BEFORE THE

(Pil Conservation Commission Santa Fe, New Mexico April 30, 1956

IN THE MATTER OF:

SPECIAL HEARING CASE NO. 1067

TRANSCRIPT OF PROCEEDINGS

DEARNLEY-MEIER AND ASSOCIATES

COURT REPORTERS

605 SIMMS BUILDING

TELEPHONE 3-6691

ALBUQUERQUE, NEW MEXICO

BEFORE THE OIL CONSERVATION COMMISSION SANTA FE, NEW MEXICO April 30, 1956

IN THE MATTER OF:

Application of the Gil Conservation Commission upon its own motion for an order relating to the extension of the provisions of Emergency Order A-77-(B). In the above entitled cause the Gil Conservation Commission contemplates an order extending the provisions of Emergency Order A-77-(B) for the duration of the period of the pipeline pro-rationing heretofore instituted by Cities Service Gil Company in Lea, Eddy and Chaves Counties, New Mexico.

No. 1067

BEFORE: Mr. A. I. Porter

Mr. E. S. (Johnny) Walker

TRANSCRIPT OF HEARING

MR. PCRTER: The meeting will come to order, please. Mr. Curley, will you read the case?

MR. GURLEY: Case 1007: Application of the Oil Conservation Commission upon its own motion for an order relating to the extension of the provisions of Emergency Order A-77-(B). In the above entitled cause the Oil Conservation Commission contemplates an order extending the provisions of Emergency Order A-77-(B) for the duration of the period of the pipeline pro-rationing heretofore instituted by Cities Service Oil Company in Lea, Eddy, and Chaves Counties, New Mexico.

MAR. PORTER: How many witnesses do we have in this case that intend to present testimony?

M. HOLL: We have three.

MR. CAMPBELL: We have one.

MR. GURLEY: The Commission has one.

ADA DEARNLEY & ASSOCIATES
STENOTYPE REPORTERS
ALBUQUERQUE, NEW MEXICO
TELEPHONE 3-6691

MH. PORTER: Would it be best to swear them all at one time? (Witnesses sworn).

MM. PORTER: Mr. Mutter, will you take the stand?

DAN NUTTER

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

DIRECT EXAMINATION

By MR. GURLLY:

- Q would you state your name and position, please?
- A Dan Nutter, engineer for the Oil Conservation Commission.
- Q Have you testified before the Commission before?
- A Yes, sir, I have.
- Q Are you familiar with case number 1067?
- A Yes, sir, I am.
- Q Do you know in what manner the Commission was notified by Cities Service Oil Company that the latter was going to institute pipeline pro-ration?

A Yes, sir, on April 3rd at 4:34 P.M. the Commission received the following telegram from Cities Service Oil Company from Bartles-ville, Oklahoma, directed to A. L. Porter, Jr., Oil Conservation Commission, Santa Fe, New Mexico. "The East Chicago Refinery of Cities Service Oil Company (Del.) was shut down at 10:30 A.M.

Tuesday morning as a result of a strike called by the local labor union. This shut down was precipitated despite the company's offer to pay increases equal to those being offered and accepted by all the other unions in the company and elsewhere in the industry. The local union insisted upon institution of straight plantwide seniority without appropriate regard for ability and other qualifi-

cations as a requisite for signing a contract extension and continuing work. This practice would subject both the employees and plant facilities to great danger and hazard. Cities Service Oil Company (Del.) could not accede to such demands." Signed, Cities Service Oil Company.

The following day a second telegram was -- it was not the following day, it was the next following day, on April 5th at 10:+2 A.M., the following telegram was received from Bartlesville, Oklahoma, directed to A. L. Porter, Secretary Director of the Cil Conservation Commission, State of New Mexico, Santa Fe, New Mexico. "Due to strike which closed our East Chicago Refinery the following telegram has been sent to all transporters who received crude from leases for our account in Kansas, Oklahoma, Texas, New Mexico and Louisiana. Effective April 1, 1956, and continuing until further notice, please run from leases connected for our account an amount of oil equal to sixty percent of actual daily average runs made in February, 1956. Properties under waterflood operations are to be exempt from this proration. Every effort will be made to resume normal purchases at the earliest possible date." Signed, Cities Service Oil Company, Gerald McGrew.

Q What action did the Commission take?

A The Commission met in Executive session on April 6, 1956, and at this time, session determined that an emergency existed, further, in order to protect correlative rights and prevent waste, an emergency order should be ordered. As a result, Order A-77-(A) was issued. After further consideration and at a second executive session on April 14th, I believe that date was April 14th, the Commission met a second time and decided that a more explanatory

order should be issued. The result of that meeting was the issuance of Order A-77-(B), which amended and superceded the Order A-77-(A). The effective date of A-77-(B) was April 14th.

- Q Provisions in the Commission order that no cut should be made from the takes in marginal wells means that all cuts would have to be taken from top allowable wells?
 - A Yes, sir.
- Q Do you have figures indicating just what the total runs of crude oil purchased by Cities Service for the month of February, 1956 were?
- A According to C-112, total of 489,325 barrels was purchased during February. There were 29 days in February, so the total daily average for that month was 16,873.3 barrels per day.
- Q Have you calculated how much a forty percent cut would amount to?
- A Forty percent of 16,873.3 equals 6,749.3, that would be the forty percent cut.
- 9 You have figures indicating the total allocation to top allowable wells with Cities Service connection for April and May?
 - A Yes, sir, I have.
 - Would you give those, please?
- A During the month of April a total of 10,691 barrels per day was allocated to top allowable wells on the proration schedule. In the month of May a total of 10,291 barrels was allocated to top allowable wells on the proration schedule.
- Q Where did you obtain these figures indicating what top wells or top allowable wells?
 - A Those figures are from the proration schedule for the

respective months.

Q How does the Commission determine what is a top allowable well, Mr. Nutter?

A The means for determining a top allowable well is the last test, G.O.R. test which the operator has submitted to the Commission; also operators are requested to submit their forms C-127, which is a request for allowable change to indicate whether a well which has previously been reported as top allowable on GOR is no longer top allowable.

- Q Are those forms required by the Commission rules?
- A Yes, sir, they are.
- Q Do you have the oil proration schedules for March, April and May with you at this time?

A Yes, sir, I have. This is the oil proration schedule for the month of March, attached to the front cover of which is a memorandum from Mr. A. L. Porter, Jr., to all operators. This proration schedule was sent to approximately 700 operators who are on the mailing list. The memorandum reads as follows: "To all operators from A. L. Porter, Jr.; Subject: Allowable Reduction. Please review the allowable and production of each of your wells and submit form C-127, one copy only to the Hobbs office of the Oil Conservation Commission, requesting allowable reductions effective April 1 for all wells which are not capable of producing the assigned allowables. These forms must be mailed so as to reach the Hobbs office not later than March 15." He attaches a sample copy of the C-121 to the proration schedule for the month of March.

MR. PORTER: Did you mean form C-127 or C-121?

A Impant to say C-127.

MR. GURLEY: We would like to have the proration schedules marked exhibits A, B, and C.

(Commission's Exhibits A, B, and C marked for identification).

- Q Are these the regular proration schedules for those months are these the ones issued by the Commission?
 - A Yes.
- Q Have you indicated on those which wells are the Cities Service wells?
 - A I have on the April proration schedule.
 - Q You have them clearly marked on the exhibits, is that true
 - A Yes, sir.
- Q Mr. Nutter, it is true, is it not, that normally a marginal well is allowed to produce as much oil as it is physically able to produce?
 - A Yes, sir.
- Q If it is cut, it cannot make up this lost production, is that not true?
 - A No, sir, it is producing at its capacity.
- Q If a top allowable well is cut in its production, can it make up for its production?
 - A Normally it should be able to.
 - Q Can it do so physically? A Yes, sir.
 - Q Is it permitted to do so under Commission rules?
- A Well, Commission Rule 503-F,I believe it is, permits the operator to make application for back allowable in the event a top allowable well is cut.
 - Q What is the effect of such application?

A Well, that would be up to the Commission; however, the Rule does provide the operator the right to apply for the back allowable.

- Q It specifically sets that forth in the rules, is that correct?
 - A Yes, sir.
- Q Taking a hypothetical example, Mr. Nutter, what result might you expect if a well producing three or four barrels per day were cut in its production by as much as forty percent?

A Well, if a well were making three barrels a day and were cut by forty percent, I believe that the resulting production might not be able to meet the overhead on the well, and as a result the well may be shut in or plugged, resulting in premature abandonment.

MR. WALKER: Are there any such wells involved in this situation?

A Yes, there are wells with allowables of less than three or four barrels per day.

MR. GURLEY: I would like to offer at this time Exhibits A, B and C to the Commission.

MR. PORTER: Without objection they will be received. Anyone else have a question of the witness?

MR. GURLEY: Just a minute, Mr. Porter, please.

MR. KITTS: Your Exhibits B and C which you said are proration schedules for the months of April and May, do they include the Eddy County schedules?

A Yes, sir, they do.

MR. GURLEY: We have no further questions.

MR. PORTER: Mr. Holl, will you proceed with your questions?

MR. HCLL: The appearances are Clarence C. Hinkle and Alfred

O. Holl, Bartlesville, Oklahoma, for Cities Service Oil Company. CROSS EXAMINATION

By MR. HOLL:

- Q Just several clarifying questions first, Mr. Nutter. Your most recent testimony was relative to wells making three or four barrels a day, isn't that correct?
 - A Yes, sir.
- Q Wonder if I might call your attention to Rule 802-C of the Commission which prohibits wells making ten barrels or less from being affected by any prorationing?
 - A Yes, sir.
- Q Are you aware that Cities Service Oil Company abided by that rule in their proposed prorationing?
 - A No, sir, I am not.
 - Q On direct examination we will bring out that we did.
- A The only thing that I had to go by was the telegram in which the company notified the Commission that they were cutting production or cutting takes from leases by forty percent, and a sentence there stated that waterflooded operations were to be exempt, but it didn't make any reference to any ten barrel allowable.
- Q That is understandable. Before that you made the statement relative to pipeline prorationing. Is it your understanding that this is pipeline prorationing and not purchase prorationing?
- A There is a rather fine line to be drawn between the two.

 I am afraid I couldn't detect the difference.
- Q You are aware that this was as a purchaser this was proposed, and not as a pipeline company?

The actual prorationing is evidently being done by the

transporters, because the authorization from the company was made to the transporters to cut their takes, but there is no indication that the pipeline couldn't take all that was ordered of them to take, isn't that correct?

- A Physically?
- Q Yes.
- A I don't imagine they would be affected by the capacity of the lines.
 - Q Backing up then, this is actually purchaser prorationing?
- A Well, I will turn back to the telegram again. "Please run from leases connected for our account an amount of oil equal to sixty percent..." The purchaser himself has authorized the transporter to curtail takes, regardless of the source prorationing.
- Q Mr. Nutter, before the issuance of Orders A-77-(A) and A-77-(B), do you recall whether you had any request from operators of marginal units for such an order?
 - A No request was made by me, no, sir.
- Q Do you know of any requests by those marginal unit operators to the Commission?
- A No, sir, not to my knowledge, there could have been, but I couldn't say.
- 2 You have testified relative to the proposal of the Commission as set out in your Orders A-77-(A) and A-77-(B) being based on the premise that underage from top allowable wells could be made up, whereas underage to marginal units could not be made up, is that correct?
 - A That is correct.
 - Q Have you had any indication from Cities Service Cil Company

that they will ever be able to make up any underage?

- A No, sir, we have not.
- Q Have you had any indication from any other purchaser of crude oil in the State of New Mexico that they will be able to buy any of this underage oil?
 - A No, sir.
- Q So then carrying that on, if a top allowable well, in order that Cities Service Oil Company could purchase only their needs in the State of New Mexico, a top allowable well would have to be cut back to approximately twelve barrels, isn't that correct, from the various discussions that you had?
- A I think that was under your forty percent reduction. A top forty barrel well would probably be cut back to, I believe that's seventy percent.
 - Q I believe that is it, approximately.
 - A Yes, sir, twelve barrels would be approximately correct.
- Q If Cities Service Oil Company cannot make up this underage as a purchaser, and no other purchaser of crude oil has made any offer to make up underage, a well which is cut back to twelve barrels at this time would have no opportunity to make up underage, isn't that correct?
- A Well, sir, no provision is made at the moment for making up any back allowable. That would probably, if it came, be several months from now, and any other purchasers and even Cities Service position might be different, they might be able to take that oil.
- Q You have no indication now that any purchaser now could, even several months down the line?
 - A No, sir.

- Q -- Is that correct?
- A No, sir.
- Q Assuming this underage wouldn't be made up as has been indicated by this testimony, would not the correlative rights of the owners of the top allowable wells be injured? If they could never make up any of this underage, wouldn't we have to assume that their rights have been and are being injured right now, under the Commission orders A-77-(A) and A-77-(B)?
- A The whole thing is predicated on the right of the operator to make application for his back allowable. You couldn't answer that until you could determine whether he would get his back allowable or whether ne could make it up.
- Q Unless we have some evidence in the hearing that back allowables will be made up, then we have to assume that the correlative rights of owners of top allowables wells will be injured?
 - A No, sir, I couldn't make that assumption.
- Q In your experience as an engineer for the Commission, are you aware that there might be, might be a number of wells which are assigned top allowables which potential is just barely above the top allowable figure?
 - A There are probably some such wells, yes, sir.
- Q Using the twelve barrel figure again for top allowable wells, could those wells ever be able to make up very much underage even if they produced at capacity for the next six months or so?
- A In most cases the wells would be able to make up their back allowable. There may be isolated cases where they would not be able to do it.
 - O How would they make it up?

- A Most of the wells have a producing capacity greater than, most top allowable wells have a producing capacity that is greater than the allowable. The fact that the well has a producing capacity given as forty-one barrels, and the well is a forty barrel top allowable doesn't mean that is all the capacity of the wells.

 Many operators in testing their wells purposely keep their wells down.
- Q Aren't there actually a lot of wells that the case is such that the top capacity is, say, from forty to forty-five barrels if they are assigned a forty barrel top allowable?
 - A There may be.
- Q Those would be almost impossible, for those wells to make up any large amount of underage, isn't that correct?
- A It would depend on the time over which the underage was extended.

By MR. HINKLE:

- Q Was the Commission's Emergency Order A-77-(B) issued solely on the strength of Rule 503-F where you are allowed to make up back allowables?
- A I think that that rule was probably issued -- let me turn to 503-F -- I think that that rule was probably issued keeping not only that rule but every rule in the book in mind. It was issued for the purpose of protecting correlative rights and preventing waste.
 - Q How does this protect correlative rights?
- A Rule 503-F, as we have stated before, gives the operator the right to make up his back allowable. That provision is very clearly stated in the rules, and it is also repeated in Order

A-77-(A) and (E) that every operator should have the right to make up his back allowable.

Q Yes, but how does that allow an operator to protect correlative rights?

A In the event of pipeline proration, you have two wells in the pool and they are offsetting each other and connected to two different lines, and one of the lines is shut in or curtailed, one of the purchasers, if the period over which the prorationing occurs is an extended period, there is sure to be drainage which would result in injury to correlative rights.

Q Let's take for example a case where a so-called marginal well is capable of, say, making thirty-five barrels. It is on the same relative structural position, next to forty-acre unit, where you have a well that is making in excess of the allowable, say forty-five barrels --

A Yes, sir.

Q -- If you took the thirty-five barrels on the non-marginal well and cut the other one to twelve, assuming, as I say, they are on the same relative structural position, how would correlative rights be protected by this Order?

A Assuming at a later date that back allowable was provided for the well which was cut to twelve barrels, he would be in a position of producing his proportional share of the reservoir fluids.

Q If this Order stayed on, suppose the strike continued for several months and it was necessary to curtail production, would that tend to make withdrawal or coning toward the well that was producing rather than remain on equal basis?

A No, sir, I don't think coning would result.

- Q Well, the faster withdrawal would that not affect the other well?
- A There may be a possibility that the thirty-five barrel well might drain some of the acreage dedicated to the forty barrel well, yes, sir, later on when the forty barrel had its previous allowable restored, if such was the case --
- Q (Interrupting) Let's assume also that this well would just keep making forty-one barrels, it would be almost impossible, as you testified a while ago, to make up the back allowable, if the back allowable was ever permitted by reason of having purchasers?
- A It would depend on the length of time that the well was permitted to make up its back allowable, also the amount of back allowable it had to make up.
- Q Did the Commission consider any element of waste in connection with the issuance of this Emergency Order?
 - A Yes, sir.
 - Q In what way does this tend to prevent waste?
- A The requirement to produce the capacity of a marginal well to prevent premature abandonment and resulting waste.
- Q I guess you are familiar with the rule or definition of a non-marginal well?
 - A Yes. sir.
- - A Yes.
- Q Is that a realistic definition as compared with the general concept of the industry as to what a marginal well is?
 - A Insofar as conservation practices, I believe marginal is

pretty well recognized throughout the conservation industry, if there is such, as being a well that can't produce top allowable. I realize that industry has another definition of marginal.

- Q Don't you think that Rule 802-C is more realistic, which says in the case of prorationing that you should take at least ten barrels from any well that's capable of making that, so as to prevent premature abandonment? Is that a more realistic definition?
 - a Than what?
 - Q Than your marginal well definition.
- A No, sir, you can have a lot of wells marginal that wouldn't be covered by ten barrels; marginal according to the concept of what marginal means to the Commission.
- Q You think that it is realistic that it varies from month to month with the Commission varying their allowable from month to month?
- A In consideration of what the Commission defines marginal as, yes, sir, it does vary.
 - Q Mr. Nutter, are you familiar with the ratable take act?
 - A What are you referring to there?
- Q Well, it is based on Rule 802, your Rule 802 follows largely the ratable take provisions? It is on page 72 of the rules as the common purchaser act.
 - A Yes, sir, I am acquainted with that.
- Q Are you aware that the law provides that purchasers shall take ratably and uniformly from all wells in the field?
- A I am aware that it requires a purchaser to take ratably, yes, sir.
 - MR. KITTS: At this point I would like to make one comment

for the record. Actually I don't think it is necessary that any objection to his answering the questions be made, if it is understood that he is testifying about legal construction of the order. I know he has referred to the statutes, but there are certain matters here that I believe that it must be applicable to that Mr. Nutter can testify about only so far as his understanding what the rules and orders of the Commission provide.

MR. HINKLE: That is understood.

- Q The Commission Rule 802 follows substantially the act, does it not?
 - A Yes, sir, it does.
- Q It requires every person engaged in the purchase to purchase ratably, does it not?
 - A Yes, sir.
- Q In every field. As we have mentioned a while ago, Rule 802-C is the one that tends to protect wells, to prevent the premature abandonment, does it not?
 - A Yes, sir.
- Q Is there any question in your mind as to whether or not the Emergency Order is in conflict with the ratable purchasing act?
 - A No, sir, I don't believe that it is.
- Q How do you justify it under the provisions of the ratable take act?
- A I believe that the Emergency Order provides for ratable take. It may not provide for it immediately today, but it does over the long term view.
 - Q You have already testified that you have no purchasers in

sight who are willing to take up the back allowable, is that right?

- A Yes, sir.
- Q You don't take the position that you can make companies purchase oil, do you?
 - A I doubt it.
- Q Unless you have some firm offers, how can you say definitely it is going to be made up?

A I stated before that this back allowable at the earliest couldn't be made up for several months, perhaps the other companies, as well as Cities Service themself, will be in a better position at that time.

Q How can the Commission base an order on speculation as to the probability of it being made up in the future, do you think that is a good policy of the Commission, to base an emergency order on speculation?

A There is a certain amount of speculation present, possibly, in every order. There would be a greater possibility of violation of ratable take if you didn't make such an order possible or issue such an order, I believe.

MR. HINKLE: That is all.

MR. PORTER: Any other questions of the witness?

MR. CAMPBELL: Yes, sir.

MR. PORTER: Mr. Campbell.

MR. CAMPBELL: Enter an appearance for Campbell and Russell appearing for M. Machris.

By MR. CAMPBELL:

Q Mr. Nutter, pursuing first this line of testimony in connection with correlative rights and the prevention of waste,

it has been indicated that an order such as Order 77-A or 77-B is contrary to ratable take provisions of our statutes and that it cannot protect correlative rights in those instances where a well may be on the border line between being a marginal well and a top allowable well. I would like for the record to call your attention to the definition of correlative rights contained in the Statutes. and in the regulations. Is it not correct that the obligations of the Commission, as I understand you are construing the Statute today, the obligation of the Commission to protect correlative rights is stated in the Statute to mean, "the opportunity afforded so far as it is practicable to do so, to the owner of each property in a pool to produce without waste his just and equitable share of the cil or gas, or both, in the pool, being an amount. so far as can be practicably determined, and so far as can be practicably obtained without waste, substantially in the proportion that the quantity of recoverable oil or gas, or both, under such property bears to the total recoverable oil or gas, or both, in the pool, and for such purpose to use his just and equitable share of the reservoir energy." Is that not the definition of correlative rights?

- A Yes, it is.
- With that in mind and considering the obvious fact there are wells on the border line between being a marginal well and a top allowable well, and just above a top allowable well, is it your opinion that Order 77-A and 77-B, insofar as it is practicable to do so, substantially protects the rights of producers in these pools to recover their fair and just share of the oil in that pool:
- \pm Order A-77-(A) and A-77-(b) both provide that nothing in this order shall be construed as denying any operator the right to make

application for back allowable, pursuant to the terms of Rule 503-F. I believe that that provision would make it possible for them to have the right to produce their oil; whether they get it or not is another question.

Q In connection with the back allowable provision of the rules and the provision you just referred to in Order A-77(A) and A-77-(B), has the Oil Conservation Commission of New Mexico had previous experience with the request for back allowables as a result of pipeline prorationing?

- A Yes, sir.
- Q When was that?

A The only time to my knowledge since I have been working for the Commission was in September of 1955, I believe it was September. At the time, Stanolina Oil Company had to resort to pipeline prorationing as a result of their fire in Indiana.

Q At the conclusion of the pipeline prorationing and going back to market with all of their demand, has the Commission received requests from operators for back allowables?

- A On the Stanolind case?
- Q Yes.
- A Yes, sir.
- Q Have those back allowables been granted?
- A Yes, sir.
- Q In what manner, generally, have they been granted and run to your knowledge, and over what period?
- A The total amount of back allowable in that case, as I recall, was approximately 400,000 barrels back allowable was granted, and that was to be made up at the rate of approximately,

- I believe it was somewhere around forty-two or forty-three hundred barrels per day and extended over a period of three months.
 - Q Have those back allowables to your knowledge been run?
 - A Yes, sir.
- Q To your knowledge have all or most of the operators of top allowable wells affected by the Stanolina prorationing sought and obtained back allowables?
 - A Yes, sir, I believe most of them did.
- Q Did they do that, Mr. Nutter, upon the basis of an order similar to Order A-77-(A) and A-77-(B)?
 - A Yes, sir.
- Q During the pipeline prorationing were marginal wells to which Stanolind was connected permitted to produce all they could produce?
 - A Yes, sir.
- Q Mr. Nutter, in connection with your other testimony, am I correct in my understanding that Order No. A-77-(A) was issued effective and dated April 6 of 1956?
 - A Yes, sir.
- And that order remained in effect until it was amended and superceded by Order No. A-77-(B) which became effective April 14, is that correct?
 - A Yes, sir.
- Q Being an Emergency Order, Order No. A-77-(B) then expired at the end of April 29th, or yesterday, is that correct?
 - A Yes.
- Q So that from April 6, 1956 until and including April 29, either Order A-77-(A) or A-77-(B) was in effect?

- A I bresume so, yes, sir.
- which Cities Service through its pipeline contract is connected, you stated that there were sufficient top allowable connections to absorb the approximately 6749.3 barrels per day cut, is that not correct?
 - A Yes, sir.
- Can you state which pools in New Mexico were involved in those Cities Service connections through their contracts?
- A There were a good many pools involved in the thing. Arrowhead Pool, Blinebry Gas Pool, Brunson Pool, Jalmat Pool, langlie-Mattix Pool, Caprock-Queen Pool, the Dean Devonian Pool, the Drinkard Pool, East Caprock-Devonian, East Caprock-Wolfcamp, Dumont, Jalmat, if I didn't say that before, the Eunice, the Hare, Jalmat again, Langlie-Mattix, this is going to be repetitious, Lazy J. Penn, Lovington-Abo, Lovington-Paddock, Maljamar, I believe I mentioned the Jalmat and the Drinkard, the Teas, the Jim Yates, Mescalero Penn, Mescalero Devonian, Eumont, Monument, Monument-Paddock, North Lynch, North Warren McKee, the Paddock, the Persol, the Fenrose-Skelly, the Rhodes, South Eunice, Terr-Blinebry, Townsend-Wolfcamp, Tubb, Vacuum, North Warren McKee, West Lovington-Wilson, bunch of wildcats, the Anderson Pool in Eddy County, the Frime, the Grayburg Jackson Loco Hills, Fremier Shugart, Warren Abo, Warren Drinkard, South Bunice, West Wilson, I. K. Queen, bunch more in the Caprock-Queen, the Fersol and the Corbin.
- out of which Cities service is the only purchaser?

- A No, sir, I haven't made a study to determine that.
- Q May I refer you particularly to the Townsend-Wolfcamp Oil Pool?
 - A Yes, sir.
- Referring to Commission records with reference to the marketing of crude oil from the Townsend-Wolfcamp Oil Pool, will you state how many crude oil purchasers or separate companies are connected to oil wells in that pool?
 - A How many purchasers?
 - Q Yes, sir.
 - A I don't have that record with me, Mr. Campbell.
 - Q Do you know whether there are more than Cities Service?
 - A I would imagine that there are more, yes, sir.
- Q Do you know from your records or your own independent knowledge whether M. A. Machris and one Wilshire Oil Company in the Townsend-Wolfcamp Pool are the only wells in that pool from which Cities Service is purchasing?
 - A Would you repeat your question?
- Q I asked you if your records would reflect or whether you know whether the purchases that Cities Service makes in the Townsend-Wolfcamp Pool are exclusively from wells of M. A. Machris or Wilshire Oil Company?
 - A Yes, sir, they are.
- Q Do you have any information in the Commission records reflecting what has occurred with regard to the purchasing of crude oil from the Cities Service connections in the Townsend-Wolfcamp Fool since April 6, 1956?
 - A All of these wells connected, owned by Wilshire Oil Company

- or M. A. Machris -- I started to make an erroneous statement -two of the wells owned by those two companies were top allowable
 wells on the April proration schedule. There are a total of six
 wells in all connected to Cities Service. The other four wells
 are all marginal wells.
- Q Do you know whether Cities Service has taken 100% of production from the marginal wells in that pool during the month of April?
 - A No, sir, they have not.
- Q Do you know whether any of those marginal wells have been or are now shut in?
 - A No, sir, I don't.
 - MR. CAMPBELL: That is all.
 - MR. PORTER: Any further questions of the witness?
 - MR. HOLL: I have just one or two.

By MR. HOLL:

- Q Mr. Nutter, when the Stanolind Oil Purchasing Company proration occurred, to your knowledge did the Commission have any assurance that Stanolind or other purchasers would attempt to make up this underage that occurred at that time?
 - A At which time, Mr. Holl?
- Q As I recall, the hearing following Stanolind's fire was in September of 1955. Do you remember if at that time there was assurance by Stanolind that the underage which was occurring by their prorationing of purchasers would be made up?
- A There was no assurance at the time that the emergency order was issued, no, sir.
 - Q You don't recall that Mr. Pielsticker of Stanolind Oil

Furchasing Company made any statements at the hearing in September that they would attempt to make up all the underage that occurred?

- A No, sir, if he made that statement it is in the record.
- Q Relative to market conditions last fall, which was when the Stanolind fire occurred, in your opinion were they better than they are at present for the market of crude oil? Is it not true -- excuse me.

A Perhaps there was a seasonable difference in the amount of crude oil necessary then compared to now, yes, sir. However, the total demand for crude oil -- strike that.

- Q Wasn't it true that they were entering at that time into a period of rather active demand for crude oil?
 - A Yes, sir.
 - Q And what do you consider the situation to be now?
- A The total demand for crude oil at this time is at a seasonable low. We are approaching a seasonal low with a resultant curtailment of allowables in practically all States.

MR. HOLL: That is all we have.

MR. CAMPBELL: May I ask one more question there?

MR. PORTER: Mr. Campbell.

By MR. CAMPBELL:

- Q With regard to marketing conditions now as compared to marketing conditions in the fall of last year, has there been any reduction to your knowledge, any reduction of imports since that time?
 - A No, sir, there has not.
 - Q Have the imports increased?
 - A I couldn't speak for the exact month compared to the exact

month last fall, but the overall trend has been toward more imports.

MR. CAMPBELL: That is all.

MR. PORTER: Mr. Kitts.

REDIRECT EXAMINATION

By MR. KITTS:

- Q Mr. Nutter, neither you nor anyone else now can be sure how long this strike is going to last, can you?
 - A No, sir, I certainly don't know how long.
- Q Neither can we be sure that any purchaser will find they are able or find it convenient to take the back allowable?
 - A We don't have any guarantee they will be able to.
- Q Isn't it your opinion that all the Commission can do is to enter an order best calculated to best protect correlative rights?
 - A Yes.
- Is it your opinion that A-77-(B) is better calculated to achieve that result than an order that would provide for cut from marginal wells?
 - A Yes, sir.

MR. GURLEY: I have a question.

MR. PORTER: Mr. Gurley.

By MR. GURLEY:

- Q Considering this underage situation again, Mr. Nutter, isn't it a fact that each application would be considered on its own merits as to the possibility at the time that the application is made for making up a back allowable?
 - A Yes, sir.
 - Q Is it also not true that it is the only way for the pro-

tection of correlative rights as to the top allowable owners or as to the marginal well owners?

- A Yes, sir, it guarantees protection to the marginal owners and it protects the correlative rights in the top allowable owners in that an opportunity is afforded to them to make up their underage.
- Q You were asked on cross examination, Mr. Nutter, several questions regarding the top allowable wells that perhaps produced only one barrel or so above the allowable, and that the change in allowable might throw what today would be a top allowable well into the marginal category, is that not true?
 - A Yes, sir.
- Isn't it a fact that the vast majority of the marginal wells are much lower than the top allowable that exists at this time?
- A Well, we have marginal wells on this schedule of Cities Service connections running all the way from one barrel for the total allowable assigned the well up to one barrel less the top allowable, but most of them are in the lower bracket.
- And that comparatively speaking there are only a few wells in the pools mentioned that would come in the category of being one barrel over or two barrels over, or something to that effect, of the allowable?
 - A You mean one or two barrels less than the allowable?
- No, what I mean is in the category of the top allowable wells that would produce just over the allowable, they are comparatively few in number?
- A Mr. Gurley, we have no way of knowing what a well can produce. The only thing we have to go by is the GOR test. The

GOR test is not an indication of the well's complete ability to produce.

MR. GURLEY: That is all.

IR. PORTER: Any further questions? Mr. Nutter, has the Commission received communication from Cities Service Oil Company as to the amount of oil that they propose to take beginning the 1st of May?

A Yes, sir. Last Friday afternoon the following wire was received from Bartlesville, Oklahoma, received April 27th at 4:57 P.M., directed to A. L. Porter, Secretary Director, Oil Conservation Commission, State of New Mexico, Santa Fe, New Mexico, for release Sunday, April 29, 1956. "Cities Service Oil Company will increase its crude oil purchases to about 80 per cent of normal effective May 1 in all States in which it buys, according to an announcement by Gerald McGrew, Manager of the company's Crude Oil Supply Division. States affected are Kansas, Oklahoma, Texas, New Mexico and Louisiana.

The company curtailed crude oil purchases to about 60 per cent of normal on April 1 as a result of a strike which closed its East Chicago Refinery. Relaxation of purchase proration has been made possible because the company has found outlets for some of its current crude surplus, McGrew said. The refinery has been closed since April 3. In early negotiations, the company offered to meet industry wage increase patterns. Meetings between company and union negotiators are continuing." Cities Service Oil Company, Gerald McGrew, Manager, Crude Oil Supply Division.

MR. PORTER: I believe you testified earlier that Cities Service Oil Company purchased in February a daily average of 16,878.3 barrels, according to our information?

A Yes, sir.

MR. PORTER: What would be the amount, the approximate amount of Cities Service reduction then for May, based on the 20 per cent reduction in takes?

A 31 days in May, rather?

MR. PORTER: Yes, sir.

A The company would take approximately 12,620 barrels per day, subtracted from 16,873 would be approximately 4,253 barrels per day cut.

MR. PORTER: I believe there must be an error in your calculation.

A What I did there, you are going from a 29 day month in February to a 31 day month in May, so I took the 489,325, took 80 per cent of that and divided that by 31.

MR. PORTER: What was the amount of the allocation on the May proration schedule to wells that are assigned top allowables to Cities Service connections?

A 10,291.

MR. PORTER: Any further questions?

MR. GURLEY: I have one more.

By MR. GURLEY:

Q With this new order now going into effect that they are now taking 80 instead of the original 60, isn't it true, Mr. Nutter, that that would put the amount of cut of the top allowable wells much lower than originally anticipated?

A Yes, they are actually reducing their cut by half, they were cutting by 40, they are now cutting 20 percent more.

Q That back allowable would be much easier to make up?

4 It should be.

MR. CURLEY: That is all.

MR. 10RTER: Is there anything further?

MR. HOLL: Just one question.

RECROSS EXAMINATION

By MA. HOLL:

You have just testified that the cut on top allowable wells based on 80 percent of takes would be less. Would it not be true that the cut for marginal units across the board would be less, also?

A Yes, sir, the cuts on all wells would be smaller with 80 percent purchases rather than 60.

- Do you feel then it might be more equitable to follow, to allow the small cut across the board rather than a bigger cut from top allowable wells?
- n. Mr. Holl, I think that this whole thing is based on the protection of correlative rights and prevention of waste and the size of the thing isn't what counts, it is the principal of the thing. I think it will be easier for wells to make up a 20 percent cut than it would be to make up a 40 percent cut.

MR. HOLL: That is all.

MR. PORTER: Any further questions? The witness may be excused.

(Witness excused).

GERALD MCGREW

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

DIRECT EXAMINATION

By MR. HOLL:

- Q Would you state your name, please?
- A Gerald McGrew.
- Q What is your address?
- A Bartlesville, Oklahoma, Cities Service Oil Company.
- Q Would you relate briefly for the Commission the formal education you have had?
- A I have a degree in Chemical Engineering from the University of Kansas, and have been with the Cities Service Oil Company for approximately 15 years.
- Q What is your present position with the Cities Service Oil?
 - A I am manager of the Crude Oil Supply Division.
 - Q How long have you been operating in that capacity?
 - A Slightly over four years.
- 7 For how long have you been associated with the Crude Oil
 Purchasing Department?
- A Excuse me, I just answered that before. I have been with the department slightly in excess of four years and been manager for slightly in excess of one year.
- Q In your position you constantly make a study of the crude oil situation not only as far as our company is concerned but as far as the industry-wide situation?
 - A Yes, sir.
- Q Would you relate for the Commission the situation that has brought about the calling of this hearing this morning?
 - A Well, as the Commission was informed, and I see no point

in re-reading the telegrams which Mr. Nutter just read into the record, on April 3rd we had a strike at the East Chicago Plant, still have it, incidentally. We had contemplated that over a period of a week or so and had made very detailed studies as to the best methods to curtail purchases; with 57,000 barrels per day going out of the picture, we knew we couldn't go long without doing something back at the source.

After considerable discussion about this, we in the company and with other people such as Mr. Porter, we decided the thing to do was to curtail our purchases by 40 percent in all States where we buy crude. That is Kansas, Oklahoma, Texas, Louisiana, and New Mexico. We are curtailing our purchases in Louisiana in exactly the same manner that we have in the other states, although not a barrel of Louisiana crude enters the Chicago Refinery picture, but we can back out supply from our Lake Charles Plant there and make it equitable, at least we think equitable in all five states.

We went to storage during the month of March with 414,000 barrels of crude oil. We are going to storage during the month of April with, we don't know exactly what the proration is going to do to us, but we are guessing a quarter million barrels in April. By relaxing our proration to only 20 percent in May, we are estimating we will go to storage in May with between nineteen and twenty thousand barrels per day. That is predicated on the strike continuing through May. We haven't made any figures beyond June 1st because we are hopeful that we will have our problem worked out by that time. Before the strike came, our long range supply picture was long. We had too much crude even before this strike occurred.

Now with this buildup in stocks over this three-month period and

with other companies in essentially the same shape, in fact, I know of one or two in worse shape than we are, I am sure we are not going to be able to move any crude, and I know we cannot take any back allowable that may accumulate from this proration during the remainder of 1956, regardless of what the amount may be.

Q Our situation in the five states that we purchase from, to your knowledge, has any question been raised by any other regulatory board relative to the method we propose to --

A (Interrupting) I haven't heard of any. I have attended every statewide hearing that happened in April except the one in Louisiana. I talked to Mr. John Husey, director, both before and after the hearing. He didn't indicate that they would question our method.

- Q You have just stated that you don't see how Cities Service Oil Company could purchase more than the current allowable from any well throughout the remainder of the year, 1956?
 - A That is right.
- Q From your study of the industry crude oil purchasing situation, from the industry as a whole, you know of no other company that could purchase any more than the current allowable from the wells?

A It is my opinion that they cannot. I know of no one who I think could. However, I couldn't testify definitely that they wouldn't. I know this, that I have contacted on numerous occasions all other purchasers who are likely people to sell crude to, and I have sold some crude oil. We have moved considerable crude during this period, that is what has allowed us to up the take from 60 to 80 percent, because we have moved some crude to other

companies and we have made a few deals where we have sold it and we will have to take it back at a later date, which aggravates the same situation of making up underage again.

Q Now we had a discussion previously with a previous witness relative to the difference between pipeline prorationing and purchaser prorationing. Would you state for the record what your idea is, what the difference between those two matters are?

A It is my opinion and interpretation that purchaser proration is proration that is initiated by a purchaser of crude oil and pipeline prorationing is prorationing which is initiated by a pipeline due to physical capacity or down pumps or that type of thing. I agree with Mr. Nutter, there is a fine line of distinction between the two.

- Q Your opinion as to this situation that is occurring at present is purchaser prorationing?
 - A Yes, sir.

MR. HOLL: That is all the questions we have.

MR. PORTER: Any further questions? Mr. Mankin.

CROSS EXAMINATION

By MR. MANKIN:

Q Mr. McGrew, you indicated you have been able to move some of this crude to other purchasers for actual deals and for tradeout in the future, which you would have to take some back. Can you state for the record who those purchasers were?

A No, I don't believe there is any objection. Texas Company Gulf, Esso at Baton Rouge, Sinclair, just almost any of them who are in a position to do it. None of them wanted the crude, I would like to make that clear. I am sure there wasn't a single

one of them that purchased that because they needed crude oil.

- Q That likewise involved the same persons for the tradeout in the future?
- A That is right. I named the whole group as a whole. I would rather not discuss individual deals unless you insist on it.
- Q Essentially the tradeout in the future involved several companies rather than a few?
 - A Yes, a half a dozen or more.
- Q And involved the same persons that you actually sold crude to as compared to the ones you will get back in the future?
- A Yes, sir. Another thing we had to do, even by prorating we were still long of crude oil up in the Kansas, Oklahoma area and we had to convert a sizable amount of crude oil up there to crude oil down south that we could run over to Lake Charles Plant.
- Q You indicated during the month of March that you went to storage with something around 400,000 barrels a day and about half a million --
 - A (Interrupting) A quarter million during April.
- Q And anticipated nineteen to twenty thousand per day during May?
 - A That is right, if the plant stays down.
- Q Is this going into your own storage or into producers tanks on their own leases?
- A No, it isn't on leases. It is storage at our tank farms or at tank farms along various pipelines through which we transport crude, once it comes off the lease it is our crude oil.
 - Q This storage is not stored in producers! tanks?
 - A No, sir.

- Q It is your own tanks or some other purchasers' tanks?
- A Or pipeline tanks.
- Q Or pipeline?
- A Yes, sir.

MR. MANKIN: That is all.

MR. PORTER: Mr. Gurley.

By MR. GURLEY:

- Q You have stated that you have been able to farm out, more or less, some of the crude which you are required to take, is that correct?
 - A Yes, sir.
- Q Did the companies so agreeing to take that crude indicate that they would cease at the time the strike ended, or in your opinion would they be willing to continue to make up the back allowable sothat the back allowable will be made up?

A They will have ceased in the morning. These deals were for the month of April. We don't have many deals made in May. They are just a one shot proposition.

- Q You are attempting to continue that?
- A Oh, yes. Yes, sir.
- Q In view of the cooperation that you have had with the other companies taking, is it not feasible that they would be willing to continue to relieve you of the situation in the back allowable case?
 - A I believe not.
 - Q But it is a possibility that they would?
 - A I would say yes, it is a remote possibility.

MR. GURLEY: That is all.

MR. HCLL: Pretty remote, though?

A I would think so.

MR. PORTER: Mr. Nutter.

By MR. NUTTER:

Q Mr. McGrew, when your refinery in Chicago was shut down by strike, did that affect the total picture, nation-wide, insofar as the demand for crude oil and crude oil products is concerned?

A I rather doubt that. I don't see that the shutdown of one refinery would, I in any sense.

Q The same number of automobiles are burning gas and ships taking bunker oil?

A Yes.

Q And it should be reasonable to assume that somebody is having to increase their refinery runs?

A I believe not because they were running more before than the demand called for. I know there was an excess supply of crude oil. They are merely taking advantage of it, you can't blame them.

- Q Then the storage is being whittled away?
- A I think your national stocks show that, Mr. Nutter, national stocks of crude oil are not alarmingly high.
- Q National stocks of crude oil and products both are in pretty good shape, right now?

A They aren't bad. The president of our company, B. S. Watson, testified before the Railroad Commission on March 18th, I believe it was, and he testified that he thought all stocks were in pretty good snape with the exception of gasoline. He thought gasoline was a little bit high.

MR. PORTER: Mr. Kitts.

By MR. KITTS:

MR. KITTS: Do you have other witnesses? Stop me if this question should be answered by some other witness.

- percent cut across the board, yet from one or two of Mr. Holl's questions in cross examination of Mr. Nutter, it seemed to be implied that you did not intend to cut marginal wells producing under ten barrels.
 - A That is right. That was not our intent.
 - Q How did you plan to make your cuts then?
- A Well, we had planned to make the cut 40 percent across the board on a pool basis with a minimum of ten barrels per well in accordance -- well, I believeit is one of your rules or regulations or something, is that right?
- Q Let's take an example here. Let's say we have a two well pool, one a forty barrel well and a twenty barrel well, that is sixty barrels. Then you would apply that sixty percent to that sixty, is that right?
 - A Yes, that comes out thirty-six.
 - Q Thirty-six barrels.
- A And divide that by two to get it back to per well and then you get eighteen barrels per well.
 - 🕽 That is the thirty-six you want? 🐇
 - A Yes, sir.
- Q What if on the other hand you had a well "A" that is a forty barrel well and well "B" a five barrel well. That's a total of forty-five. Sixty percent of that would be twenty-seven?
 - A Yes, twenty-seven and ahalf, divide that by two and you get

thirteen.

- Q Thirteen point five. Then you would have Well "A" producing 13.5 and Well "B" producing --
 - A (Interrupting) 13.5.
 - Q Producing five.
 - A Yes, but we can't measure.
- Q In other words, you would have a total of 18.5 barrels from this second pool, wouldn't you?
 - A I am not sure, I am following your arithmetic there.
- Well, if the actual takes, if Well "B" only produced five barrels, that is all you could take?
 - A That is right.
 - So you would be taking 13.5 from "A" and 5 from Well "B"?
- A Practically speaking, though, I believe those two wells, I am assuming, are on the same lease and both producing in common lease tankage.
 - Q All right.
- A Therefore, I don't know how we, I shouldn't use the term "we", how the pipeline company could police the fact of the one well taking 13.5 and --
- (Interrupting) The point is that you will only be getting 18.5?
 - A Fight.
- Q actually applying your sixty percent to the total 45 barrels, you would want 27, isn't that right?
 - A Yes.
- 30 actually it would be only in such cases where each well would produce the overage that you would cut only forty percent;

otherwise it would be more than forty percent in each case, wouldn't it? It would have to be.

A Oh, sure, it would have to be a little more. Under the terms of your order it was necessary that we cut those top allowables wells, taking the Caprock-Queen where the top allowable in April was forty, it was necessary that we cut the forty barrel wells down to twelve barrels, cut them by seventy percent in order to absorb this some -- I have forgotten what the figure was, Mr. Nutter gave it to you, 10,000 plus top allowables to which we are connected.

- Q With the possibility that they could make it up?
- A Yes.

MR. PORTER: Mr. Campbell.

By MR. CAMPBELL:

- Q Mr. McGrew, you stated, I believe, that you followed the procedure generally of reducing 40 percent in all five states in which you buy domestic crude?
 - A That is right, with certain exceptions.
 - Q What exceptions?
- A We exempted waterfloods and wells which are classified as gas wells by the regulatory board in that particular state and assigned a gas allowable.
 - Q Why did you exempt waterflooding projects?
- A Because according to our engineers, and I believe there are other engineers who may agree with them, they might be harmful to cut them back.
- Q Is it conceivable to you that it might be harmful for a marginal well to cut it back?

- A Well, it might be. I am not qualified to talk about reservoir behavior, that type of thing.
- Q Is your information solely on the basis of the overall market picture for the company, or are you acquainted with what has actually transpired with regard to takes in particular areas?
- A Well, I am not familiar to discuss any particular lease or sets of leases, and have figures, if that is what you mean, Mr. Campbell.
- Are you acquainted with the instructions that Cities Service has directed to the pipeline company in New Mexico which picks up your crude, with reference to the position you will take or had taken in New Mexico?
 - A Yes, sir, I am.
- Q Is it correct that you have notified the Commission that as of April 19, I believe it was, you would take 100% of production from marginal wells in the State of New Mexico?
 - A That is right, except it was April 20.
 - Q Effective April 20?
- A Would you like me to read the wire? April 20th this wire came to Mr. Porter. "The following wire has been sent to the Texas New Mexico Pipe Line Company. 'For the remainder of April and applicable to New Mexico only, please run crude oil from leases connected for our account in accordance with the following:
- 1. Fun an amount of oil from each marginal proration unit equal to the April daily allowable as shown by the New Mexico Oil Conservation Commission Order No. A-77.
- 2. Run an amount of oil from top allowable wells equal to thirty percent (30%) of the April daily allowable as shown by order

referred to above.

The change in method of curtailment of purchases is necessitated by issuance of Order A-77-B, by the New Mexico Oil Conservation Commission."

- Q Prior to April 20th, you were producing upon the same basis you stated was being used in each State?
 - . Yes, sir.
 - That is 40 percent reduction upon a pool basis?
 - A Yes, sir.
 - Q What do you contemplate doing starting today?
 - A Well, that decision hasn't been made.
- Q You stated I believe that no other State of these five States has raised any questions about the procedures that you are following in connection with this reduction?
 - A That is right.
- You don't mean to imply that there has been no objection raised to the reduction, do you?
 - A Oh, no, sir. There has been lots of objection.
- Isn't it true that at least Texas, I am not acquainted with the others, but perhaps some of the other States have no provision for granting back allowables?
- A That is true. I might add that Kansas, Oklahoma and New Mexico do have. I don't know about Louisiana.
- At least in the State of Texas there wouldn't be any particular point in them suggesting a procedure such as our Commission has adopted here, because they had no authority for back allowable?
 - A I assume that is correct.

- MR. HOLD: I might interpose a statement here. If you understand, he is not a lawyer, I think he is more or less interpreting a rule or law of the State of Texas.
- MR. CAMPBELL: We follow the procedure out here that the witnesses act as lawyers and the lawyers act as witnesses.
- i Mr. McGrew, the Cities Service imports crude oil, does it
 not?
 - A Yes, sir.
- In your capacity are you acquainted with the situation so far as the availability to Cities Service is concerned, from the source of imports?
 - A Would you re-ask that please?
- In your capacity do you confine yourself solely to the domestic supply and demand, or are you acquainted with the import service of Cities Service?
- In my capacity I am not concerned in any way with imports. I am concerned only with Mid-Continent and Gulf Coast in the five States, and supply the three refineries, the Ponca City, Oklahoma, and lake Charles, and Mast Chicago, which is down. I have close contact with those people who do know about the import problem. I have the report which Mr. Watson gave before the Railroad Commission in Texas at their March meeting.
- Has Cities Service since the strike occurred at the Hast Chicago hefinery undertaken to reduce its import?
- I cannot answer if they have undertaken to reduce them or not. I think I can answer firmly that they have not reduced them, because you don't reduce imports in a really short time, I

am sure you realize.

- Q What has been the situation with regard to Cities Service imports for the months of February and March?
- A I do not have that information unless it would be here.

 All I have, I have the February, March, and April estimates. These
 are only estimated figures. I don't know what actuals are.
- Q Do you know if Cities Service contemplates reducing or undertaking to reduce the imports during the month of May?
 - à T do not.
- Q If they did so, or were able to do so, would it by adjustment relieve your domestic condition?
 - A No, sir, it would not affect it in any way.
 - Q Why?
- A Because this refinery at East Chicago doesn't run foreign crude, doesn't run Canadian or Rocky Mountain crude. The products made there do not enter into the competition with the products made from the foreign crude. The foreign is a special heavy crude most of it, comes from Croat, Venezuela and Mexico, some of it are ten and eleven gravity crude run in a special plant on the East Coast, it wouldn't affect in any way, in my opinion.
- Q Are you certain about the gravity of all that crude? Did I understand you to say that it all ran that?
- A I didn't say it all, what we run in our plants is Venezuelan and Mexico, the Mexico runs ll gravity. The Venezuelan shows to be from 10 to 17 and a half, that is run at Linden, New Jersey in an affiliated plant and made primarily into asphalt. We run some crude, which is thirty gravity in another plant on the East Coast we do not own.

- ? At that plant, East Coast plant, do you know how much crude they run?
- A Yes, it runs about, looks like it would average out for the year of 1956 about 21,000 barrels per day.
- Is there any reason why through exchanges and adjustment you couldn't supply some of the crude from domestic supply?
 - A Yes, sir, economics.
 - You mean it would be more expensive?
 - A Very much more so.
 - Q But it is not a matter of being unable to do it?
 - A Oh, physically, no, sir.
- Q But it would be expensive for your company to reduce its imports and utilize domestic crude during this critical period?
 - A That is right.
- Q With regard to your arrangements in New Mexico, you have drawn a line of some sort between pipeline prorationing and purchaser prorationing. What sort of an arrangement do you have with the Texas New Mexico Pipe Line Company? Is it a contract?
- A No, sir, they are a common carrier and operate under the Interstate Commerce Commission, and as such transport crude oil for us. We pay them for that service.
- Q Does Cities Service own any interest in the Texas New Mexico Pipe Line?
 - A We own ten percent of the capital stock.
- Q They are carrying the crude, you requested them to carry as a common carrier, is that correct?
 - A That is correct.
 - Q You give them instructions as to how much crude to pick up

from each well and each lease for your account, do you not?

- A Yes, sir.
- Q Do you know whether or not in compliance with the telegram that you sent them effective April 20th they have been taking 100% of the crude from marginal wells of New Mexico?
 - A I would have no way to know that today, for example.
- Q Are there any other instructions you have given Texas New Mexico Pipe Line in connection with this matter?
- A I believe not. I am sure that possibly some oral instructions just on a day to day operating procedure may have been given. This I believe is the only written communication that has gone to the pipe line.
- Q To make it perfectly clear, am I correct that from April the 3rd to April the 20th Texas New Mexico Pipe Line was directed by you to take for your account 60% of the crude of the February runs in New Mexico?
- A Based on average daily runs in February. We made the adjustment for the difference in months.
- Q And at April 20th and thereafter, they were to take 100% of crude from marginal wells and 30% from top allowable wells?
 - A That is right.

MR. CAMPBELL: That is all.

MR. PORTER: Mr. Mankin.

By MR. MANKIN:

- Q You indicated on one of your prior telegrams, I believe it was your telegram on April 5th, that waterflood projects were to be exempt, is that correct?
 - A That is right.

- Q Did you mean at that particular time that the repressuring projects that you are hooked onto, such as in the Maljamar Pool, that that would likewise, as marginal wells prior to April 19th, would not be affected?
 - A I don't believe I quite understand.
 - The gas repressuring projects, secondary recovery project.
- A We made no provision for overall exemptions on repressuring projects, Mr. Mankin.
- Then at that time you didn't consider these repressuring secondary projects by gas to be in the same category as the water-flood projects?
 - A No, sir.
- Q Therefore the wells that were under secondary recovery from April 1st to April 19th took their respective cuts of those marginal wells?
 - A I assume they did.
- Q Therefore those wells cannot make that allowable up, is that correct?
 - A You mean because physically they can't?
- Q No, I mean because you physically cut them and did not consider them in the same category as waterflood?
- A Well, I assume we cut them, but as to making up allowable, I don't know.
- Q Of course, then after April 19th or 20th, they were so instructed to take 100% from those marginal wells, even though they were with the secondary recovery project?
 - A Yes.
 - MR. PORTER: During that period from April 3rd to April 19th,

I believe you testified that the Texas New Mexico Pipe Line Company was instructed to base their run on the February runs, 60% of the February runs?

A Yes, sir.

MR. PORTER: Do you recall under that plan what was the maximum amount which could be run from a top allowable well in the Caprock-Queen Pool?

A I think I have that figure. According to the calculations which we made, we purchasedor did purchase during February from 152 wells in the Caprock-Queen Field and on the basis that we calculated it, we would take from each of those 152 wells 22 barrels per day during April. That was arrived at by adding up our total purchases in the Caprock-Queen for February and dividing into that the total wells from which we purchased in February and taking, actually taking 62% of it to offset for the one day difference, 29 days in February and 30 in April.

MR. PORTER: Then 22 barrels was the maximum amount that could be run from any proration unit?

A Yes, sir. We didn't differentiate, Mr. Porter, as you know, between marginal and top unit wells under this scheme.

MR. PORTER: And a marginal well that was assigned 21 barrels a day would not suffer any reduction?

A No. sir.

MR. PORTER: Do you recall what the maximum amount of oil was that could be run from a well in the Jalmat Pool?

A 10 barrels, 30 wells.

MR. PORTER: In other words --

A (Interrupting) It figured out 9.

MR. PORTER: There was a maximum of ten barrels per day established in the Jalmat Pool?

A Yes, sir.

MR. PORTER: How about the Eumont?

A 61 wells, 15 barrels per day.

MR. PORTER: I believe that is all I have. Any further questions?

MR. KITTS: Yes.

MR. PORTER: Mr. Kitts.

By MR. KITTS:

Q Were there any pools where the average figure was less than ten?

A Yes, lots of them. Persol, 8; Jalmat, 9; North Lynch, 5; Eunice, 9; Arrowhead, 7. I would like to qualify this, however. These averages are averages of the wells to which we are connected, they are not averages for the Pool. Here, for example, in the Eunice we only show here and I assume, have to assume these are correct figures. We only purchased from two wells in that Pool. The average is 9, I don't want it to be construed that is the average for all the wells in the Pool.

Q Were there any special instructions given to the pipe line company about takes from marginal wells that were able to produce ten barrels?

A No, sir.

MR. KITTS: That is all.

MR. PORTER: Any further questions? Mr. Holl.

REDIRECT EXAMINATION

By MR. HOLL:

- Q Mr. McGrew, do you consider that the market situation for crude oil was more favorable last fall, the fall of 155 when the Stanolind prorationing took effect than it is at present?
- A I would say very definitely that the market was considerably tighter at that time than it is now. It wasn't good then, however,
 - Q You say considerably tighter?
 - A Well, I mean firmer.

MR. HOLL: That is all.

MR. PORTER: Any further questions of this witness? Do you have anything further?

A No, sir.

MR. PORTER: The hearing will recess until 1:15. (Recess).

MR. PORTER: The meeting will come to order, please. We will hear from the next witness for Cities Service.

DIRECT EXAMINATION

By MR. HOLL:

- Q Would you state your name and address, please?
- A John D. Albright, Hobbs, New Mexico.
- Q By whom are you employed and in what capacity?
- A I am employed by Cities Service Cil Company as their district engineer.
 - Q Would you relate for the record your education in the field

of petroleum engineering?

- A I graduated from Oklahoma University as a petroleum engineer in 1947.
- Since that time have you been constantly engaged in the
 profession that you trained for?
 - A Yes, sir.
 - Q In various fields of Mid-Continent area, is that correct?
 - A Yes, sir, in Texas, Oklahoma, Kansas, and New Mexico.
 - Q How long have you been in New Mexico?
 - A Two years.
- From your experience in production matters, do you believe that the proration schedules of the various States show accurately the status of wells granted top allowables? By that I mean, is there any way to distinguish how many are just barely top allowables or just barely over?
- A I don't believe there is any designation made by the Conservation Commission on that.
- Q Have you found generally from your experience that there are quite a number that fall in that category?
- A I think on our particular leases that we have quite a few wells that would fall in that category.
- Q Have you found from your various experience that underage which develops from any reason is a difficult thing to make up, because of the fact that you just discussed here?
 - A We have found it difficult to make up.
- Q When top allowables wells then are cut back, have you found that there is ordinarily a great amount of oil that would normally be produced from those top wells is never produced?

- A I didn't understand your question.
- Q From your various experiences, do you find when underages do develop it is impossible for those top wells to make up but very little of it?

A In some cases that is true. We, of course, have top allowable wells that will make it up; also we have wells that are classified as top allowable wells that I don't believe would make it up. That depends too on the amount of the reduction.

Q Taking this situation we have in New Mexico at the present do you feel that correlative rights of individual mineral owners would be protected more by the emergency order of this Commission, A-77-(B), or by a pro-rata cut under the ratable take statute and rules of this Commission?

A It's my opinion that reducing your takes pro-rata and accepting the industry's designation of a marginal well and accepting the Oil Conservation Commission's privilege to set a minimum allowable for those wells would protect the correlative rights more.

MR. HOLL: That is all the questions we have.

MR. PORTER: Mr. Mankin.

CROSS EXAMINATION

By MR. MANKIN:

Q Mr. Albright, taking a particular pool, for example, which Cities Service operates in, such as the Caprock-Queen where the Cities Service is right down the fairway of the pool, most of the wells have capacities just barely greater than the top allowable -- is that an actual condition or is that because of testing, testing the allowable within the 125%?

- A Of course, we are required by GOR tests to test wells between their top allowable and 125% of that figure. I would say that in many of our cases there in that particular field that that doesn't reflect the maximum producing capacity.
 - Q It is just the testing capacity at that particular time?
- A That is right. I would like to state too that in the Caprock-Queen Pool most of these wells have not been tested for some time. Last year the regular test period was skipped when the Caprock and the Drickey Queen Pools were consolidated. We have a test period coming up this summer which I think will be a better indication of the wells' productive capacity.
- Q As a result of Mr. Porter's memorandum to submit new nominations based upon the wells' proper capacity during the month of March and to be submitted by March 15th, what was the reaction of Cities Service to that in your area?
- A As I recall, in our area we submitted a list of wells which didn't make top allowable. I can't state whether any wells in the Drickey or Caprock Pool were included.
- Q I am thinking now of all the wells which you are connected to, regardless of the Caprock-Queen Pool. Did Cities Service comply with that request of Mr. Porter to more realistically submit nominations?
- A I didn't prepare such a list. In my own mind I am certain we did and I am certain it is in the Commission files. Personally I couldn't tell you what was in the order.
- Q I was wondering if Cities Service did comply with that particular request to submit C-127.
 - A We did comply with that request.

- Q As to whether it was pretty well taken care of prior to April 1st, as district engineer you have no direct knowledge of this, then, as to whether it was or was not submitted?
- A Normally in Hobbs district, the district superintendent submits those forms regarding proration, regarding what you speak of.
 - MR. MANKIN: That is all.
 - MR. PORTER: Mr. Nutter.

By MR. NUTTER:

- Q Mr. Albright, you mentioned the fact that many of these wells may have capacities which are just one or two barrels more than the allowables, and it would be difficult for them to make it up. This strike has occurred early in the spring, we don't know how long it may be prolonged. Assuming it doesn't run all during the summer and in the fall, the summer months are regarded generally as the low allowable months, aren't the allowables lower in the summer than in the winter?
 - A I believe they are.
- I believe the records will reflect that as a rule top allowables are two or three barrels per normal unit allowable lower in the summer months than in the winter months. Therefore, don't you think that if this period of back allowable which has been mentioned before today would come -- assuming that the strike is not prolonged clear through the summer -- that the period of back allowable would come at a time when the allowables would be lower:
 - A That is right.
 - O Therefore more wells would have an easier chance to produce

more than the allowables to make up any back allowable?

- A I think that is correct within its limitations. One thing that I would like to point out, just assuming that we could start full production immediately in that area, we would have to produce these wells at the maximum rate, if possible, allowed by the Commission, at say 125% of the unit allowable. We would have to produce those wells at that rate for between three or four days for each day that the production has been curtailed.
- Q Well, if it was 125% it would take four days to make up one day's production?
 - A That is right, at that highest rate allowed.
- Q Yes. Another thing, what did you say would be the most logical way to protect correlative rights in making a cut of purchasers' takes from a pool?
- A Well, to use the same example that you would use there, for instance, our Caprock-Queen area where your unit allowables, say during the past year, I suppose the unit allowables have varied from 39 to possibly 43, 44, you have quite a variation there; then below that figure you drop to what your regulations would call a minimum allowable of 10 barrels a day. Between those two extremes, between your 10 barrels a day, between your lowest unit allowable, say, of 39 barrels a day, you have many wells that in my estimation can stand a production cutback as well as those wells with over that standard unit allowable productivity.
- Q Didn't you a while ago in your testimony relating to this 40% cut say that a pro-rated straight cut across the board would be the most equal or the most fair means of cutting, you thought?

 I think you used the actual word of prorated cut amounting to 40%.

A Excluding the minimum allowable wells -- maybe I misunderstand what you are getting at. Are you talking about a 40% cut?

MR. NUTTER: Maybe if the girl will read back that testimony --

(Testimony read back).

Q You say to reduce the pro-rata among the various wells would protect correlative rights. Now to get back to not the same wells that Mr. Kitts was referring to, but the same figures, I am talking about two hypothetical leases which have one well on them apiece. One has an allowable of 40 barrels, the other has an allowable of 20 barrels. Those are the only two leases in the pool to which the purchaser is connected. They took a total of 60 barrels for an average in February, and they reduced that by 60% giving a total of 36 barrels desired for the month of April. As I understand, the Cities Service proration system, they divide the 36 by 2 and come up with a figure of 18, is that correct, to be allocated to each of the two wells or each of the two leases?

A As I understand, the pipe line proration, they would limit that to 36 barrels, yes.

- Q Each of the two one-well leases would have an allocation of 18 barrels, is that correct?
 - A I don't -- you are talking about separate leases?
- Q Yes, sir, this is a hypothetical case in which there are two leases in a pool, each lease has one well on it. The total take in the month of February was 60 barrels. The desired take for April would be 36. Then that desired take would be divided by the number of wells in the pool --

MR. HOLL: (Interrupting) I might interpose that Mr. Albright is a member of the production department. He had nothing to do with setting up the purchaser proration.

MR. NUTTER: I realize that. I want to ask him one question. I want to be sure that he understands this system so I can ask him one question about the prorata production that he referred to as being in the interest of correlative rights.

MR. WALKER: Ask him the question whether he understands it or not. Let's get it over with.

Q Assuming that is it, one of the wells had an allowable of 20 barrels and production rate of 20 barrels in the month of February, and the other had the rate of 40 barrels, and they are both to be cut to 18, you testified that by that system you would be protecting correlative rights. Do you think it is in the interest of correlative rights to cut the marginal well by 2 barrels and the other well by 22 barrels?

A I wouldn't testify to that, no. My understanding of that would be that the 40 barrel well would be cut to 24 and the 20 barrel well would be cut to 12 barrels.

Q We evidently have a different understanding of how they are prorated.

MR. NUTTER: That is all I have.

MR. PORTER: Mr. Kitts.

By MR. KITTS:

- Q Then your statement of what you believe would be equitable would be appropriate cut, what you would mean by that in this hypothetical case would be cutting one to 24 and the other to 12?
 - A That is what I mean, yes, sir.

MR. PORTER: Mr. Campbell.

By MR. CAMPBELL:

- Q Do you know, Mr. Albright, whether that is what Cities Service has done?
 - A The way that I have outlined it here?
- Q Yes. What I am trying to get at, and I think what Mr. Nutter is trying to get at, we are trying to determine what you mean when you say prorata cuts and find out what you have been doing in connection with your allocations. I understood this morning that your position was the same as Mr. Nutter and Mr. Kitts outlined it, that you were taking your pool-wide necessary reduction and allocating it among the wells irrespective of their existing allowable or productive capacity. Now you say you are taking that and applying it not to the pool but each well. Do you know of your own knowledge which method they are using?
- A I don't know what method the pipe line is using on a hypothetical case like this.
 - Q Do you know if anyone here with Cities Service knows?
 - A I am sure that Mr. McGrew would know.
- Q Well, then, what Mr. McGrew testified to is apparently the manner they are applying, is that correct?

MR. HOLL: Yes.

Q Let me ask you one other question with reference to your statement concerning correlative rights. Let's assume a situation which exists, I am sure, all of us will accept that, where Cities Service is connected with a few wells in a pool and other purchasers are connected with offset wells. Do you feel that it protects correlative rights for a single purchaser out of several to prorate

or reduce the take from any well, marginal or top allowable, in a pool without the other wells being reduced to some extent to protect against drainage?

- A I believe that that would be right.
- Q In other words, if it was applied only to a few wells to which a particular purchaser was connected, it might result in offset wells producing at top allowables, draining the other operator, is that correct?
 - A That is right.
- Let me ask you one other question. Is there a Cities
 Service Production Company and a Cities Service Furchasing Company
 separate companies, or is it all one company? Do you work for
 Cities Service?
 - A I work for Cities Service Oil Company, Delaware.
 - Q Is that the production company in New Mexico?
- A We have a Cities Service Production Company in New Mexico. We handle their leases, too.
- Q Who owns the wells that Mr. Mankin referred to in the Caprock Pool there?
 - A That is Cities Service Oil Company.
- Have you ever calculated the difference of the effect on Cities Service Oil Company's producing wells in New Mexico whether you use the 80% across the board or give the marginal wells the 100% of production in reducing the top allowable?
 - A You mean like in the difference in a particular pool?
- Q No, I am referring to applying these two formulas we have been talking about to Cities Service production; if anybody has made any calculation to the effect it would have on your own pro-

auction.

A As far as calculation in total production in New Mexico, we went as far as, say in one pool where we are cutting it now to 30% say in the Caprock where we cut it from 30 to 12; if this was more or less on across the board reduction, I would presume that we would be able to reduce that by only 40% in April which would, that wasn't 40%, that was reducing purchases to 60% which would increase the allowable from those wells from 12 to 24 barrels.

In other words, on this basis of an across the board cut in that particular pool, you would have top allowable wells getting more production than under the other system?

A In that particular pool we would, yes.

MR. CAMPBELL: That is all.

MR. PORTER: Any other questions?

MR. KITTS: Yes, I have one more. I want to be sure I understood your answer to one question on direct examination. Did you testify that there were a great number of these wells with top allowable where their actual productive capacity was not much greater than, say 40 to 41 barrels?

A I believe there are in the Caprock-Queen Pool. We haven't tested those wells in a long period of time. I will repeat my previous testimony that we haven't --

MR. KITTS: That is all.

MR. PORTER: Any other questions? The witness may be excused.

(Witness excused).

R. E. ADAMS

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

DIRECT EXAMINATION

By MR. HOLL:

- Q Would you state your name and address, please?
- A R. E. Adams, Bartlesville, Oklahoma.
- Q By whom are you employed and in what capacity?
- A Cities Service Oil Company as proration engineer.
- Q How long have you been employed in that capacity -- can you remember that far back?
- A It's 22 or 23 years. I have been with Cities Service 25 years.
- During that period of time you have dealt with proration matters in other States as well as the State of New Mexico?
- A In the last 22 or 23 years my duties have all been on conservation problems.
 - Q You are qualified as an engineer in this field?
 - A I have been, yes, sir.
- In these numbers of years experience, have you come across situations where proration has come about, pipeline proration, purchaser proration?
- A We have had numerous instances of that in the Trapp Field in Kansas. There was a pipeline bottleneck in 1937, we have had a number of occasions in Oklahoma where there has been pipeline proration.
- Q You also have had experience with purchaser proration, isn't that correct?

- A Yes, sir.
- Q Taking your whole experience as a whole, what is your feeling relative to making up underage from the two top allowable wells?
- A My department have used kind of a rough figure that the only amount that can be made up is roughly between 25 and 30 percent of proratable oil in our operations. That is in Oklahoma and New Mexico and Kansas and Louisiana and Texas and other places where we operate, all underage is cancelled.
- Q What is your feeling, based on this experience, relative to how a cut should be made in the event of proration of any kind?
- A I think a cut should be made across the board, but not to the extent that a well that is just barely making expenses should be hurt. I think in New Mexico five or ten barrels, those wells will lose and make money, there wouldn't be any premature abandonment or anything. In my opinion there would be isolated cases where they would be hurt to any degree.
- Q What is your feeling relative to the procedure that should be followed?
- A I think the procedure that Mr. McGrew has followed is the only one that will properly protect correlative rights.

MR. HALL: That is all the questions we have.

CROSS EXAMINATION

By MR. PORTER:

Q Mr. Adams, do you feel that it is fair to reduce the allowable say in the Caprock Pool on top allowable wells to only 22 barrels and at the same time reduce the allowable in the Jalmat Fool on the top allowable well to 9 barrels or 10?

A Well, I don't know the circumstances of the Jalmat Pool, but I know overall whenever you have purchaser proration you are going to have inequities somewhere. Any kind of proration results in certain inequities. To me the solution that Cities Service has recommended has fewer than anything that can possibly be devised.

Q Since you are a representative of the production department, do you know whether or not Cities Service Oil Company intends to apply for back allowable for the shortages incurred on top allowable wells during April?

A From the time of April 20th to the end of the month, I can make this statement: That it will be my recommendation that we do apply and put ourselves in the same position as other operators on a comparable basis, but I don't think it's right.

MR. PORTER: Any other questions? Mr. Campbell.

By MR. CAMPBELL:

Q Mr. Adams, I don't like to labor this point. I am still not clear on the formula that you are applying. I am willing to state my understanding; if I am incorrect I would appreciate it if you would correct me.

As I understand it, you are taking or did take prior to April 20th, you calculated in each pool what your total take was on February run per day average, and then you took 60% of that and that was your reduction for that pool. Then you divided that into the number of wells to which you were connected, irrespective of whether they were marginal, top allowable, or what they showed on the schedule or anything else. Am I correct in that?

A Mr. Campbell, I can't correctly answer that question. I

am in the production department and the problem is entirely divorced from us. Mr. McGrew devised this system of proration and overall, it seemed very fair and equitable, but exactly the mechanics of it -- and I have worked enough on these different problems to know -- to actually understand them you have to get a pencil in your hand and work them out yourself. I wouldn't want to answer your question because I just conscientiously can't --

Q (Interrupting) You don't know what it is, but you think it is good, is that it?

A It is good to this extent, yes, sir, that it protects correlative rights as near as you can protect them when you aren't going back and pick up excess oil. It is protecting light wells that might be prematurely abandoned. I can't think of a fairer method myself.

Q What is your position with reference to the effect of pipeline prorationing in a particular pool where the company that is undertaking the pipeline prorationing is only one of several purchasers in the pool?

A Well, there's -- at the present time I don't know of any pipeline prorationing. There is purchasers' prorationing.

Q Call it what you may. What is your feeling about the situation where you happen to be, or your purchasing company, connected through their contract with the pipeline company with a few wells in the pool; those wells are offset by top allowable wells connected to other purchasers?

A I think eventually that there would be drainage between those wells and Texas met that situation in the Roundtop Field in the last hearing by reducing the producing allowable.

- MR. PORTER: The allowable for all wells?
- A The producing days for all the wells in the field.
- Q Do you think that that effectively protects correlative rights more than the program that you had put into effect?

A Well, the purchasing company, I don't see how they could possibly put into effect a program that takes the Commission to do under their authority.

I realize that the Commission will have to take the action. I am asking you if the Commission saw fit to reduce the allowable through each pool on all wells, top allowable wells, irrespective of the pipeline company, do you think that that would more fully perhaps protect the correlative rights of all the operators in the pool?

A I do. I think it would do away with migration between different properties and fully protect them.

MR. CAMPBELL: That is all.

MR. PORTER: Mr. Mankin.

Ey MR. MANKIN:

- Implies a parently we have arrived at some sort of a fine line definition here today between pipeline proration and purchaser proration. The State of New Mexico speaks of pipeline proration, period. There is no such thing as purchaser proration mentioned. Do you have a fine line of distinction between them?
- A To me there isn't even a fine line of distinction. A pipeline is a transporter of crude oil. All he does is move that crude through his facilities, just like you get on a train and take a ride some place. The purchaser is the man that furnishes that product to go through his lines. To me it is entirely

divorced and separated. That as far as the pipeline is concerned they get a tariff on that oil, the more they run there the better off they are, the happier tney are, and with Cities Service 10% we'd be happy if we could run more through there. There is a very distinct distinction between purchaser and pipeline proration. In Kansas, as I mentioned a while ago, we had proration back there that was due to a pipeline bottleneck. That Western Kansas expanded rapidly one time and the coast system had one pump system. That was pipeline proration, that was all they could get through their facilities. The purchasers were willing to buy, but the pipeline couldn't get it through the bottleneck.

- - A (Interrupting) Yes.
- - A Yes, sir.
- Q Are you stating by this that you don't feel that an emergency exists?
- A When a purchaser prorates I certainly think that an emergency exists, when he is not able to take all the oil that has been assigned to him, not that he wants, that has been goofed off on him.
- Q You attempted to give us your thoughts on what you thought a marginal well was. You made some comments that a well should not be less than five or ten barrels. You are not attempting to say that the deep wells should be on that same classification; you are speaking from a top unit standpoint?
 - A Yes.

- Q For deep wells it should be greater?
- A It should be more than five or ten barrels.
- Q In other words, the economics goes into the thing on your category?
- A Yes, in my category when a well can't be economically produced it is a marginal well. Where it is approaching the marginal limits, that is my idea of a marginal well. It might be in some areas, it might be one or two barrels. In other areas it might be one hundred.
- Q Do you feel that in some other States such as Texas their marginal wells are more realistic than in New Mexico?

A Well, Texas has this marginal well low that is the graduated depth basis, starts at 10 barrels at 2,000 feet and then goes on down, but in my opinion Texas hasn't gone far enough because that law was devised long before they had the deep drilling that they have at the present time in Texas, and long before this offshore came in.

- 0 10 to 35 barrels is the range there?
- A At the present time. I think that's -- you can correct me on this -- but I think it is 6,000 feet or 5,000.
 - Q Six, five or six.
 - MR. NESTCR: Eight thousand.
 - MR. MANKIN: That is all.
 - MR. FORTER: The witness may be excused.

(Witness excused).

EALPH U. FITTING, JR.

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

DIRECT EXAMINATION

By MR. CAMPBELL:

- Q State your name.
- A Ralph U. Fitting, Jr.
- Where do you live?
- A Midland, Texas.
- Q What is your profession?
- A I am a consulting petroleum engineer and geologist.
- Q Have you on previous occasions testified before this Commission?
 - A Yes.
 - Q In that capacity?
 - A Yes.
- MR. CAMPBELL: Are the witness's qualifications acceptable to the Commission?
 - MR. PORTER: They are.
- Q Mr. Fitting,, have you been employed by M. A. Machris in connection with this hearing?
 - A Yes, I have.
- Q At their request have you made studies of the Townsend-Wolfcamp Oil Pool in Lea County, New Mexico, relative to the wells of M. A. Machris?
 - A Yes, sir.
- Q As a result of your investigation, will you state to the Commission generally the number of wells and the designations of the wells of M. A. Machris situated in that pool that are affected by this particular hearing?
 - A Mr. Machris owns five wells in the Townsend-Wolfcamp Field.

all of which are connected to the Cities Service as purchaser.

It is my understanding that these five wells plus one of Wilshire's are the only wells in the Townsend Field that are connected to the Cities Service, that Cities Service is purchasing the crude. Of the five Machris wells, two are top allowable and two are less than top allowable. The wells are offset by top allowable wells that are connected to other pipe lines or to other purchasers.

- Q Mr. Fitting, do you have any information with respect to the actual runs from the Machris wells during the month of April?
 - A Yes.
- Q Would you, referring to your notes, read into the record the actual runs and would you also state the February runs for the wells, as you relate what the runs have been for the month of April according to the records of M. A. Machris?

A The five wells owned by Mr. Machris are: Well No. 15-2, during February the well ran 3960 barrels; the April allowable was 4633 barrels, the runs to the pipeline were 2581 barrels. The second well is 32-3, this is a less than top allowable well, 2700 barrels -- beg your pardon, the actual allowable during April was 3451 barrels, with the runs 1574 barrels. The next well is 36-3; during February the runs were 5556 barrels, in April the allowable was 5573 barrels, the runs were 3175.5 barrels. On a two well lease there are wells 32-10 and 42-10, the total allowable for these two wells is 11,376 barrels; the actual runs were 4,337.65 barrels. The current status of these wells is that wells 15-2 and 32-3 are still producing, the storage is practically full. The last shipment on 15-2 was on April 24th; 32-3 was on April 18th. The other three wells are currently snut in with

storage full. 36-3 was shut in on April 23rd, and 32-10 and 42-10 were shut in on April 22nd.

Mr. Fitting, have you made an effort, utilizing those figures, to construct any kind of a formula by which those wells have been cut back in connection with this prorationing?

A Yes, I have. I can see no rhyme or reason to the actual runs that were imposed on these wells. They don't seem to follow any of the formulas we heard testified to earlier.

- Three of the wells are now shut in?
- A That is correct.
- Q Which of the wells are marginal or non-top allowable?
- A One of those is 32-10.
- Now, Mr. Fitting, you stated that the Machris wells were surrounded by top allowable wells connected to other pipelines, is that correct?

A Well, I don't mean that they are completely surrounded by them; for example, on the two well lease on which are the wells 32-10 and 42-10, the lease to the north of both wells are top allowable wells, the lease to the northeast is also a top allowable well. The leases to the west and south are not top allowable. Well 15-2, the wells around it are not top allowable.

Q Do you know what the allowables for those wells are in relation to the Machris wells?

A Yes, I could give you that. The north offset to Machris 15-2 is Tidewater 17 Hillburn. It is called State "Y" on the proration schedule. It's allowable is 30 barrels a day. The well to the east of the Machris well 15-2 is Shell 2-TB. It is top allowable. The south offset is Shell Hillburn 3, 118 barrels

- a day. The west offset is Shell Hillburn 2 which has 67 barrels a day.
- Q Mr. Fitting, in those situations where these prorated or cut back or shutin wells are offset by top allowable wells or wells able to produce and producing in excess of the prorated wells, is it your opinion that that results in drainage?
 - A Very definitely, yes.
- Q And that the greater the cut back, the greater the length of time of the shutin while the offset wells are producing at top allowable or their full capacity, the greater the drainage?
 - A Yes, sir.

(Machris' Exhibit No. 1 marked for identification).

- Q Mr. Fitting, I hand you what has been marked Machris Exhibit No. 1 and ask you to state generally what that is, and then we will explain it.
- How It is a suggested method for prorating in a field of the type of the Townsend-Wolfcamp where one purchaser is connected to only a few wells and other purchasers are connected to remaining wells, and one purchaser is limiting his purchases and the other purchasers are not.
- Q Will you state to the Commission what the three different plans encompass, please?
- A Well, Plan "A" is based on areal indication of allowable within a field. Assuming that the amount of curtailed oil is a thousand barrels a day or one-eighth of the 8,000 barrels normal allowable in the field, that that field be limited to 7,000 barrels a day allowable and that it be redistributed among the wells in the field. That, of course, can be done on a percentage basis by

just taking an eighth of the allowable of the field, or twelve and a half percent.

Flan "B" is a suggestion for allocating the entire emergency oil throughout the entire area affected. It assumes that 15,000 barrels a day is the emergency oil and that the allocation for the month of April, for example, is 15,000 barrels a day and that during the month of May there is another 15,000 of distress oil and that the actual allowable prorated among the producing wells be limited to 240,000 barrels.

Plan "C" is an extension of that for an additional month where there is no previous month to take into account and that only the distress oil for that one month be taken into account, such as 255,000 barrels of allowable be prorated among the producing wells.

- Q Now, Mr. Fitting, plan "A" as set up here does not contemplate any -- it contemplates treating the marginal wells in the same manner you treat the other wells, does it not?
- A It actually doesn't state that, but that was the original intent.
- Q Is there a manner by which the Commission Order A-77-(B) or the approach with reference to the marginal wells could be used in conjunction with Plan "A"?
- Example 1. It certainly could. The entire thousand barrel cut could be placed on the top allowable wells and all the less than top allowable wells could remain at their current allowable.
- Q But the effect of it would be that where there is more than one purchaser in a pool you would avoid the discrimination against the producer who happened to be tied to the purchaser that was

prorating below the normal allowable, is that correct?

- A That is quite correct, yes.
- Q It would simply be a matter to everyone in the pool of being delayed to some extent in their ultimate recovery, rather than being in any respect drained by other operators in the pool?
 - A Which does occur under the plan 77-A, 77-B.
- Q The reason it occurs under the plan as set up now, as I understand it from your testimony that the wells which are being prorated by particular purchasers are being drained by wells that are not being prorated by their purchaser?
 - A That is correct.
- Q Is it your opinion that any of these plans lend themselves more satisfactorily to the situation in the Townsend-Wolfcamp Pool than any of the others?
- A I imagine Plan "A" is ideally suited to Townsend-Wolfcamp Pool or for that matter to any other pool where this same situation exists.
- Q Is it your recommendation that the Commission consider the additional application of the 100% factor for marginal wells as is normally done in State-wide prorationing in New Mexico?
 - A Yes, that would be my recommendation.

MR. CAMPBELL: I think that is all.

MR. PORTER: Any questions? Mr. Nutter.

CROSS EXAMINATION

By IR. NUTTER:

- Q Yes, I dian't get your runs in February on 32-3.
- A I believe I neglected to give that. It was 2374.
- Q How about the total run for the 32-10 and 42-10?

A That was 11,058.

MR. CAMPBELL: May I ask one more question?

REDIRECT EXAMINATION

By MR. CAMPBELL:

Q Mr. Fitting, based upon the information that you have available and assuming that the runs from the marginal wells were on the basis of the reduction up to the 20th and the 100% from the 20th through the 29th, do you have any estimate of the number of barrels lost by Machris during that period?

A According to my calculations, the runs should have been -this is based on 19 rather than 20 days, I didn't know the effective
date of the change in the order -- on 15-2, 3205 barrels; 32-3,
2100 barrels; 36-3, 2837 barrels; on 32-10 and 42-10, 6906.

Q You have based that on what type of calculation, prior to April 13th?

A Well, it's not, it's based on taking 60% of 19 days' runs and 11 days at 100% on the marginal wells and 11 days of 30% on the top allowable wells.

MR. CAMPBELL: That is all.

MR. PORTER: Mr. Holl.

RECROSS EXAMINATION

By MR. HOLL:

- Q These wells that you were testifying to, could the size of the tank battery, size of tanks on the leases, have had anything to do with the actual runs that were made during the month of April?
- A I don't think so. There is ample tankage on the lease.
 As I understand it, it is the question not of lease storage but of

takes by the purchaser.

- 1 Isn't it customary the pipeline will not run partial tanks;
 it will run only full tanks?
- A I would have to ask Mr. Stone the size of the tanks, are they not 5,000 barrel tanks?
- MR. STONE: They are thousand barrel, two thousand barrels tanks on each one of the leases.
- Q Couldn't the fact that the tank was not full or full make a difference to the actual runs of the pipeline during that period?
- A It possibly could. I don't see how it could make the differences we were talking about.

MR. HOLL: That is all.

MR. PORTER: Mr. Mankin.

By MR. MANKIN:

- Q If the wells are shut in due to full tanks, I guess they are eligible to run, then, if that is the criterion, that a tank must be full to be run?
- A It certainly wouldn't fall in the partial tank category. They have been full, too, since about the 23rd and 22nd of April.

MR. MANKIN: That is all.

MR. PORTER: Any further questions of Mr. Fitting? If you have nothing further, the witness may be excused.

(Witness excused).

MR. PORTER: Are there other witnesses?

MR. CAMPBELL: We have no witnesses. I would like to make a statement.

MR. PORTER: Anybody else have anything further to say before the closing statement? Mr. Campbell.

ADA DEARNLEY & ASSOCIATES

STENOTYPE REPORTERS

ALBUQUERQUE, NEW MEXICO

TELEPHONE 3-6691

If the Commission please, first I would MR. CAMPBELL: like to make a few remarks about the situation which has existed in the Townsend-Wolfcamp Pool, only that that is the only one with which we are immediately concerned; and first with reference to the month of April, I think the testimony shows that on April the 6th the Commission issued its Order A-77-(A) requiring the purchaser to purchase from the wells from which it was purchasing in the Townsend-Wolfcamp Pool 100% on wells which could not make the top unit allowable. That order was amended and superceded by the emergency order on April 14th and therefore there was in effect an emergency order of this Commission from April 6th through April 29th requiring purchaser to purchase 100% from the non-top allowable wells. The testimony has reflected that until April 20th the purchaser did not comply with either of those The testimony further shows that since April 20th at least on the three wells referred to in the Townsend-Wolfcamp Pool which are now shut in, the purchaser has not complied with Order A-77-(B). It is quite possible that due to the fact that most of that production is lost from marginal wells, that there is no remedy which the Commission can give to Machris for the failure of the purchaser to comply with the Commission's order; but certainly the Commission, it seems to me, is obligated to protect the correlative rights of producers in that pool and perhaps the other ones with which I am not acquainted commencing today, the expiration date of the order A-77-(B). Due to the peculiar circumstances in the Townsend-Wolfcamp Pool which as the evidence discloses indicate that this particular purchaser is acquiring oil from only a very few of the wells and that there are other purchasers in the pool, merely the granting of a full production to the marginal wells and taking the cut from the top allowable wells doesn't fully protect the correlative rights, because you have further problems between those who are being prorated and those who are being prorated under the normal Statewide proration schedule.

So it occurs to us that perhaps in addition to protecting the correlative rights of the owners of marginal wells and preventing waste which might occur through premature abandonment and granting to the marginal wells a full allowable, as is done under our normal procedures, that the Commission should in addition to that require all top unit allowable wells in a particular Pool to be prorated during these periods of distress oil, on the same basis, so that drainage will not occur between those who happen to be fortunate enough to be tied to a line that is not then in distress, and those who happen to be unfortunate enough to be tied to a line wherethe purchasing company is in some difficulty market-wise. That would certainly protect the correlative rights during the distress period and would not deprive anybody of their fair share of the oil in the reservoir. It might postpone it for a period of time, but certainly it would not create uncompensated drainage.

Should the Commission see fit to issue a new order or some sort effective immediately, we would certainly like to urgently request the Commission to do everything they can in cooperation with the purchaser, or otherwise to see that that order is complied with, because once this production from marginal wells is lost, it is lost forever. There isn't even the opportunity, as remote as they seem to think it may be, to make up that lost oil as has

been done here in New Mexico in the past in the Stanolind case.

We are here to ask this Commission, in addition to its performing its duty of preventing waste, to protect our correlative rights both for those marginal wells which have lost considerable production and stand to lose considerable production in the future, and to our top unit allowable wells which are being drained by offset production which is not being prorated upon the same basis.

We feel that a consideration of these plans offered with a possible modification suggested on Plan "A" to allow full production from marginal wells would fully protect correlative rights of all the operators in the Pool because tomorrow this may be happening to the offset operators who are now in the fortunate position of not being cut back or shut in because of the purchaser's problem here.

MR. PORTER: Anybody else have a statement? Mr. Hinkle.

MR. HINKLE: If the Commission please, Clarence Hinkle, appearing on behalf of Cities Service Oil Company. I might say at the outset that the Cities Service Oil Company are anxious to cooperate with the Commission in every way possible. We are not here because we don't want to comply with the order of the Commission, but we are here because we think that the emergency order of the Commission in this case is contrary to the conservation laws in New Mexico.

I am sure that the Commission wants to be fair and it has in the past been fair to the industry in every respect. At the same time, I know that the Commission also wants to comply with the laws of the State. I know that this Commission wouldn't willingly undertake to issue an order which was in direct violation of the

laws of this State, the conservation laws particularly, or in probable violation of its own rules and regulations.

I think that the Commission ought to adopt a policy of being very careful in the orders which it issues, to see that it doesn't put a company or purchaser in the position of being in jeopardy of being penalized for compliance with the order of the Commission for probably violation of a law of this State.

Our position is simply that we have a common purchaser act here in the State, whether we like it or not, it is on the books. Whether we agree with it or not, I think it is the first duty of this Commission and the duty of all concerned to see that that law is complied with. I am not going to read all the provisions of the Common Furchaser Act because I am sure that you are all familiar with it, which requires all purchasers to purchase ratably, but it does contain this provision. "If any common purchaser shall not have need for all such oil lawfully produced within the field or if for any reason it shall be unable to purchase any such oil, then it shall purchase from each producer in the field ratably, taking and purchasing the same quantity of oil from each well, to the extent that each well is capable of producing its ratable portion."

Whether we like the provision or not, it is the law of the State and I don't think anyone here can contend otherwise. I think also that the literal interpretation of the act and the interpretation that should be followed and the right interpretation is that means ratable taking at the time the oil is produced. It doesn't mean that you can defer that time and adjust it by speculation that these back allowables are going to be made up in some

way, because the testimony here shows that they are probably not going to be made up. It means that you have got to take that oil ratably at the time it is produced. That is it.

Now your own regulation 802 provides practically the same wording as the Act itself. Then the Commission has gone a little bit farther than the Act itself in providing that where there are marginal wells involved, which is Rule 802-C, that in order to preclude the premature abandonment of wells, that you can require that the purchaser take at least ten barrels from all wells which are capable of making that amount. I think perhaps that the Commission could go a little further and adjust that to take into consideration the deep well proportional factor in fixing a minimum allowable; but I don't think that the Commission can adopt a rule which is a definition of a marginal well which is a flexible thing, which is not realistic at all. I think the adoption of that kind of rule and the issuing of this order and following it is in violation of the Act itself, the Ratable Take Act. As you know, the Ratable Purchasing Act provides a very severe penalty for anyone who fails to comply with it. In fact, it can be a felony and it can amount to a thousand dollars a day fine for anyone who fails to comply with it. So that is the reason we are here today, not because we want to buck the Commission or not do what's right, but we don't want an order putting us in jeopardy of being in violation of the Ratable Take provisions of the Conservation Act. I think the Commission ought to think twice and consider carefully the issuance of any order that might put any purchaser in violation of that Act. Fortunately, there's an easy way out of this whole thing for the Commission, in that the Cities Service has been able

through their efforts as a prediction for this next month to make deals so that there will be only a 20% reduction in their take, which isn't going to hurt anybody too much. I think the safest thing for the Commission to do is to issue a new order providing for compliance with your hules 802 and 802-C so that they would take ratably with ample protection for what is a realistic definition of a marginal well. That wouldn't hurt anybody, it wouldn't put the Cities Service Company in jeopardy. It would be harmonizing this whole situation. You would be complying with your own rules. You would put the Cities Service in the position where they could comply with the order without being put in jeopardy of being subject to a penalty under the provisions of the Ratable Take Act.

- MR. FORTER: Any further statements?
- MR. CAMPBELL: I assume that my comments will be construed by the Commission and I want them to be construed as a request that in any new order the Commission may issue, that it incorporate a reduction on all wells within the pool equally, to avoid what I brought up as discrimination against operators tied to Cities Service.
 - MR. PORTER: Are you speaking of all wells in the Pool?
- MR. CAMPBELL: Yes, I am speaking of all wells. My request was that if the Commission sees fit to continue their policy of trying to protect the marginal wells and allow them full production that the allowable reduction on top wells be taken from all top wells in the Pool and simply treated as a reduced market demand to that extent; but in any event, if the Commission decides not to go along in taking 100% of marginal wells and prorate them, and then we would like to ask that all wells be prorated on the same basis,

rather than just a few wells that would be connected to Cities Service.

MR. NUTTER: Would that apply to all Pools in which Cities Service has connections?

MR. C.MPBELL: I don't know, in a Pool where Cities Service is a predominant purchaser, I think it would be fair as a general proposition; certainly if they are the only purchaser it isn't any problem particularly, because there is not any discrimination, but where there is more than one purchaser I think it is the reasonable approach and fair approach.

MR. PORTER: Anyone else? Mr. Kitts.

MR. KITTS: I have a short statement. I want to make this statement on behalf of the Commission staff merely to put us on record, particularly in view of the closing statement of Cities Service.

We feel that this is a case, as is often the situation, where in locking at one provision of our Statutes you will find one section which requires or indicates that one procedure should be followed, and another section which is often inconsistent with that. We are minoful of the ratable take provision both in our Statute and in our Rules. At the same time, we must construe that in connection, it has been our feeling that we must construe that ratable take provision with 6-5, which provides in essence that any rule, regulation, or order of the Commission shall, so far as it is practicable to as so, afford to the owner, each owner, an opportunity to produce his just and equitable share of the oil and gas; in order words, the correlative rights provision found in the Statute, or the main one.

I just wanted to mention that to indicate, I believe this is a case where to do justice to each operator, to afford him the opportunity to recover or eventually recover his just share of the reservoir energy, certain steps ought or should be taken. In this particular instance it is possible that it conflicts with Rule 802-C of our rules and the comparable section of the Statute. In making its final order, I am sure that the Commission will endeavor to both protect correlative rights and to follow what appears to be the mandate of other portions of the Statute. That will be our job. It may be a difficult one.

A.P. PORTER: Anything else? The case will be taken under advisement.

The hearing is dismissed.

* * * * *

STATE OF NEW MEXICO)
: ss
COUNTY OF BERHALILLO)

I, ADA DEARNLEY, Court Reporter, do hereby certify that the foregoing and attached transcript of proceedings before the Oil Conservation Commission in Santa Fe, New Mexico, on April 30, 1,56 is a true and correct record of said proceedings to the best of my knowledge, skill and ability.

Witness my hand and seal this 10th day of May, 1956.

Notary Public - Court Reporter

My commission expires: June 19, 1959.

Pag	e	-

NEW MEXICO OIL CONSERVATION COMMISSION MABRY HALL - STATE CAPITOL SANTA FE, NEW MEXICO

REGISTER

HEARING DATE	April 30, 1956	TIME: 10:00 a.m.
NAME:	REPRESENTING:	LOCATION
ald mc Gres	Cities Service Oil Co.	Brantlesville, O
ful O. Holl	L L L -	
Manne Alush	1, 1,	M. W. Wewood
1.T. Smith		midland -x
L. Shoemsher	Standing O.P.Co.	milland Dead
J. albugh		Holde, N.M.
Janiat. v.	M. Madaris SHELL OIL COMPANY	Midlaud, Texas
W NESTOR	6. A Aztec Oct of bas 6.	
JAN. Steve		Mobbs. NKI meland, Tefor
HeM Campbell	Cumpled + Russell	Roswell, NM
charle my	OCC	Sant 2
an huth	· occ	Santa JE
im like	oce	Sant The
		·