

BEFORE THE
OIL CONSERVATION COMMISSION
Santa Fe, New Mexico

Pursuant to legal notice to all parties and the public the following proceedings were held before the Oil Conservation Commission in the Senate Chamber of the Capitol Building in Santa Fe at 10:00 A. M. on July 15, 1948.

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, of the following public hearing to be held July 15, 1948, beginning at 10:00 o'clock 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 149

In the matter of the application of Mid-Continent Petroleum Corporation for an order establishing 80-acre proration units; to establish a uniform pattern for the spacing and drilling of wells with allowance for tolerance for surface obstructions and for an order fixing and establishing allowables for wells drilled in the Crossroads pool to a depth below 12,000 feet (Devonian formation), Lea County, New Mexico.

CASE 150

In the matter of the application of Ross Sears for an order granting permission to drill unorthodox location designated as Well No. 5 on his Miller lease, described as SW $\frac{1}{4}$ of Section 26, Township 17 South, Range 32 East, N.M.P.M., in the Maljamar Field, Lea County, New Mexico.

CASE 151

Mary A. Lindop, Exrx. of Will of John Lindop, Miami, Florida; The Mid-Continent Co., Lincoln, Nebraska; F. J. Danglade, Lovington, New Mexico; United Producing Co., Inc., Charleston, W. Va.; J. L. Reed, Lovington, New Mexico; Nettie Lowe, Lubbock, Texas; H. Dillard Schenck, Lovington, New Mexico; Mark D. Rector, Atherton, California; Louise C. Ritsher, Beloit, Wisconsin; George F. Henneberry, Chicago, Ill.; Robert N. Cowham, Chicago, Ill.; Dr. Ralph Sullivan, Chicago, Ill.; Sigmund Stein, New York, N. Y.; Ella B. Stein, Chicago, Ill.; Marie E. Palmer, Boston, Mass.; Maud Cowham Sr., Robert Neil Cowham and C. Fred Cowham, Trustees, Chicago, Ill.; J. E. Day, Dallas 1, Texas; Claire I. Levy, Chicago, Ill.; Aylward H. Vosburgh & Grace H. Vosburgh, Chicago, Ill.; Mrs. V. M. Taylor, Roswell, New Mexico; Charles F. Grey, Trustee, Chicago 2, Ill.; Atlantic Oil Corporation. Tulsa.

Oklahoma; Ginevra Dougherty, Chicago 37, Ill.; Harriet D. Herd, Midland, Texas; John J. Redfern, Jr., Midland, Texas; John G. Ellinghausen, Tulsa, Oklahoma; Helen S. Eisendrath, Chicago, Ill.; Orville W. Rosengren, Minneapolis, Minn., each claiming some interest, in the matter of the application of Amerada Petroleum Corporation for the pooling or unitization of the NW $\frac{1}{4}$ SE $\frac{1}{4}$ of Section 32, Township 19 South, Range 37 East, N.M.P.M., within the Monument pool.

Given under the seal of the Oil Conservation Commission of New Mexico at Santa Fe, New Mexico, On June 29, 1948.

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

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

BEFORE:

Hon. Thomas J. Mabry, Chairman
Hon. John E. Miles, Member
Hon. R.R. Spurrier, Secretary

REGISTER:

George A. Graham,
Santa Fe, N. M.
For the Commission

Frank C. Barnes,
Santa Fe, N. M.
For the Commission

H. N. Sweeney
Hobbs, N. M.
For the Commission

A. E. Pierce
Tulsa, Okla.
For Mid-Continent Petroleum Corporation

J. H. Crocker
Tulsa, Okla.
For Mid-Continent Petroleum Corporation

M. B. Penn,
Tulsa, Oklahoma
For Mid-Continent Petroleum Corporation

Ed. Pierce
Midland, Texas
For Mid-Continent Petroleum Corporation

E. S. Calvert
Tulsa, Okla.
For Devonian Oil Co.

E. A. Paschal
Amarillo, Texas
For Oil Development Co. of Texas

E. O. Hennessey
Albuquerque, N. M.
For Santa Fe Railway Co.

G. H. Gray
Midland, Texas
For Repollo Oil Co.

L. J. Torch
Tulsa, Okla.
For Repollo Oil Co.

T. H. Hammett
Tulsa, Okla.
For Repollo Oil Co..

Paul C. Evans
Hobbs, N. M.
For Gulf Oil Corporation

L. Hosford
Tulsa, Okla.
For Gulf Oil Corporation

Mrs. Nettie Ogl
Santa Fe, N. M.

Scott R. Brown
Midland, Texas
For Western Natural Gas Co.

E. P. Keeler
Dallas, Texas
For Magnolia Petroleum Co.

Harve H. Mayfield
Midland, Texas
For Magnolia Petroleum Co.

R. Simmons
Artesia, N. M.
For Grayburg Oil Co. of New Mexico

R. J. Heard
Artesia, N. M.
For Grayburg Oil Co. of New Mexico

John E. Cochran
Artesia, N. M.
For Ross Sears

Oliver Seth
Santa Fe, N. M.
For Stanolind Oil and Gas Co.

P. P. Manion, Jr.
Tulsa, Okla.
For Stanolind Oil and Gas Co.

J. O. Seth
Santa Fe, N. M.
For Amerada Petroleum Corporation

R. S. Christie
Ft. Worth, Texas
For Amerada Petroleum Corporation

Harry J. Gibbons
Tulsa, Okla.
For Skelly Oil Co;

A. F. Holland
Tulsa, Okla.
For Skelly Oil Co.

George N. Selinger
Tulsa, Okla.
For Skelly Oil Co.

Walter Famaris
Hobbs, N. M.
For Famaris Oil Co.

W. G. Head
Clovis, N. M.
For Triangle Oil Co.

Glenn Staley
Hobbs, N. M.
For Lea County Operators

O. V. Adkins
Midland, Texas
For Cities Service Oil Co.

C. S. Mitchell
Bartlesville, Oklahoma
For Cities Service Oil Co.

J. D. Boatman, Jr.
Dallas, Texas
For The Atlantic Refining Co.

Sid W. Binion
Midland, Texas
For Atlantic Pipe Line Co.

W. B. Hamilton
Amarillo, Texas
For Phillips Petroleum Co.

P. J. Gaskin
Santa Fe, N. M.
For Wilson Oil Co.

Roy O. Yarbrough
Hobbs, N. M.
For the Commission

N. R. Lamb
New Mexico Bureau of Mines
Artesia, N. M.

Foster Morrell
Roswell, N. M.
For U. S. Geological Survey

COMMISSIONER MILES: The Commission is now in session.

COMMISSIONER SPURRIER: Will you read the first case, George,
please?

(Mr. Graham reads the notice of publication in Case No. 149.)

COMMISSIONER SPURRIER: Will the Mid-Continent come forward, please?

MR. CROCKER: Mr. Chairman, the applicant is ready to proceed in this cause. I might state briefly that while Mid-Continent is the applicant, you might say it is applicant in name only, on behalf of itself and on behalf of all operators within the immediate area upon which this discovery well, No. 1 Sawyer in Lea County, has been drilled. This application was filed with the Commission on the 14th of June. It was done pursuant to the consensus of opinion voiced at a meeting held in Tulsa on June 11. At the meeting in Tulsa on June 11, the operators were well represented and had one thought in mind with respect to the type of application that should be filed, and Mid-Continent, as being the operator of the discovery well, was designated as the medium through which this application should be filed. The application, briefly speaking, invokes the jurisdiction of the Commission for the purpose of securing an order to cover three points, you might say. First, and foremost, it was thought that at this time, or as soon as could be conveniently accomplished by the Commission, the proration units in this field should be established in an area of 80 acres, a half of a governmental quarter section constituting a proration unit. The petition further seeks an order to establish a spacing pattern. We ask the Commission to designate the northeast 40 acres and the southwest 40 acres of each governmental quarter section as the drilling units, with a reasonable tolerance. We ask for 150 feet to accommodate any surface obstructions. Third, and incident to the order, we have sought in the application that this Commission fix a daily allowable. We really regard this at this particular moment ~~as~~ incidental to the principal

purposes, that of fixing a proration unit and to establish well spacing. Presently, in addition to the discovery well, four wells are now drilling in the area. Some offsets and probably one or maybe two that are not exactly offsets, but maybe the second location. All of these wells have respected a common conventional pattern, drilling either in the northeast 40 or southwest 40. Only a month ago, I believe June 15, we appeared--Mid-Continent on its own behalf, and sought from the Commission a temporary allowable for the discovery well. The Commission very kindly granted our request. Last evening an operators' meeting at the hotel here in Santa Fe was in session probably two hours in an effort to see whether or not any divergent opinions existed with regard to the manner in which we should present this cause to you this morning. I may state just briefly, and later on in the proceedings it will probably be elaborated on, but the unanimous opinion, I believe I can safely say, of the operators at yesterday's meeting was that we appear this morning and seek your order establishing an 80-acre proration unit and fixing a conventional well-spacing pattern as I have stated in the northeast and southwest quarter sections of a governmental 160-acre tract. With respect to fixing a daily allowable for--at least temporarily until more information is brought before you, the meeting decided that we should ask you to fix an allowable, daily oil allowable, of 300 barrels until a further order issued by this Commission. Three hundred barrels would apply to the discovery well and to all wells hereafter drilled until such time as the Commission might fix another permanent allowable. As I state, we regard probably that any temporary allowable that you now fix you might want to change, the operators might want to change, as a result of information yet to be developed. We have taken the liberty--we do it without any presumptuousness--we did it

to form a basis for our discussion at our meeting yesterday-- we have prepared what we call a proposed order. We have undertaken, after some study, to incorporate in the order all of the facts with sufficient definiteness to be readily interpreted and not misunderstood. We thought we would submit it, and if the Commission agrees with us, it might be helpful in the formulation of any final order you make as a result of this hearing. In that proposed order we have--well, I think the statute gives it to the Commission anyway, perhaps the wordage is not needed--but in the order we appropriately provided that this Commission retains jurisdiction of this cause, that it might on its own motion, or upon the motion of any interested operator, at a later time issue further and additional orders. We rather anticipate that someplace further down the line when further information is developed on the reservoir that that might be done.

Now, with respect to further proceedings, we were going to offer Mr. Penn, our Chief Engineer. Following his testimony, it is our understanding that perhaps Skelly and Magnolia might care to make a further statement, and maybe we ourselves might have something further to observe. As Mr. Penn testified here a month ago today on the well, we have qualified him, I believe, to the satisfaction of the Commission and other operators as an expert. He testified with respect to the well at that particular time. The tests that had been made, the cost of the well, and other figures, engineering figures. We would like to suggest that the record of his testimony be adopted and made a part of this hearing. It might then in some respects shorten the proceedings, and we certainly have no desire to prolong the proceedings, nor unduly tax the Commission. We would be glad to give you all the information you wish. I believe with that preliminary statement, I would like to have Mr. Penn sworn and take the

stand.

(Witness sworn)

M. B. PENN, having been first duly sworn, testified as follows:

DIRECT EXAMINATION BY MR. CROCKER:

Mr. Penn, will you state your name, please?

A. M. B. Penn.

Q. What is your profession?

A. Petroleum engineer.

Q. Where do you live?

A. Tulsa, Oklahoma.

Q. With whom are you connected?

A. Mid-Continent Petroleum Corporation.

Q. Have you heretofore testified before this Commission?

A. I have.

Q. Were you qualified as a petroleum engineer at that time as an expert witness?

A. I believe so, yes, sir.

Q. Do you want further qualifications, or will you adopt them?

COMMISSIONER MILES: No, we will adopt them.

Q. Mr. Penn, in your capacity as Chief Engineer of the Mid-Continent Petroleum Corporation are you familiar with the No. 1 Sawyer well and the Crossroads Pool in Lea County, New Mexico?

A. I am.

Q. When was that well completed--let me ask you this, first. When was the well started? About?

A. The well was started about August of 1947.

Q. When was it completed, Mr. Penn?

A. About May 6, 1948.

Q. To what depth was it completed?

A. 12,258 feet.

Q. Did you make a test for initial production at the time it

was completed?

A. Yes, the initial test showed 995 barrels of oil and no water through a 3/4 inch choke for a period of six hours and twenty minutes.

Q. Is there another well drilling in the area at the present time?

A. Yes, there are four other wells drilling.

Q. Can you give the Commission the approximate location of each of those wells?

A. The wells are located as follows: one in NENE of Section 33; one in the NENW of Section 34; one in the NESW of Section 27; and the fourth in the center of the SWSW of Section 26, all in Township 9 South, Range 36 East, Lea County, New Mexico.

COMMISSIONER MILES: For fear of overlooking it later, I did not understand how much oil was produced in a certain given time.

A. In the initial test, Governor Miles, the well was flowed for six hours and twenty minutes. And in that period it produced 995 barrels of oil. That was produced through a 3/4 inch choke on the tube at the top of the hole.

MR. CROCKER: This will help you visualize what our witness is talking about (laying a map before the Commission).

Q. What is the distance in feet between offsets?

A. This is 1867 feet between offsets. This is the Skelly well here, and this is a Magnolia well and this--these two are Mid-Continent. They are all drilling now between about four and six thousand feet.

MR. CROCKER: Did you get all the information you wanted, Governor?

COMMISSIONER MILES: Yes, sir.

Q. Mr. Penn, did you understand that that area has been delineated and recommended by the Nomenclature Committee for the Devonian formation in this particular area?

A. Yes, sir, it is my understanding that the $W\frac{1}{2}$ of Section 26, all of Section 27, the $E\frac{1}{2}$ of Section 28, the $E\frac{1}{2}$ of Section 33, and all of Section 34, and the $W\frac{1}{2}$ of Section 35 in this township have been recommended as being the probable producing area now set up by this Nomenclature Committee.

Q. Is it your understanding that it is the purpose of the application in the event an additional area might be proven productive outside of the delineated area that any order issued by the Commission based upon this application would cover and embrace such an outlying area?

A. That is correct. If a well should be drilled into or produced from the Devonian formation, in the interests of uniformity it should be drilled on the pattern that has been set forth.

Q. Mr. Penn, at the time this No. 1 Sawyer well was completed and put into production, did you understand that the Oil Conservation Commission of New Mexico had then established a formula for a daily deep well allowable for production below 12,000 feet.

A. It is my understanding that at that time the allowable for wells had been set for a depth down to 12,000 feet, but that for wells below 12,000 feet a formula or allowable had not been set up.

Q. Yes, sir. Going back to the drilling wells you have described and located, may I ask whether or not all of those wells are drilling either in the northeast 40-acre tract or the southwest 40-acre track of a governmental quarter section of 160 acres?

A. It is fortunate that they are. All the wells that are presently drilling and our discovery well are on the pattern which is shown as Exhibit A on the proposed order that we have prepared.

Q. In other words, if this Commission were to confirm by an

order a drilling pattern requiring all Devonian wells to be drilled on either northeast or southwest 40-acre tracts, we have no well that is unorthodox or that would require an exception to the order?

A. That is correct.

Q. Mr. Penn, I wish you would give the Commission the benefit of the observations and conclusions and recommendations that were made at a meeting held in the La Fonda Hotel yesterday afternoon, at which Repollo Oil Co., Grayburg Oil Co. Skelly Oil Co., Magnolia Petroleum Co., Amerada Petroleum Corporation, Santa Fe Railway Co. and the Oil Development Company of Texas, Lea County Operators Committee, represented by Mr. Staley, U. S. Geological Survey, represented by Mr. Morell, the Devonian Oil Co., represented by Mr. Calvert, Bureau of Mines, represented by Mr. Lamb, and Mid-Continent, with respect to their unanimous--and Gulf Oil Corporation, I beg your pardon--with respect to the unanimous view with regard to the establishment of 80-acre proration units, the conventional well-spacing pattern, and the recommendations of the meeting with regard to the fixing of a temporary daily allowable for the field until such time as the Commission, upon further information, might determine that a different permanent daily allowable should be established for the pool. I wish you would explain to the Commission those particular points, if you will.

A. The operators were still unanimous in their opinion that the reservoir can be adequately and economically drained by drilling one well for each 80-acre proration unit, as they has been in the Tulsa meeting. They were looking forward to having a great deal more information on the Mid-Continent well than was available at that time. Mid-Continent made clear that the conditions that existed and the inadequacy of the proper results, or the complete results from tests that

are still being taken might or might not be representative of the productivity and characteristic of future wells that might be drilled in the reservoir. Upon this basis the operators felt that an allowable that might be set up at this time should be an allowable that future wells, which will probably be completed in four or five months, might produce--at a rate at which these wells might produce--for such time until information was available upon these wells which might supplement the information that was had on the discovery well. So that the 300 barrel allowable was agreed upon by the operators as being the rate at which everybody would produce until such time as more complete information could be obtained. The number isn't valued or just picked out of the air. It was decided upon from all the information that they had, and all the opinions, and all the desires that the operators representing all those present in the Cross roads area might agree upon.

MR. CROCKER: I believe with that testimony we are willing to turn the witness to the Commission and to any interested operator who might care to interrogate the witness further.

COMMISSIONER MILES: Just one question there. Maybe I am not clear on it. Awhile ago you said that was the initial production, the amount so produced. That 900-odd barrels.

A. Yes. That was the initial rate at which the well produced on the first day it was completed.

COMMISSIONER MILES: Has there been any change made since that time? Any tests made?

A. Yes, we gave the Commission quite a few tests at the last hearing, Governor, based on various sizes of chokes. All the way, I believe, from about 150 barrels per day to about 3970 barrels per day. It showed the ability of the well to produce on those various sizes of chokes, and the amount of energy required to produce the oil on those various sized chokes.

COMMISSIONER MILES: I remember that testimony.

A. Since then we have taken further tests to show the order or magnitude of those tests to be the same under the different engineering company that took the second set of tests.

COMMISSIONER MILES: That is all I have.

COMMISSIONER SPURRIER: Mr. Penn, what was the figure that the Oil Conservation Commission has set for the allowable, based upon the extension of the curve? The Commission in an executive order set an allowable before this past hearing was held.

A. It is my understanding that based on the 44 barrel basic allowable that the allowable for this well should be somewhere around 300 or 310 barrels.

COMMISSIONER SPURRIER: I wonder if we couldn't bring out a few more of the facts to substantiate your basis of 300 barrels, whereas the Commission granted an allowable of 500 barrels at the June 15 hearing.

A. There are two things that I would like to point out in that respect. In the first place, the operators are agreeable to Mid-Continent having an allowable of 500 barrels as a temporary measure, both for testing the well and as a bonus allowable for a new discovery. The operators present were not unanimous in their desire to give the applicant a permanent allowable of 500 barrels. That was to be taken care of at this hearing today. The data that Mid-Continent presented indicated that one of the important factors upon which we based the 300 barrels was production of salt water. This water appears in the well after production is increased from a low rate at a figure somewhere between 300 and 500 barrels a day. And the operators felt that 300 barrels a day, based upon this data, was probably the optimum rate. That was arrived at independent of the Commission's former factor of 6.75.

MR. CROCKER: Mr. Penn, the Commission established--I believe it was Mr. Spurrier who drew it out--a proportional formula of 6.75. Is that your understanding?

A. That is correct.

MR. CROCKER: For this depth?

A. Yes.

MR. CROCKER: As a matter of fact, the application of the proportional formula of 6.75, I believe you state, as related to 300 barrels is just a matter of a very few barrels, is it not?

A. That is correct.

MR. CROCKER: I would like to make this statement. In the meeting yesterday we got to talking in terms of barrels rather than on the question of a proportional factor. And when we adjourned yesterday, we had, as I understand, been talking in terms of 300 barrels. I don't know, it might be that the Commission if it saw fit to grant approximately what we are asking for, to-wit, 300 barrels a day, you might desire to use it in the form of a proportional factor rather than the 300 barrels. Now, I don't know how other operators--I didn't discuss that at the meeting--and I don't know how other operators who participated in yesterday's meeting might feel about it. But I take it that if the results are approximately the same, we, at least Mid-Continent, can't see where we would have any objection to it being referred to in a factor form or a barrel form. Does that catch the point that you made?

THE WITNESS: I might say that several of the operators have indicated that in view of the fact that we are asking for 80-acre spacing, and in view of the fact that the curve that Mr. Spurrier has referred to is at the present time applicable to wells drilled on 40-acre proration units, it might be advisable to separate the two until some method might be worked out for setting up an allowable formula for these deep wells that will be drilled on 80-acre spacing. The two are separate and apart in that respect. I just throw that in as a suggestion.

COMMISSIONER SPURRIER: When you say the two, you mean the allowable for 40-acre units and the allowable that might be arrived at for 80-acres?

A. Yes.

MR. SELINGER: I represent the Skelly Oil Co. I would like to ask Mr. Penn a few questions.

Q. Mr. Penn, as to the casing and other drilling and operating rules, do you feel that the present general rules applicable to Lea County in that respect are sufficient to cover this area?

A. Yes, I do.

Q. Now, to further clarify Mr. Spurrier's last question to you with regard to 40 and 80-acre units. That subject is covered in Section 4 of the order--part of the proposed order that had been submitted to the Commission. Is that right?

A. That is correct.

Q. And briefly, it permits wells to be given an allowable on an 80-acre basis, and units of less than 80 acres--as a result of a hearing--will be assigned an allowable based on the amount of acreage that the--that it bears to the normal 80.

Is that right?

A. That is correct.

Q. At this meeting held yesterday, all interested parties, both within the probable area as delineated by the Nomenclature Committee and by interested operators outside that area, were they unanimous in their accord as to the rules as now proposed? Submitted to the Commission?

A. They were.

Q. In your opinion, Mr. Penn, the establishment of an 80-acre unit for this field only would eliminate the necessity of drilling unnecessary wells in order for each operator to recover his proportionate share from the reservoir?

A. It would.

Q. In order to specifically clarify it, these rules as now proposed are applicable only to the Crossroads pool, that common source of supply designated as the Devonian, which was discovered by your Sawyer No. 1 well. Is that right?

A. That's right.

MR. SELINGER: That is all.

COMMISSIONER MILES: The Governor just asked me, and I don't know. How extensive is that area applied for here? What is the proposed area?

GOVERNOR MABRY: What is the extent of the area?

COMMISSIONER SPURRIER: Four square miles.

THE WITNESS: The pool that is temporarily set up in this area here (indicating on the map) is four square miles.

COMMISSIONER MILES: Four square miles. Mr. Spurrier, did you attend that meeting?

COMMISSIONER SPURRIER: Yes, sir, I did.

COMMISSIONER MILES: Do you see any complications anywhere in the set up?

COMMISSIONER SPURRIER: I don't think there is anything in the proposed order that would be detrimental to our general set up, due to the fact that as stated it is temporary in nature until such time as additional wells are drilled and additional information compiled.

GOVERNOR MABRY: I have no questions.

COMMISSIONER MILES: I have no questions.

COMMISSIONER SPURRIER: I would like to ask some further questions, please.

GOVERNOR MABRY: Go ahead.

COMMISSIONER SPURRIER: What is the alternative, or what are the alternatives, of a person who owns only 40 acres in the Crossroads pool as it exists now or may be extended?

A. There are two alternatives. The first alternative is that a 40-acre that exists as one-half of one of the 80-acre pro-

ration units be unitized with the other forty to form an 80-acre proration unit. The second is that if the operator should choose to drill a well on his 40 acres, which is on 100 per cent interest, that he would be permitted to produce the well at one-half the allowable that would be attributable to an 80-acre proration unit.

COMMISSIONER MILES: Is that referred to in this order?

A. Yes, that is referred to in Section 4 of the order on page three.

COMMISSIONER MILES: Mr. Spurrier, do you have some more questions?

COMMISSIONER SPURRIER: Yes, Governor, thank you. I don't care to string this out too far, but I think there are a few things that should be brought out. I have heard them discussed.

Q. Suppose that some individual owned the NW $\frac{1}{4}$ and the SE $\frac{1}{4}$ of a governmental quarter section? What could he do now in the way of unitizing or communitizing or what should he do?

A. In the present set up, he would own half of the two 80-acre proration units. And those proration units, upon the application and agreement of the two parties could be established as they are shown in Exhibit A on our proposed order, or they could be changed as set out in Section 3. I quote, "by agreement of the operators within said quarter section upon proper showing to the Commission." It is fortunate, Mr. Spurrier, that in the area that is immediately foreseen as being productive there are very few of those problems that you mention.

GOVERNOR MABRY: I was wondering how many there were, if any.

A. I have a map that I can show you, Governor.

GOVERNOR MABRY: I don't care, specifically. Is there a substantial number?

A. It will be an exception to find one.

COMMISSIONER SPURRIER: You propose to take care of it with the two ways out.

MR. CROCKER: That is correct. The proposed order, as amended, without burdening the record, your Commission retains jurisdiction here. If any operator, or you can upon your own motion correct any inequity that might exist by reason of unusual circumstances.

THE WITNESS: The order is very flexible, Governor.

GOVERNOR MABRY: I assumed so with my cursory reading of it. There is no objection from anybody who participated in the conference? I take it that all operators of the area agreed to them?

THE WITNESS: That is correct.

COMMISSIONER MILES: Mr. Morrell, do you have any interest in the matter?

MR. MORRELL: I have a few general remarks. First, New Mexico is fortunate in having the type of operators that can settle these problems. It seems to me that a too-detailed discussion of engineering and reservoir conditions in this case would be academic as the data is available only from one well which is still in the process of experimentation. In the absence of more details it would appear that an order issued at this time should be specifically for a temporary period. Possibly for a fixed date or number of wells. After which the problem would be further considered. I have been privileged to attend several meetings of the operators of the Crossroads pool, and I would like to note for the benefit of the Commission and for the record that the considerations expressed by the operators involved were largely for the proper protection of the reservoir. Some differences of opinion were expressed, naturally. But all were quickly resolved in the interest of the majority. I feel it only proper and just--the fine work done which Mid-Continent and Magnolia aided by Skelly in initiating

and developing the necessary data to secure a well-spacing proper for the Cross roads pool. Special consideration should be given Mid-Continent and its personnel for the fine cooperation open-minded manner in which it has approached this problem. In the present circumstances I see no objection to granting the application made to your Commission.

COMMISSIONER MILES: Anybody else?

MR. SELINGER: I represent Skelly Oil Co., one of the companies drilling at the present time. If everything goes well, we hope to bring in the second well in the area. We are particularly anxious for the Commission to adopt these proposed rules for the reason that even though there is only one well, it is my experience, covering a period since 1933 in proration exclusively, that the quicker a state assumes jurisdiction for a proper development program in which they fix the spacing and proration units, the less headaches that regulatory body has farther on down the line. In that way, operators do not have any preconceived selfish ideas, whether on top of the structure or on the fringe. At the present time we don't know where the structure lies. Here all the operators come in and say, we agree on a proposed order. Let the chips fall where they may. It may be that we will be hurt by this kind of an order. That is something that we don't know. As long as each operator knows what the drilling unit is and knows where the wells are supposed to be located, and knows what his approximate allowable is, every single operator in the field is treated alike. That is why we particularly urge the Commission to adopt these rules now. Because if additional wells are brought in, then the unanimity is naturally broken up between particular interests of each individual operator. Of course, we are all in business for money making. But as Mr. Morrell very aptly put it, the cooperation shown by operators in this particular regard

has been in line with the remarkable record that operators in the field and throughout the State have shown since 1935. It is particularly to the good name of your State that in thirteen years of proration you have only had 151 proration cases. I have always found that the spirit of the Legislature, particularly in Section 12, the fifth paragraph, in which it tells this Commission to approve any plan which was agreed upon by all operators in any particular field, and if it felt that it was just to adopt that plan. We, as one operator, particularly urge the Commission under that particular section to adopt the plan which has been unanimously approved by the operators interested in the field.

MR. KEELER: I represent Magnolia Petroleum Co. I should like to take this opportunity to concur with all recommendations made by Mid-Continent and Skelly, and state that Magnolia is in favor of this proposed order as presented to the Commission.

COMMISSIONER SPURNIER: Is there anyone else to be heard from? I would like to state for the record that I heartily agree with Mr. Morrell's well put comments.

COMMISSIONER MILES: Anybody else to be heard in this matter? I don't think it is necessary for me to repeat it, but I have always found the cooperation of all the oil companies to be very admirable. We have never had any trouble along that line, so we never hesitate when they are together in adopting what they approve. Is anybody else to be heard in this matter? Unless there can be something offered that is outside of this order, I don't think it is necessary for us to hear any more testimony along that line. Unless there is somebody who wants to offer some.

GOVERNOR MABRY: I assume that counsel for all operators in the area are familiar with the order and have seen it.

MR. CROCKER: Governor, I don't know how generally counsel

have gone over it, but I think I can state that it has been submitted to most of the legal departments of the various companies operating in the pool, and that insofar as we are advised, there has been no suggestion that has come our way for any change. There were attorneys in the meeting yesterday, and engineers--production men--and every operator has gone over it. And we have heard no suggestions.

COMMISSIONER MILES: Mr. Spurrier, have you and Mr. Graham read this order?

COMMISSIONER SPURRIER: Just casually, Governor. I haven't studied it.

GOVERNOR MABRY: I don't think we need to more than announce at this time that we will approve the order. Of course, we will carefully study it.

MR. SELINGER: I would like to make one suggestion which might not be considered in line with Mr. Morrell's and Mr. Spurrier's recommendation. I think it would be practically impossible to put a definite time in the order in view of the fact that it takes a well six, seven, or eight months to be drilled and put on production.

GOVERNOR MABRY: You would prefer to leave it upon motion?

MR. SELINGER: There is a retaining provision in Section 8. I don't think a specific time limit would be applicable at this time because we don't know when we will get the additional information, and it will be probably a year and a half before more than five or six or seven wells are drilled.

GOVERNOR MABRY: "Section 8. The Commission retains jurisdiction in this case for the purpose of issuing such further and additional orders as may be necessary to meet changed conditions, preclude inequities, and preserve correlative rights; all upon the motion of the Commission or upon the petition of any interested operator upon a public hearing, after notice as provided by law." I think we have a right to

do what we want to under that order. That would be my interpretation looking at it briefly.

COMMISSIONER SPURRIER: I wasn't aware, Mr. Selinger, that I had recommended any definite time. I would rather that the record show now that after a reasonable number of wells are drilled and the information is gathered, that then we should devise a permanent spacing.

MR. SELINGER? Then our thoughts coincide in that respect.

COMMISSIONER MILES: I think maybe Mr. Morrell suggested that. If anybody else wishes to be heard, we will be glad to hear them. If not, we will proceed with the next case.

MR. CROCKER: We desire to thank the Commission for its courtesy and patience.

COMMISSIONER MILES: Read the next case, George.

(Mr. Graham reads the notice of publication in Case No. 150.)

MR. COCHRAN: Governor Mabry and members of the Commission. This is an application made by Ross Sears to drill an unorthodox location on land described as the SW $\frac{1}{4}$ of Section 26, Township 17 South, Range 32 East, in the Maljamar Field, of Lea County, New Mexico. Heretofore, there has been drilled in this 160 acres four wells. Each of the four wells were drilled in the center of each 40 acre legal subdivision. The well drilled in the SE $\frac{1}{4}$ of the SW $\frac{1}{4}$ of Section 26 was completed in 1942. It was drilled to a total depth of 4338 feet. The well did not have a commercial showing and was plugged and abandoned. The applicant makes application to drill an unorthodox location to be located 1295 feet north of the south line and 1370 feet east of the west line of Section 26; which location is approximately 25 feet south and 50 feet east of the common intersection of the quarter sections. It is their belief that by drilling a well at this location they can obtain a commercially producing well, and

that the drilling of such a well would be in the interests of conservation in that a substantial quantity of oil would probably be recovered that would not otherwise be recovered if the well were not drilled. In the event this application is granted and the applicant permitted to drill the well, then they would like to have an allowable set up on the proration schedule for that forty-acre unit upon which there is no production at the present time. Now, I would like to call your attention to the location on the map. Here is the well that was drilled and plugged. The proposed location is here. The Commission will note that there is no encroachment of outside property lines. Now, this lease covers Federal lands. A copy of this application was submitted to the office of the Supervisor of the U.S. Geological Survey at Roswell with the request that he express his opinion and the opinion of his office with reference to this location. I have a letter which I would like to introduce in evidence, addressed to John E. Cochran, Jr., dated June 29, 1948, from Mr. Morrell as Supervisor of the U. S. Geological Survey, in which, among other things, he states that no objection is offered by his office to the unorthodox well location specified in the application. "It is the opinion of this office that the drilling of the additional well may afford an opportunity for increased recovery of oil and gas from the presently producing reservoir of the Maljamar pool." And further, "Approval to drill the additional well at the unorthodox well location will be contingent upon approval of such location by the Oil Conservation Commission of the State of New Mexico for proration purposes." I offer in evidence this letter that I have mentioned. Now, the person who was to be a witness here today, Mr. Sears, was unable to come. Therefore, I have no witness to offer. But Mr. Morrell I believe is present, and he is thoroughly familiar with the Maljamar

pool and this particular location, and if the Commission has any questions they would like to ask with reference to it, I believe Mr. Morrell would answer those questions.

GOVERNOR MABRY: He has said what he has to say in his letter.

COMMISSIONER MILES: Has there been anybody protest it?

MR. GRAHAM: There is nothing in the file, Governor.

COMMISSIONER MILES: If not, I don't see why we wouldn't grant the order. Next case.

(Mr. Graham reads the notice of publication in Case No. 151.)

MR. SETH: We would like to have Mr. Christie sworn.

(Mr. Christie sworn.)

MR. SETH: If the Commission please, this involves the NW $\frac{1}{4}$ of the SE $\frac{1}{4}$ of Section 32, Township 19 South, Range 37 East, N.M.P.M. of the Monument pool. These diagrams will show the situation. The particular well is marked with a cross. The Amerada Petroleum Co. is the owner of the lease on 3 $\frac{1}{4}$ acres of this forty. And it has acquired the fee to the remaining six acres located as shown on the map here marked "Fee". So, it holds the lease and the six acres and the purpose of this application is to unitize the six with the 3 $\frac{1}{4}$ and produce it as one unit. In order that the record may be clear, I would like to effer in evidence exhibits 1, 2, and 3, which the Reporter has already marked, being the original oil lease and the assignments that quiet the lease on the 3 $\frac{1}{4}$ acres into the Amerada. I would like also to offer in evidence exhibit 4, which is the deed from the numerous heirs of a lady named Gaither who homesteaded the original tract and conveyed away the 3 $\frac{1}{4}$ acres and conveyed this six acres to the Baptist Church for church purposes. I also have an abstract of title available to the Commission if it desires it. The suit to quiet title was brought in 1939.

COMMISSIONER MILES: Do you want us to examine that title?

MR. SETH: I have examined it and it is good. Unless Mr. Graham wants to examine it, I will hold it available to the Commission. We also offer in evidence exhibit 5, which is the plat showing the surrounding conditions.

R. S. CHRISTIE, having been first duly sworn, testified as follows:

DIRECT EXAMINATION BY MR. SETH:

Q. Please state your name.

A. R. S. Christie.

Q. What is your profession?

A. Petroleum engineer.

Q. By whom employed?

A. Amerada Petroleum Co.

Q. I think Mr. Christie has testified so often before this Commission it isn't necessary to offer his qualifications.

COMMISSIONER MILES: Yes.

Q. Are you familiar with the 40-acre tract involved here?

A. Yes, sir.

Q. Does this plat I exhibit represent the real situation down there as to wells drilled?

A. Yes, it does.

Q. The Amerada has had a well on this 40 acres for a good many years?

A. Yes, sir, since February 1937.

Q. And it is still producing?

A. Yes, sir.

Q. At this point I will offer in evidence the records of the Commission which show that this well, beginning November 1, 1939, is on the proration schedule as if it were a 40-acre unit. Is there anything that differentiates this 40 acres from the surrounding acreage, Mr. Christie?

A. No, sir.

Q. It is there being produced as a 40-acre unit--those are

being produced as 40-care units, this should also be produced as a 40-acre unit?

A. That is correct.

Q. Is it your opinion that it should be produced as a unit?

A. Correct.

Q. Take the six acres in the NE $\frac{1}{4}$. Would it be feasible from an economic point of view to drill a well on that six acres?

A. In my opinion, I don't believe it would.

Q. In other words, if a well were drilled on that six acres and the allowable cut down to 6/40 of an allowable it would probably never pay out. Is that the situation?

A. Yes, sir.

Q. In your opinion, should this 40 acres be developed as a unit as to other pays that might be found at deeper depths in the future?

A. Yes, sir.

Q. Is there any way which Amerada could use to get its share of the recoverable oil under this six acres other than by pooling or drilling an independent well?

A. No, sir.

Q. Is it your view that the 40-acre tract would--should be pooled and produced as a unit?

A. Yes, sir.

Q. From all strata that might be found?

A. Yes, sir.

MR. SETH: I believe that is all.

GOVERNOR MABRY: No protest, of course.

COMMISSIONER MILES: Does anyone want to speak on this matter?

MR. SETH: We wish to offer in evidence the registry return receipts. The notice was served on all the royalty owners under the 34 acres and the evidence of service is shown by the return receipts. We would like that considered.

GOVERNOR MABRY: You want to introduce them in evidence?

MR. SETH: We offer them in evidence.

GOVERNOR MABRY: Service was complete and there was no protest?

MR. SETH: Yes.

COMMISSIONER MILES: The order will be granted. Is there anyone else to come before the Commission?

COMMISSIONER SPURRIER: Yes. We have Case No. 143, which was continued to this date by the Commission at the last hearing for lack of appearance. I think probably Mr. Seth will come forward.

MR. OLIVER SETH: If the Commission please, I would like to make an appearance for the Wilson Oil Co. in connection with their application which was Case No. 143 at the last hearing. Mr. Wilson was unable to be present at that time. It is an application for an unorthodox location in the SE $\frac{1}{4}$ NW $\frac{1}{4}$ of Section 23, Township 21 South, Range 34 East. If the Commission please, the original location was made at the proper point, but mechanical difficulties arose at the well which required an abandonment of the original location. The tools were lost and could not be recovered. The rig was consequently moved a short distance south and east to a new location to avoid the original mechanical difficulties. I call Mr. Jim Gaskin at this time.

R. J. GASKIN, having been first duly sworn, testified as follows:

DIRECT EXAMINATION BY MR. OLIVER SETH:

Q. State your full name, Mr. Gaskin.

A. R. J. Gaskin.

Q. Are you employed by the Wilson Oil Co.?

A. I am.

Q. Are you familiar with their application now pending for an unorthodox location?

Q. Will you state briefly to the Commission the original location?

A. The original location was in the SE $\frac{1}{4}$ NW $\frac{1}{4}$ of Section 23, Township 21 South, Range 34 East, Lea County, New Mexico, 2320 feet south of the north line and 2380 west of the east line of the Section.

Q. Will you state who owns the acreage surrounding this location?

A. Wilson Oil Co. owns all the surrounding land.

Q. They lease it?

A. It is a State lease.

Q. They lease it from the State?

A. Yes.

Q. What was the reason for not completing the original location?

A. The original drilling started and they got down about 150 to 200 feet and lost a string of tools, and the fishing job was unsuccessful. They attempted to drill around the string of tools and got the second string of tools tied up. They finally had to abandon the hole with a loss of approximately \$5,000.00.

Q. Where is the proposed location with reference to the original location?

A. It is approximately 90 feet east and 10 feet south.

MR. OLIVER SETH: I believe that is all, if the Commission please.

COMMISSIONER MILES: Does anybody have any statements to make? It is agreeable that the order be granted.

GOVERNOR MABRY: Nobody objects to that? Mr. Spurrier, have you anything else?

A. No, Governor.

GOVERNOR MABRY: Mr. Graham?

A. No.

COMMISSIONER MILES: Let the record show that the order will be granted. Are there any other matters to come before the Commission?

COMMISSIONER SPURRIER: I would like the record to show that Case No. 146, which was the pipeline case, could not be presented today, and the Lea County Operators have requested that it be continued to our hearing on July 29.

COMMISSIONER MILES: Let the record so show.

COMMISSIONER SPURRIER: And further, we have a letter from Petrolite's attorneys requesting that we dismiss the case that Petrolite brought before us several months ago on tank cleaning. In other words, we are requested to dismiss Petrolite's application in the old tank cleaning proposition which is still to be decided at some later date. Lea County Operators there again have not completed their work on the tank cleaning case and will advise us as soon as they do.

GOVERNOR MABRY: It is a petitioner on his own motion who wants the petition dismissed?

COMMISSIONER SPURRIER: Right.

COMMISSIONER MILES: Are some still operating under the temporary arrangement?

COMMISSIONER SPURRIER: Yes. Walter Famarriss and Hardin - Houston.

MR. FAMARRISS: In the case of 104, which I believe is the case number, I was issued an order. I think that has been referred to erroneously as a temporary order. But I believe in my instance I was given an order which was as permanent as this Commission issues. Of course, there is the old clause at the end of the order. I believe at the October 15 hearing that I made the suggestion to the Commission that another applicant, namely, Hardin-Houston be issued a temporary order similar to the order which existed which was given for me personally. That is to clarify the record.

MR. SETH: I think that the Lea County Operators anticipate that it will come up on the 29th.

GOVERNOR MABRY: The order speaks for itself.

MR. FAMARRISS: Yes, the authority is all that I need.

GOVERNOR MABRY: I don't know what the order is.

COMMISSIONER MILES: He is operating?

COMMISSIONER SPURRIER: Yes, it is a temporary permit

MR. FAMARRISS: It still has the holdover clause at the end.

MR. GRAHAM: We held jurisdiction of the case.

GOVERNOR MABRY: Yes.

COMMISSIONER MILES: Any other matters, Mr. Spurrier? I think the order issued in Case No. 110 is temporary in nature, Mr. Famarriss. According to my understanding, you are operating under the same order as Hardin-Houston.

MR. FAMARRISS: Let's put it this way. My order was issued September 9 and theirs issued in October. So, they are operating in line with the order originally offered me.

COMMISSIONER SPURRIER: In the matter of Mr. Seth, in regard to the tank cleaning order, all that I know is that by telephone conversation George Card

MR. SETH: I don't know. I got a thing from Mr. Staley, a draft of a proposal.

COMMISSIONER SPURRIER: That is true, but

MR. SETH: I don't know whether there is anything to be continued or not, but I didn't want it to be overlooked. I don't know whether they have agreed on it or not.

COMMISSIONER SPURRIER: That is the point, Judge. Mr. Card tells me they have not agreed and wish to work on it further.

COMMISSIONER MILES: Couldn't we have the hearing at that time and extend it even if they have not agreed.

COMMISSIONER SPURRIER: I doubt that we have time to advertise, Governor.

GOVERNOR MABRY: That is all we have here today?

COMMISSIONER SPURRIER: Yes, sir.

COMMISSIONER MILES: The hearing is adjourned.

C E R T I F I C A T E

I HEREBY CERTIFY that the foregoing transcript of a hearing before the Oil Conservation Commission of the State of New Mexico in Santa Fe on July 15, 1948, is a true record of such hearing to the best of my knowledge, 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 July 22, 1948.


E. E. GREESON
Court Reporter