Case No.

981

Application, Transcript,
Small Exhibits, Etc.

Before The

OIL CONSERVATION COMMISSION

Santa Fe, New Mexico
November 21, 1955

Examiner Hearing

IN THE MATTER OF:

CASE NO. 981.

TRANSCRIPT OF PROCEEDINGS

Business & Secretarial Service
Room 14, Radio Plaza
Santa Fe, New Mexico

Page _____

NEW MEXICO OIL CONSERVATION COMMISSION
MABRY HALL - STATE CAPITOL
SANTA FE, NEW MEXICO

REGISTER

HEARING DATE November 21, 1955 TIME: 9:00 A.M.

NAME:	REPRESENTING:	LOCATION
J. C. Williamson	Self	Midland
Frank S. Hayford	J. C. Williamson	—
Marvin Rawlins	—	—
Jason Kellahin	O C C	Santa Fe
W. B. Macey	"	"
Ben Nutter	"	"
Jason Kellahin	J. C. Williamson	Santa Fe, N. M.

Before The
OIL CONSERVATION COMMISSION
Santa Fe, New Mexico
November 21, 1955

IN THE MATTER OF: Application of J. C. Williamson for an order approving a non-standard drilling and proration unit consisting of N/2 NE/4 Section 24, Township 17 South, Range 38 East, in the South Knowles-Devonian Pool, Lea County, New Mexico.	Case No. 981

BEFORE:

Warren W. Mankin, Examiner

TRANSCRIPT OF HEARING

HEARING EXAMINER MANKIN: The hearing will come to order. Case 981 is the only case on the docket today. Will all the witnesses that are going to testify in this case stand and be sworn? Proceed.

MR. KELLAHIN: J. C. Kellahin, representing J. C. Williamson, the applicant in the case before the Commission. If the Commission please, this is an application for approval of a non-standard unit in the South Knowles-Devonian Oil Pool. It is brought in order that there can be a compliance with the rule of the Commission entered under Order No. R-638-B, and as a preface to the presentation of our case, I would like to say that it is the intent of the applicant to seek the approval of this merely as a compliance of the rules as they now exist, without in any way committing themselves as to a position on the spacing which is now in effect or may be in effect on this pool

in the future. The first witness will be Mr. Williamson.

J. C. WILLIAMSON,

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

DIRECT EXAMINATION

By MR. KELLAHIN:

Q. Will you state your name, please?

A. J. C. Williamson.

Q. Are you the applicant in Case 981, now before the Commission?

A. Yes sir.

Q. Mr. Williamson, are you familiar with the application?

A. Yes sir.

Q. In which you are seeking approval of a proration unit consisting of the N/2 NE/4, Section 24, Township 17 South, Range 38 East, is that correct?

A. Yes sir. This is Exhibit No. 1.

Q. Exhibit No. 1? What does that show, Mr. Williamson?

A. That just shows the location from a land viewpoint of the 80 acres that we own.

Q. How is that shown on the Exhibit?

A. In red.

Q. And is there a well located on that?

A. Yes, there is a well drilling on it at the present time.

Q. Can you tell us what the present status of that well is?

A. It is approximately 1,200 feet deep.

Q. Now, what is the ownership of that acreage, Mr. Williamson? In the first place, what is the royalty ownership?

A. The royalty ownership is common under the whole NE/4.

Q. And is it fee land?

A. Yes, it is fee land.

Q. What is the ownership on the working interest?

A. The working interest is at present owned one-half by me and one-half by Mr. Hayford and Mr. Rankin.

Q. And how did you acquire that, Mr. Williamson?

A. With a farmout agreement from the Amerada.

Q. Is there anything in that farmout agreement which would affect the formation of a unit other than the one which you are proposing?

A. Yes. Now, Mr. Hammond owns the other part of the lease in the E/2 of Section 24. On our part, we acquired it a little later than Mr. Hammond--considerably later. The Amerada retained a straight 1/8th of 8/8ths override, with the provision that when we had recovered our expenses for drilling and equipping and producing the well, that they are to come back in for a 1/4th working interest, and their 1/8th is to go away at the time, but they come back in for just a full 1/4th working interest.

Q. Under the terms of that agreement, what would be the effect, then, if you have to pool with the S/2 NE/4, Mr. Williamson?

A. Well, in this farmout agreement, it states that if this acreage is forced into pooling with any other acreage, that Amerada gets their 1/8th anyway, and that the 1/4th reversionary stands as stated in the farmout agreement. Now, if we were forced into unitizing with Mr. Hammond, who has only 1/16th on his, it would result in--if the well produced at all--it would result in something like the--well, it would be approximately

this: These figures that I am going to give are just the tenths. They left off half of barrels and things like that.

Q. Are those figures based on the assumption that a well completed in that area would make its full allowable?

A. Yes. And the allowable at the present time is 150 barrels a day in the pool, and these figures necessarily have to be based on 150 barrels a day, thirty days. This is the way it would be if we were granted the unit: Total production would be approximately 4,500 barrels a month, of which a 1/8th royalty would be 562.5 barrels, and the Amerada's 1/8th would be 562.5 barrels; Williamson, Hayford and Rankin's 6/8ths interest would give us 3,375 barrels a month. Now if we were forced into a unit, North-South unit, of the 4,500 or total 8/8ths, Amerada would still get their 1/8th or 562 barrels; the royalty owners would get their 1/8th, of course, 562.5 barrels. Hammond and Warren, having only 1/16th, and the basis which they had proposed to unitize, they would get 1,828 barrels, approximately, and we would get--having to continue to pay our 1/8th, which would make Hammond and Warren pay 1/32nd, us pay 3/32nds--we would then have 11/32nds interest to Hammond and Warren's 13/32nds interest--we would get only 1,547 barrels. Now, that's until pay-back. If the well paid pretty well and did pay back, of the total production the royalty owner would get, as usual, 562.5 barrels. Hammond and Warren would then come in for 14/32nds, which would be 1,968.7 barrels; Amerada would come in for their 1/4th, which would be 7/32nds or 984.3 barrels; Williamson, Hayford and Rankin, who are drilling the well, would come in for 7/32nds, which would be 984 barrels. Now, this against--if we are granted the unit and take the risk on drilling the well, we

would get, after pay-back and after giving Amerada their 1/4th reversionary, 2,973 barrels, if we were granted the unit. If we are not, all we have got out of it is 984.3, under the present set up. Now, that gives Hammond and Warren quite an advantage in our unit, which rightfully belongs to us, through the farmout, and through risk of drilling the well, which we have already started, which is going ahead.

Q. What is the well you are drilling? What is the designation of it, Mr. Williamson?

A. The name?

Q. Yes sir.

A. It is the Williamson No. 1 Amerada Hardin.

Q. And is that in an orthodox location according to pool rules of the South Knowles-Devonian Pool?

A. Yes, it has been approved by the Commission. It is 1,980 from the East and 660 from the North.

Q. Do you have anything you care to add to your testimony?

A. Not at the present time.

Q. That's all.

HEARING EXAMINER MANKIN: Are there any other questions to the witness?

CROSS EXAMINATION

By MR. GURLEY:

Q. One question, Mr. Williamson. At the time you made this farmout agreement with Amerada, you knew, did you not, that these particular pool rules were in effect? That is, that it was an East-West development, and that you knew you were taking a chance? That there had not been any other exceptions made to the East-West division?

A. I didn't know about those rules at the time I took it. Now, I went up on Monday and talked to the Commission in Hobbs and found out the details. I understood that there had been some rules, but I didn't know what they were, and they didn't get down to the Commission. If I remember right, Mr. Rieder told me, I think, that they arrived on Friday, and I went in there and at the time asked for a 330 location from the North line, and he said, "I might have granted this on Friday, but this is Monday and we have received the rules." At that time I had already taken the farmout from the Amerada. I would say this: That I was aware that some changes had been made in this particular pool from the regular New Mexico rules, but I wasn't aware of what they were.

Q. Now, when did you take this farmout?

A. I took that--well, I don't remember the dates exactly, but it was--I know that the actual rules didn't arrive until Friday there, and I took the--I believe it was on Thursday before the rules arrived down at Hobbs. On whatever day they arrived at Hobbs, I took it the day before. Now, I wasn't aware, and of course that is probably my fault, of what Hammond and Warren had presented to the Commission. I wasn't aware of what had gone on up at Santa Fe at the time.

Q. Well, I'd like to ask you a question here, sir. You knew--had you been interested for some time in taking this farmout?

A. No sir. The fact is, I didn't think the farmout was very good until about Thursday of that week, which I cannot remember exactly the dates of it there, and when I was called by Amerada, and I went up to their department and got considerable

information and they asked me to bid on the property, and I did. I bid the highest bid and received the farmout. Everything changed, of course, when the Holloway No. 2 came in high and produced. These prospects can change in a minute, you know, whenever you hit one high.

Q. Had you actually received the farmout or signed an agreement for farmout before or after the effective date of this case?

A. Well, I actually received it afterward, but I didn't know the details of the case until I had already made the agreement. Now, down in Texas, we do things a lot by just simply verbal agreement. I told the Amerada I would take it. They said, "You have it." Now then, it is usually about a week or perhaps two weeks before the actual instruments are signed; but down there, it is just pretty close to an unwritten law that when you say you'll take things, you have them, and you are more or less morally bound to go right ahead. I don't recall the exact date that the Amerada sent it out, but those are the details as to my knowledge of what had gone on at the Commission up here. I did know--we called Mr. Macey and talked to him; I believe it was--I don't remember exactly what day it was, but it was after I had taken the farmout and we found out that they were coming down to Hobbs. Frankly, I went up there Monday with the idea of perhaps getting my application in before the papers arrived, but Mr. Rieder said that they had been notified and that they went into effect, and that he couldn't approve it at the present time for a 330 location up to the north.

Q. At the time you actually signed the farmout, you didn't know the rule was in effect on the East-West?

A. The actual signing of the farmout is quite an anti-climax down there in our dealing. At the time that I said I would take it, I didn't know that you had to have an East-West 80. I knew that it was 80's.

Q. Of course, in New Mexico the rule is in real property the agreement must be signed; that's when--

A. At the time that I signed it, I did know that it was required to be North-South, but that was some ten days later, whenever the letter arrived.

MR. NUTTER: What date was that you signed the contract, Mr. Williamson?

A. I believe it was--well, those dates I don't know. I unfortunately left the instruments at home, but I do know that the letter got lost in the mail with the Amerada, and it was signed ten days after the agreement was made, or even longer than that, because we went over and made a search of the mail box and found it in another company's box, where it had been for five days, and they come out of the head office a lot, and this one did, and it had a ten-day provision in it, and the ten days had just about expired before it finally reached me. Those are things that just happen down there, and they don't make any real difference, because when you say you take one, and if you just skip them, that is a breach of agreement.

Q. Is that the agreement that you have there?

A. No. Unfortunately, I left the agreement at home, but I can send you a copy of it as soon as I get back.

Q. I will appreciate it.

A. I will be glad to do so.

Q. One other thing. At the time that you signed the agreement, wasn't Amerada aware, or was there any discussion at that time of the fact that you were in this pool under this order?

A. Yes, but Amerada didn't give me the details of that. I didn't even know to ask at the time that I took it. Now, I believe that it was stated here a while back that Amerada said that they acquiesced in this agreement. They didn't, I don't believe that you will find that to be the truth. Amerada knew something about it, but they didn't agree to it.

Q. They didn't appear of record and make any protest to it?

A. No. They had a listener, I understand, but they didn't agree to it nor they didn't protest, but they certainly didn't agree to it at the time.

HEARING EXAMINER MANKIN: Are there any other questions of this witness?

By MR. NUTTER:

Q. I would like to review once more the details of this contract. Now is it correct when I say that if your proration unit runs East and West, Amerada retains 1/8th royalty interest until the well is paid out?

A. Yes.

Q. And then when the well is paid out, they get a 1/4th working interest?

A. Yes sir.

Q. And if the proration unit is based on a North-South proration unit, what is the deal there?

A. They still get the same thing. There's a provision in their letter that they still get the same thing. It simply doubles our override and it actually doubles the working interest, if you

can figure it that way. I mean, if it runs North and South, Hammond comes in for their half without the 1/4th reversionary, while we would still have to give our 1/4th reversionary, we'd lose a half interest and finally end up with a 1/4th working interest, Amerada 1/4th working interest, and Hammond and Warren a half working interest.

Q. Of course, if it were drilled that way, Hammond and Warren would help to drill the well.

A. Well, they have offered to so so, yes; but they haven't offered to do so on the same terms that we have got it here. We are not anxious to unitize and don't want to unitize, and we haven't talked of unitization with them, but they haven't also offered to unitize on the basis that we have it on either. They want to unitize it on the basis of their 1/16th

Q. The fact remains that if you had a North-South proration unit, half the acreage would belong to Hammond and Warren.

A. Yes.

Q. They would get half of the production of the well?

A. Yes.

Q. It is reasonable to assume any contract you would sign with them for unitization of the W/2 NE/4 would also call for their sharing the cost of the well.

A. Well, yes. They would have to share their cost of the well, but not their cost of the--take their part of the override or reversionary interest, which isn't on their part of the lease.

Q. Your contract with Amerada is the same, regardless of whether your prorationing goes East and West or North and South?

A. Yes, that's the way the contract reads. And the pay back is when we've actually got our expenses back, or $250,000.

If the well should cost as much as Hammond and Warren say it costs, which they claim they cost as much as $300,000, Amerada has set our pay-back at no more than $250,000.

Q. Another thing; when you made this oral agreement with Amerada to take the farmout, did you go to Amerada's office to do that, or what did you do?

A. Well, down there everything is pretty informal. I did go over and sit down in the office, Mr. Hayford and I, and make the deal right across the table with the Amerada land man, Mr. Cornwall, and we made that deal just--that's where the deal was made. I mean, you don't--

Q. What was the date of that visit to the Amerada office?

A. I don't remember the date of it, exactly. I can figure that out and give you the details. If I had been aware that I would have been asked that, I would have figured it out in detail, but it was--the day I made the deal was on either Thursday or Friday before I appeared up at the Commission on Monday and found out all the details from Mr. Rieder.

By MR. GURLEY

Q. If that's the case then, sir, if it was on Thursday or Friday before you appeared on Monday, and Mr. Rieder had already received the order that this hearing had been had some time before--

A. Yes sir.

Q. The order would have been written at the time that you made the agreement--the initial agreement--not just when you signed it, is that correct?

A. Yes.

Q. And do you remember whether or not there was any discussion at that time of the fact that this was not included in

this pool under this order?

A. Yes. The Amerada land man said, "Now this thing has been set up on 80 acre locations, as I understand."

Q. Did he tell you on an East-West basis?

A. No, he didn't. I didn't hear anything of an East-West basis until I arrived in Hobbs the following Monday.

Q. But you knew that the possibility was that it could have been on an East-West basis?

A. Well, I never thought of it. You know, this is the first thing like this that has happened in Lea County. Usually Lea County is--I mean New Mexico, is well, it is regarded as one of the easiest States to operate in as far as rules and things they have laid down. You can even drill 330's, and more or less--there's no great deal of restrictions, and having been down in the country for--in the Midland district for--I think I've been there eighteen years this makes, and operated under the regular rules, I was taken quite unaware that these rules had been laid out and detailed from this pool, and I thought I could drill even a 330 location, and I asked the Amerada that--if it was all right with them if I could drill a 330 location. They said, "Yes, it is, as far as we're concerned."

Q. One other question. As far as the application is concerned, you state in there that there is evidence showing that the S/2 of this NE/4 is unproductive. What evidence to you have in this regard?

A. Well, I would like to bring another witness to the stand on that, sir.

HEARING EXAMINER MANKIN: Any other questions?

By MR. KELLAHIN:

Q. I would like to ask a couple here, in view of the testimony that has been brought out. Mr. Williamson, were you aware of the fact that the South Knowles-Devonian Pool had been under 80 acre spacing prior to the entry of Order R-638-B, that being the last Order that was entered?

A. The only time that my attention was called to it being 80 acres, is at the time of discussion with the Amerada up there. Now, we can do things pretty fast. We didn't know anything about the change in the valuation of the acreage until--it was either Thursday afternoon or Friday--that we did the dealing, and I believe we accepted that on Friday, wasn't it, Mr. Hayford?

MR. HAYFORD: Thursday or Friday, I dont remember--

A. I don't remember those details there, and when we decided we could take one, we could take it rather quick--ten minutes. It happens, though, the Amerada officials were down in Midland and that's one reason that it went by so fast. After our attention had been called to the new geological data, I believe it was only a matter of four hours, or three hours, or something like that, until we had agreed to take it on that basis. Now, let me tell you that I knew about the 80 acres, but I didn't know about it until that afternoon, but before I said I would take it, I knew about it, but I didn't know about the fact that you had to have it North-South. Now, of course, the State has been selling East-West 80's and North-South 80's and 40's and everything, and I wasn't aware of proceedings before the Conservation Commission as far as the South Knowles Pool was concerned, putting these restrictions on. In fact, I got--

By MR. GURLEY:

Q. One other question, sir. Now, had you been considering

this farmout from Amarada for any length of time? Or, in other words, did you have any idea that you might take it? Had they offered it to you prior to the time that you discussed it with the land man at this particular Thursday or Friday?

A. At the time the Davis No. 2 was drilled, which is in the South and East of Section 13, Amerada offered this farmout all around the town. I looked at it at the time, which was considerably before this--oh, it must have been, I imagine, six months. It didn't look good; I didn't consider it very much, but I knew it was there. I called them and told them I wasn't interested in the farmout.

Q. When were you next contacted on the farmout, sir?

A. That afternoon of Thursday or Friday that we have been speaking about, and I can give you those exact dates by going back to--

Q. You were contacted on the same day? That's the first that you---

A. Yes sir; Oh, yes sir.

By MR. NUTTER:

Q. And that was immediately after that Holloman No. 2 was brought in?

A. Yes. That's the only way that we could make any headway against most of the companies, is by quick decisions, and we make those quick decisions. It seems a little strange to you, perhaps, sir, that it could be made within hours, is that right?

Q. No, I can understand that.

A. It can be--in the way we operate, it does. They are made in hours, and that isn't unusual to make one that quick.

By MR. KELLAHIN:

Q. Just one thing to straighten this out, Mr. Williamson. Were you aware of a Commission rule requiring East and West 80's as a standard unit in the South Knowles at the time you took this farmout?

A. No sir, but I was aware that they had split it up in 80's tentatively.

Q. Correction, please. I would like the Examiner to take note of the various orders that have heretofore been entered in Case 819 in connection with the spacing and proration units. I don't have those rules with me, but I think that the record will show that the first order entered, being Order No. R-638, which created 80 acre drilling proration units without any designation as to whether they are East-West or North-South, that by Order 638-A, the Commission, on June 22nd---

HEARING EXAMINER MANKIN: I believe you'll find, Mr. Kellahin, that 638 and 639 were--

MR. KELLAHIN: Then 638 reopened the application and 638-B created the units. That's all I have.

HEARING EXAMINER MANKIN: Any other questions of the witness? If not, the witness may be excused.

MR. KELLAHIN: We offer in evidence Applicant's Exhibit No. 1.

HEARING EXAMINER MANKIN: Is there any objection to entering Exhibit No. 1 for the Applicant as evidence? If not, it will be so entered.

MR. KELLAHIN: I would like to call Mr. Hayford.

FRANK S. HAYFORD,

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

DIRECT EXAMINATION

By MR. KELLAHIN:

Q. Will you state your name, please?

A. Frank S. Hayford.

Q. Mr. Hayford, are you connected or associated with Mr. Williamson in the operations of the South Knowles-Devonian Pool?

A. Yes, I am.

Q. What is that relationship?

A. We are partners. I am owner of 1/4th interest in the drilling of the well.

Q. Mr. Hayford, what is your profession?

A. I am an independent geologist.

Q. Have you ever testified before this Commission?

A. No, I haven't.

Q. What qualifications do you have as a geologist?

A. I graduated in 1947 with a Master's Degree in geology, having gotten my Bachelor's in 1946 from Colorado College. I went to work for Amerada Petroleum Company as a geologist. I worked for them for two and a half years, at which time I went independent, and have been independent in this area for approximately the last six years.

Q. You hold a Master's Degree, did you say?

A. Yes.

MR. KELLAHIN: Are the witness's qualifications acceptable to the Commission?

HEARING EXAMINER MANKIN: One other thing; you have worked the New Mexico area?

A. Yes, I have.

HEARING EXAMINER MANKIN: In addition to West Texas?

A. Yes, I have.

HEARING EXAMINER MANKIN: Yes, they are.

Q. Now, Mr. Hayford, do you have an Exhibit showing the contours of this area?

A. I would like to first bring back an exhibit that appeared before the Commission at the last hearing in regard to a request made by us for a 330 location. An Exhibit used by Mr. Hammond. This Exhibit represents a contour map in case 819. This map was shown by a geologist for Mr. Hammond, his district geologist for West Texas-New Mexico area, Mr. Elliott, and represents a geological opinion, other than mine, as to the structure in the area. The map plainly shows on the basis of the water table established by Mr. Hammond in the field by wells making water, of his, the northern part of the field, datum of 8,530 as he has stated it, shows that the acreage owned by him, south of our lease, to be below the water table, as you can see by projecting it; your 8,550 contour goes into theirs and your 8,530 would hit approximately a little more than half way between the two contours, which would be 8,550 and 8,500. The location would be approximately here. In other words--

Q. When you say "here", what do you mean?

A. On the minus 8,550 contour. In other words, the location on the present pool set up would force them to drill a dry hole down there if it were to be drilled; on the other hand, the 80 acres owned by us would appear to be productive except the southeast approximate 30 acres, I'd say.

Q. Have you prepared contours--before we go to that, I would like to ask that the Examiner take note of the testimony offered by Andy Elliott in behalf of Warren and Hammond in Case 819, in connection with this Exhibit, since it was prepared by him and offered by him to prove the same identical point we are showing here. Have you prepared an Exhibit showing contours that you have determined, Mr. Hayford?

A. Yes.

Q. Exhibit No. 3, Mr. Hayford, what does that show?

A. Referring to Exhibit No. 3, this is my interpretation of the pool structure as I see it, and varies in some respect to that of Mr. Hammond.

Q. What have you contoured the structure on?

A. The basis of the contours is the top of the Devonian. It is contoured on a twenty-five foot interval.

Q. What does that show in regard to the structure in the area of the proposed unit?

A. It shows the 80 acres in question here as being productive down to the possibility of the last five acres in the southeast corner of the 80 acres, to be below the water, but no more than that; the water is shown in red.

Q. At what contour interval is your water-oil contact shown?

A. I have used the contour interval of an 8,530 for the reason that while there is a possibility that the water table is lower, on the basis of the Number 2 Federal Davis, a prudent operator in the area would have to use 8,530, considering his risks, due to the fact that there are wells in the field producing water at an 8,530 datum. You could not prudently

draw any water contact any lower than that and accept the risk involved at a test of some 12,000 feet.

Q. On the basis of your information as shown by Exhibit No. 3, in your opinion would the S/2 NE/4 of Section 24 be productive of oil?

A. No, it would not.

Q. Would the N/2 NE/4 be productive?

A. Yes, this half should be productive and efficiently have an 80 acres to drain.

Q. Could you tell the Examiner just briefly the source of your information whereby you arrived at those contours?

A. Well, the basis for my datums are the Schlumberger tops which I picked in the area, and my interpretation of the possibility of some separation in the middle of the structures is due to the fact that there seems to be some slight difference in the character of the reservoir in the two wells so drilled in the South part of the field.

Q. Was that plat prepared by you, Mr. Hayford?

A. Yes, it was.

Q. Have you made any study of drainage patterns on the basis of 80 acres?

A. Yes, I have.

Q. Is there anything you want to add in connection with Exhibit No. 3?

A. No, I think it speaks for itself.

By HEARING EXAMINER MANKIN:

Q. Before you go on to another Exhibit, I want to ask a question, Mr. Hayford. You indicate an oil-water contact surrounding completely the known reservoir at the present time,

whether it be two separate structures combined as one or what it might be. What was the basis for your picking the oil-water contact as you did? Are you using the same oil-water contact as Mr. Elliott used, or did you make further interpretation of it?

A. No, as I pointed out, I felt as though any operator that was going to take the risk of drilling a test there would have to assume that he was not going to get oil below the datum of wells in the field making water. There are wells in this field owned by Hammond and Warren which are making water at a datum slightly above a minus 8,530. That was the reason for picking 8,530 as a water table. There is the possibility that the water table may be a little bit different, but when you have pool wells making water at a certain datum, a prudent operator doesn't feel inclined to dig deeper than that, I do not believe, or to count on anything further extension of the productivity below that datum.

Q. Do you feel that this is a common water drive in the field or even capable of determining whether this is a bottom water drive, edge water drive, or what it might be?

A. Well, a study of the field in that regard is going to be added considerably to the present drilling of wells there and the histories on production as it comes up. There is some indication at present that at least part of the field is a bottom hole water drive, since from testimony I have read concerning Mr. Hammond's engineer, the wells in the North part may have coned some water. I believe this: In my opinion--you asked for it, of course--the field is probably both an edge

water drive and a bottom hole drive, with the biggest influence coming on an edge water drive. I state this because of my experience with other Devonian fields similar to this.

Q. The reason I asked that, I noticed you pulled your structure--the oil water contact--you pulled it a way further and sharply to the North, as you go from Section 24 to Section 13, which is quite a great difference as to what Mr. Elliott showed on that. That's the reason I asked that question. Whether it was an edge drive or bottom drive or a combination of both.

A. Perhaps you have reference to the West side of Mr. Elliott's map?

Q. Well, I have particular reference to the West side as you have drawn your oil-water contact going from Section 24 up toward 13--no, on the East side, going North, as compared to his oil-water contact, which ran pretty much in a Southwest Northeast direction, whereas you go pretty nearly North from your oil-water contact. I didn't know that you had any additional points to draw that on.

A. No, I haven't. I think that's more a matter of interpretation. My actual opinion of the field is that it runs a little more North-South, I believe, than Mr. Elliott shows.

By MR. KELLAHIN:

Q. Mr. Hayford, referring to Exhibit No. 4, what does that show?

A. Exhibit No. 4 is a map showing an 80 acre theoretical drainage pattern in the Jones Ranch field in Yoakum and Gaines Counties in Texas.

Q. Was that map prepared by you?

A. Yes, it was.

Q. In the Jones Ranch field, what is the condition arising in that field?

A. This is a Devonian producing field, producing from the Devonian Formation, and is very similar in nature to the South Knowles-Devonian. Incidentally, this field, while it is in Texas, is only approximately ten miles from the South Knowles-Devonian.

Q. What do the yellow circles on the map show, Mr. Hayford?

A. Each yellow circle represents 80 acres in a circular circumference around the well, and represents the theoretical area each well would drain, should the well be capable of draining 80 acres, which is presumed. The point of interest I want to bring up in this particular example of 80 acre drainage patterns is that the wells are drilled in such a manner that you can trend your 80 acres either North or South, as you will note. The 80 acre unit can be trended either up North-South or East-West, in all cases in every well in this field.

Q. Would the change of proration unit materially affect the drainage in any way?

A. No, not the slightest. In no case would the proration unit have any effect upon the drainage.

Q. Assuming that one well would drain 80 acres, Mr. Hayford, would the pattern of the unit, whether North-South or East-West have any effect upon where the oil came from?

A. None, no.

Q. Have you anything to add to that?

A. No, except that you are looking at a field that is--

there are several other fields similar to this in Texas in which 80 acre units have been designated, and this is the pattern that is attempted to being followed. You can see why. It is an efficient method of draining a reservoir on an 80 acre spacing program, so--

Q. Have you prepared a similar Exhibit showing the drainage pattern in the South Knowles-Devonian Pool?

A. Yes, I have.

By HEARING EXAMINER MANKIN:

Q. Before you go any further, what you are attempting to say, I believe, Mr. Hayford, is that what you have here is a true 80 acre spacing, regardless of whether it is East-West or North-South.

A. Right.

Q. That may or may not be the situation in the field in question.

A. Right. I would now like to show you--this is the South Knowles-Devonian Field, drawn on the same basis.

By MR. KELLAHIN:

Q. What do the circles on Exhibit No. 5 show, Mr. Hayford?

A. This map is prepared on the same basis as Exhibit No. 4, showing 80 acre drainage patterns on the South Knowles Devonian Field. The yellow represents an 80 acre unit, which would theoretically be drained by one well.

Q. In other words, then, each of those circles purports to include 80 acres, is that correct?

A. That is correct.

Q. Is that a regular spacing pattern?

A. It represents no regular spacing pattern that I am

aware of.

Q. Does it represent a regular 40 acre spacing pattern?

A. It could be construed as a 40 acre spacing pattern of sorts.

Q. To locate a well, as is proposed--as the well now being drilled by Williamson is located in an East-West unit or a North-South unit, would that make any difference in the pattern?

A. It is obvious that since there is no pattern exists, that whether we trend the 80 in question North or South, it will not break any pattern. Comparison of the two maps will show you that if it is an unorthadox location up here, it would stick out like a sore thumb and would be obviously out of place. In the pattern which doesn't exist on the South Knowles at present, a turning on edge or East-West 80, there would be no effect at all on the overall pattern of the field.

Q. In your opinion and referring specifically to this Exhibit, Mr. Hayford, will one well drain the 80 acre pattern as shown by that Exhibit?

A. In all probability, yes.

Q. It will drain 80 acres?

A. I do not say that one well will drain 80 acres. Study in regard to that particular aspect of the South Knowles-Devonian Field I haven't completed; there may or may not be the possibility that 80 acres will be drained by one well.

Q. The Exhibit, was it designed to show that one well will drain 80 acres?

A. No, it is not. It is designed to show a pattern of drilling to be compared with that of a set pattern as against

one that is not a set pattern. The comparison of the patterns is the thing I wish to point out. I do not want to suggest that the field may--one well may or may not drain successfully an 80 acre unit.

Q. Do you have anything to add to that, Mr. Hayford?

A. No.

Q. In your opinion, and based on your study of the South Knowles-Devonian Pool, with particular reference to the NE/4, would attributing the S/2 NE/4 to a well located in the NE/4 result in the attribution of dry acreage to that well?

A. Yes, it would.

Q. And would that then result in the drilling of unnecessary wells, if we assume, as the Commission has found, that one well will drain 80 acres?

A. On that assumption, yes. If the Commission were to see fit to unitize the N/2 NE/4 with the S/2 of the same quarter, this would, in fact, unitize acreage that has no--is worthless or without any drainage possible to acreage that has oil under it, to the best of our knowledge at this time, and further would force us to drill two wells to drain one 80 acre unit; in other words, we would have to drill in order to meet offsets; we would have to drill in the 660 out of the NE/4, and drill two wells on an 80 acres which would have a productivity of only 80 acres of drainage. In other words, we would be drilling two wells where one well would accomplish the purpose, if it would drain 80 acres.

Q. Have you anything to add to that?

A. No.

By HEARING EXAMINER MANKIN:

Q. I take it from your testimony, then, Mr. Hayford, that the well that Hammond and Warren is drilling in Section 19 you do not feel is going to be productive?

A. I do not.

Q. I am just trying to get some history.

A. My conversation with Mr. Hammond would lead me to believe that he is drilling it more on the basis of land problems that it is geological.

Q. Any questions of the witness? If you you are excused.

MR. KELLAHIN: We offer in evidence Exhibits Nos. 2 through 5, inclusive.

HEARING EXAMINER MANKIN: Is there objection to the entering of these Exhibits? If not, they will be so entered in this case.

MR. KELLAHIN: That completes our presentation.

HEARING EXAMINER MANKIN: Does anyone have a statement to make in this case? If not, we will take the case under advisement. Thank you.

HEARING CONCLUDED.

STATE OF NEW MEXICO)
: SS
COUNTY OF SANTA FE)

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

Dated at Santa Fe, New Mexico this 29th day of November, 1955.

Joy E. Fincke
Reporter

BEFORE THE OIL CONSERVATION COMMISSION

OF THE STATE OF NEW MEXICO

APPLICATION OF J. C. WILLIAMSON FOR APPROVAL OF A NON-STANDARD DRILLING AND PRORATION UNIT CONSISTING OF THE N/2 NE/4, SECTION 24, T 17 S, R 38 E, N.M.P.M., SOUTH KNOWLES-DEVONIAN POOL, LEA COUNTY, NEW MEXICO.

Case 981

APPLICATION

Comes now J. C. Williamson, and shows the Oil Conservation Commission of New Mexico:

1. That applicant is owner of the exclusive right to drill for andproduce oil and/or gas from the South Knowles-Devonian Pool, insofar as the N/2 NE/4 of Section 24, Township 17 South, Range 38 East, N.M.P.M., Lea County, New Mexico, is concerned.

2. That the S/2 NE/4, Section 24, Township 17 South, Range 38 East, N.M.P.M., is owned and held by J. L. Hamon and Warren Petroleum Company.

3. That evidence presently available indicates that the S/2 NE/4 of Section 24, Township 17 South, Range 38 East, N.M.P.M. is unproductive of oil or gas.

4. That by the provisions of Paragraph 1, Order No. R-638-B, an 80-acre proration unit is established for the South Knowles-Devonian Pool, said proration unit to consist of either the E/2 or W/2 of each governmental quarter section.

5. That by the provisions of Paragraph 4 of said Order No. R-638-B, the maximum allowable for any well located on an 80-acre proration unit is set at 150 barrels per day, subject to gas-oil ratio limitations and adjustment.

6. That if applicant is required to pool his properties with those in the S/2 NE/4, Section 24, it will result in the creation of different royalty and overriding royalty rights, to applicant's detriment, without any increase in the amount of oil

or gas recovered, and will result in the attribution of acreage to a unit which cannot reasonably be presumed to be productive.

7. That unless applicant is granted an exception to the provisions of Paragraph 1 of said Order No. R-638-B, to allow creation of a drilling and proration unit consisting of the N/2 NE/4 of Section 24, Township 17 South, Range 38 East, N.M.P.M., he will be denied the right to recover his fair share of the oil or gas underlying his property, and will be denied the right to use his fair share of the reservoir energy for the production of oil from said property, and that denial of such right will result in the drilling of unnecessary wells, and result in waste.

WHEREFORE, applicant prays that this Commission, after notice and hearing as required by law, enter its order approving a drilling and proration unit consisting of the N/2 NE/4 of Section 24, Township 17 South, Range 38 East, N.M.P.M., as an exception to the provisions of Order No. R-638-B, in the South Knowles-Devonian Pool, Lea County, New Mexico.

Applicant further prays that this matter be set for special hearing before the Commission, or in the alternative, that it be set for hearing before an examiner as provided by law, in order that applicant may immediately commence drilling of a well on the unit proposed herein.

Respectfully submitted,

By Jason W. Kellahin
Jason W. Kellahin
Attorney for Applicant

54½ East San Francisco Street
Santa Fe, New Mexico

[illegible]

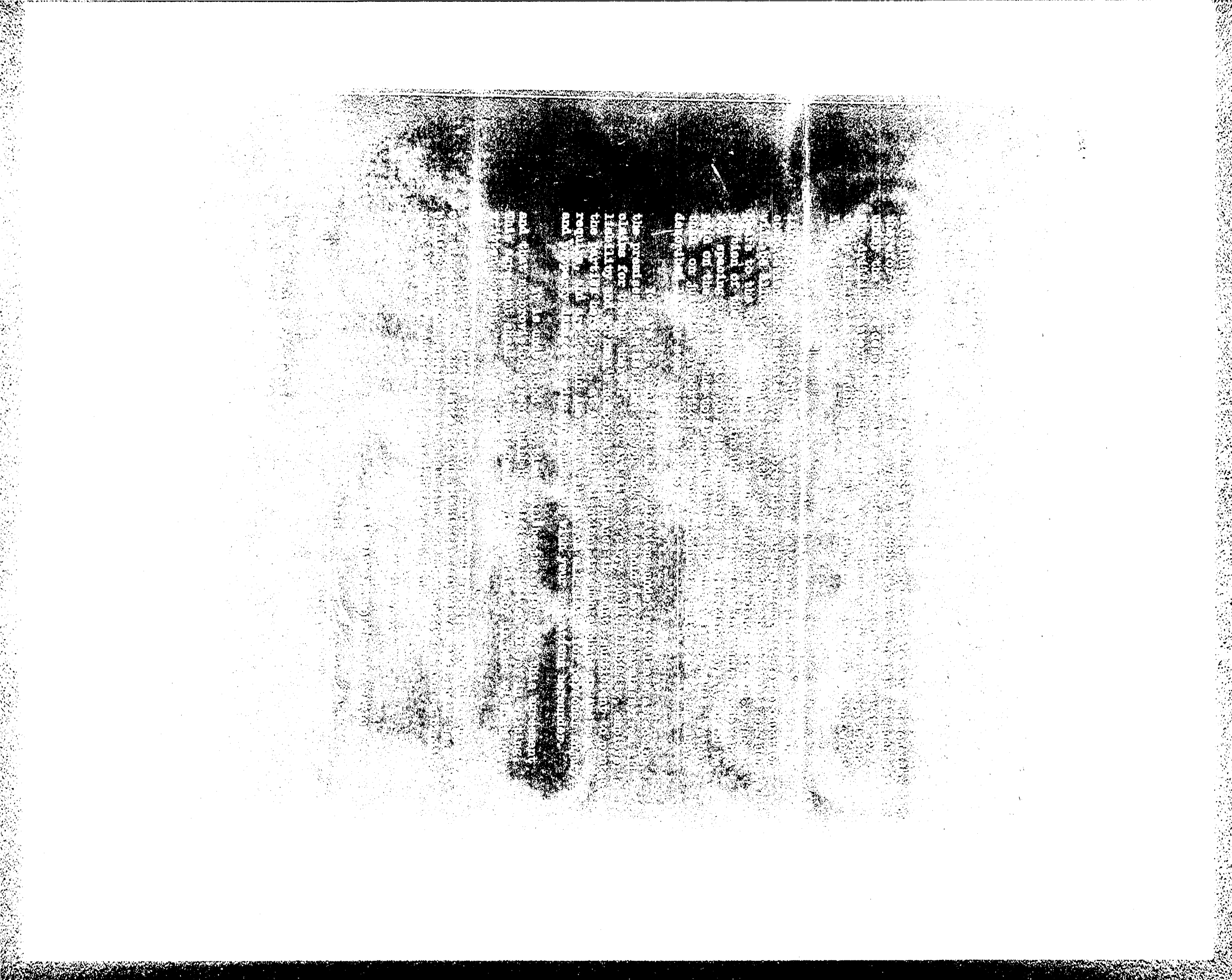
[illegible] other remuneration [illegible] by us in writing, [illegible] log or the well, [illegible] and upon completion of the well [illegible] if a dry hole, a certified copy of the official plugging report, all in such numbers of copies as our geologist may request.

Prior to abandonment we may, at our [illegible] expense, including payment to you for shutdown time, lower a geophone within the hole and make seismographic observations around it, or make any other type of special survey.

Upon your completion of the well as herein provided, we shall execute and deliver to you an assignment of the lease to the land as above agreed. Such assignment shall be made without warranty of title, express or implied. We shall have no obligation to furnish title information, other than such as may be in our files, or to perform any curative work.

In our assignment to you we shall except and reserve to ourselves, as an overriding royalty, 1/8th to 3/8ths of all oil, gas and other hydrocarbons produced and saved, [illegible] or severance taxes, under the above described leases or any extensions or renewals thereof. In the event the above described leases covers less than a full mineral interest, this overriding royalty shall be proportionately reduced.

As to the well you are required to drill under this agreement or any subsequent well you may drill on the above described land under the above described lease or any extensions or renewals thereof, you will with respect to each such well give us written notice when you have recovered out of production from such well, [illegible] of the land [illegible] our above reserved overriding royalty, gross production taxes and [illegible] operating expenses (not [illegible]) [illegible] equipping and completing such well, or [illegible] $50,000.00 [illegible]



OIL CONSERVATION COMMISSION
P. O. BOX 871
SANTA FE, NEW MEXICO

December 30, 1955

COPY

Mr. Jason Kellahin
P.O. Box 597
Santa Fe, New Mexico

Dear Sir:

In behalf of your client, J. C. Williamson, we enclose two copies of Order R-735 issued December 14, 1955, by the Oil Conservation Commission in Case 981, which was heard on November 21st.

Very truly yours,

W. B. Macey
Secretary - Director

WBM:brp
Encls.

BEFORE THE OIL CONSERVATION COMMISSION
OF THE STATE OF NEW MEXICO

IN THE MATTER OF THE HEARING
CALLED BY THE OIL CONSERVATION
COMMISSION OF THE STATE OF NEW
MEXICO FOR THE PURPOSE OF
CONSIDERING:

CASE NO. 981
ORDER NO. R-735

THE APPLICATION OF J. C. WILLIAMSON
FOR AN ORDER GRANTING APPROVAL OF A
NON-STANDARD DRILLING AND PRORATION
UNIT IN EXCEPTION TO PARAGRAPH (1)
OF THE SPECIAL RULES AND REGULATIONS
OF THE SOUTH KNOWLES-DEVONIAN POOL
AS CONTAINED IN ORDER NO. R-638-B
IN ESTABLISHMENT OF A NON-STANDARD
PRORATION UNIT OF 80 CONTIGUOUS
ACRES CONSISTING OF THE N/2 NE/4
SECTION 24, TOWNSHIP 17 SOUTH,
RANGE 38 EAST, NMPM, LEA COUNTY,
NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 o'clock a.m. on November 21, 1955 at Santa Fe, New Mexico, before Warren W. Mankin, Examiner, duly appointed by the Oil Conservation Commission of New Mexico in accordance with Rule 1214 of Order No. R-681.

NOW, on this 14th day of December, 1955, the Oil Conservation Commission of New Mexico, hereinafter referred to as the "Commission", a quorum being present, having considered said application, the transcript of testimony and record, and the recommendations of the Examiner, Warren W. Mankin, and being fully advised in the premises;

FINDS:

(1) That due notice of the time and place of hearing and the purpose thereof having been given as required by law, the Commission has jurisdiction of this case and the subject matter thereof.

(2) That the Commission has power and authority after due notice and hearing to permit the formation of a proration unit consisting of other than an E/2 and W/2 of each governmental quarter section, in the area adjacent to the South Knowles-Devonian Pool.

(3) That applicant, J. C. Williamson and others are the owners by farmout agreement of a working interest in certain land adjacent to the South Knowles-Devonian Pool described as follows:

TOWNSHIP 17 SOUTH, RANGE 38 EAST, NMPM
N/2 NE/4 Section 24

(4) That the N/2 NE/4 of Section 24, Township 17 South, Range 38 East, NMPM, is productive of oil or gas in commercial quantities from the Devonian formation.

(5) That the evidence indicates that the S/2 NE/4 of Section 24, Township 17 South, Range 38 East, NMPM, is unproductive of oil or gas in commercial quantities from the Devonian Formation.

(6) That applicant is now in process of drilling their Amerada-Hardin Well No. 1, located in the NW/4 NE/4 of Section 24, Township 17 South, Range 38 East, NMPM, adjacent to the South Knowles-Devonian Pool.

(7) That it is impractical from both an economic and conservation standpoint to pool applicant's said lease with aforesaid adjoining acreage in the area adjacent to the South Knowles-Devonian Pool.

(8) That unless a proration unit consisting of applicant's aforesaid acreage is permitted, applicant will be deprived of an opportunity to recover its just and equitable share of the oil in the South Knowles-Devonian Pool.

(9) That the creation of the proration unit consisting of the aforesaid acreage will not cause, but will prevent waste and will protect correlative rights.

IT IS THEREFORE ORDERED:

That the application of J. C. Williamson for approval of a non-standard drilling and proration unit in the area adjacent to the South Knowles-Devonian Pool consisting of the following described acreage:

TOWNSHIP 17 SOUTH, RANGE 38 EAST, NMPM
N/2 NE/4 Section 24

be and the same is hereby approved and a proration unit consisting of the aforesaid acreage is hereby created.

IT IS FURTHER ORDERED:

That the above described acreage be and the same is hereby dedicated to applicant's Amerada-Hardin Well No. 1 now drilling in the NW/4 NE/4 of said Section 24.

DONE at Santa Fe, New Mexico on the day and year hereinabove, designated.

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

John F. Simms

JOHN F. SIMMS, Chairman

E. S. Walker

E. S. WALKER, Member

W B Macey

W. B. MACEY, Member and Secretary

ga

OIL CONSERVATION COMMISSION
P. O. BOX 871
SANTA FE, NEW MEXICO

November 18, 1955

COPY

Mr. Clarence Hinkle
P.O. Box 614
Roswell, New Mexico

Dear Sir:

Enclosed please find a copy of the application of J. C. Williamson in Case 981 for a non-standard proration unit in the South Knowles-Devonian Oil Pool. This case is set for hearing on November 21st.

Very truly yours,

W. B. Macey
Secretary - Director

WBM:brp
Encl.