of a well. In addition to the investment that we as the operator have, any well might have, or any other operator, we have an additional investment in wells connected to our system of having installed gathering lines and gathering facilities that would not be amortized or paid out in the event the well is prematurely abandoned. So that we have every incentive

to want this Commission to prevent premature abandonment.

However, it is our feeling that the, and our belief, based upon the study that has been made, that the proposals which are made and the figures which have been set here are not necessary in the light of conditions that exist today. The 20% of the wells in the San Juan Basin which are the poorest wells and the most likely to be abandoned are in a category that won't be helped a bit by this. It seems to me that what we're doing is not abolishing poverty, but if this proposal is adopted, is spreading poverty so that even those who had good fortune or good practices of wells that are average or above are forced to share their reserves with somebody who isn't quite that fortunate. And that the proposal constitutes a change, a material change in each of the proration rules and formulas without giving any consideration to reserves and without being based upon study other than an estimate of economics, which we think is not related to the statutory directions, to grant to certain wells an allowance because of lifting costs to prevent premature abandonment.

We think the record in this case will show that for those 791 wells that admittedly won't be helped, constituting 20% of the field will not be prematurely abandoned and have not been prematurely abandoned up to the present time, that the granting of additional allowables to even better wells that are getting

a great production right now than these will not have any effect that is related to premature abandonment.

It constitutes a sharing of poverty between those who are not quite as poor as others and those who are in the poorer category, and our opposition to the proposal is based upon that belief and the results that will follow, and we certainly do not want to be considered as opposing the grant of necessary allowables when it actually prevents premature abandonment.

MR. KELEHER: I would like to say this, that we trust the Commission will dismiss this petition. It will just bring chaos into the field.

MR. PORTER: Mr. Keys.

MR. KEYS: In regard to the operating of wells, we work for quite a few of the smaller operators and our costs vary, or charges run anywhere from twenty-five to fifty dollars a well. The fifty dollar charge includes a complete service that's producing the well, keeping it painted and doing necessary repairs, but does not include any fittings that we might have to put on the well, and it includes filing all federal, state reports, any other incidental reports that might come up, and making distribution of funds, that is to the working interest and to the royalty interest.

I know of one case, one well that I believe if the minimum

allowable were set, as Mr. Utz claimed, that that party would put out a little bit of money and get that well to where it is producing, whereas now they have abandoned the well. They haven't plugged it, but they will do so.

MR. PORTER: Mr. Keys, as I understand it, you operate a well testing and reporting service?

MR. KEYS: That's right.

MR. PORTER: Does anyone else have a statement? Mr. Eaton.

MR. EATON: For Pan American Petroleum Corporation, George W. Eaton, Jr. Pan American is opposed in principle to the establishment of minimum allowables for the Pictured Cliffs and Mesaverde Pool in the San Juan Basin. Minimum allowables tend to disrupt and to nullify the orderly operation of the established proration formula. They also tend to favor one group of wells in favor of another group within the same pool. The ultimate effect of a field-wide minimum allowable would be to distribute all production from the pool in a prorated pool without regard to the allocation formula.

We've heard testimony here today that such would be the immediate effect for all practical purposes in two pools. Pan American, therefore, urges that the Commission not establish minimum allowables for the Pictured Cliffs and the Blanco-

Mesaverde Pools in the San Juan Basin as contemplated by Case 2503.

MR. PORTER: Does anyone else care to make a statement? Mr. Payne.

MR. PAYNE: We have received a communication from Skelly Oil Company which reads as follows: "Skelly Oil Company favors the principle of establishing minimum allowables for gas wells particularly in Northwestern New Mexico. Existing statutes and power of the Commission to establish such minimums to permit premature abandonment, also the decreasing market for gas during the past year has forced the Commission to assign extremely low allowables far below amount of gas necessary to be produced to prevent premature abandonment. Also it is necessary to relieve these marginal type wells of necessity of taking deliverability tests and other onerous requirements not necessary for a marginal type well. We would recommend from two to three million minimum allowable per month. Which under present economics would require thirteen to fourteen year pay out." Signed George W. Selinger.

MR. PORTER: Is that all?

MR. PAYNE: Yes, sir.

MR. PORTER: If no one has anything further to offer in the case, we'll take it under advisement.

STATE OF NEW MEXICO)
) ss
COUNTY OF BERNALILLO)

I, ADA DEARNLEY, Court Reporter, do hereby certify that the foregoing and attached transcript of proceedings before the New Mexico Oil Conservation Commission at Santa Fe, New Mexico, is a true and correct record to the best of my knowledge, skill and ability.

IN WITNESS WHEREOF I have affixed my hand and notarial seal this 15th day of September, 1962.

Ada Dearnley
Notary Public-Court Reporter

My commission expires:

June 19, 1963.

BEFORE THE OIL CONSERVATION COMMISSION
OF THE STATE OF NEW MEXICO

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

CASE No. 2503
Order No. R-2307

APPLICATION OF THE OIL CONSERVATION
COMMISSION, ON ITS OWN MOTION, TO
CONSIDER THE ESTABLISHMENT OF MINIMUM
GAS ALLOWABLES IN CERTAIN OF THE PRO-
RATED GAS POOLS OF SAN JUAN, RIO
ARRIBA, AND SANDOVAL COUNTIES, NEW
MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 o'clock a.m. on August 15, 1962, at Santa Fe, New Mexico, before the Oil Conservation Commission of New Mexico, hereinafter referred to as the "Commission."

NOW, on this 28th day of August, 1962, 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 the preponderance of the evidence indicates that the establishment of a minimum gas allowable of 1000 MCF per month in the Blanco-Mesaverde, Aztec-Pictured Cliffs, Ballard-Pictured Cliffs, Fulcher Kutz-Pictured Cliffs, South Blanco-Pictured Cliffs, and West Kutz-Pictured Cliffs Gas Pools, San Juan, Rio Arriba, and Sandoval Counties, New Mexico, will repay reasonable lifting costs and otherwise avoid the premature abandonment of wells in said pools, thereby preventing waste.

IT IS THEREFORE ORDERED:

(1) That the Special Pool Rules for the Blanco-Mesaverde, Aztec Pictured Cliffs, Ballard-Pictured Cliffs, Fulcher Kutz-Pictured Cliffs, South Blanco-Pictured Cliffs, and West Kutz-Pictured Cliffs Gas Pools, San Juan, Rio Arriba, and Sandoval

Counties, New Mexico, as promulgated by Order No. R-1670 and amended by Order No. R-2086 be and the same are hereby amended by the inclusion of the following Special Rule 11 for said pools:

RULE 11: A minimum allowable of 1000 MCF per month per proration unit will be assigned in order to prevent the premature abandonment of wells.

(2) 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

EDWIN L. MECHEM, Chairman

E. S. WALKER, Member

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

esr/

MINIMUM ALLOWABLE TESTIMONY

Purpose:

To show the need for minimum allowables and the effect of various minimum allowables for South Blanco-Pictured Cliffs, West Kutz-Pictured Cliffs, Fulcher Kutz-Pictured Cliffs, Aztec-Pictured Cliffs, Ballard-Pictured Cliffs, and Blanco-Mesaverde.

Need of Minimums:

1. The New Mexico Statutes 1953, 65-3-14 Paragraph (d) gives the Oil Commission the authority to establish minimums. Rule 11 of Order No. R-1670, the general gas proration order which was written several years ago recognizes the fact that minimum allowables may be advisable to prevent the premature abandonment of small wells which receive allowables based on the formulas which are too low to prevent premature abandonment. Wells which are plugged and abandoned because of extremely low allowables will certainly cause waste of gas which could be recovered.

2. To establish a producing level in the above-mentioned 6 pro-rated gas pools below which the wells in the pools would not be subject to the proration requirements of Order No. R-1670 so long as the wells do not produce above the established level. These requirements consist of deliverability testing and overproduction shut-in. Wells in this category would be classified as exempt marginal wells. The purchaser usually leases this classification of wells on the line continuously which in effect prorates them on 100% deliverability and eliminates the need of switching. This classification of wells will eliminate administrative expense for the Commission. Without a minimum, allowables must be calculated each month and reclassification accomplished periodically on many wells of questionable economic value. With a minimum these wells would remain constant in allowables and classification.

GOVERNOR
EDWIN L. MECHEM
CHAIRMAN

State of New Mexico
Oil Conservation Commission

LAND COMMISSIONER
E. S. JOHNNY WALKER
MEMBER

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

P. O. BOX 871
SANTA FE

August 28, 1962

Re: Case No. 2503
Order No. R-2307
Applicant:

OIL CONSERVATION COMMISSION

Mr. Ben Howell
El Paso Natural Gas Company
Box 1492
El Paso, Texas

Dear Sir:

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

Very truly yours,

A. L. Porter, Jr.

A. L. PORTER, Jr.
Secretary-Director

ir/

Carbon copy of order also sent to:

Hobbs OCC x

Artesia OCC

Aztec OCC x

OTHER Mr. W. A. Keleher

SETH, MONTGOMERY, FEDERICI & ANDREWS
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GEORGE A. GRAHAM, JR.
RICHARD S. MORRIS

J. O. SETH
COUNSEL

POST OFFICE BOX 828
TELEPHONE YU 3-7315

August 15, 1962

Oil Conservation Commission
State Land Office Building
Santa Fe, New Mexico

Re; Case 2503

Gentlemen:

Please consider this letter as this firm's entry of appearance on behalf of El Paso Natural Gas Company in Case 2503, to be heard before the Commission on August 15, 1962.

Messrs. Ben Howell and Garrett Whitworth of the Texas Bar will be associated with us in this case representing El Paso.

Very truly yours,

Richard S. Morris

M

PUBCO PETROLEUM CORPORATION
BOX 1419
ALBUQUERQUE, NEW MEXICO
TELEPHONE CHAPEL 7-8835

1962 MAR 5 AM

March 1, 1962

Re: Case No. 2503

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

Attention: A. L. Porter, Secretary - Director

Gentlemen:

Reference is made to the subject case formerly set for examiner's hearing on March 7, 1962. It is our understanding that this case, concerning the consideration of establishment of minimum allowables in certain gas pools in northwest New Mexico, has been indefinitely postponed.

Should this matter be re-scheduled for hearing, it is the opinion of Pubco Petroleum Corporation that such a proposal, which would in effect alter the current gas prorationing formula, is of sufficient importance to warrant a regular hearing before the Oil Conservation Commission.

Very truly yours,

Frank D. Gorham, Jr.
Executive Vice President

FDGJr:GJSJr:gt

Docketed for Aug. 15 Hearing
Aug 3, 1962

STATE OF NEW MEXICO)
) ss.
COUNTY OF BERNALILLO)

I, ANITA OSWALD, COURT REPORTER in and for the County of Bernalillo, State of New Mexico, do hereby certify that the foregoing and attached transcript of hearing was reported by me in stenotype and that the same was reduced to typewritten transcript under my personal supervision and contains a true and correct record of said proceedings, to the best of my knowledge, skill and ability.

Anita Oswald
COURT REPORTER

I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case No. 2503, heard by me on 3/1, 1962.

....., Examiner
New Mexico Oil Conservation Commission

NO. 24-62

DOCKET: REGULAR HEARING - WEDNESDAY - AUGUST 15, 1962

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

ALLOWABLE: (1) Consideration of the oil allowable for September, 1962.

(2) Consideration of the allowable production of gas for September, 1962, from ten prorated pools in Lea and Eddy Counties, New Mexico, also consideration of the allowable production of gas from nine prorated pools in San Juan, Rio Arriba and Sandoval Counties, New Mexico, for September, 1962.

CASE 2504: (REHEARING)
Application of Consolidated Oil & Gas, Inc. for an amendment of Order No. R-1670-C, changing the allocation formula for the Basin-Dakota Gas Pool, San Juan, Rio Arriba and Sandoval Counties, New Mexico.

NOTICE

CASE 2504 has been continued by the Commission to the September 13, 1962 regular hearing, at 9 o'clock a.m., Morgan Hall, State Land Office Building, Santa Fe, New Mexico. All parties who entered a formal appearance have been notified of the continuation by certified mail.

CASE 2561: (Continued)
In the matter of the hearing called on the motion of the Oil Conservation Commission to consider revising Rule 111, Deviation Tests and Whipstocking. The Commission will consider the report and recommended rule of the Industry Committee appointed by the Commission after the May, 1962 hearing. The proposed rule, as stated in the Committee Report, reads in its entirety as follows:

Rule 111. Deviation Tests and Directional Drilling

(a) Any well which is drilled or deepened with Rotary Tools shall be tested at reasonably frequent intervals not to exceed 500 feet or at the next subsequent bit change to determine the deviation from the vertical. A sworn notarized tabulation of all tests run shall be filed with Form C-105, Well Record. When such deviation averages more than five degrees in any 500 foot interval, the Commission may request that a directional survey be run to establish the location of the producing interval(s).

Rule 111. Deviation Tests and Directional Drilling (Cont.)

The Commission, at the request of an offset operator, may require any operator to make a directional survey of any well. Said directional survey and all associated costs shall be at the expense of the requesting party and shall be secured in advance by a $5,000 indemnity bond posted with and approved by the Commission. The requesting party may designate the well survey company, and said survey shall be witnessed by the Commission.

(b) No well shall be intentionally deviated in a predetermined direction without special permission from the Commission. Permission to deviate toward the vertical to straighten an excessively deviated well bore as defined in (a) above; or to sidetrack junk in the hole in an indeterminate direction or toward the vertical; or to drill a relief well to control a blow-out shall be obtained from the appropriate District Office of the Commission on Commission Form C-102 with copies of said Form C-102 being furnished to all offset operators. Permission to deviate a well in any other manner or for any other reason will be granted only after notice and hearing. Upon completion of any well that was deviated in a predetermined direction, except toward the vertical, a directional survey of the entire well bore must be run and filed with the Commission. In addition, all directional surveys run on any well that was intentionally deviated in any manner for any reason must be filed by the operator with the Commission upon completion of the well. Prior to the assignment of an allowable, operator shall submit a sworn notarized statement to the effect that all directional surveys run on the well have been filed.

CASE 2618: Application of El Paso Natural Gas Company for a revision of Rule 314. Applicant, in the above-styled cause, seeks the revision of Rule 314 pertaining to the gathering, transporting and sale of drip to provide for the redefinition of drip also to include condensate; to further regulate the transportation of drip, as redefined; and to require the reporting of such transportation on Forms C-110-A and C-110-B.

CASE 2503: Application of the Oil Conservation Commission, on its own motion, to consider the establishment of minimum gas allowables in the Blanco-Mesaverde, Aztec-Pictured Cliffs, Ballard-Pictured Cliffs, Fulcher Kutz-Pictured Cliffs, South Blanco-Pictured Cliffs, and West Kutz-Pictured Cliffs Gas Pools, San Juan, Rio Arriba and Sandoval Counties, New Mexico.

CASE 2619: Southeastern New Mexico nomenclature case calling for an order creating new pools and extending certain existing pools in Lea and Roosevelt Counties, New Mexico.

(a) Create a new oil pool for Montoya production, designated as the North Justis-Montoya Pool, and described as:

TOWNSHIP 25 SOUTH, RANGE 37 EAST, NMPM
Section 1: NW/4

(b) Create a new oil pool for Waddell production, designated as the North Justis-Waddell Pool, and described as:

TOWNSHIP 24 SOUTH, RANGE 37 EAST, NMPM
Section 35: SE/4

(c) Extend the Allison-Pennsylvanian Pool to include:

TOWNSHIP 8 SOUTH, RANGE 36 EAST, NMPM
Section 25: NW/4

TOWNSHIP 9 SOUTH, RANGE 37 EAST, NMPM
Section 4: NW/4
Section 8: SW/4

(d) Extend the Blinebry Pool to include:

TOWNSHIP 22 SOUTH, RANGE 37 EAST, NMPM
Section 5: N/2

(e) Extend the South Crossroads-Devonian Pool to include:

TOWNSHIP 10 SOUTH, RANGE 36 EAST, NMPM
Section 15: W/2

(f) Extend the Hobbs Pool to include:

TOWNSHIP 19 SOUTH, RANGE 38 EAST, NMPM
Section 22: N/2 NW/4

(g) Extend the Justis-Blinebry Pool to include:

TOWNSHIP 26 SOUTH, RANGE 37 EAST, NMPM
Section 1: NE/4

(h) Extend the North Justis-Blinebry Pool to include:

TOWNSHIP 24 SOUTH, RANGE 37 EAST, NMPM
Section 35: SW/4

(i) Extend the North Justis-Ellenburger Pool to include:

TOWNSHIP 25 SOUTH, RANGE 37 EAST, NMPM
Section 2: SE/4

(j) Extend the North Justis-Fusselman Pool to include:

TOWNSHIP 25 SOUTH, RANGE 37 EAST, NMPM
Section 2: SE/4

(k) Extend the North Justis Tubb-Drinkard Pool to include:

TOWNSHIP 25 SOUTH, RANGE 37 EAST, NMPM
Section 2: SE/4

(l) Extend the Lea-Pennsylvanian Gas Pool to include:

TOWNSHIP 20 SOUTH, RANGE 34 EAST, NMPM
Section 11: E/2
Section 12: All

(m) Extend the South Lane-Pennsylvanian Pool to include:

TOWNSHIP 10 SOUTH, RANGE 33 EAST, NMPM
Section 35: NW/4

(n) Extend the Medicine Rock-Devonian Pool to include:

TOWNSHIP 15 SOUTH, RANGE 38 EAST, NMPM
Section 23: NW/4

(o) Extend the Saunders Permo-Pennsylvanian Pool to include:

TOWNSHIP 14 SOUTH, RANGE 33 EAST, NMPM
Section 21: SW/4

(p) Extend the East Saunders Permo-Pennsylvanian Pool to include:

TOWNSHIP 14 SOUTH, RANGE 34 EAST, NMPM
Section 17: NW/4

(q) Extend the Sawyer-San Andres Gas Pool to include:

TOWNSHIP 10 SOUTH, RANGE 38 EAST, NMPM
Section 5: NE/4

(r) Extend the East Weir-Blinebry Pool to include:

TOWNSHIP 20 SOUTH, RANGE 37 EAST, NMPM
Section 12: NW/4

iqg/

RULE 314: GATHERING, TRANSPORTING, AND SALE OF DRIP OR CONDENSATE

(As proposed by El Paso Natural Gas Company)

(a) For the purpose of this Rule, condensate is defined as any liquid hydrocarbon which is produced at the wellhead incidental to the production of gas well gas and separated from the gas by conventional separation methods; drip includes condensate, as defined above, or any liquid hydrocarbon incidentally accumulating in a gas gathering or transportation system, or any mixture of such hydrocarbons.

(b) The waste of drip is hereby prohibited when it is economically feasible to salvage same.

(c) Transportation and sale of drip is hereby authorized provided the provisions of this Rule are complied with and Commission Form C-110 has been completed and filed in compliance with the provisions of Statewide Rule 1109.

(d) Every person transporting drip within the State of New Mexico shall file Commission Form C-112 in compliance with the provisions of Statewide Rule 1111.

(e) The owner during transportation and all persons transporting drip by truck or other vehicle shall make report of such transportation on Commission Form C-110-A. When the owner is also the transporter, the owner shall complete Sections I and II of the Form, furnish one copy to the driver of the vehicle and, when the trip has been completed, file one completed copy with the Commission. When the owner is not the transporter, the owner shall complete Section I of Form C-110-A and deliver the Form to the transporter, who shall complete Section II of Form C-110-A and furnish the driver of the vehicle with one copy and, when the trip has been completed, file one completed copy with the Commission. The driver of the vehicle shall complete Section III of Form C-110-A. The person driving or operating a vehicle transporting drip shall have in his possession a copy of Form C-110-A signed by the owner and transporter, or an authorized agent, in the appropriate Section thereof, showing the name and address of the owner, the source and destination of the drip, the name and address of the owner of the vehicle, type of vehicle, license number of vehicle, name and address of driver of vehicle, quantity of drip transported, and date and time and places loaded.

(Over)

If the owner of said drip is not the producer thereof, each and every operator of such truck or other vehicle shall have in his possession, in addition to the above requirements, a completed copy of Commission Form C-110-B, signed and certified by the producer and the purchaser of said drip, or their agents, in the appropriate Section thereof, showing the name and address of the producer, the name and address of the purchaser, the source of the drip and the expiration date of the authority of the purchaser to transport drip from the producer's system or other facility. Commission Form C-110-B shall be prepared in sufficient number by the purchaser. One copy shall be retained by the producer, one copy by the purchaser, one copy shall be filed by the purchaser with the Commission, and one copy shall be given to each vehicle driver having need thereof.

(f) Every gas transporter in the State of New Mexico shall, on or before the first day of November of each year, file with the Commission maps of its entire gas gathering and transportation systems within the State of New Mexico, locating and identifying thereon each drip trap and/or tank in said systems, said maps to be accompanied by a report, on a form prescribed by the Commission, showing the disposition being made of the drip from each of such facilities.

NEW MEXICO OIL CONSERVATION COMMISSION
SANTA FE, NEW MEXICO
DRIP TRANSPORTATION REPORT

FORM C-110-A
(As proposed by El Paso Natural Gas Company)
TICKET NO._____

PRODUCER'S IDENTIFICATION NO. _____
(To Be Inserted by Owner of Drip)

SECTION I

1. NAME OF OWNER OF DRIP _____

a. PRODUCED BY OWNER ☐ PURCHASED FROM PRODUCER ☐
(Check one. If b. is checked, attach copy of Form 110-B showing transfer of title)

2. ADDRESS OF OWNER _____

3. SOURCE OF DRIP _____

4. DESTINATION _____
(Name of Person and Physical Place to Which Delivery Authorized)

I hereby certify that on this _____ day of _____ 19____, I have authorized the below-named transporter to gather and transport to the above destination the quantity of drip specified below and that I have authority to sell the same.

_____
Signature of Owner or Agent

SECTION II

1. NAME AND ADDRESS OF OWNER OF VEHICLE _____

_____

2. TYPE OF VEHICLE _____ 3. LICENSE NO. OF VEHICLE _____

4. NAME OF OWNERS AGENT ORDERING TRIP _____

5. DATE ORDERED _____

6. FACILITIES TO BE SERVICED _____

The undersigned accepts drip for delivery in accordance with the above directions.

_____
Signature of Transporter or Agent

SECTION III

1. NAME AND ADDRESS OF DRIVER _____

Source	Gauge (Top)	Gauge (Bottom)	Barrels	Date and Hour
	Ft. ___ In. ___	Ft. ___ In. ___		
	Ft. ___ In. ___	Ft. ___ In. ___		
	Ft. ___ In. ___	Ft. ___ In. ___		
	Ft. ___ In. ___	Ft. ___ In. ___		
	Ft. ___ In. ___	Ft. ___ In. ___		
		Total	_____	

I hereby certify that drip transported by me was obtained by me from the source described in Section I and loaded as described in Section III.

_____
Signature of Driver

FORM C-110-B

(As proposed by El Paso Natural Gas Company)

NEW MEXICO OIL CONSERVATION COMMISSION

SANTA FE, NEW MEXICO

DRIP SALE AND PURCHASE REPORT

I

NAME OF PRODUCER _____

ADDRESS OF PRODUCER _____

SOURCE OF DRIP _____

EXPIRATION DATE OF THIS AUTHORIZATION _____

I certify that I have transferred title to the drip from the above source or sources to the below-named purchaser and he is hereby authorized to obtain drip from such source or sources until the expiration of this authorization.

_____
Producer

II

NAME OF PURCHASER _____

ADDRESS OF PURCHASER _____

I certify that I am the purchaser and owner of the drip from the source or sources indicated above and am authorized to remove the same until the expiration date set out in Section I above.

_____
Purchaser

CLASS OF SERVICE
This is a fast message unless its deferred character is indicated by the proper symbol.

WESTERN UNION
TELEGRAM

W. P. MARSHALL, PRESIDENT

1201 (4-60)

SYMBOLS
DL = Day Letter
NL = Night Letter
LT = International Letter Telegram

The filing time shown in the date line on domestic telegrams is LOCAL TIME at point of origin. Time of receipt is LOCAL TIME at point of destination

LA036 KA202

1962 AUG 14 AM 8 34

K TUB003 PD=FAX TULSA OKLA 14 838A CST=
NEW MEXICO OIL CONSERVATION COMMISSION=
STATE LAND OFFICE BLDG SANTA FE NMEX=

RE: CASE 2303

SKELLY OIL COMPANY FAVORS THE PRINCIPLE OF ESTABLISHING MINIMUM ALLOWABLES FOR GAS WELLS PARTICULARLY IN NORTHWESTERN NEW MEXICO. EXISTING STATUTES AND POWER OF THE COMMISSION TO ESTABLISH SUCH MINIMUMS TO PERMIT PREMATURE ABANDONMENT, ALSO THE DECREASING MARKET FOR GAS DURING THE PAST YEAR HAS FORCED THE COMMISSION TO ASSIGN EXTREMELY LOW ALLOWABLES FAR BELOW AMOUNT OF GAS NECESSARY TO BE PRODUCED TO PREVENT PREMATURE ABANDONMENT, ALSO IT IS NECESSARY TO RELIEVE THESE MARGINAL TYPE WELLS

THE COMPANY WILL APPRECIATE SUGGESTIONS FROM ITS PATRONS CONCERNING ITS SERVICE

CLASS OF SERVICE

This is a fast message unless its deferred character is indicated by the proper symbol.

WESTERN UNION

TELEGRAM

W. P. MARSHALL, PRESIDENT

1201 (4-60)

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OF NECESSITY OF TAKING DELIVERABILITY TESTS AND OTHER ONEROUS REQUIREMENTS NOT NECESSARY FOR A MARGINAL TYPE WELL. WE WOULD RECOMMEND FROM TWO TO THREE MILLION MINIMUM ALLOWABLE PER MONTH. WHICH UNDER PRESENT ECONOMICS WOULD REQUIRE THIRTEEN TO FOURTEEN YEAR PAY OUT=

= GEORGE W SELINGER SKELLY OIL CO...

THE COMPANY WILL APPRECIATE SUGGESTIONS FROM ITS PATRONS CONCERNING ITS SERVICE

F. D. Gorham, Jr.

H. E. Maxwell, Jr.

Gas Allocation

Blanco Mesa Verde:

August 1962 pool allocation was	7,[illegible],214 MCF
1696 wells at 3,000 MCF/Mo.	5,[illegible],000
Amount left to be allocated	1,527,214
MCF/well to be allocated	806
Formula: 75% acreage, 25% deliverability	

Aztec Pictured Cliff

August 1962 pool allocation	975,101
365 wells at 2,000 MCF	730,000
Amount left to be allocated	245,101
MCF/well to be allocated	672
Formula: 75% acreage, 25% deliverability	

Ballard Pictured Cliff

August 1962 pool allocation	923,590
421 wells at 2,000 MCF	842,000
Amount left to be allocated	81,590
MCF/well to be allocated	194
Formula: 91% acreage, 9% deliverability	

Fulcher-Kutz Pictured Cliff

August 1962 pool allocation	426,030
310 wells at 2,000 MCF	620,000
No gas available for deliverability allocation	
Formula: 100% acreage	

Basin DaKota

August 1962 pool allocation	5,025,292
672 wells at 3,000 MCF	2,016,000
Amount left to be allocated	3,009,292
MCF/well to be allocated	4,470
Formula: 40% acreage 60% deliverability	

BEFORE THE
OIL CONSERVATION COMMISSION
SANTA FE, NEW MEXICO
Pubco EXHIBIT No. 2
CASE 2502

South Blanco Pictured Cliff
August 1962 pool allocation 2,742,186
969 wells at 2,000 MCF 1,938,000
Amount left to be allocated 804,186
MCF/well to be allocated 830
Formula: 75% acreage, 25% deliverability

Tapicoto Pictured Cliff Pool
August 1962 pool allocation 267,351
113 wells at 2,000 MCF 226,000
Amount left to be allocated 41,351
MCF/well to be allocated 365
Formula: 99% acreage, 1% deliverability

West Ests Pictured Cliff Pool
August 1962 pool allocation 304,128
200 wells at 2,000 MCF 400,000
No gas left to be allocated
Formula: 100% acreage

Exhibit No. 3

Minimum Sales Required for Continued Operation of Mesaverde and Pictured Cliff Formation Gas Wells, San Juan Basin, New Mexico

	Mesaverde	Pictured Cliff
Total Monthly Sale	**480 MMF**	**325 MMF**
@ $.13 Mcf, $.1175 Mcf	$64	$39
Distillate @ 5% of Gas Value	3	0
Total Value	$67	$39
Less State Royalty	(8)	(5)
Less Production Taxes	(4)	(2)
Less Operating Costs*	(51)	(30)
	$ 4	$ 2

* **Operating Costs Include:**

	Mesaverde	Pictured Cliff
1. Maintenance	12%	1%
2. Operation	74%	91%
3. Ad Valorem Taxes on Well Equipment	11%	7%
4. Miscellaneous	3%	1%

FDGJr:t
8-14-62

SOUTH BLANCO-PICTURED CLIFFS GAS POOL
ESTIMATED EFFECT OF VARIOUS MINIMUM ALLOWABLES

	0 Minimum		1000 Minimum			1500 Minimum			2000 Minimum		
Well Groups	#Wells	Allowable	#Wells	0 Minimum Allowable	1000 Min Allowable	#Wells	0 Minimum Allowable	1500 Min Allowable	#Wells	0 Minimum Allowable	2000 Min Allowable
1. Producing ability less than 0 minimum breaking point. (48 MCFD - 1468 MCF/Mo)	199 21.4%	169,555 5.1%	199 21.4%	169,555 5.1%	169,555 5.1%	199 21.4%	169,555 5.1%	169,555 5.1%	199 21.4%	169,555 5.1%	169,555 5.1%
2. Producing ability of more than 1468 MCF/Mo and less than minimum allowable.			The zero minimum allowable factors calculate more than 1000 MCFM allowable at the breaking point. Therefore a 1000 minimum allowable would not be effective at current conditions of development & market demand.			6 .6%	8,939 .3%	8,939 .3% [-0- -0-]	146 15.7%	256,696 7.6%	256,696 7.6% [-0- -0-]
3. Producing ability of more than minimum allowable but calculate less than minimum and are assigned the minimum allowable.						4 .4%	5,659 .2%	6,000 .2% [+ 341 + .01%]	8 .8%	13,863 .4%	+16,000 + .5% [2,123 .07%]
4. Prorated on basis of 25% acreage plus 75% acreage times deliverability.	733 78.6%	3,177,123 94.9%				723 77.6%	3,162,525 94.1%	3,162,184 94.4%	579 62.1%	2,906,564 97.1%	2,904,427 86.8%
TOTALS	932	3,346,678	932	3,346,678	3,346,678	932	3,346,678	3,346,678	932	3,346,678	3,346,678

NOTE: The percentage figure directly beneath a well or allowable figure indicates the percentage of wells or allowable of the total wells or allowable for the Pool.

The volume figures in brackets indicate the comparison of the allowable, in the column & well group in which the data is located, to the zero minimum allowable located immediately to the left. The percentage figure in the brackets reflects the percentage of group 4 zero minimum allowable which would be allocated that well group because of the assignment of minimum allowable.

BEFORE THE
OIL CONSERVATION COMMISSION
SANTA FE, NEW MEXICO
O. C. EXHIBIT NO. 2
CASE 2-52-3

WEST KUTZ-PICTURED CLIFFS GAS POOL

ESTIMATED EFFECT OF VARIOUS MINIMUM ALLOWABLES

Well Groups	0 Minimum # Wells	0 Minimum Allowable	1000 Minimum # Wells	1000 Minimum 0 Min Allowable	1000 Minimum 1000 Min Allowable	1500 Minimum # Wells	1500 Minimum 0 Min Allowable	1500 Minimum 1500 Min Allowable	2000 Minimum # Wells	2000 Minimum 0 Min Allowable	2000 Minimum 2000 Min Allowable
1. Producing ability less than 0 minimum breaking point. (14 MCFD - 464 MCF/Mo)	23	6,041	23 12.8%	6,041 2.4%	6,041 2.4%	23 12.8%	6,041 2.4%	6,041 2.4%	23 12.8%	6,041 2.4%	6,041 2.4%
2. Producing ability of more than 464 MCF/Mo and less than minimum allowable.			37 20.7%	26,808 10.7%	26,808 10.7% [-0- -0-]	86 48.0%	32,513 33.0%	87,797 35.2% [+ 5,284 4.0%]	111 62.0%	118,593 47.5%	131,829 52.8% [+ 13,236 + 15.8%]
3. Producing ability of more than minimum allowable but calculate less than minimum and are assigned the minimum allowable.			19 10.6%	16,222 6.5%	19,000 7.6% [+ 2,728 + 1.36%]	23 12.8%	29,638 11.8%	34,500 13.80% [+ 4,862 + 3.7%]	23 12.8%	41,373 16.5%	46,000 18.4% [+4,627 + 5.5%]
4. Prorated on basis of 25% acreage plus 75% acreage times deliverability.	156	243,339	100 55.9%	200,309 80.4%	197,501 79.3% - 2,808 - 1.1%	47 26.4%	131,188 52.6%	121,042 48.6%	22 12.4%	83,373 33.6%	65,510 26.4%
TOTALS	179	249,380	179	249,380	249,380	179	249,380	249,380	179	249,380	249,380

NOTE: The percentage figure directly beneath a well or allowable figure indicates the percentage of wells or allowable of the total wells or allowable for the Pool.

The volume figures in brackets indicate the comparison of the allowable, in the column and well group in which the data is located, to the zero minimum allowable located immediately to the left. The percentage figure in the brackets reflects the percentage of group 4 zero minimum allowable which would be allocated that well group because of the assignment of minimum allowable.

FULCHER KUTZ-PICTURED CLIFFS GAS POOL

ESTIMATED EFFECT OF VARIOUS MINIMUM ALLOWABLES

Well Groups	0 Minimum #Wells	0 Minimum Allowable	1000 Minimum #Wells	1000 Minimum 0 Min Allowable	1000 Minimum 1000 Min Allowable	1500 Minimum #Wells	1500 Minimum 0 Min Allowable	1500 Minimum 1500 Min Allowable	2000 Minimum #Wells	2000 Minimum 0 Min Allowable	2000 Minimum 2000 Min Allowable
1. Producing ability less than 0 minimum breaking point. (17 MCFD - 552 MCF/Mo)	47 16.8%	12,299 3.25%	47 16.8%	12,299 3.25%	12,299 3.25%	47 16.8%	12,299 3.25%	12,299 3.25%	47 16.8%	12,299 3.25%	12,299 3.25%
2. Producing ability of more than 552 MCF/Mo and less than minimum allowable.			55 19.7%	42,706 11.29%	42,706 11.29% [-0- -0-]	128 45.9%	130,890 34.6%	132,515 35.03% [+ 1,625 + .78%]	162 58.0%	181,669 48.02%	191,264 50.56% [+ 9,595 6.88%]
3. Producing ability of more than minimum allowable but calculate less than minimum and are assigned the minimum allowable.			23 8.2%	17,965 4.75%	23,000 6.08% [+ 5,035 + 1.65%]	22 7.9%	26,173 6.91%	33,000 8.72% [+ 6,827 + 3.27%]	28 10.0%	44,930 11.87%	56,000 14.8% [+ 11,070 7.94%]
4. Prorated on basis of 25% acreage plus 75% acreage times deliverability.	177 96.75%	323,262	154 55.3%	305,297 80.71%	300,262 79.38%	82 29.4%	208,905 55.24%	200,854 53.00%	42 15.2%	139,369 36.86%	118,704 31.39%
TOTALS	279	378,267	279	378,267	378,267	279	378,267	378,267	279	378,267	378,267

NOTE: The percentage figure directly beneath a well or allowable figure indicates the percentage of wells or allowable of the total wells or allowable for the Pool.

The volume figures in brackets indicate the comparison of the allowable, in the column & well group in which the data is located, to the zero minimum allowable located immediately to the left. The percentage figure in the brackets reflects the percentage of group 4 zero minimum allowable which would be allocated that well group because of the assignment of minimum allowable.

AZTEC-PICTURED CLIFFS GAS POOL

ESTIMATED EFFECT OF VARIOUS MINIMUM ALLOWABLES

Well Groups	0 Minimum #Wells	0 Minimum Allowable	1000 Minimum #Wells	1000 Minimum: 0 Min Allowable	1000 Minimum: 1000 Min Allowable	1500 Minimum #Wells	1500 Minimum: 0 Min Allowable	1500 Minimum: 1500 Min Allowable	2000 Minimum #Wells	2000 Minimum: 0 Min Allowable	2000 Minimum: 2000 Min Allowable
1. Producing ability less than 0 minimum breaking point. (34 MCFD - 1043 MCF/MO)	50	31,061	50	31,061	31,061	50 14.0%	31,061 3.2%	31,061 3.2%	50 14.0%	31,061 3.2%	31,061 3.2%
2. Producing ability of more than 1043 MCF/MO and less than minimum allowable.			The zero minimum allowable factors calculate more than 1000 MCFM allowable at the breaking point. Therefore a 1000 minimum allowable would not be effective at current conditions of development & market demand.			54 15.2%	68,742 7.09%	68,742 7.09% [-0- -0-]	94	152,082 15.69%	145,311 14.9% [+ 6,771 .87%]
3. Producing ability of more than minimum allowable but calculate less than minimum and are assigned the minimum allowable.						2 .56%	2,287 .24%	3,000 .31% [+ 713 .08%]	9	15,808 1.63%	18,000 1.8% [+ 2,192 .28%]
4. Prorated on basis of 25% acreage plus 75% acreage times deliverability.	307	938,166				251 70.3%	867,137 89.7%	866,424 89.4%	204	770,276 79.5%	774,855 79.9%
TOTALS	357	969,227				357	969,227	969,227	357	969,227	969,227

NOTE: The percentage figure directly beneath a well or allowable figure indicates the percentage of wells or allowable of the total wells or allowable for the Pool.

The volume figures in brackets indicate the comparison of the allowable, in the column & well group in which the data is located, to the zero minimum allowable located immediately to the left. The percentage figure in the brackets reflects the percentage of group 4 zero minimum allowable which would be allocated that well group because of the assignment of minimum allowable.

BALLARD-PICTURED CLIFFS GAS POOL

ESTIMATED EFFECT OF VARIOUS MINIMUM ALLOWABLES

Well Groups	0 Minimum #Wells	0 Minimum Allowable	1000 Minimum #Wells	1000 Minimum: 0 Minimum Allowable	1000 Minimum: 1000 Min Allowable	1500 Minimum #Wells	1500 Minimum: 0 Minimum Allowable	1500 Minimum: 1500 Min Allowable	2000 Minimum #Wells	2000 Minimum: 0 Minimum Allowable	2000 Minimum: 2000 Min Allowable
1. Producing ability less than 0 minimum breaking point. (30 MCFD -- 915 MCF/Mo)	83 20.5%	54,036 5.5%	83 20.5%	54,036 5.5%	54,036 5.5%	83 20.5%	54,036 5.5%	54,036 5.5%	83 20.5%	54,036 5.5%	54,036 5.5%
2. Producing ability of more than 464 MCF/Mo and less than minimum allowable.			4 1.0%	3,861 .4%	3,861 .4% [-0- -0-]	67 16.6%	82,847 3.5%	82,847 8.5% [-0- -0-]	138 34.1%	196,125 20.1%	200,848 20.6% + [4,723 + .7%]
3. Producing ability of more than minimum allowable but calculate less than minimum and are assigned the minimum allowable.			4 1.0%	3,753 .4%	4,000 .4% [+ 247 .03%]	31 7.7%	42,318 4.3%	46,500 4.7% [+4,182 .5%]	20 4.9%	32,573 3.3%	40,000 4.1% [+ 7,427 1.1%]
4. Prorated on basis of 25% acreage plus 75% acreage times deliverability.	321 79.5%	920,263 94.5%	313 77.5%	912,649 93.7%	912,402 93.7%	223 55.2%	795,098 81.7%	790,916 81.3%	163 40.5%	691,565 71.1%	679,415 69.8%
TOTALS	404	974,299	404	974,299	974,299	404	974,299	974,299	404	974,299	974,299

NOTE: The percentage figure directly beneath a well or allowable figure indicates the percentage of wells or allowable of the total wells or allowable for the Pool.

The volume figures in brackets indicate the comparison of the allowable, in the column & well group in which the data is located, to the zero minimum allowable located immediately to the left. The percentage figure in the brackets reflects the percentage of group 4 zero minimum allowable which would be allocated that well group because of the assignment of minimum allowable.

BLANCO-MESAVERDE GAS POOL

ESTIMATED EFFECT OF VARIOUS MINIMUM ALLOWABLES

Well Groups	0 Minimum # Wells	0 Minimum Allowable	0 to 2500 Minimum			3000 Minimum # Wells	3000 Minimum 0 Minimum Allowable	3000 Minimum 3000 Minimum Allowable
1. Producing ability less than 0 minimum breaking point. (92 MCFD - 2817 MCF/Mo)	393 21.5%	629,445 4.7%	393	629,445	629,445	393 21.5%	629,445 4.7%	629,445 4.7%
2. Producing ability of more than 2817 MCF/Mo and less than minimum allowable.			The zero minimum allowable factors calculate more than 2500 MCFM allowable at the breaking point. Therefore a 2500 minimum allowable would not be effective at current conditions of development & market demand.			36 2.0%	104,489 .8%	104,489 .8% [-0- -0-]
3. Producing ability of more than minimum allowable but calculate less than minimum and are assigned the minimum allowable.						14 .8%	38,510 .29%	42,000 .31% + [3,490 + .03%]
4. Prorated on basis of 25% acreage plus 75% acreage times deliverability.	1,435 78.5%	12,625,807 95.3%				1,385 75.7%	12,482,808 94.2%	12,479,348 94.2%
TOTALS	1,828	13,255,252				1,828	13,255,252	13,255,252

NOTE: The percentage figure directly beneath a well or allowable figure indicates the percentage of wells or allowable of the total wells or allowable for the Pool.

The volume figures in brackets indicate the comparison of the allowable, in the column & well group in which the data is located, to the zero minimum allowable located immediately to the left. The percentage figure in the brackets reflects the percentage of group 4 zero minimum allowable which would be allocated that well group because of the assignment of minimum allowable.

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

EXAMPLE OF INCOME FOR VARIOUS MINIMUM ALLOWABLES

PICTURED CLIFFS GAS POOLS

	Aztec Breaking Point Allowable (1010)	Ballard Breaking Point Allowable (915)	Fulcher Kutz Breaking Point Allowable (552)	South Blanco Breaking Point Allowable (1468)	West Kutz Breaking Point Allowable (464)	1000 Minimum Allowable	1500 Minimum Allowable	2000 Minimum Allowable
Gas @ 11.5¢ MCF	116.15	105.22	63.48	168.82	53.36	115.00	172.00	230.00
Less Royalty @ 12.5%	14.40	13.05	7.87	20.93	6.62	14.37	21.56	28.75
Less well operating costs	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00
Gross Monthly Income after Royalty and operating costs	51.75	42.17	5.61	97.89	3.26	50.63	100.44	151.25

EXAMPLE OF INCOME FOR VARIOUS MINIMUM ALLOWABLES

BLANCO MESAVERDE GAS POOL

	Breaking Point Allowable (2817)	3000 Minimum Allowable
Gas @ .13¢ MCF	366.21	390.00
Less Royalty @ 12.5%	45.76	48.75
Less well operating costs	100.00	100.00
Gross Monthly Income after royalty and operating costs	220.45	241.25