BEFORE THE

STATE CEOLOGIST

OIL CONSERVATION COMMISSION

Santa Fe, New Mexico

The State of New Mexico by its Oil Conservation Commission hereby gives notice, pursuant to law, of the following special public hearings to be held April 22, 1948, beginning at 10:00 A. M. on that day in the City of Santa Fe, New Mexico.

STATE OF NEW MEXICO TO:

All named parties in the following cases, and notice to the public:

Case No. 133.

In the matter of the application of Stanolind Oil and Gas Company for an order for final approval of the Rosa Unit Agreement comprising 54,224.07 acres, more or less, described as All of Sections 1, 2, 3, 4, 5, 6, 7, 8, 9. 10, 11, 12, 13, 14. 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31 in Township 31 North, Range 4 West; All of Sections 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15. 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36 in Township 31 North, Range 5 West; All of Sections 1, 2, 3, 4, 5, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 21, 22, 23, 24, 25, 26 in Township 31 North, Range 6 West; All of Section s 32, 33, 34, 35, 36 in Township 32 North, Range 6 West, N.M. P.M., in the counties of San Juan and Rio Arriba, New Mexico.

Case No. 134.

In the matter of the application of the Oil Conservation Commission of New Mexico upon its own motion upon recommendation of the New Mexico Nomenclature Committee to delete therefrom all lands heretofore designated as the West Roberts Pool covering the SW_2^1 of Section 1, S_2^1 of Section 2, S_2^1 of Section 3, N_2^1 of Section 10, all of Section 11 and the W_2^1 of Section 12, Township 17 South, Range 32 East, N.M.PM., Lea County, New Mexico, and to include said described land in the boundaries of the existing redefined Roberts Pool in said county.

Case No. 135.

In the matter of the application of the Oil Conservation Commission of New Mexico upon its own motion upon recommendation of the New Mexico Nomenclature Committee to delete from the Empire Pool the South, Range 27 East, N.M.P.M.; Work of Section 34, Township 17 South, Range 27 East, N.M.P.M.; Work of Section 3, all of Sections 4 and 5, Eof Section 6, Eof of Section 7, all of Section 8, Work and NEw of Section 9, Township 18 South, Range 27 East; and the Section 19, Township 17 South, Range 28 East, N.M.P.M., Eddy County, New Mexico, and to redefine the boundaries of said Empire Pool and designate the production formations therein.

Case No. 136.

In the matter of the application of the Oil Conservation Commission of New Mexico upon its own motion upon recommendation of the New Mexico Nomenclature Committee to delete from the Red Lake Pool the $S^{\frac{1}{2}}$ of Section 24, and all of Section 25-17S-28E, N.M.P.M., Eddy County, New Mexico.

Given under the seal of the Oil Conservation Commission of New Mexico at Santa Fe, New Mexico, On April 2, 1948.

(SEAL)

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

By /s/ R. R. Spurrier
R. R. SPURRIER, Secretary

BEFORE:

Hon. Thomas J. Mabry, Chairman Hon. R. R. Spurrier, Member and Secretary

REGISTER:

George A. Graham, Legal Advisor to the Commission.

Lake Frazier, Legal Advisor to the Commission.

R. O. Yarbrough, For the Commission.

Frank C. Barnes, For the Commission.

Al Greer, For the Commission.

Seth & Montgomery, By Mr. J. O. Seth, For Stanolind Oil and Gas Company.

Paul Umbach, For Stanolind Oil and Gas Company.

R. O. Cronquist, For Stanolind Oil and Gas Company.

L. P. Hine, For Stanolind Oil and Gas Company.

Glenn Staley, For the Lea County Operators.

GOVERNOR MABRY: Go ahead, gentlemen.

COMMISSIONER SPURRIER: Let the record show, Mr. Reporter, that the advertisement has been read for Case No. 133. We will proceed with that case.

MR. SETH: I would like to have Mr. Umbach and Mr. Cronquist

sworn, please.

(Witnesses were thereupon sworn.)

Paul Umbach, upon oath, testified as follows:

DIRECT EXAMINATION BY MR. SETH:

Please state your name.

- A. Paul Umbach.
- Q. What is your profession, Mr. Umbach.
- A. Geologist.
- Q. And by whom are you employed?
- A. By Stanolind Oil and Gas Company.
- Q. Please state briefly your educational qualifications.
- A. I have a Bachelor of Science and Master of Science in geology in the University of Wyoming, and a year of graduate work toward a PhD at the University of Missouri.
- Q. And your experience?
- A. Seven years—let's see— two years with the Wyoming geological Survey, five years as an instructor, State College of Arkansas, seven years as a geologist with the Stanolind Oil and Gas Company.
- Q. Are you familiar with this proposed Rosa Unit?
- A. I am.
- Q. And are you familiar with the gravity and magnatometer work that has been done in the area?
- A. I am.
- Q. Have you the plats or maps showing the results of this work?
- A. I do.
- Q. Please produce them. Which was made first?
- A. The gravity map.
- Q. I would like to have the gravity map marked Exhibit A, and the magnatometer map marked Exhibit B, and this report attached of November 13, 1947, Exhibit C. Now, Mr. Umbach, does this gravity map, Exhibit A, represent the results of the

gravity survey made by Stanolind in the area?

- A. It does.
- Q. What, in a general way, does that gravity work indicate?
- A. It indicates a long anomaly of approximately a mile wide and approximately eighteen miles long.
- Q. A long anomaly?
- A. That's right.
- Q. What do you mean by anomaly? An underground structure of some character?
- A. Transferring it into geological terms, it would be an indication of a long anti-clinal fold.
- Q. Referring to the magnatometer map, Exhibit B, what does that indicate?
- A. That also indicates a long anti-clinal fold covering approximately the same area as the gravity indications.
- Q. The gravity work and the magnetic work indicate substantially the same thing?
- A. Substantially the same.
- Q. And underground structure?
- A. Yes.
- Q. On these maps there is an outline in red. What does that indicate?
- A. That indicates the proposed Rosa Unit.
- Q. Does that area indicated red, in your opinion, include within its boundaries the anomaly that you say these surveys disclose?
- A. That's right, it does.
- Q. Are you familiar with the surface geology of that country?
- A. I am.
- Q. What does that indicate in the way of this underground anomaly, if anything?
- A. There is a structural terrace covering that area on the surface which corresponds fairly well to the anomaly indicated

- in these maps.
- Q. Does it indicate anything to the contrary of what is shown on the maps?
- A. It does not.
- Q. In your opinion, do those maps—the results of the gravity and magnatometer surveys—indicate a structure that should be developed as a unit?
- A. It does.
- Q. Is there any engineering data available at all? Has there been any wells drilled?
- A. There has not.
- Q. Is there an y production within thirty or forty miles of the area?
- A. No production.
- Q. Purely wildcat. Who will be the operator of the proposed unit?
- A. Stanolind Oil and Gas Company.
- Q. Are they willing to drill a well in an effort to find out whether there is any oil and gas, as a result of these maps?
- A. They are.
- Q. Will you state in a general way what formations you anticipate encountering in drilling the well?
- A. We encounter tertiary sediments comprised of wasach, puerco, terrejo of approximately 2,000 feet; Kirtland formation, including Farmington of approximately 1,000 feet; pictured cliffs, approximately 1,000 feet; then Lewis at approximately 2,000 feet; then Mesa Verde, oh, 700 feet; Mancus, 1,700 feet; Dakota, approximately 200 feet. That is approximately the maximum depth.
- Q. What does the Stanolind contemplate drilling a well to, the Dakota?
- A. Into the Dakota and thoroughly testing the Dakota.
- Q. Where would that well be located, approximately?

- A. Approximately in the NE of the NW of Section 22, Township 31 North, Range 5 West.
- Q. Now, we would like to offer in evidence the two maps and the accompanying report. Exhibits A, B, and C. They are already on file in your office.

COMMISSIONER SPURRIER: Yes, sir.

- Q. Mr. Umbach, in your opinion, if oil and gas is found, should that area properly be developed as a unit?
- A. It should.
- Q. In your opinion, as a geologist and from your knowledge of the area, would unit development, as far as can be told at this time, be fair to the royalty owners as well as the working interest?
- A. It would.
- Q. Now, the map shows some State land that might be on the edge of the structure as set up. Do you believe that the production of the area as a unit would result in the State's recovery of its fair share of the oil under this State land?

 A. I do.
- Q. Do you think the development as a unit might be highly advantageous to the edge leases?
- A. It would.

MR. SETH: I believe that is all I want to ask him.

GOVERNOR MABRY: Anything, Mr. Spurrier?

COMMISSIONER SPURRIER: No, sir.

MR. GRAHAM: We might like to know who is included in the unit. What I mean-are they-how many have

MR. SETH: I will have another man put that on.

GOVERNOR MABRY: Could you state that for the record. There will be no objection to it. I think that will be sufficient for this purpose.

MR. SETH: The area comprises approximately 54,000 acres. The area consists of 54,209.49 acres; of which Federal lands

include 49,505.22 acres; patented land 1,948.01 acres; and State lands 2,756.26 acres. The Federal lands comprise ninety-one per cent of the area. There has been committed to the unit agreement a total now of 94.35 per cent of the total acreage, consisting of one hundred per cent of the Federal -all Federal lands -- thirty-four per cent of all the patented lands, and thirty-five per cent of all State lands; and in addition 1,120 acreas of State lands are still being considered, held by Byrd Frost. They are wating on their geologist. We submit a map, which we ask to have marked as Exhibit D, showing the land ownership and the area committed to the unit. I might add that the unit agreement is in the form approved by this office and the Land Commissioner. The Geological Survey has made some minor suggestions for changes, which are entirely immaterial, but we are not asking that the changes be approved. We don't want to have to submit it back to all these signers. The Geological Survey has also suggested the addition of eight sections on the north of the area. We are not asking that that be added to the unit under the terms of the unit agreement.

COMMISSIONER SPURRIER: Yes.

MR. SETH: And they have made no material changes in form. They didn't know it had been signed. It is the ordinary practice to wait and not have it signed until the Geological Survey and this office approve, but the Land Commissioner approved it as to form, and we are anxious to start drilling this summer, so they went out and got it signed, and we will iron the difficulties out with the Interior Department. The unit agreement requires drilling of a well within six months. Stanolind will be the operator, and they are ready to go ahead. We have here the ten forms of unit agreement that are required by the—seven of them I think go to the Interior Department.

COMMISSIONER SPURRIER: Naturally, the bulk of them would.

MR. SETH: I might add that the Interior Department in checking the acreage claimed errors of nineteen acres out of the fifty thousand, due to resurveys up there. We have had people affected by that change in the area sign up all Federal lands and attached an addition showing the corrected acreage.

MR. GRAHAM: The people who are unsigned, do you continue to invite them?

MR. SETH: Yes. The agreement provides that enybody who hasn't come in may come in at any time. If the area is to be enlarged, the unit agreement itself provides—there is a question in the Interior Department's mind as to whether the geophysical work doesn't require the eight sections to the north.

MR. GRAHAM: All eight sections Federal lands?

MR. SETH: Yes, sir. And another matter, the unit agreement is not fixed by any lease ownership proposition because the Stanolind Oil and Gas Company could have gotten twice as many leases as are already committed to it. It is a bona fide effort to make the unit correspond to the geophysical work.

Mr. Cronquist was going to testify to what I have stated.

GOVERNOR MABRY: I wonder whether that isn't just as good.

It is in the record. Anybody object to it? I think that will be sufficient. Is Governor Miles familiar with this?

COMMISSIONER: SPURRIER: Yes, sir, he approved it as Land Commissioner. As there is no objection, does anyone have anything further in this case?

GOVERNOR MABRY: All right, the order will issue.

COMMISSIONER SPURRIER: These next three cases are purely matters of nomenclature, of committee recommendations for deletions, Governor.

GOVERNOR MABRY: Yes.

COMMISSIONER SPURRIER: When the Nomenclature Committee was set up to advise the Commission on determining the boundaries

of the different pools, they very specifically put in a proviso that the Oil Commission could not delete any part of any pool without an open hearing. That is why these are brought up. Mr. Staley is familiar with it and he can verify that these have been circulated before the operators for a matter of thirty days and that our advertisement for the legal ten days has been served. If there has been no objection, we have always prepared them in the past.

GOVERNOR MABRY: Yes. The necessary thing is to show proof of service?

COMMISSIONER SPURRIER: Yes.

GOVERNOR MABRY: And the recommendation of the Committee?
COMMISSIONER SPURRIER: Yes, sir.

GOVERNOR MABRY: You have them all?

MR. STALEY: Governor, I can give you the background of that committee. The Nomenclature Committee is not a subcommittee of the Lea County operators. It is a committee acting in an advisory capacity to the Oil Conservation Commission in fixing the boundaries of various pools in southeastern New Mexico, and furnishing different information to the Commission; and when new wells are completed that are not in any field, to assist the Commission in designating it as a new field, and giving it a name, for proration purposes. The Commission and the Nomenclature Committee have felt that where lands have been added to a field that they cannot then be taken out by the Nomenclature Committee or the Commission without an open hearing, so that any operator that might object could have his day in court and state his objection.

GOVERNOR MABRY: Yes. The operator gets notice by the appearance of the publication, I guess.

COMMISSIONER SPURRIER: Yes.

GOVERNOR MABRY: Just publication.

COMMISSIONER SPURRIER: In addition to that, Governor, Mr.

Staley, also circulates all Nomenclature recommendations for thirty days before we can act on them.

GOVERNOR MABRY: You have your proof of service and no objection.

MR. STALEY: I think the Nomenclature Committee sends a
recommendation to the Oil Conservation Commission. The Lea
County operators take that and send it to all operators in
southeastern New Mexico with the notation that anyone having
any objection can voice that objection.

GOVERNOR MABRY: There has been no objection interposed?

COMMISSIONER SPURRIER: No, sir.

GOVERNOR MABRY: And you know of none, Mr. Staley?

MR. STALEY: I know of none.

COMMISSIONER SPURRIER: There is one exception here. consider it an objection, I consider it a request for special consideration, you might say. In deleting one of these pools, which is Case No. 135, a certain area has been requested to be deleted from the Empire Pool. Now, this letter is from an operator known as Paton Brothers. They advise that when part of this one pool is deleted that they will find themselves operating in two pools, one overlying the other. According to our rules and regulations, and the insistence of the United States Geological Survey, the production from separate pools must be produced in separate tankage. Now, there are many reasons for it which I don't think are necessary to bring up here. But Paton Brothers have certain wells in this very area which produce considerably less than ten barrels. they are approaching the economic limit. And if, according to their request, they are forced to put in the usual tankage and lay the new lines necessary to produce these separate pools into separate tankage, it will force the abandonment of these small wells.

GOVERNOR MABRY: They are asking us to consider their case and give them some relief on the separation of tankage?

COMMISSIONER SPURRIER: That's right. And asking the Commission to allow them to go ahead and produce as they have in the past.

GOVERNOR MABRY: Can the Commission do that?

COMMISSIONER SPURRIER: It is my personal opinion that they should, and the reason is this: It is strictly not conservation to cause the premature abandonment of those wells.

As long as they produce a few barrels a day and make these boys money under the circumstances, then we are recovering oil which would be otherwise lost. I don't want to plead their case

GOVERNOR MABRY: Yes. Are we supposed to act upon their request at the same time we act upon this petition for deletion?

COMMISSIONER SPURRIER: Yes.

MR. STALEY: I don't believe that is necessary, Dick. I believe that in submitting the production report to the Commission by Paton Brothers

GOVERNOR MABRY: Hereafter?

COMMISSIONER SPURRIER: Yes.

MR. STALEY: If they will designate the **smount** of oil produced from each one--it would be purely a prorating procedure and not have to be involved in that at all. It would be merely an order from the Commission to Paton Brothers in making out their monthly report of operation that they designate the amount of oil produced from each pool, even though superimposed upon the other. We keep checks upon every forty-acre unit in each pool. That is two separate pools, and in compiling the yield for each pool, we would have to have that, and we could take that off of this report. I believe that would take care of that. If you will notify them that they can continue, but it is necessary for them--the burden of proof is on them as to the amount produced from each one of those allowables. COMMISSIONER SPURRIER: That's right.

MR. GRAHAM: It would be an exception to our very stringent rule.

GOVERNOR MABRY: That's right, but it is so little, it isn't worthwhile. You might indicate to them that the Commission would look favorably upon this conception if the facts are as stated in their petition. What do they call that?

MR. GRAHAM: Request for consideration. They want an exception to a very stringent rule we have.

GOVERNOR MABRY: Well, there wouldn't be anything wrong with that. Let them make a showing.

MR. STALEY: It doesn't necessarily mean that you are setting a precedent because each one is an individual case.

COMMISSIONER SPURRIER: Yes.

MR. STALEY: I would make it plain to them that this is an isolated case and until a very thorough study can be made of the case that they be allowed to produce in the same tank battery, but furnishing the Commission on the C-115 the exact amount of oil produced from each horizon.

COMMISSIONER SPURRIER: Governor, I think it would be neglect of conservation practices if we caused them to put in the new tankage because they would abandon the wells.

MR. GRAHAM: The production wouldn't pay for the tankage.
GOVERNOR MABRY: Let the order issue on that. Write them
about this, as Mr. Staley says, and put the burden upon them.
Separate from this thing entirely.

COMMISSIONER SPURRIER: Yes, sir.

GOVERNOR MABRY: Is that all you have?

COMMISSIONER SPURRIER: Yes, sir.

GOVERNOR MABRY: We will adjourn.

CERTIFICATE

I HEREBY CERTIFY that the attached transcript of proceedings before the Oil Conservation Commission of New Mexico, held at Santa Fe, New Mexico, April 22, 1948, is a true transcript of such proceedings to the best of my know-ledge, skill, and ability.

I FURTHER CERTIFY that I am the Official Reporter for the United States District Court for the District of New Mexico.

DATED at Santa Fe, New Mexico, this 27th day of April, 1948.

COURT REPORTER