BEFORE THE
OIL CONSERVATION COMMISSION
Santa Fe, New Mexico
January 16, 1957

IN THE MATTER OF:

Case No. 727

DEARNLEY - MEIER & ASSOCIATES
INCORPORATED
GENERAL LAW REPORTERS
ALBUQUERQUE - SANTE FE
3-6691 2-2211

BEFORE THE
OIL CONSERVATION COMMISSION
Santa Fe, New Mexico
January 16, 1957

IN THE MATTER OF: (Readvertisement) Application of the Oil Conservation Commission upon its own motion as provided for in Order R-610-C, to hear testimony and receive evidence regarding the amending, revising or abrogating existing rules and regulations of the Oil Conservation Commission and/or promulgating rules and regulations relating to gas pool delineation, gas proration and other related matters affecting or concerning the Blinebry Gas Pool, Blinebry Oil Pool and Terry-Blinebry Oil Pool.	Case No. 727

BEFORE:

Honorable Edwin L. Mechem
Mr. A. S. Porter
Mr. Murray Morgan

TRANSCRIPT OF HEARING

MR. PORTER: The meeting will come to order please. The next case to be considered is Case 727.

MR. GURLEY: Case 727 is the application of the Oil Conservation Commission upon its own motion as provided for in Order R-610-C, to hear testimony and receive evidence regarding the amending, revising or abrogating existing rules and regulations of the Oil Conservation Commission, and/or promulgating rules and regulations relating to gas pool delineation, gas proration and other related matters affecting or concerning the Blinebry Gas Pool, Blinebry Oil Pool and Terry-Blinebry Oil Pool.

MR. PORTER: Mr. Fischer. Is there anyone else to present testimony here this morning in the Blinebry Case? No company representatives? Will you swear the witness?

(Witness sworn.)

E. J. F I S C H E R,

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

DIRECT EXAMINATION

By MR. COOLEY:

Q Will you state your name and occupation for the Commission?

A E. J. Fischer, Engineer for the Commission in Hobbs.

Q What is your educational background?

A I graduated from the University of Texas with a Bachelor of Science Degree in Petroleum Engineering.

Q What experience have you had since the time of your occupation?

A I went to work for the Gulf Oil Corporation in 1953 and have worked for the Gulf Oil Corporation until November, 1956, at which time I went to work for the Commission.

Q In your official duties with the New Mexico Commission, have you had an opportunity to study conditions in the Blinebry Pools in Lea County, New Mexico?

A I have.

Q Have bottom hole pressure tests been conducted in the Blinebry Pools of Lea County since the last hearing in this case?

A Yes, there have.

Q Will you please state to the Commission the methods used in

determining the bottom hole pressures in these separate pools?

A The bottom hole pressures in the Terry-Blinebry Oil and Blinebry Oil Pools were determined directly by use of a bottom hole pressure bomb. Bottom hole pressures in the Blinebry Gas Pool were determined by use of sonic meters to obtain the level of the liquid in the pipe and this data along with the gas and oil gravity determinations were used to calculate an apparent bottom hole pressure.

Q Will you please state to the Commission the results of these tests and how the average pool pressures compare between pools?

A First I would like to say that only one bottom hole pressure was submitted from the Blinebry Oil Pool, and that was the Western Oil Fields, Inc., Gulf Hill No. 1, a flowing well located in Unit R of Section 4-21-37; and that on June 30th, 1956, bottom hole pressure was 2273 psig at pool datum of 2400' subsea on 72 hour shut-in. The previous test submitted was for December 12, 1955, at which time the bottom hole pressure was 2213 psig at the same datum of -2400' subsea on 72 hour shut-in, a drop of 60 pounds per square inch in bottom hole pressure over that time.

Q Has a statistical compilation of the bottom hole pressures for the Terry-Blinebry, have the statistics been prepared and have they been sent out to all the operators?

A Yes, they have, and they have been sent out to the operators.

(Marked Commission's Exhibit No. 1, for identification.)

Q I hand you what has been identified as Exhibit 1 and ask you to state what that is?

A Most of the tests were run in October 1956. This is the

Terry bottom hole pressures in the Terry Blinebry.

Q Explain what is shown by Exhibit No. 1.

A The bottom hole pressures on each well were submitted by operators in well number. At the end of this report we have averaged these bottom hole pressures and made a comparison. First, comparing the total wells run in the field for the Terry-Blinebry Oil Pool, there were 48 wells run in May of 1956, and the average pressure was 1,440.8 psi. In October, 1956, 59 wells were run and the average pressure was 1,348.8, or a change of -92 pounds per square inch. We ran some on comparable wells, the same wells in May, 1956, 45 wells were run, and the average bottom hole pressure was 1,473.4. In October, 1956, the same 45 wells run, the average pressure was 1,307.3, or a drop of 166.1 pounds in bottom hole pressure.

The Blinebry Gas Pool, the Gas-Condensate Ratio Survey tabulation was submitted to the operators along with the bottom hole pressure and oil and gas gravities, and these well pressures were run by sonic means. They are listed according to operator and well number. They list the well number, the location, the date shut in, the gas gravity, oil gravity, 48-hour shut-in pressure at the surface, 72-hour shut-in pressure at the surface, and then the change in the shut-in pressures, the 48-hour sonic depth, the 72-hour sonic depth, the fluid level change, the 48-hour bottom hole pressure at the pool datum of -2400, the 72-hour bottom hole pressure at the pool datum of -2400, and the bottom hole pressure change in that time. One more column there lists the bottom hole pressure change from October, 1956 test with the May, 1956 test.

To the rear of this tabulation we have given the evaluation of

of these and the totals, and the averages comparing total wells and comparable wells. We had submitted to us 33 wells from the operators; for the comparable wells, the change in shut-in pressure at the surface averaged 19.4. From 48-hour shut-in to a 72-hour shut-in, it gained 19.4 pounds. The fluid level changed, from 48 to 72 hours it dropped 19 feet. The 48-hour bottom hole pressure and the 72 hour bottom hole pressure changed a plus 20 pounds. This average is compared with the average for May, 1956, there was a nine pound increase in the bottom hole pressure. The pool averages now, the average gas gravity came out at .6863; the average oil gravity came out 61.6 degrees API. 48-hour surface shut-in pressure averaged 1,592 pounds; 72-hour surface pressure averaged 1,635 pounds, or a change of plus 43 pounds. The 48-hour sonic depth average was minus 1919 subsea, and the 72-hour fluid sonic level was minus 1959, or a drop of minus 40 feet. The 48-hour bottom hole pressure average was 2,076 pounds. The 72-hour bottom hole pressure was 2,154 pounds, or an increase of 78 pounds.

The Pool average for May, 1956 -- We will go over those -- gas gravity was .6874. In other words, the gas gravity dropped a little bit. The oil gravity was 65.4 average. It went up. The 48-hour surface shut-in pressure was 1585. Average 72-hour surface shut-in pressure was 1602, or increase at that time of 17 pounds. The 48-hour sonic depth was minus 1555, the 72-hour fluid sonic level was minus 1595, or a drop of 40 feet. 48-hour bottom hole pressure was 2150; 72-hour bottom hole pressure was 2155, or increase of five pounds. So the change from May to October, 1956 in the gas gravity was -.0011; the oil gravity decreased 3.8 degrees API. 48-hour

surface shut-in pressure, that's comparing the 48-hour shut-in pressure with May, 1956 and that of October, 1956, had increased seven pounds. The 72-hour surface shut-in pressure had an increase over the six months there of 33 pounds. Therefore, the pressure change in these two was plus 26 pounds. The average 48-hour sonic depth was, the change, rather, from May to October was minus 364 feet, and the 72-hour depth was minus 364 feet, and there was no change. The 48-hour bottom hole pressure was minus 74 pounds and the 72-hour bottom hole pressure was just one pound difference. There was a bottom hole pressure change there of 73 pounds increase.

Q Has a graphic illustration of the pressure differential between the Terry-Blinebry and the Blinebry Gas Pool been prepared?

A It has.

(Marked Commission's Exhibit 2, for identification.)

Q I hand you what has been marked as Exhibit 2 and ask you to identify and explain the significance of it.

A It is a graphic picture of the average bottom hole pressures of the Blinebry gas and the Terry-Blinebry Oil Pools. The Blinebry gas pressures are plotted from past tests in May, 1955, October, 1955, May, 1956, and the most recent test in October, 1956. The Terry-Blinebry Oil pressures are plotted from tests in May, 1956 and October, 1956.

Q Will you go over and explain the plots on the graph?

A Referring to the graph here, considering the first point on the graph in the Blinebry gas pool, the average pressure from 17 wells in May, 1955, bottom hole pressure test, was 2103 pounds per

square inch gauge.

The graph from here on denotes a change in the pressure in these same 17 wells, and is denoted by the solid line. The dashed line denotes the change in the bottom hole pressure from all the wells reported on the tests. That is all the wells in the pool submitted. The next points in the Blinebry gas for October, 1955 shows an average pressure for the comparable wells of 2174 pounds per square inch gauge, and an average pressure for the total wells of 2171 pounds per square inch gauge. It is not shown on the graph, but in the Terry Blinebry Oil Pool the October 1955 average pressures for comparable wells was 1274 pounds per square inch gauge and for the total wells, 1206 pounds per square inch gauge. The differential in pressure between pools based on total wells tested in each was 965 pounds. That was for October, 1955.

In May, 1956, the comparable wells in the Blinebry Gas -- that is the same 17 wells -- had an average pressure of 2180 psig.

The May, 1956 Terry-Blinebry oil well average pressures were 1473 psig for comparable wells, and 1440 psig for total wells, or a differential pressure between pools of 741 psi. The October, 1956 averages in the Blinebry gas was 2117 psig for comparable wells, and 2154 psig for the total.

In the Terry-Blinebry oil the comparable wells averaged 1307 psig and the total wells averaged 1348 psig. Therefore the present differential of pressure between these two pools is 805 pounds per square inch gauge.

I think that would be enough to prevent movement at this time.

Q Do you have any recommendations concerning future testing in the Blinebry Pools?

A It is my recommendation that all the wells in the Blinebry oil or the Blinebry gas pool be tested. I would like to put this on a bottom hole pressure bomb and test by key wells to be picked by the Commission.

Q Do you feel, Mr. Fischer, that the three Blinebry Pools are separate common sources of supply?

A Well, I believe from what the geologist told me, they are one source of supply, and I would like to call them one pool, and for administrative convenience, leave all the orders as they are, the only change to be made is to be called one pool, and leave everything else the same.

Q The oil wells that are now presently designated in the Blinebry and the Terry-Blinebry all would then be designated as gas wells in the Blinebry gas pool?

A Would then be designated as oil wells in the Blinebry Gas Pool.

Q Do you have any recommendation concerning the definition of a gas well?

A I recommend that no change be made in order R-610 concerning the definition of a gas well, and that it remain defined as a well producing from the vertical and horizontal limits of the Blinebry Gas Pool, with a condensate gravity of 51° API and a GOR minimum of 32,000 to 1.

Q Do you have any other recommendations?

A No.

MR. COOLEY: At this time I would like to offer Exhibits 1 and 2.

MR. PORTER: Are there any objection to the admission of these exhibits? They will be admitted. Does anyone have a question of Mr. Fischer? Mr. Malone?

MR. MALONE: Ross Malone, for the Gulf Oil, if it please the Commission.

CROSS EXAMINATION

By MR. MALONE:

Q Mr. Fischer, in preparing your study that you have presented, I am sure you had access to the testimony that was presented in the original hearing in 1954, did you not?

A I have.

Q You will recall, that at that time Gulf presented rather extensive testimony with reference to the possible administration of the three pools as they were subsequently set up?

A Yes.

Q Did you give consideration in your analysis to the pressure differentials which existed at that time, as they relate to the differentials which you now find?

A At that time I think the differentials were a little lower. The differentials have increased according to the May, 1956 test, and I still believe that the differential between the Blinebry Gas and the Blinebry Oil is enough to prevent migration of oil up structure.

Q Is there any difference in that regard with reference to the

differential you now find, as against the differential in 1954, anything in the present change that would require a change that did not exist in 1954?

A No.

Q So, essentially, the Commission is dealing with the same problem and the same set of physical facts that it was dealing with when the order was promulgated in 1954?

A I believe so.

Q Your recommendation that the three pools be consolidated into a single pool is purely a matter of administrative convenience?

A Yes.

Q I didn't exactly follow the administrative convenience which you felt would result from that. Would you mind restating that?

A I believe the only one would be to just be able to have better control over the three. Everything else will be left as is, of course, the operators have been living with the conditions long enough to be used to them. It's just a matter of calling it one pool, and then you can deal with them a little easier I believe.

Q Did you find from your study that in general, Order Number R-610 and the administration under that order had progressed satisfactorily?

A Yes.

Q There are no serious defects in the set-up that that order sets out, in your opinion?

A No.

Q That order, of course, sets up special rules for the Blinebry

Gas Pool, for the Terry-Blinebry Oil Pool and for the Blinebry Oil Pool, does it not?

A It does.

Q And delineates the three pools. It would require a re-writing of Order Number R-610 if your recommendation were followed, would it not?

A That is correct.

Q So that while the effect of it might be merely a consolidation for administrative purposes, it would necessitate a complete re-writing of Order R-610?

A Yes, it would, but it wouldn't change anything.

Q Do you feel that the benefit that would result from this administrative change would justify the change that would be incident to the re-writing the order and the change in the operations of the companies under the order?

A Yes, I do.

MR. MALONE: Thank you.

MR. PORTER: Mr. Mankin?

By MR. MANKIN:

Q Mr. Fischer, did you not relate from your testimony on Exhibit 2 that the differential pressure between the Terry-Blinebry Oil Pool and the Blinebry Gas Pool had constantly increased?

A From May, 1955 to October, 1955, to May, 1956 it did increase. You mean the differential in pressure?

Q The differential in pressure between two pools?

A I am sorry, the differential in pressure between the two pools, from October 1955 tests was 965 pounds. In May, 1956 when

the tests were taken again of these two pools, the differential in pressure between the two was 741 pounds, the differential had dropped between the two pools. In October, 1956 the results of the tests taken at that time show that the differential in pressure between the total wells submitted from these two pools, the averages, the differential in pressure was 805 pounds, that it increased again.

Q To what do you attribute that increase from May, 1956 to October, 1956?

A Well, I don't think that the increase is true. I think that possibly it's an error in the method of taking the bottom hole pressure of the Blinebry gas by sonic meter.

Q Is the condition to which those wells were taken the same in all three times, October of '55 and May of '56 and the October of '56, were the conditions and the same wells used?

A The same conditions were used, as far as I know.

Q Were the same wells used?

A In the comparable wells the same wells were used.

Q Was this differential on comparable wells the same condition?

A Yes, the differential between comparable wells, between the Blinebry gas and the Terry-Blinebry oil was 810 pounds, only five pounds different from the average differential from the total wells. They match up fairly close.

Q Then it's your recommendation that the sonic method would not be used, is that your recommendation?

A Yes.

Q That you would use the bottom hole pressure bomb?

A I think you would get more accurate data that way.

Q It is possible in some cases to use the bottom hole pressure without pulling the well?

A That I know of, most of the wells or all of the wells that I know of are dually completed wells. I don't know what equipment is in the wells. I assume that most of them have garret sleeves to block off each zone above and below the packer, or maybe a bottom hole choke. I think the average cost to shift those garrett sleeves is around $135.00, if it goes off all right.

Q It is your recommendation and you feel that bottom hole pressures where they would be used with a smaller bomb, or move the choke in such a manner that normal pressures could be taken on all wells?

A Yes.

MR. MANKIN: That is all. Thank you.

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

By MR. NESTOR:

Q Mr. Fischer, I would like to ask, Mr. Mankin mentioned all wells. I understood you to say "key" wells. Do you have in mind how many wells per section?

A I think in that line the Commission could draw you an isobaric map of that, and pick the key wells from that map. Then maybe after six months we would use some of the same key wells and, if possible, to get more wells tested by a bottom hole pressure bomb

to designate other wells. Drop some of the other key wells and add new key wells in order to get, say in a year's time, or year and a half's time, you would have tested with the bot om hole pressure bomb all the wells in the Blinebry gas.

Q You did mention one thing there, the fact that the cost might run $135.00 if everything went all right, is there danger in running block off tools and pulling same?

A Yes, there is.

Q With the differential between these two pools as great as it is, do you think it is justified in being so precise to endanger, actually it can become pretty expensive?

A Not too expensive. If you run into trouble there you might have to run into pulling your tubing.

Q What does that do to the two zones in the well then?

A Well, you will have to kill the well.

Q Precisely. That's the point which really is dangerous. What I'm concerned about is, is what we are going to gain in more accurate measurement, and I agreed we would get a better measurement. Is it of sufficient need to justify additional risk in these wells, since the differential between the two fields, that is the oil and the gas zone, is so very great.

A I don't think the danger is as great as you make it out to be.

Q We don't know what it is?

A That is right, but I think in most cases your shifting your valve is probably all you are going to have to do. If you want to work those wells over later on you are going to have to go in and

kill the well anyhow if you want to do some work on the bottom gas or bottom hole zone.

Q That is optional. That is when it is necessary. This is something else. This is running in there with a tool, and there must be some concrete value to justify doing this. We don't just do these things of whim, of course. There is some little danger in running the tools. We have had some troubles and I am sure other operators have.

A That is right. I believe that this chart shows that these sonic meter methods, they vary too much. It is not consistent. In order to find out whether we are really having oil from the Terry-Blinebry migrating into the Blinebry gas, I think we need a better method of calculating.

Q How much differential would there have to be if the facts were known, to preclude any migration of oil from the Blinebry oil zone into the gas cap?

A I don't know.

Q Would one pound suffice?

A It might.

Q How can the Blinebry flow if the one pressure is higher than the other by one pound even?

A I think in certain cases that it might be that condition where you could flow it in there. Capillary pressure might cause that oil to rise in that sand.

Q Then what would you guess ought to be the differential?

A Well, I don't know at this time.

Q Could you give us an estimate?

A No, I couldn't.

Q Well, it would seem to me it might be a little premature to suggest the other program until we do know actually. With the 800 pound indicated differential we would agree there is probably some discrepancy with the actual truth of the pressure for the gas zone, but with that much differential I can't conceive of any combination of errors that would bring us to a situation where there would be danger of migration of oil into the cap.

A That is true. In order to get the correct sort of data on the thing, I think the bottom hole pressure bomb in the Blinebry would be the best method to determine that. We are trying to get the best method we can.

Q We agree with that, but for what benefit? If we introduce a risk there must be a benefit.

A Maybe we can call a meeting of the operators in Hobbs and possibly get a better way of getting the sonic bottom hole pressure, if that would be agreeable.

Q We just wonder, really, if you think it is necessary.

MR. NESTOR: No further questions.

MR. PORTER: Anyone else have a question?

MR. MANKIN: I have another.

By MR. MANKIN:

Q Mr. Fischer, have you noticed the gas-oil contact, any changes in the gas-oil contact over the period of the last two years between the Terry-Blinebry and the Blinebry gas?

A No, I haven't. I think the differential —

Q You think there is some shift in the gas-oil contact because of the fluid produced, and this might be gascap gas?

A I don't think--it is possible. It is very possible for that to happen.

Q You haven't observed any particular change?

A No.

Q In the gas-oil contact? A No.

MR. PORTER: Anyone else have a question?

MR. COOLEY: One question on re-direct, if the cross is finished.

MR. PORTER: Mr. Montgomery?

By MR. MONTGOMERY:

Q Getting back to your reasons for wanting to call this all one pool for administrative ease, we have had some cases just recently where the boundaries between the Terry-Blinebry Pool and the Blinebry gas pools had to be changed because a gas well was completed in the Terry-Blinebry Oil Pool.

A Yes.

Q Of course, it never was in the Terry-Blinebry Oil Pool, but the order was written and is written to the effect that no gas allowable can be granted a gas well in the Terry-Blinebry Oil Pool. Your recommendation would ease that particular difficulty which would be in the Shattuck zone?

A I believe the order should remain there be no simultaneous dedication of acreage.

Q Plus the fact that a gas well could continue to receive a gas allowable upon the date of connection, instead of waiting for

the administrative procedure to get the hearing to get the name changed from Blinebry to Terry-Blinebry gas, and when it has actually been Blinebry gas and never Terry-Blinebry?

A Yes.

Q Further, along the same lines, a gas well was completed just north of the Terry-Blinebry oil development. It is general where they had another high structure and it was above the gas-oil contact. The gas-oil was complete in the Blinebry, which is the same reservoir as the Terry-Blinebry oil and the Blinebry gas. The order again prohibits the Blinebry gas from crossing the Terry-Blinebry oil field. If we have to get up a new pool for that gas well, there is a definite possibility that a different market would exist for that pool if we created another pool, which could cause excessive drainage and not protect correlative rights, is that correct?

A Yes.

Q Regarding your key well survey, one of the reasons you wanted the key well survey was because of the oil wells that are presently going on pump, and if we are going to continue to watch these two pools, to make sure that the oil isn't migrating, we are going to have to set up something in the very near future?

A That is right.

MR. MONTGOMERY: That is all I have.

MR. PORTER: Does anyone have a question?

MR. CHRISTIE: R. S. Christie, with Amerada.

By MR. CHRISTIE:

Q I would like to know what the variation of pressures, individual pressures are in the different pools?

A The variation in pressures?

Q Where they range from. Are they pretty consistent or quite a variation?

A Well, in the Terry-Blinebry Oil Pool the bottom hole pressure ranged from a low of 717 pounds to a high of 1949 pounds. Those were the two extremes. In the Blinebry gas on a 72-hour basis I found the lowest to be 1740 pounds, and there was a high, the highest I found was 2629.

Q What is the relative difference in volumetric withdrawal between the two pools?

A I don't know, Mr. Christie.

Q What I'm trying to figure out, why that differential between two areas. It doesn't seem to be very consistent from a reservoir standpoint to have that much differential in the same pool?

A It doesn't, but I have taken what was submitted to me as correct.

Q That's the geological information, based on geological information only, isn't it, that these are all one reservoir?

A Yes.

MR. CHRISTIE: Thank you.

MR. PORTER: Anyone else have a question? Mr. Cooley, you have another question on redirect examination?

RE-DIRECT EXAMINATION

By MR. COOLEY:

Q Mr. Fischer, if the three Blinebry pools are consolidated and designated as the Blinebry gas pool, and another set of orders are written as was contemplated, will there be any change in operating

conditions whatsoever?

A No.

MR. COOLEY: That is all.

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

(Witness excused.)

MR. PORTER: Does anyone have a statement to make in this case?

MR. MALONE: Mr. Ross Malone, if it please the Commission, for Gulf Oil Corporation. Gulf is probably the largest operator in the fields which are under consideration in this field, and the pools under consideration. At the hearing held on October 20, 1954, at Hobbs, when the subject was first considered, Gulf introduced rather extensive testimony and offered recommended field rules for the Blinebry Gas Pool. At that time testimony was introduced to prove that the Blinebry formation is primarily a formation with a gas distillate reservoir from which the withdrawal of hydrocarbons would have no recovery effect on the recovery efficiency of the associated reservoirs; that is the Blinebry and the Terry-Blinebry Oil Pool. It was the recommendation of Gulf that field rules be established as if the reservoir were not associated with the others, i n order to permit the withdrawal of gas in the pool in accordance with market demand. In Gulf's opinion, this would, in no way, effect the ultimate oil recovery from the Terry-Blinebry Oil Pools, and testimony to that effect was presented in the former hearing.

Gulf further recommended that these three pools be regulated

and prorated as if they were single reservoirs. At that time it also proposed that a gas well in the Blinebry Gas Pool be defined as any well within the vertical and horizontal limits of the Blinebry Gas Pool which produced gas in liquid hydrocarbons; the liquid hydrocarbons having a gravity in excess of 45 degrees API, and be producing gas and liquid hydrocarbons, the liquid hydrocarbons having a gravity of less than 45 degrees API, a gas-oil ratio in excess of 100,000 to 1.

There was no opposition to the case and the testimony presented by Gulf at that time. As a result of this hearing in October, 1954, Order Number R-610 was issued by the Commission, and rules were adopted which conformed generally to the recommendations which were made at that hearing. A gas well in the Blinebry Gas Pool was defined as a well producing from within the vertical and horizontal limits of the Blinebry which: (a) produces liquid hydrocarbons, the liquid hydrocarbons possessing a gravity of 51 degrees API, or greater, or (b) producing gas and liquid hydrocarbons, the liquid hydrocarbons having a gravity of less than 52 degrees API and a GOR minimum of 32,000 cubic feet of gas or more per barrel of liquid hydrocarbon removed.

Guld has periodically reviewed the status of the Blinebry reservoir, and has found no substantial change during the intervening period, from the condition which existed at the time of the adoption of the present rules.

As I understood Mr. Fischer's testimony, he confirmed that fact that he found no substantial change to have occurred in the intervening period. Operations under the present order which delineate

the three pools for administrative purposes, seem to have proceeded satisfactorily. It is the feeling of Gulf that while there might be some administrative flexibility result from the recommended change, that the problems that it would pose for operators presently operating in the pool would far outweigh any benefit that might be obtained. The Commission considered this question very seriously, and came up with the rules that are now in effect. The conditions have not changed since that time, and Gulf strongly recommends that Order R-610 continue in its present form, and that the three reservoirs be administered as separate reservoirs under the present rule.

MR. PORTER: Thank you, Mr. Malone. Does anyone else have a statement? Mr. Kellahin?

MR. KELLAHIN: Jason Kellahin, representing Continental Oil Company. Continental Oil Company has reviewed the existing rules and regulations relating to gas pool delineations, gas proration and other related matters affecting and concerning the Blinebry Gas Pool, Blinebry Oil Pool and Terry-Blinebry Oil Pool, and is of the opinion that although existing rules and regulations and pool delineations are not in all respects completely satisfactory, they are probably the best that can be promulgated under the circumstances.

I would like to deviate from the prepared statement, and observe that in view of the testimony that has been presented here today, it calls for additional testing and, as pointed out by Mr. Malone, shows no substantial change in the pool conditions since the original rules were adopted, pursuant to the hearing in 1954;

that there should, at this time, in our opinion, be no further change made in the present rules until the additional studies have been completed and additional evidence presented to the Commission, to show the effect of the consolidation of the pools into one pool.

Continental Oil Company, therefore, does not desire to recommend any changes in the existing rules and regulations and pool delineations. Continental's Warren Unit Well No. 8, which was dually completed as a gas well in the Tubb and Blinebry pools pursuant to the Commission's approval, is located north of the, and outside of the horizontal limits of the Blinebry Gas Pool and Blinebry Oil Pool and the Terry-Blinebry Oil Pool and Continental Oil Company proposes to request a new pool designation and field rules for the area surrounding its said Warren Unit Well No. 8 in the immediate future.

MR. PORTER: Thank you, Mr. Kellahin.

MR. HINKLE: Clarence Hinkle, Hervey, Dow and Hinkle, Roswell, representing the Atlantic Refining Company. The Atlantic has some properties which are being operated in this area by the Continental, and Atlantic would like to concur with the statement made by the Continental Oil Company in this case.

MR. PORTER: Anyone else have a statement? Mr. Seth?

MR. SETH: On behalf of Shell Oil Company, Shell doesn't feel there is any present need for any changes in the existing rules; as indicated, and it might leave something to be desired, but they are working as well as they can be expected to work. We see no need for a change.

MR. PORTER: Anyone else have a statement?

MR. KELLEY: C. L. Kelley with Stanolind Oil and Gas. We, too, feel that the present rules are working very satisfactorily and would like to see the present rules as adopted as permanent rules rather than have a change.

MR. PORTER: Thank you, Mr. Kelley. Any further statements? The case will be taken under advisement. At this time I would like to announce that the normal unit allowable for February will be 43 barrels. We will recess until 1:30.

STATE OF NEW MEXICO)
:
COUNTY OF BERNALILLO)

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

IN WITNESS WHEREOF I have affixed my hand and notarial seal this 21st day of January, 1957.

Ada Dearnley
Notary Public, Court Reporter

My Commission Expires:
June 19, 1959