

BEFORE THE
OIL CONSERVATION COMMISSION
SANTA FE, NEW MEXICO
NOVEMBER 28, 1956

TRANSCRIPT OF HEARING

Case No. 1184

DEARNLEY-MEIER AND ASSOCIATES
COURT REPORTERS
605 SIMMS BUILDING
TELEPHONE 3-6691
ALBUQUERQUE, NEW MEXICO

BEFORE THE
OIL CONSERVATION COMMISSION
SANTA FE, NEW MEXICO
NOVEMBER 28, 1956

-----:
IN THE MATTER OF: :

Application of Harold Kersey, dba Kersey and Company, :
for approval of the proposed Red Lake Premier Sand :
Unit in Eddy County, New Mexico, in accordance with :
Rule 507 of the New Mexico Oil Conservation Commis- :
sion Rules and Regulations. Applicant, in the :
above-styled cause, seeks an order approving the :
proposed Red Lake Premier Sand Unit comprising the :
following acreage in Eddy County, New Mexico: :

Township 17 South, Range 28 East

- Section 19: SE/4
- Section 20: NE/4 NW/4, S/2 NW/4, NE/4, S/2
- Section 21: SW/4 NW/4, SW/4, W/2 SE/4
- Section 28: NW/4, NW/4 NE/4, NW/4 SW/4
- Section 29: N/2
- Section 30: NE/4

: Case
: No.
: 1184

said unit consists of State and Federal Acreage. :
-----:

BEFORE:

Mr. Dan Nutter

TRANSCRIPT OF PROCEEDINGS

MR. NUTTER: The next case on the docket will be Case No. 1184.

MR. COOLEY: Application of Harold Kersey, dba Kersey and Company, for approval of the proposed Red Lake Premier Sand Unit in Eddy County, New Mexico, in accordance with Rule 507 of the New

Mexico Oil Conservation Commission Rules and Regulations.

MR. HINKLE: Clarence Hinkle, of Hervy, Dow and Hinkle, Roswell, appearing in Case No. 1184 on behalf of the applicant, Harold Kersey and the Ibex Company.

Mr. Commissioner, we have two exhibits which we would like to have identified to start off here. This will be Exhibit No. 1, several copies.

ROBERT A. BICK

a witness, of lawful age, having been first duly sworn on oath, testified as follows:

DIRECT EXAMINATION

By MR. HINKLE:

Q State your name. A Robert H. Bick.

Q By whom are you employed, Mr. Bick?

A The Ibex Company of Bettenridge, Texas.

Q In what capacity?

A As a petroleum engineer in secondary recovery in engineering work.

Q Aren't you a graduated petroleum engineer?

A Yes, University of Oklahoma, 1950.

Q ~~Where~~ have you practiced your profession since that time?

A Continually with Sun Ray Oil Corporation after graduation, and for a period of four years, five years in the remaining year

with the Ibex Company.

Q And during your stay with the Sun Ray Oil Corporation, what capacity were you employed there?

A The first year I was in drilling and production work, general work, and the remaining four years were in reservoir and secondary engineering work.

Q And during the years since you have been with the Ibex Company, what has been the nature of your work?

A That has all been on secondary recovery lines and reservoir engineering.

MR. HINKLE: Are the qualifications acceptable?

MR. NUTTER: Yes, sir, they are.

Q Now, Mr. Bick, are you familiar with the Red Lake Field area in Eddy County, New Mexico?

A I am. My employment with the Ibex Company commenced in September of 1955 and they had integrated the pilot water flood in June of 1955, and since my employment date I have been continually in association with the project, and, from an engineering standpoint.

Q Are you familiar with the application which was filed by the Ibex Company with the United States Geological Survey for designation of this area as an area suitable and proper for unitization.

A Yes.

Q What is the primary objective of the unit in this case?

A To instill secondary recovery measures on the Premier Sand section of the Grayburg formation which exists in the field at approximately 1700 feet subsea depth plus 1750 subsea.

Q What is the description of the proposed unit area?

A It's shown on Exhibit 1 here, with the --

Q (Interrupting) Let's don't refer to that. If you will just give the description as shown by the application.

A Includes 1760 acres, approximately, in Eddy County, New Mexico, and portion or all of Sections 19, 20, 21, 28, 29 and 30 in Township 27 South, Range 28 East in Eddy County.

Q The total of 1760 acres, how much of that is Federal land and how much is state land?

A 480 acres Federal land and 1280 acres state land, and no fee land.

Q Mr. Bick, state whether or not this area has been designated by the United States Geological Survey as an area suitable and proper unit as far as Premier Sand formation is concerned?

A Yes, it has been approved.

Q Are you familiar with the designation that was made by the United States Geological Survey?

A Yes, I am.

Q Is the letter which is attached to the application filed in this case as Exhibit A, is that the designation?

A Yes, it is.

Q By the United States Geological Survey?

A Yes, it is.

Q Does the designation, which by the way is dated September the 19th, 1956, by Acting Director of the United States Geological Survey, approve the form of unit agreement proposed for?

A Yes, with the minor exception that it has been changed a little to include the secondary recovery application.

Q In other words, this is the form that was approved by the United States Geological Survey, is in effect the standard form which has been customarily used where Federal and state lands are involved, with modification to limit to secondary recovery operation in the Premier Sands, is that right?

A Yes, sir.

Q Now, Mr. Bick, state whether or not in your opinion the proposed unit area includes all of that portion of the Red Lake Field or pool which is believed to be productive from the Premier Sand.

A Yes, to the best of our knowledge that was the determining factor in the boundary of the proposed unit, was the productive limits of Premier Sand in the Red Lake Pool.

Q Are you familiar with the proposed form unit agreement?

A Yes, sir.

Q Who is designated as the unit operator in the proposed unit?

A Mr. Harold Kersey, or the Harold Kersey Company of Artesia, New Mexico.

Q Now, why was Mr. Kersey, or Kersey and Company, designated as a unit operator instead of Ibex Company even though in the Ibex Company as you testified, is the one that made the application for designation of the area?

A Well, Mr. Kersey being a very experienced operator in the area, and being thoroughly competent to carry out the operations, and also the fact that he is located in Artesia, promoted his selection as unit operator.

Q Does he have any interest himself?

A Yes, sir, he is an interested owner on the project.

Q Does the proposed unit provide for any development operations?

A You mean expansion?

Q No, I mean drilling or --

A (Interrupting) Yes, oh, we have shown here on Exhibit 1, tentative --

Q Well, now, let's, if you will pardon, let's not refer to Exhibit 1. Let's refer to the formal unit and ask you whether or not the proposed form of the unit provides for any plan of operation

or development operation?

A Yes, we listed in it on page three of the agreement, Section B under the Expansion states our thoughts along that line, that the plan of operation will be submitted within thirty days for the expansion of the present pilot.

Q Well now, refer to Section 9 of the unit agreement, is that the section that provides for the plan of operation?

A Oh, yes, I am sorry.

Q And what in effect does that provide for?

A Do you mean as far as expansion, Mr. Hinkle, or --

Q (Interrupting) No, not as far as expansion, but it just provides generally, does it not, for putting into effect, formulating and putting into effect a secondary recovery project limited to the Premier Sand, is that correct?

A Yes.

Q Now, upon what basis of the working interest are royalty owners to participate under the terms of the proposed unit agreement?

A The formula as proposed, and the one that was used to set up the participation factors was based on a 75 percent cumulative primary production figure and factor, and a 25 percent acreage factor. Now, that has been the cumulative production in old fields similar to these where the existing reservoir data is very limited, has been the controlling factor in working out equitable rights for

all the parties concerned, and so therefore, it was used as the 75 percent factor and then the 25 percent factor was taken in to allow some participation for the tracts that had not been developed on primary production. But, we are still within the productive limits of the field, so therefore, had not been taken in, but we felt that cumulative production indicated the manner of residual oil left in place on the most equitable basis and that was it.

Q That formula is set forth in Section 10 of the proposed unit, is it not?

A Yes.

Q And, state whether or not in your opinion under the circumstances, taking into consideration the present production, this formula is an equitable formula and will permit all of these owners to recover their fair share of their oil?

A To the best of my knowledge, I believe with the information at hand that was the most equitable formula that could be devised.

Q Well now, will the royalties payable to the United States and the State of New Mexico be based upon the allocation of respective leases under this formula?

A Yes, sir, they will.

Q Don't you know whether or not a pilot plant operation has been inaugurated in this area?

A Yes, sir, one forty acre five spot was put into operation,

as shown right here.

Q Well now, will you refer to Exhibit 1 and identify the five spot which you have reference to?

A Now, that is on Exhibit 1 we have designated the different leases as unit numbers with an encircled number here that we are taking into the overall proposed unit, and here on unit fourteen, or tract fourteen, I am sorry, this forty acre five spot was installed and an injection started in June of 1955. Now the number five, Thompson, the center producer, was drilled as a new well to complete the five spot, and the initial production of number five was approximately five to six barrels per day; within approximately three months time the production had dropped to about two barrels per day. Injection was tried out and is still going on. In January number five began to respond from the water injection and as you can see on Exhibit 2, production increased to a point of approximately thirty barrels per day, and a little bit above. And at that point the water injection capacity of the four injection wells were giving a little bit out of balance, number four injection well was taking too much water, so the injection there was cut back, which is indicated on the decline of the production curve from number five there.

But as the pilot flood, the one five spot has given us enough information to feel justifiable in completing the rest of the expansion for the overall unit.

Q Now, I believe you testified that the pilot operations have been in effect since about June 1st, 1955?

A Yes.

Q Is that right? Was the inauguration of the pilot plan approved by the Oil Conservation Commission?

A Yes, in I believe November of 1954. All the material in evidence was presented in Santa Fe at a regular hearing, and I don't have the order number from that, but it is in the file.

Q Now, referring again to Exhibit No. 1, what does that exhibit show?

A The proposed boundary of the unit operations, and also the proposed, tentatively proposed expansion of the initial pilot that

Q (Interrupting) First it shows initial pilot and the proposed expansion?

A Yes.

Q Does it also show the location of all of the wells that have been drilled and producing from?

A Yes, sir, it does.

Q Does it show the ownership of the leasehold interests that are within the boundaries of the proposed unit?

A Yes, sir.

Q To the best of your knowledge and belief is Exhibit No. 1 plat correct with respect to this information?

A To my knowledge, yes.

Q Was this plat prepared by you or under your direction?

A Yes, it is.

MR. HINKLE: I would like to offer in evidence Exhibit No. 1.

MR. NUTTER: Without objection, Exhibit 1 will be received.

Q Now, Mr. Bick, refer to Exhibit No. 2 and state to the Commission what it is and what it shows.

A Well, that's a performance state on the Thompson State No. 5.

Q Thompson State No. 5 is the pilot well?

A Yes, sir, the center producer in the original forty acre five spot, flood pattern. Now, the curve shown there are the total water injected into the four injection wells surrounding number five, and the oil production and the water production from number five.

Q Does the plat show or tend to show that the pilot operation has been successful?

A In our estimation, yes, it, the unbalancing effect is what definitely has caused the decrease in production shown on the curve, and which will all be taken care of when we expand the project.

Q It has been successful to the extent that you think that further expansion to cover the proposed unit is warranted?

A Yes, sir, it certainly is.

Q Now, what generally is your plan of development under the

proposed plan of development in connection with this secondary recovery operation?

A Well, we plan to take in segments such as the one we've tentatively proposed here, and expand.

Q Well now, is that shown by the red lines on Exhibit 1?

A Yes, sir, the expansion.

Q The expansions?

A Yes, sir, which will include approximately within the original forty acres five spot will be approximately 210 acres.

Q Now, you proposed to expand this on forty acres basis, that is having each forty acres constitute a unit or a five spot, with the injection wells located on approximately four corners and the producing well on the center, is that right?

A Yes, sir, that's correct. The forty acre five spot wouldn't coincide with the proration unit as set out, but it will be on a forty acre five spot.

Q It will not necessarily coincide with the legal subdivision?

A No, sir.

Q Now, where have you been obtaining your water supply in connection with the pilot operation?

A We have been obtaining the water from a water well completed to a sand and gravel bed in the northeast quarter of Section 19, which is just outside the unit boundary, but the water source was

approved by the State Engineer's Office prior to the installation of the pilot flood, and it is outside of any areas designated for control by the State Engineer's Office.

Q Does it look like you have adequate water supply in that area to go ahead with this water flood project?

A Yes, sir, we have found some additional shows of water from the same sand and gravel bed at approximately 300 feet in the center of the unit as we were drilling these new producing wells, and the supply is ample to continue on flooding operations.

Q Now, in the proposed expansion of the pilot operation, will it necessitate drilling of any other injection wells or producing wells on unorthodox locations?

A Yes, sir, not essentially on our, none will be entailed on our first proposed expansion here, but as we progress from the outer limit here to the outer limits of the unit boundary, in order to utilize present producing wells that are on a more or less standard location, we intend, or well, we would like to have permission to complete some on unorthodox locations, which would give us a more balanced picture on our flooding program, and --

Q (Interrupting) Well, now, by unorthodox locations, you mean that they might be unorthodox as far as the regular lease lines are concerned, but they would not be unorthodox as far as the outside boundaries of the unit is concerned?

A That's right.

Q In other words, you would stay within 330 feet at least of the outer boundaries?

A Yes, sir.

Q But in forming the forty acre five spots, there will be instances where injection wells or producing wells would be unorthodox as far as the lease boundaries are concerned?

A Yes, sir.

Q Now, in your opinion does that make any difference under this allocation formula as far as everyone obtaining their fair share of the oil is concerned?

A No, sir, the participation on the factors on the unit will be set up initially, and any, any and all development that takes place after the approval of the unit will be on the same participation factors. So therefore, it would rule out any inequalities that an unorthodox location might normally cause on nearly a lease line or other than the 330 location.

Q Have you made application to the, or has Mr. Kersey made application to the Commissioner of Public Lands for approval of this form?

A Yes, it has been made, and submitted, and there were a few minor changes that the Land Commissioner wanted noted on it, and it was rewritten and it has been resubmitted.

Q Or it will be. I would like at this time to submit to the Commission three copies of the form to be substituted for the form which was originally filed with the application due to the fact that in considering this form by the Commissioner of Public Lands, he suggested the inclusion of the word Commissioner of Public Lands in some instances, which we have to comply with his suggestion.

MR. NUTTER: Could you briefly outline those sections, just point out to the section, just for the sake of the record.

MR. HINKLE: Seven changes which were made were for the insertion of the word Commissioner where it appears in all with supervisor and director, I believe on pages 5, 7, 8, 9, 10, 12, 15 and 20. I don't have the form that was revised by the Commissioner. It was sent to the Ibex and they inserted, made the changes, and these copies that we have submitted do embody those changes. That is all it amounted to, insert the word Commissioner of Public Land along with director and supervisor.

Q Now, Mr. Bick, state whether or not in your opinion if this proposed unit is approved and secondary recovery operations are conducted as planned, it will be in the interest of conservation and prevention of waste.

A Well, our present calculations indicate that is that we can recover more than, take a million barrels of oil from the project gross barrels.

Q That is oil which would not otherwise be recovered by primary operation, is that right?

A Yes, sir, that's right, and we feel that without unitization we could not use the most efficient type pattern in the field, and would have to develop along lease lines, and, which would to us make the project not economical.

Q Then the unit agreement is definitely in the interest of conservation and prevention of waste, is that right?

A Yes, sir, that's correct. The amount of oil we expect to recover would otherwise be unrecoverable by the present stripper method of operation.

Q Now, referring again to Exhibit No. 2 which is a graph showing the recovery from the pilot operation, was that prepared by you or under your direction?

A Yes, sir, it was.

MR. HINKLE: I would like to offer that in evidence, Exhibit No. 2.

MR. NUTTER: Without objection Exhibit No. 2 in Case 1184 will be received.

MR. HINKLE: I believe that's all we have.

MR. NUTTER: Does anyone have any questions of the witness?

CROSS EXAMINATION

By MR. COOLEY:

Q Turning first to the allocation formula set out, I believe

in paragraph 10, what was the speed of development in this field, if you are aware of this, Mr. Bick, were there some wells completed several years prior to the next well?

A I think the majority of it was, there has been some late wells drilled, but the majority were early.

Q And expediting development would have very little effect on cumulative production?

A Our cumulative figures which we have gathered for the field and what little amount of knowledge or information we can secure from the driller's logs and such, indicate that the cumulative production has been a very true measure of the sand thickness and the productive capacities of the areas, different areas.

Q I would like to know what percentage of joinder you have in your entire unit at the present time.

A The working interest?

Q Well, you have state and federal approval of farms, what, going first to working interest, what is the joinder of working interest, is all working interest joinder?

A Yes.

Q What about over interest?

A We have not started work on all of the royalty interest or the overrise, but we don't expect any great amount of trouble.

MR. HINKLE: That is in the process of being done.

Q What would be the effect of non joinder on an overriding interest owner, would you, do you feel the necessity of joining all interests in this, is what I am getting at, before you can proceed in any given area?

A There has been some discussion on that. If too much trouble is encountered, we feel that we could purchase some of the outstanding overrides or royalties to relieve any trouble we might have along that line.

Q You would not proceed to develop any area until you had all interests signing the agreement?

A Well, let me just check a second.

MR. HINKLE: Let me ask a question. If I can clarify that to some extent. The designation of this area by the United States Geological Survey, I believe, provides that it is presented with final approval within a reasonable time and proved enough have joined to provide efficient control, so I think your answer to your question is one of law in the discussion of the efficiency with the approval of the government, and I think we would have to get a sufficient amount committed to say the Commissioner of Public Lands at direction of United States Geological Survey that we have effective control. And it is practical to operate it.

MR. COOLEY: By effective control you mean you would proceed to flood the entire outlined area here even though one hundred per cent of the interest holders have not joined?

MR. HINKLE: Well, they might.

MR. COOLEY: Take the case of all but one.

MR. HINKLE: If they wanted to take a chance on it and the legal consequences of it, I think they can go ahead providing the director or commissioner would approve it.

MR. COOLEY: I want to make it clear at this time that our approval of this unit would in no way relieve the operator of any responsibility.

MR. HINKLE: I don't think it would anyway. The lease obligation,, I think they have a definite obligation to the royalty owners one way or the other, and it is going to be up to them to satisfy them either by buying or getting to join one of the others, looks to me like.

A I think the second paragraph on page 10 outlines the procedure, does not it, Mr. Hinkle?

MR. HINKLE: The second paragraph?

A Yes, or the first one. That's the tracts that are --

MR. HINKLE: (Interrupting) That's the tracts that are subsequently permitted to after approval.

MR. COOLEY: I believe you testified, Mr. Bick,, that you have approval from the State Engineer's Office to use of water taken from Section 19, is that correct?

A Yes, sir, it was cleared through the information I have.

It is a little brackish but it could pass as fresh water.

Q Do you have any letter or any kind of development of approval from the state?

MR. HINKLE: I don't know.

A It was cleared before my coming with the company, I am sure Mr. Harold Kersey Company. We could obtain same unless he has it in his files, we could submit it later.

MR. KERSEY: I went to see the State Engineers and I cleared it through his office. This particular area is outside Artesia Water Conservancy District, so he said that in that case that didn't involve State Engineers as far as water was concerned.

MR. COOLEY: Thank you. I believe that's all the questions I have at this time.

MR. NUTTER: Does anyone else have any questions of the witness?

By MR. NUTTER:

Q Mr. Bick, as I understand it, the purpose of this unit agreement is to unitize the area outlined on Exhibit 1 insofar as the Premier Sand alone is concerned, is that correct?

A That's correct, yes, sir.

Q Now, what is the Premier Sand, is it a member of the Grayburg formation?

A To my knowledge it is a member, it is the lower member of the

Grayburg. It lies immediately above the top of the San Andres formation, and it's a fine to medium grain sand, running from zero to approximately fifty feet in thickness and is presently outside of the unit. But the productive limits have more or less been determined by permeability, pinch out, porosity pinch out.

MR. HINKLE: Mr. Nutter, may I ask him a question that I might clarify that?

MR. NUTTER: Go ahead.

MR. HINKLE: Does section three of the unit agreement defined Premier Sand, you might read for the record the definition as shown in section three of the proposal.

A Reading: "The Premier Sand or formation as used herein shall be construed to mean that heretofore established underground reservoir in the basal member of the Grayburg formation in the Red Lake Field lying immediately above the San Andres dominion, the top of which sand is found at a depth of approximately plus 1755 feet above sea level, and the Kersey and Company No. 5 Thompson State located in the northwest quarter, southwest quarter, southwest quarter of Section 20, Township 17 South, Range 28 East, Eddy County, New Mexico.

MR. NUTTER: Well, now, Mr. Bick, I think you stated a minute ago that the sand as it occurs under the proposed unit area, was limited to this area alone and limited by pinch outs of porosity

and permeability, is that correct?

A Yes, sir.

MR. NUTTER: Do you have any evidence to support that statement that the permeability and porosity around the unit area is such that it wouldn't be productive, or what is the basis of that statement?

A Well, the capacity of the wells in the, within the unit boundary, the geology of which was all used in working up the contours and the isopacks that were presented at the initial hearing before the Commission, but the potentials and the character of the wells and sand thickness in the outer edge wells indicated a definite pinch out.

Q So do you feel that any water injected into this particular area of the sand would be confined to that area and won't escape?

A Yes, sir, I do.

Q It is a closed lease then? A Yes, sir.

Q I wonder if you could tell me the date that water injection was commenced on each of those four wells that you were injecting water on.

A June the 6th, 1954.

Q Were all wells started at the same time?

A '55.

Q '55 you mean? A I mean ' 55.

Q And they were all started at the same time?

A Well, within a few days' time of each other.

Q And when was your Number Five well completed?

A In, I believe, May, 1955. May or June.

Q And it's original production declined for two or three months and then it caught the effect of the water flood and started upward again?

A Yes, sir.

Q Now, Mr. Bick, a question with reference to the participation of the interest owners in the area here, now, immediately upon approval of the unit agreement, would all of this acreage share in the production?

A That's right in the total overall production it would be set up when the unit becomes effective and the participation formula be effective.

Q In other words, you have a participate area which is the same as the unit area and the effective date of the participate area would be the date of approval of the unit, the final approval?

A I think that is set out definitely in Section Ten. The date of it says this schedule shall be part of Exhibit B and upon approval thereon, thereof, of the ~~directors~~ and Commission shall become a part of this agreement and shall govern the allocation of production until the new schedule is filed and approved by the

directors and Commission. Nevertheless allocation under the unit agreement shall not commence until the first day of the month until commensation of the secondary operation pursuant to Section Nine.

Q What does it mean, pursuant to the Section Nine, when is the effective date of that?

MR. HINKLE: That is a plan, I believe, that has been approved.

A The thirty-day waiting period from the Commissioner.

MR. HINKLE: The general plan of operation must be approved by the supervisors and the Commissioner, and the Commission.

Q And then after that plan is approved and works start --

MR. HINKLE: (Interrupting) There is no participating area within the unit area like there is in ordinarily these agreements, this is a unitwise participation.

Q Just one grand participating area right from the beginning. Well, now, how about the royalty interest, how will they share in the participation on the same basis as the formula as the working interest owners?

A Yes, sir.

MR. HINKLE: On the basis that the oil is allocated to each particular lease on that formula.

MR. NUTTER: It will be computed under the same formula?

MR. HINKLE: Under the same formula.

Q How about operating expenses and the construction of the water flood, will the expenses be proportioned equally according to the acreage or what is the formula for allocation of the expenses?

A Between the working interests on the basis of their participation as shown on the agreement here, which is a part of Exhibit B, Part Two.

MR. HINKLE: In other words, Mr. Bick, Exhibit C does show a percentage over participation set up in connection with each tract, does it not?

A That's correct, yes, sir.

MR. HINKLE: And Mr. Nutter's question on what basis would the working interest owners share on the expenses, would it be on the same basis as their participation as set up in Exhibit B?

A That's correct.

Q Thank you. How much percent of the working interest ownership did you say had already been committed to the unit?

A We have, I believe, one hundred percent.

Q You have one hundred percent? A Yes, sir.

Q Of the working interest? A Yes, sir.

Q And I think according to Exhibit A which was the letter from the United States Geological Survey, that they had returned the preliminary unit agreement to you for some minor changes, you made those changes?

MR. HINKLE: The Commissioner of Public Lands.

Q Originally did the United States Geological Survey --

MR. HINKLE: Oh, yes, in the letter they suggested several changes which were made, and then the form was submitted to the Commissioner of Public Lands and he suggested the inclusion in some instances which we have already referred to, the word Commissioner of Public Lands which have been already been included and included in the form which has been filed with you.

Q And this new form of unit agreement which you submitted this morning embodies the changes that were requested by the United States Geological Survey and the Commissioner of Public Lands?

A Yes, sir, yes, sir.

Q Could you have prime approval of this unit agreement by both agencies?

A That's right.

Q That is all the questions I have.

MR. HINKLE: I have one more question. Do you intend in connection with the operation of this water flood project, to ask for any increased allowable over the normal forty acre unit allowable?

A We feel that a formal forty acre unit allowable would be sufficient if it could be in some way designated as a unit allowable from the indication we have from our pilot flood. The wells on

the four acre five spot pattern would be capable of producing in excess of forty barrels, and to produce them in the most efficient manner and flood in the most efficient manner, they would have to be produced in excess of forty barrels, and we would like permission for it. Now, the overall unit area won't be developed at once, but in portions, as we are planning here we would like some type of ruling or permission from the Commission to grant increased allowables in certain cases on this within the unit area, which we don't feel would penalize.

The fact that it is set up in a unit, there won't be an unbalancing between different leases, but from an efficiency standpoint we feel that the well definitely will produce more than forty barrels, and we would like some means of transferring allowables from some of the outer forty acre units to the immediate zone of development.

MR. NUTTER: I don't think that in this case this morning, that I have the jurisdiction of authorizing any such thing as that. However, I think that possibly as a matter for any hearing, you can make application for distribution of allowables. I am also a little bit uncertain whether the actual approval of this expanded water system is the subject of the hearing this morning, Rule 701 shows the applicants for the hearing shall show that the wells that it is to be made into, and we don't have that information with the

application, I realize it has been submitted here this morning.

A On a tentative basis, but it states in our agreement here that within thirty days' period after the approval, that we will submit our plan of development to the Commission, and is that the point you were bringing out?

MR. NUTTER: Well --

A For their approval.

MR. NUTTER: I don't know the answer to this, but it might be that injection of water into these various wells would have to be a succession of hearings in --

MR. HINKLE: (Interrupting) There is a question in my mind if you can do that admission. The unit agreement provides for approval by the Commission, by the Commission or director or supervisor of these different steps or plans of development, this that has been testified to is only the tentative plan, after approval of the agreement they will, there will be a plan submitted, definite plan submitted for the expansion which has already been approved. I think that if the Commission approves this formal agreement, which I think is within the scope of this hearing, then I think they have the right to prove administratively the subsequent plans for expansion of the pilot water plan.

MR. NUTTER: We have made an automatic exception to Rule 701?

MR. HINKLE: That's right.

MR. NUTTER: That is probably one the Commission has to mull over and see what they could come up.

MR. HINKLE: The allowable that I brought up, that is another question here, whether you can do that admission or whether you will have a separate hearing or not, there will be a situation developed, and I don't think the Commission has had to face it yet, but it is coming up sooner or later in determining what is the proper allowable. Because in the course of development you have one well that will produce more than allowable of other wells temporarily that are producing less than the allowable. The question is whether you should take the units that are involved, the forty acre units involved, and put it together and limit the production to the number of units that you got, which would seem to be equitable and which is the situation.

I think the rule has been followed in text, and I think too, and I believe, Mr. Bick could verify my statement in this connection, that in connection with these water floods, if you cut down the allowable it may effect the overall efficient recovery from the entire water flood.

MR. COOLEY: We have dealt with this problem, Mr. Hinkle, in the application of Mr. Wells.

MR. NUTTER: As I stated before, I think that is definitely subject to another hearing and I just want to alert you to the

possibility that the actual initiation of water flooding in these other wells might be required by the Commission to be the subject of another hearing also.

MR. COOLEY: Mr. Bick, do you anticipate production from the entire unit once the entire contemplated water flood is accomplished, to exceed the allowable attributable to the entire unit?

A On a regular forty acre unit basis?

MR. COOLEY: Yes.

A No, I don't.

MR. NUTTER: Mr. Bick, does this proposed plan here for the inclusion of an additional one, two, three, four, five, six, and seven, and eight injection wells, is that probably your first plan of development that will be submitted?

A Yes, sir.

MR. NUTTER: I see. How long do you suspect that it might take to complete the first expansion of the water flood?

A A period of approximately two or three months.

MR. NUTTER: I see. Does anyone else have any further questions of the witness? If not, the witness may be excused.

(Witness excused.)

MR. NUTTER: Does anyone else have any further statements they would like to make in this case? If not --

MR. COOLEY: I would like to do the unusual here. The application being in the name of Mr. Kersey, I would like him to state

whether he concurs with all that has transpired this morning.

MR. KERSEY: Yes, I do. We have discussed all this previously and we are all in agreement to what has taken place this morning, and the plan as proposed.

MR. COOLEY: Thank you.

MR. NUTTER: If there are no further statements we will take the case under advisement.

STATE OF NEW MEXICO)
) ss
COUNTY OF BERNALILLO)

I, J. A. Trujillo, Court Reporter, do hereby certify that the foregoing and attached transcript of proceedings before the New Mexico Oil Conservation Commission Examiner, at Hobbs, New Mexico; that it is a true and correct record to the best of my ability, skill, and knowledge.

IN WITNESS WHEREOF, I have affixed my hand and notarial seal this 19th day of December, 1956.

J. A. Trujillo

COURT REPORTER

My Commission Expires:
October 5, 1960