

BEFORE THE  
OIL CONSERVATION COMMISSION  
STATE OF NEW MEXICO

PROCEEDINGS

The following matter came on for consideration before a hearing of the Oil Conservation Commission of the State of New Mexico, pursuant to legal notice, at Santa Fe, New Mexico, on February 21, 1950, at 10:00 A. M.

NOTICE OF PUBLICATION  
STATE OF NEW MEXICO  
OIL CONSERVATION COMMISSION

The State of New Mexico by its Oil Conservation Commission hereby gives notice pursuant to law and the rules and regulations of said Commission promulgated thereunder, of the following public hearings to be held February 21, 1950, beginning at 10:00 o'clock A. M. on that day in the City of Santa Fe, New Mexico, in the Capitol (Hall of Representatives).

STATE OF NEW MEXICO TO:

Southeastern New Mexico Nomenclature Committee, Mr. Dudley Sands, its Chairman, all operators in the area, and notice to the public:

Case 212

In the matter of hearing upon motion of the Oil Conservation Commission upon recommendation of the Southeastern New Mexico Nomenclature Committee to extend the boundaries of certain oil pools, pursuant to Rule 5 of the Oil Conservation Commission; said extensions are:

- (1) Extend the Empire Pool to include S/2 Sec. 12, N/2 Sec. 13, Twp. 17S-R.27E, and N/2 Sec. 18, Twp. 17S-R.28E, N.M.P.M., for Seven Rivers production, Eddy County, New Mexico.
- (2) Extend the Turkey Track-Queen pool to include S/2 Sec. 10, N/2 Sec. 15, Twp. 19S-R.29E, N.M.P.M. for Queen production, Eddy County, New Mexico.
- (3) Extend the Loco Hills pool to include all of Sec. 12, Twp. 18S-R.28E, N.M.P.M. for Grayburg Production, Eddy County, New Mexico.
- (4) Extend the Hare pool to include E/2 Sec. 29, Twp. 21S-R.37E, N.M.P.M. for Simpson sand production, Lea County, New Mexico.
- (5) Extend the House pool to include N/2 and SE/4 Sec. 1, Twp. 20S-R.38E, and all of Sec. 6, Twp. 20S-R.39E, N.M.P.M. for lower Leonard (Permian) production, Lea County, New Mexico.

- (6) Extend the Young Pool to include NE/4 Sec. 19, Twp. 18S-R.32E, N.M.P.M. for Queen Sand production, Lea County, New Mexico.
- (7) Extend the West Lovington Pool to include E/2 Sec. 12, Twp. 17S-R.35E, and SW/4 of Sec. 7, Twp. 17S-36E, N.M.P.M. for San Andres production, Lea County, New Mexico.
- (8) Extend the North Drinkard pool to include SW/4 Sec. 3, Twp. 21S-R.37E, N.M.P.M. for Drinkard production, Lea County, New Mexico.
- (9) Extend the Langlie-Mattix pool to include all of Secs. 3 and 10, Twp. 23S-R.36E, N.M.P.M. for Yates production, Lea County, New Mexico.
- (10) Extend the Brunson pool to include SW/4 Sec. 22, Twp. 21S-R.37E, N.M.P.M. for Ellenberger production, Lea County, New Mexico, and

to classify each named pool as so extended as a gas pool or an oil pool.

Given under the seal of the Oil Conservation Commission of New Mexico, at Santa Fe, New Mexico, on February 7, 1950.

STATE OF NEW MEXICO  
OIL CONSERVATION COMMISSION

/s/ R. R. SPURRIER, SECRETARY

LEA COUNTY OPERATORS COMMITTEE  
HOBBS, NEW MEXICO  
February 10, 1950

NOTICE FOR PUBLICATION  
STATE OF NEW MEXICO  
OIL CONSERVATION COMMISSION

The State of New Mexico by its Oil Conservation Commission hereby gives notice pursuant to law and the rules and regulations of said Commission promulgated thereunder, of the following public hearings to be held February 21, 1950, beginning at 10:00 O'clock A.M., on that day in the City of Santa Fe, New Mexico, in the Capitol (Hall of Representatives).

STATE OF NEW MEXICO TO:

The Northwestern New Mexico Nomenclature Committee, Mr. Paul Umbach, its Chairman, all operators in the area, and notice to the public:

Case 213

In the matter of hearing upon motion of the Oil Conservation Commission upon the recommendation of the Northwestern New Mexico Nomenclature Committee to define and classify the several oil and gas pools of McKinley, San Juan and Rio Arriba

Counties in Northwestern New Mexico under authority of the  
Oil Conservation Commission Rule No. 5.

Given under the seal of the Oil Conservation Commission of  
New Mexico, at Santa Fe, New Mexico, on February 7, 1950.

STATE OF NEW MEXICO  
OIL CONSERVATION COMMISSION

/s/ R. R. SPURRIER, SECRETARY

LEA COUNTY OPERATORS COMMITTEE  
DRAWER "I"  
HOBBS, NEW MEXICO

FEBRUARY 10, 1950

BEFORE:

Honorable R. R. Spurrier, Secretary and Member

REGISTER:

Wm. E. Bates  
Midland, Texas  
For The Texas Company

M. T. Smith  
Midland, Texas  
For Shell Oil Company

Foster Morrell  
Roswell, New Mexico  
For the United States Geological Survey

Ed McKellar, Jr.  
Dallas, Texas  
For Magnolia Petroleum Company

R. L. Denton  
Midland, Texas  
For Magnolia Petroleum Company

Joe Lilly  
Farmington, New Mexico  
For Southern Union

Al Greer  
Aztec, New Mexico  
For the New Mexico Oil Conservation Commission

Donald B. Anderson  
Roswell, New Mexico  
For Malco Refineries, Inc.

Joe W. Lackey  
Roswell, New Mexico  
For Malco Refineries, Inc.

Robert G. Anderson  
Roswell, New Mexico  
For Malco Refineries, Inc.

E. E. Kinney  
Artesia, New Mexico  
For New Mexico Bureau of Mines

Elvis A. Utz  
Santa Fe, New Mexico  
For the New Mexico Oil Conservation Commission

Paul H. Umbach  
Albuquerque, New Mexico  
For Stanolind Oil & Gas Company

Peter N. Chumbris  
Santa Fe, New Mexico  
Assistant Attorney General

Glenn Staley  
Hobbs, New Mexico  
For Lea County Operators

Frank R. Lovering  
Hobbs, New Mexico  
For Shell Oil Company

M. L. Patterson  
Odessa, Texas  
For P. P. Co. (Gasoline Department)

Frank C. Barnes  
Santa Fe, New Mexico  
For New Mexico Oil Conservation Commission

R. G. Schuehle  
Midland, Texas  
For Texas Pacific Coal & Oil Company

F. S. Carter  
Hobbs, New Mexico  
For Texas Pacific Coal & Oil Company

J. W. Rodgers  
Hobbs, New Mexico  
For E. F. Moran, Inc.

Elwyn C. Hale  
Piedmont, California

George Graham  
Santa Fe, New Mexico  
Commission Attorney  
For New Mexico Oil Conservation Commission

Dan McCormick  
Santa Fe, New Mexico  
Commission Attorney  
For New Mexico Oil Conservation Commission

MR. SPURRIER: The meeting will please come to order. In the absence of a quorum of any other member of the Commission, I will sit this morning to take the record only. First on the agenda this morning will be the allowable hearing for setting the allowable for the State of New Mexico for the month of March.

MR. McCORMICK: Mr. Utz and Mr Kinney, will you come forward, please.

ELVIS A. UTZ, having been first duly sworn, testified as follows:

DIRECT EXAMINATION BY MR. McCORMICK:

MR. McCORMICK: I would like for the record to show that notice of this hearing was given by publication in the newspapers of each county which is producing oil, and also in the Santa Fe New Mexican, and that this hearing is being held pursuant to Order No. A-1, issued on the 3d of January 1950.

Q. State your name, please.

A. Elvis A. Utz.

Q. Are you a member--are you an employee of the New Mexico Oil Conservation Commission?

A. Yes, I am.

Q. In what capacity?

A. Gas engineer and engineer.

Q. Did you testify in the allowable hearing held one month ago?

A. Yes, sir, I did.

Q. You have with you an estimate of the United States Bureau of Mines for the month of March?

A. Yes, sir, I do.

MR. McCORMICK: I would like to read into the record a telegram from Washington, D. C., dated the 17th of February, 1950, addressed to the Oil Conservation Commission, Santa Fe, New Mexico. "Forecast March demand New Mexico crude is 130,000 barrels daily. Signed A. G. White, Bureau of Mines." That figure is the same as for March last month.

Q. I would like to ask you, Mr. Utz, if you have made any study of the probable, reasonable market demand for the State of New Mexico for the month of March 1950?

A. Yes, I have.

Q. What did that study consist of?

A. A study of past production, a study of the Bureau of Mines, the runs, and nominations.

Q. Now, have you received, or rather has the Commission received nominations from the various purchasers for the months of March 1950?

A. Yes, it has.

Q. Will you state to the Commission the names of all purchasers which have filed written nominations giving the complete corporate name?

A. You want me to read all of those?

Q. All of the names, yes, not the figures themselves.

A. New Mexico Asphalt & Refining Co., Artesia, New Mexico.  
Malco Refineries, Inc., Roswell, New Mexico  
Continental Refinery, Artesia, New Mexico  
Famariss Oil & Rfg Company, Hobbs, New Mexico  
Petroleum Products Rfg & Prod. Co., Prewitt, New Mexico  
Atlantic Refining Company, Dallas, Texas  
Cities Service Oil Company, Bartlesville, Okla.  
Gulf Oil Corporation, Tulsa, Okla.  
Humble Oil & Rfg. Co., Houston, Texas  
Magnolia Petroleum Company, Dallas, Texas  
Shell Oil Company, Houston, Texas  
Stanolind Oil Purchasing Company, Tulsa, Okla.  
Sinclair Oil & Gas Company, Tulsa, Okla.  
The Texas Company, Houston, Texas  
Tidewater Associated Oil Company, Houston, Texas.

Those are all in-state buyers. Buyers that buy New Mexico oil and transport it out of the state. That is all the nominations.

Q. Have you checked to determine if nominations have been filed by all companies currently purchasing oil in New Mexico?

A. Yes, I have.

Q. On the basis of your study and of the nominations, have you any opinion as to what the reasonable, market demand for crude oil for the state will be in March 1950 daily?

A. The entire state, it should be approximately 137,900 barrels.

Q. Now, of that total figure of 137,900 barrels, how much do you estimate will be produced by the unallocated pools of Rio Arriba, San Juan, and McKinley Counties?

A. Approximately 900 barrels daily.

Q. And then the balance of 137,000 barrels will be needed from Eddy, Lea, and Chavez Counties to meet the market demand?

A. That is correct.

Q. In your opinion is the potential producing capacity of all the wells in Eddy, Lea, and Chavez Counties greater than 137,000 barrels per day?

A. It is.

Q. As to the proration and limitation of production, is it necessary that the production in those three counties of Lea, Eddy, and Chavez be limited during March in order to prevent waste?

A. Yes, I believe it is.

Q. How much oil can Eddy, Lea, and Chavez Counties produce during March each day without committing waste in your opinion?

A. Well, they can produce 137,000 barrels daily.

Q. Do you have any recommendation as to the total allowable production daily for Eddy, Lea, and Chavez Counties for the month of March?

A. Any recommendation did you say?

Q. Yes.

A. My recommendation would be 137,000 barrels.

Q. Do you have any recommendation as to the normal unit allowable for that month?

A. If the normal unit allowable is set at 42, it would result in an approximate daily production of 137,000 barrels.

Q. 42 barrels per well per day normal unit allowable?

A. Normal unit allowable.

Q. In your opinion how should this production of oil for Eddy, Lea, and Chavez Counties be distributed and prorated?

A. According to the present rules and regulations of the Commission.

Q. In your opinion, will such proration and distribution be reasonable and prevent waste and protect correlative rights?

A. Yes, I think it will.

MR. McCORMICK: Any questions by anyone else? Any questions by the Commission? Mr. Spurrier? All right, Mr. Kinney.

(Witness excused.)

EDWARD E. KINNEY, having been first duly sworn, testified as follows:

DIRECT EXAMINATION BY MR. McCORMICK:

Q. Your name is Edward Kinney?

A. Yes.

Q. Where do you live, Mr. Kinney?

A. Artesia.

Q. Do you have any official position with the New Mexico Bureau of Mines?

A. Petroleum engineer.

Q. And you maintain your office in Artesia?

A. Yes, sir.

Q. Have you made any study of the reasonable market demand for the month of March in Eddy, Lea, and Chavez Counties?

A. Yes, sir.

Q. What does that study consist of?

A. A study of crude oil nominations from southeastern New Mexico and a study of the demand of individual purchasers.

Q. You have also studied the records of past production of the wells in those three counties?

A. Yes, sir.

Q. On the basis of your studies, do you have any opinion as to what the reasonable, market demand will be per day for Eddy, Chavez, and Lea Counties?

A. In my opinion, the reasonable market demand will be 137,000 barrels per day.

Q. And have you made any calculations as to what the normal unit allowable should be to produce that demand?

A. Normal unit allowable should be 42 barrels to achieve approximately 137,000 barrels per day.

Q. You recommend to the Commission that the allowable be set for Eddy, Lea, and Chavez Counties at 137,000 barrels?

A. I do.

Q. And the normal unit allowable for those three counties be set at 42 barrels?

A. I do.

MR. McCORMICK: Any questions by anybody else? That is all, Mr. Kinney.

(Witness excused.)

MR. SPURRIER: Does anybody have any further comment, not necessarily questions, but anything that anyone would like to put in the record.

MR. McCORMICK: Mr. Spurrier, I think it should appear in the record that the Commission hereafter desires all purchasers to make nominations on the basis of their anticipated actual purchases, not taking into consideration or allowing for any anticipated under production so that the nominations will be consistent.

MR. SPURRIER: You might add that the nominations which the Commission wants to receive should be a gross nomination for the various companies' purchases in the state. Not by

pool, but a gross figure, also differentiate northwestern New Mexico from southeastern. We will have nomination forms prepared and will mail a supply of them to each purchaser. But until you receive your forms, we would like to have you make your nomination by letter as soon you can--as soon as is convenient and before the allowable hearing each month. Mr. McCormick reminds me that these figures need not be sworn to, just a simple figure presented by letter or telegram whichever you wish. Mr. Anderson, you had something on the allowable?

MR. ANDERSON: What I wanted to bring out was the fact that we were buying 1800 barrels a day, and 1200 barrels comes from direct connected oil under our own gathering system. The other 600, which is a third of our production, we buy through open spot purchase from Sinclair. Now, we are nominating full demand, which will be 1800 barrels, or actual demand regardless of where we are getting it. Is that correct? We are correct in doing that?

MR. SPURRIER: That is fine.

MR. ANDERSON: Apparently, everybody is doing it that way. And I just wanted to know if there would be any distinction.

MR. McCORMICK: Mr. Anderson, if Sinclair should nominate all their direct purchases, and you nominate all 1800 barrels, wouldn't there be a duplication of 600 barrels?

MR. ANDERSON: It is a duplication. That is the reason I wanted to bring it out. I am not sure the same case doesn't exist among some of the other buyers. It is a small matter. 600 barrels won't throw your figure off. Of course, to us it is one third of our oil. And is extremely important to us.

MR. McCORMICK: It seems to me when you are purchasing from

another purchaser, the two of you should get together and see that the total of the two figures is the correct figure as to the total that is going to be purchased from wells.

MR. ANDERSON: Well, we can talk to Sinclair about it. They don't have a representative here today.

MR. McCORMICK: Do you have any suggestion on that, Mr. Staley?

MR. STALEY: I would suggest like in the case of Walter Famorris, He buys practically all his oil through the Texas Company, and all he has requested here is that condensate he is buying from other parties, that is, a producer. So that the Texas Company's figures include the amount of oil that they furnish to Walter Famorris. I think the same procedure could be followed in the case of Malco. Purchaser that originally purchased the oil from the producer include the amount they give the Malco, and the Malco nominate only that which they buy direct from the producer.

MR. ANDERSON: Wouldn't it be a true statement that the buying company would have a true statement of market demand?

MR. McCORMICK: But it would result in a duplication if the person buying from the purchaser--

MR. ANDERSON: (Interrupting) The way it is now, it will be a duplication. I assume it is. I doubt if Sinclair made any deduction.

MR. McCORMICK: I think you should get together with Sinclair and see that the total of your nominations reflects true purchases from the producers.

MR. ANDERSON: It is possible that situation exists among some of the others. I know several instances where they are taking in the same area, and there might be a case like that or two. We will bring it up at the next meeting, and in the meantime

contact Sinclair on it.

MR. McCORMICK: Mr. Kinney, will you come forward in connection with Case No. 212?

MR. SPURRIER: If there is nothing further, we will take up the next case which is Case No. 212.

(Mr. Graham reads the notice of publication in Case No. 212.)

MR. SPURRIER: Let the record show he read the extensions.

FURTHER DIRECT EXAMINATION OF EDWARD E. KINNEY. BY MR.

McCORMICK:

Q. Your name is Edward Kinney?

A. Yes.

Q. And you were sworn in connection with the matter immediately preceding?

A. Yes, sir.

Q. You are a petroleum engineer for the State Bureau of Mines?

A. Yes, sir.

Q. Do you hold any position on the southeastern New Mexico nomenclature committee?

A. Recording secretary.

Q. How long have you been in that position?

A. This year.

Q. Are you familiar with the recommendation made by the New Mexico--southeastern New Mexico nomenclature committee for the extension of 10 different pools in Eddy, Lea, and Chavez Counties?

A. Yes, sir.

Q. Were you present in the meeting in which this was discussed?

A. Yes, sir.

Q. I hand you Exhibit A and ask you if that contains the recommendations of the southeastern New Mexico nomenclature committee

as to the extension of existing pools?

A. It does.

Q. In your opinion are the extensions recommended reasonable?

A. Yes, sir.

Q. And is it necessary that those extensions be made in order to define the limits of common reservoirs?

A. Yes, sir.

Q. If those extensions are ordered by the Commission, would each pool then consist of only one common reservoir?

A. Yes, sir.

Q. And would the known limits of that reservoir be then accurately defined?

A. Yes, sir.

MR. McCORMICK: We offer in evidence Plaintiff's Exhibit A.

MR. SPURRIER: It will be accepted.

MR. McCORMICK: That is all. Any questions by anybody else?

MR. GRAHAM: One question.

MR. McCORMICK: One other question.

Q. All the pools you have recommended an extension for are oil pools, are they not?

A. Yes, sir.

MR. McCORMICK: That is all. Any questions by anybody else?

MR. SPURRIER: If there are no further questions, we will have a five minute recess before we proceed with the next case.

(Recess.)

MR. SPURRIER: We will now take up Case No. 213.

(Mr. Graham reads notice of publication.)

PAUL UMBACH, having been first duly sworn, testified as follows:

DIRECT EXAMINATION BY MR. McCORMICK:

Q. Your name is Paul Umbach?

A. Yes, sir.

Q. What is your profession, Mr. Umbach?

A. District geologist for the Stanolind Oil and Gas Company, Albuquerque.

Q. How long have you been practicing geology?

A. Approximately 18 years.

Q. What was your training for that profession?

A. I have a B. S. and M. S. at the University of Wyoming and a year of post graduate work in the University of Missouri, and I was instructor in geology in the State

A. & M. College in Arkansas for five years. And I have been with the Stanolind Oil & Gas Company for nine years, and district geologist for three years.

Q. How long have you been working in the oil and gas pools of McKinley, San Juan, and Rio Arriba Counties?

A. Approximately five years.

Q. And what is the nature of the work which you were doing in the oil and gas pools of those counties?

A. Exploration.

Q. Have you studied the geology of each producing oil or gas pool in those three counties?

A. I have.

Q. You are a member of the northwestern New Mexico nomenclature committee appointed heretofore by the Commission, are you not?

A. I am.

Q. You are chairman, I believe?

A. I am chairman, that's right.

Q. Now, this committee has made recommendations to the Commission as to the boundaries of each pool in those counties,

and as to its designation as a gas pool or oil pool. You are familiar with the recommendations made, are you not?

A. I am.

Q. You have before you a map, which has been marked Exhibit A, was this map prepared under your direction?

A. It was.

Q. And does it reflect the boundaries of each oil pool and gas pool as recommended by the committee?

A. It does.

MR. McCORMICK: We wish to offer in evidence Exhibit A.

MR. SPURRIER: It will be accepted.

Q. Now, as to the Angels' Peak Pool. From what horizon does it produce?

A. Dakota.

Q. Is it a gas pool or oil pool?

A. Gas pool.

Q. What are your recommendations as to the boundaries of that pool?

A. 27N-10W, Sec. 3, W/2, Secs. 4,5, All, 28N-10W, Secs. 32, 33, All, Sec. 34, W/2.

Q. The Angels Peak Pool is designated consistent with that description on the map, Exhibit A?

A. The description is made on the map.

Q. In your opinion does the Angels Peak Gas Pool as so designated comprise all the known limits of the common reservoir?

A. It does.

Q. Now, I will ask about the Aztec Pool. Is it a gas or oil pool?

A. Gas pool.

Q. From what horizon does it produce?

A. Farmington sand.

Q. In your opinion, what are the boundaries--what is the area covered by this pool?

A. 30N-11W, Sec. 9, S/2, Sec. 10, S/2, Sec. 15, N/2, Secs. 16,17, All, Sec. 20, N/2, Sec. 21, N/2.

Q. In your opinion the Aztec Pool is a gas pool?

A. That's right, a gas pool.

Q. And the pool as defined by the description you just read will constitute all the known limits of the common reservoir?

A. It will.

Q. Now, the Barker Creek Pool. Is that a gas or oil pool?

A. Gas pool.

Q. And producing from the--

A. (Interrupting) Dakota sand.

Q. In your opinion, what is the area covered by the common reservoir which you have designated as the Barker Creek--Dakota Pool?

A. 32N-14W, Secs. 9, 10, 11 that portion in N.M., Secs. 14, 15, 16, All, Sec. 17, E/2, Secs. 20, 21, 22, All, Sec. 23, NW/4, Sec. 27, NW/4, Sec. 28, N/2, Sec. 29, All.

Q. In your opinion, is that area you have just read, does it constitute all the area now comprising the known reservoir of Barker Creek--Dakota?

A. It does in New Mexico.

Q. A portion of the reservoir extends over into Colorado?

A. It does.

Q. Now the Barker Creek--Paradox. What kind of pool is that?

A. A gas pool.

Q. And in your opinion, what area constitutes the common reservoir of the Barker Creek--Paradox Gas Pool?

A. 32N-14W, Secs. 9, 10, 11 that portion in N.M., Secs. 14 15, 16, All, Sec. 17, E/2, Secs. 20, 21, 22, All, Sec. 23, NW/4, Sec. 27, NW/4, Sec. 28, N/2, Sec. 29, All.

Q. Now this Barker Creek--Paradox Pool likewise extends over into Colorado?

A. It does.

Q. That is the common reservoir does?

A. That's right.

Q. In your opinion, the description which you just read would constitute all the known limits of the common reservoir lying in New Mexico?

A. It does.

Q. Now the Blanco--Pictured Cliffs Pool. What kind of pool is that?

A. Gas pool.

Q. And in your opinion, what is the area constituting the common reservoir?

A. 30N-9W, Sec. 28, W/2, Secs. 29, 32, All, Sec. 33, W/2.

Q. And that description you just gave will constitute the know<sup>d</sup> limits of the Blanco - Pictured Cliffs Gas Pool?

A. It will.

Q. The Blanco - Mesaverde Pool. What kind of pool is that?

A. Gas pool.

Q. And what are the limits, in your opinion, of the common reservoir?

A. 29N-9W, Sec. 2, W/2, Secs. 3, 4, 5, 9, 10, 11, 14, 15, All; 30N-9W, Sec. 7, S/2, Sec. 8, S/2, Sec. 15, W/2, Secs. 16, 17, 18, 19, 20, 21, 22, All, Secs. 27, 28, 29, 30, 32, 33, 34, All.

Q. This description you just read will constitute the entire area of the common reservoir?

A. It will.

Q. Now the Bloomfield Pool. What kind of pool is that?

A. Oil Pool.

Q. And from what horizon does it produce?

A. From the Farmington sand.

Q. And, in your opinion, what is the area constituting the common reservoir?

A. 29N-11W, Sec. 13, W/2, Secs. 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, All, Sec. 24, W/2.

Q. And in your opinion, the Bloomfield Pool as according to the description you just read will comprise the known limits of the oil reservoir?

A. That's right.

Q. Now the Gavilan Pool. What kind of pool is that?

A. Gas pool.

Q. And from what horizon is it produced?

A. Pictured Cliffs.

Q. That is in Rio Arriba County?

A. That's right.

Q. And what area constitutes that common reservoir?

A. 25N-2W, Sec. 10, Se/4, Sec. 11, S/2, Secs. 14, 15, All Sec. 22, NE/4, Sec. 23, N/2.

Q. And if the Gavilan Gas Pool is designated according to your recommendation it would comprise all the known limits of the gas reservoir?

A. It would.

Q. Now the Hogback - Dakota Pool. Is that a gas or oil pool?

A. Oil pool.

Q. Producing from the Dakota lime sand?

A. It is a sand, Dakota sand.

- Q. In San Juan County?
- A. In San Juan County.
- Q. And in your opinion, what are the limits of the area covered by the common reservoir?
- A. 29N-16W, Sec. 18, S/2, Sec. 19, All.
- Q. You stated that was--
- A. That is an oil pool.
- Q. Now the Hospah Pool. Is that an oil pool or gas pool?
- A. An oil pool.
- Q. Producing from what horizon?
- A. From Hospah sand.
- Q. In McKinley County?
- A. In McKinley County.
- Q. In your opinion, what area is covered by that common reservoir?
- A. 17N-8W, Sec. 6, W/2, Sec. 7, NW/4; 17N-9W, Sec. 1, All Sec. 2, E/2, Sec. 11, NE/4, Sec. 12, N/2; 18N-8W, Sec. 31, W/2; 18N-9W, Sec. 35, E/2, Sec. 36, All.
- Q. I will ask you if, in your opinion, the description which you have just read comprises all the known limits of the Hospah Oil Reservoir?
- A. It does.
- Q. Now the Fulcher Basin-Kutz Canyon Pool. Is that an oil pool or gas pool?
- A. Gas pool.
- Q. And from what horizon does it produce?
- A. Pictured Cliffs.
- Q. And it is in San Juan County?
- A. San Juan County.
- Q. In your opinion, what area comprises the known limits of the Fulcher Basin-Kutz Canyon Gas Reservoir?

A. 27N-9W, Secs. 6, 7, All, Sec. 18, N/2; 27N-10W, Secs. 1, 2, 3, 4, 5, All, Secs. 8, 9, 10, 11, 12, All, Secs. 13, 14, 15, 16, All, Sec. 17, E/2, Sec. 20, E/2, Secs. 21, 22, All; 28N-9W, Sec. 31, S/2; 28N-10W, Secs. 7, 8, All, Secs. S/2 15, 16, 17, 18, All, Secs. 19, 20, 21, 22, All, 23 W/2, Sec. 26, W/2, Sec. 27, 28, 29, All, Secs. 30, 31, 32, 33, 34, 35, 36, All; 28N-11W, Secs. 9, 10, 11, 12, 13, 14, 15, 16, 22, 23, 24, 25, 26, All; 29N-11W, Secs. 6, 7, 8, All, Secs. 16, 17, 18, 19, 20, 21, 22, All, Secs. 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, All; 29N-12W, Secs. 1, 2, 3, 4, 5, 6, 9, 10, 11, 12, 13, 14, 15, 23, 24, 25, All; 29N-13W, Sec. 1, All; 30N-12W, Sec. 19, All, Sec. 20, S/2, Secs. 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, All; 30N-13W, Secs. 24, 25, 36, All.

Q. In your opinion, the description which you have just read comprises all the known limits of the Fulcher Basin Kutz Canyon Reservoir?

A. It does.

Q. Now the La Plata Pool. Is that a gas pool or an oil pool?

A. Gas pool.

Q. And producing from what horizon?

A. The Mesaverde.

Q. In your opinion, what area comprises the common reservoir of this pool?

A. 31N-12W, Secs. 10, 11, 14, 15, All.

Q. Now the Lindrith Pool. Is that an oil or gas pool?

A. Oil pool.

Q. Producing from what horizon?

A. Dakota sand.

Q. And that is in Rio Arriba County?

Q. And in your opinion, what area constitutes the common reservoir of the Lindrith Oil Pool?

A. 24N-2W, Secs. 20, 21, 28, 29, All.

Q. Now the Oswell Pool. Is that a gas pool or an oil pool?

A. Oil Pool.

Q. Producing from what horizon?

A. Farmington sand.

Q. In your opinion, what area comprises the known limits of this common reservoir?

A. 29N-11W, Sec. 3, N/2, Sec. 4, N/2; 20N-11W, Sec. 27, S/2, Sec. 28, S/2, Secs. 33, 34, All.

Q. Now the Rattlesnake - Dakota Pool. Is that an oil or a gas pool?

A. It is an oil pool.

Q. In San Juan County?

A. In San Juan County.

Q. In your opinion, what area constitutes or what area comprises the common reservoir of the Rattlesnake - Dakota Oil Pool?

A. 29N-19W, Secs. 1, 2, All, Sec. 11, E/2, Secs. 12, 13, All; 30N-19W, Sec. 35, S/2, Sec. 36, SW/4.

Q. Now the Rattlesnake - Pennsylvanian Pool. Is that an oil pool or gas pool?

A. It is an oil pool.

Q. In your opinion, does the area comprising that oil reservoir coincide exactly with the area comprising the Rattlesnake - Dakota?

A. That's right.

Q. And it would be your recommendation that that area be designated also as the Rattlesnake - Pennsylvanian Oil Pool?

A. We do.

Q. Now the Red Mountain Pool. Is that a gas pool or an oil pool?

A. It is an oil pool.

Q. Producing from what horizon?

A. The Mesaverde.

Q. In your opinion, what area comprises the known limits of the common reservoir?

A. 20N-9W, Secs. 20, 21, 28, 29, All.

Q. The Table Mesa Pool. Is that an oil or gas pool?

A. Oil pool.

Q. Producing from what horizon?

A. The Dakota sand.

Q. In your opinion, what area comprises the known limits of that common reservoir?

A. 27N-17W, Sec. 3, All.

Q. The Ute Dome - Dakota Pool. Is that an oil pool or gas pool?

A. It is a gas pool.

Q. Producing from what horizon?

A. The Dakota sand.

Q. And in your opinion, what area comprises the known limits of that common reservoir?

A. 31N-14W, Secs. 1, 2, All; 32N-14W, Secs. 35, 36, All.

Q. The Ute Dome - Paradox Pool. Is that a gas pool or oil pool?

A. It is a gas pool.

Q. In your opinion, what area comprises the known limits of that common reservoir?

A. 31N-14W, Secs. 1, 2, All; 32N-14W, Secs. 35, 36, All.

Q. The Wyper. Is that a gas pool or an oil pool?

A. It is an oil pool.

Q. Producing from what horizon?

A. Farmington sand.

Q. In your opinion, what area comprises the known limits of this common reservoir?

A. 30N-12W, Secs. 28, 29, 32, 33 All.

Q. Now, as to each pool, you have stated it was a gas pool or an oil pool. From what information or what study do you base your statement as to each pool being either a gas pool or oil pool?

A. In studying the production obtained from the pools. The type of fluid and gas.

Q. And you recommend to the Commission that these pools be classified as gas or oil pools in accordance with your detailed testimony?

A. I do.

Q. In your opinion, would those classifications be reasonable?

A. I believe it would.

MR. McCORMICK: Any questions by anyone else?

MR. LOVERING: I am not very well versed in the northwestern New Mexico fields, but we covered a lot of fields in one breath here, and for a matter of information I would like to know on what basis or yardstick he uses when he states it is gas field or not a gas field. We are going to have many problems of our own, and I am kind of curious as to what the yardstick is. I don't know whether these wells are dry gas wells or make fluids with the gas, or how much. There isn't that information. I would like to know what yardstick he uses in basing an opinion upon whether it is a gas or oil field.

MR. UMBACH: There would be only one pool that there might be any question with the nomenclature committee, and that would be the Angels Peak Pool, which I believe has made approximately 10 barrels of oil a day and about 600,000 cubic feet of gas. And from the study of production from that field it appears the percentage is turning towards gas, therefore, on that particular field, we have called it a gas field. The other fields are--I don't believe there is any doubt. There isn't any doubt in the nomenclature committee. In the minds of the individuals.

MR. LOVERING: What is the gravity of the fluid in this Angels Peak Field?

A. I believe about 65, approximately that.

MR. LOVERING: Color?

A. Light color.

MR. LOVERING: Do you have any oil fields in that region from the same horizon?

A. We do.

MR. McCORMICK: How many wells are in the Angels Peak Pool?

A. One.

MR. McCORMICK: Do you recommend to the Commission that the respective oil and gas pools about which you have testified be defined and limited and classified in accordance with your detailed testimony?

A. I do.

MR. McCORMICK: Any other questions?

MR. LILLY: My name is Joe Lilly with Southern Union. I believe in the Aztec Pool where it shows production from the Farmington sand, the only known production in that area is from the Pictured Cliff gas. At the present time there is one shut in

gas well.

MR. McCORMICK: You are Mr. Lilly?

A. Joe Lilly.

MR. McCORMICK: With the Southern Union?

A. That's right.

MR. McCORMICK: Did you understand the statement he made about the Aztec Pool?

MR. UMBACH: That's right. He means one well is now productive, is that right?

MR. LILLY: The only one at the present time is the Al Greer No. 1 - Thompson.

MR. McCORMICK: Mr. Umbach, I understood in your detailed testimony you stated the Aztec Gas Pool was producing from Farmington sand?

A. That is what we have here.

Q. Now, do you believe you were in error, and it is producing from the Pictured Cliffs?

A. That field is so old I would have to look it up.

MR. BARNES: If you will note the Aztec Pool is marked with an asterisk, and on the back page it is listed as abandoned. I believe they have listed the abandoned production and haven't included the well Mr. Lilly referred to.

A. That's right. It was an old Farmington sand.

MR. LILLY: It produced some gas. The only known production there now is from the Pictured Cliffs.

A. The nomenclature committee did not take into consideration the production now being obtained from the field. The outline of the fields--the abandoned fields, for instance--before giving a name in outline--in other words, any well that would produce at any time would be included in the field according

to the nomenclature committee recommendations.

MR. McCORMICK: Mr. Lilly, I will examine Mr. Barnes, and we will develop that point further.

FRANK BARNES, having been first duly sworn, testified as follows:

DIRECT EXAMINATION BY MR. McCORMICK:

Q. Your name is Frank C. Barnes?

A. That's right.

Q. What position do you hold with the New Mexico Oil Conservation Commission?

A. Geologist.

Q. You have heard the detailed testimony of Mr. Umbach here. I will ask you if you are also a member of the northwestern New Mexico nomenclature committee?

A. That's right.

Q. I will ask you whether or not you concur in the recommendations and opinions of Mr. Umbach?

A. That's right.

Q. If not, in what respects you do not concur?

A. In general, I concur with Mr. Umbach, and the recommendations of his committee. I can't see that there is any conflict in any of the recommendations against the interests of conservation as set forth by the Commission in our policies.

Q. Now, as to the Aztec Pool about which Mr. Joe Lilly just spoke. Is there a well currently producing from that pool from the Pictured Cliffs horizon?

A. There is. Mr. Lilly is correct. Mr. Umbach is also correct. The difference is that I believe this recommendation refers to an abandoned pool. What the nomenclature committee should have done in my opinion is create another pool to take in this one well which wasn't included in the recommendation.

Q. You recommend to the Commission that another pool to be known as the Aztec - Pictured Cliffs Gas Pool be designated?

A. I don't believe I would be in a position to recommend it, because these recommendations are made by a Committee. I would be a minority, and I don't believe I could make a recommendation.

Q. As an individual would you make such a recommendation?

A. Yes, as a matter of opinion, I believe probably I should.

Q. Do you have any opinion as to the area which would be comprised in such a pool?

A. Since only one well is involved, and the policy of the committee has been to maintain the production within a mile of proven production, probably the Aztec - Pictured Cliffs Pool would cover an area of roughly a mile. That is, a very rough estimate. Around the main well.

Q. In your opinion, what would be the exact description of the area covered by such pool?

A. It would be Section 10, I believe, of Township 30N, Range 11 West. The well is, I believe, in the southwest quarter of that section.

Q. Do you recommend that Section 10, Township 30 North, Range 11 West be designated as the Aztec - Pictured Cliffs Gas Pool?

A. No, I don't believe so since the well is in the southwest quarter of the field. It would have to extend into the next section below and probably somewhat in the next section to the west. Perhaps, Mr. Lilly could make some recommendations as to the exact boundary at this time.

Q. All right. Now, aside from the matter of the Aztec - Pictured Cliffs Gas Pool, do you believe that the recommendations

made and the opinions of Mr. Umbach would result in a reasonable classification of the known oil and gas pools of those three counties?

A. I do.

Q. Do you have anything else you would like to add to the testimony?

A. No, I have no further comment.

MR. McCORMICK: Mr. Lilly, would you like to come forth and straighten us out on this one pool? Would you like to be sworn.

(Mr. Lilly sworn.)

JOE LILLY, having been first duly sworn, testified as follows:

DIRECT EXAMINATION BY MR. McCORMICK:

Q. Your name is Joe Lilly?

A. Yes, sir.

Q. And you are with the Southern Union Gas Company?

A. Yes, sir.

Q. What position?

A. Geologist.

Q. Are you familiar with the gas well now producing from the Pictured Cliffs horizon in the Aztec Pool?

A. Yes, sir.

Q. Do you have an opinion as to the area which would be comprised in the common reservoir of that pool?

A. Yes, sir.

Q. What is your opinion?

A. My opinion is that it should be classified as and comprising an area similar to the Gavilan Pool, which is four sections. That seems to be the practice of the committee.

Q. What would be the exact description?

A. The exact description would be Township 30 North, Range 11 West, all of Section 9, 10, 15, and 16.

Q. And you would recommend to the Commission that the Aztec - Pictured Cliffs Gas Pool be designated according to that description?

A. Yes, sir.

Q. Anything else you would like to add to your testimony, Mr. Lilly?

A. As far as the outline of the Fulcher Basin-Kutz Canyon Field is concerned, I think they are possibly over optimistic in the area included. There are a number of marginal wells that are definitely non-commercial.

Q. In your opinion, the area as designated comprises all of that common reservoir, does it not?

A. Yes, it certainly does.

Q. Perhaps more.

A. Sir?

Q. Perhaps more?

A. And perhaps more. Experience on the northwest end and along the south--along the southwestern portion of the designated acreage as well as to the northeast.

Q. Well, if it develops that the reservoir does not cover that much territory, the outlying portions could later be deleted without injury to anyone?

A. I think so. However, there are plugged gas wells in one particular area in Section 15, Township 28 North, Range 10 West.

Q. In your opinion, or any other common reservoirs of the Pictured Cliffs horizon incorporated into that recommended pool?

A. You will have to say that again, I don't quite get the question.

Q. As I understand your former statement, all of the Fulcher Basin-Kutz Canyon Pictured Cliffs common reservoir was inside of the recommended boundaries?

A. Yes, sir.

Q. Now, I will ask you if any other common reservoir of the same horizon overlaps into this recommended designation?

A. The Farmington sands are the only two pools. I mean the Farmington sand and the Dakota gas production are the only two pools, three pools.

Q. But no other known reservoirs in the Pictured Cliffs are within the recommended area?

A. Yes, sir.

Q. There are no other common reservoirs in the Pictured Cliffs in this recommended area?

A. That's right.

Q. Do you have a recommendation of your own to make as to the limits of that pool?

A. I think the committee should get together and possibly narrow the margin of the recommended Pictured Cliffs producing area.

Q. Now, does your company or you individually have any recommendations to make as to any of the other three pools in those three counties?

A. No, sir.

Q. Aside from the Fulcher Basin-Kutz Canyon Pool, do you concur in the recommendations and opinions as expressed by Mr. Umbach?

A. I didn't quite follow that.

Q. Aside from this one pool, do you concur with Mr. Umbach--

A. (Interrupting) Yes, sir, I concur with Mr. Umbach.

MR. McCORMICK: Any questions by anybody else?

MR. MORRELL: Foster Morrell of the U. S. Geological Survey. For the purpose of the record, will you describe the well that you referred to in the Aztec Pool that produces from the Pictured Cliffs?

A. It is the southeast of the southwest of Section 10, Township 30 North, Range 11 West.

MR. MORRELL: When was that well completed?

A. I don't know the exact date the well was completed.

Mr. Greer can possibly give you the exact date.

MR. MORRELL: Approximately, the month or year?

A. It has been completed some five years, I believe.

MR. MORRELL: It has been on production continuously since that time?

A. It hasn't been on continuous production. Some gas had been taken from the well.

MR. MORRELL: To the town of Aztec?

A. Yes, sir.

MR. MORRELL: It appears that was an oversight of the nomenclature committee, because I don't believe any of us were aware of it.

MR. UMBACH: I am glad you brought it up.

MR. MORRELL: What is the name of the well?

A. Al Greer No. 1 - Thompson.

MR. SPURRIER: Mr. Morrell, do you think this might be a hot gas well?

(Off the record facetious remarks.)

MR. MORRELL: I don't see any difficult problem there. It is merely a matter of the nomenclature committee being informed so they can take appropriate action.

MR. SPURRIER: Is it on Federal land?

A. It is patented land, sir.

MR. MORRELL: One other statement I might make at this time in connection with Mr. Lilly's reference to the character of it. Included in the recommended definition of the Fulcher Basin-Kutz Canyon Pictured Cliffs. It really represents an area in which any gas production found in the Pictured Cliffs formation will be included in this common reservoir. Though it may take in areas not now definitely proved or wells that are of marginal character, it does indicate an area within which if any additional wells are completed, they will be within this same common reservoir and not another.

MR. McCORMICK: Do you have any other statements or recommendations to make as to the other pools in this area, Mr. Morrell?

MR. MORRELL: I concur entirely with the recommendations presented by Mr. Umbach.

MR. McCORMICK: Does anyone else have any statement to make or questions to ask? This is more important than it seems because this classification will become the basis for future gas proration. I think the committee is to be commended for the attention they have given to it.

MR. MORRELL: In addition to proration in Fulcher Basin, it does affect well spacing by virtue of the outstanding orders of the Commission.

MR. SPURRIER: Mr. Umbach, is the pool extended more than a mile beyond any producing well?

A. In some cases, yes.

MR. SPURRIER: By approximately how much?

A. It could be as much as a mile and a half or two miles.

The nomenclature committee has extended that especially for the

reason of the erratic condition of the reservoir. In other words, we have outlined what we think is an outline of the present reservoir. In other words, if the field has taken a straight trend, and if there has not been wells drilled, and there is a slight curve in the field, we may have extended it a little beyond a mile. We have also taken into consideration the character of the wells on our extension. Where we have a good well, we have extended the field--we may have extended a little farther than a mile. Where we have outside wells, where we have had marginal or almost commercial production in a particular direction, we have favored that side.

MR. SPURRIER: That is all I have, Mr. Umbach. We want to take this opportunity to thank you and your committee for the considerable amount detailed work you have done, and we appreciate every bit of it. Any further questions of this witness? Gentlemen, Case No. 204 was to come before the Commission today. But two interested parties have asked that the case be continued, and the Commission has granted their request. The case will be continued to March 21, 1950, at 10 o'clock, in the Capitol Building in Santa Fe. There being nothing further, all the cases heard today will be taken under advisement until a majority of the Commission may become acquainted with the record. The meeting stands adjourned.

STATE OF NEW MEXICO )  
                          : SS  
COUNTY OF BERNALILLO )

I HEREBY CERTIFY That the attached transcript of proceedings before the Oil Conservation Commission of the State of New Mexico on February 21, 1950, is a true record of the matters therein set forth to the best of my knowledge, skill, and ability.

DATED at Albuquerque, N. M., March 21, 1950.

*L. G. Guleson*

\_\_\_\_\_  
NOTARY PUBLIC

My Commission Expires : 8-4-52