

*Wilson Case*

BEFORE THE  
OIL CONSERVATION COMMISSION  
Santa Fe, New Mexico  
July 17, 1957

TRANSCRIPT OF HEARING

Case 1277

DEARNLEY - MEIER & ASSOCIATES  
INCORPORATED  
GENERAL LAW REPORTERS  
ALBUQUERQUE - SANTE FE  
3-6691 2-2211

BEFORE THE  
OIL CONSERVATION COMMISSION  
Santa Fe, New Mexico  
July 17, 1957

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

Application of the Oil Conservation Commission at :  
the request of Wilson Oil Company for an order :  
establishing a new oil pool with special pool :  
rules in the Potash-Oil Area, Lea County, New :  
Mexico, in accordance with Section 3, Paragraph :  
III, of Order R-111-A. Applicant, in the above- :  
styled cause, seeks an order creating a new oil :  
pool in the area of Wilson Oil Company's recently :  
completed oil well located in the NE/4 NE/4 : Case  
Section 21, Township 20 South, Range 34 East, : 1277  
Lea County, New Mexico; and for the promulgation :  
of special pool rules to govern future drilling :  
in said pool in order to afford adequate protec- :  
tion for the potash deposits in the area. :  
----- :

BEFORE:

- Mr. A. L. Porter
- Mr. Murray Morgan
- Honorable Edwin L. Mechem

TRANSCRIPT OF HEARING

MR. PORTER: We will take up next, Case 1277.

MR. COOLEY: Application of the Oil Conservation Commission  
at the request of Wilson Oil Company for an order establishing a  
new oil pool with special pool rules in the Potash-Oil Area, Lea  
County, New Mexico, in accordance with Section 3, Paragraph III, of  
Order R-111-A.

MR. PORTER: You may proceed.

MR. LOSEE: Let the record show that A. J. Losee appears for the applicant, Wilson Oil Company, and let me make a short statement, for clarification of the application.

On February 11th of 1957 Wilson Oil Company filed an application in Case 1215 for an exception to the Commission's Order R-111-A. That order R-111-A established the Potash Area and casing program for exploratory wells drilled in the defined Potash Area. Case 1215 was heard in February of this year, and the Commission set forth its order, Wilson order, drilled their No. 1 Muse in the Northeast, Northeast of Section 21, Township 20 South, Range 34 East, and completed it as a discovery well, producing from the Yates formation.

In accordance with R-111-A, the applicant filed a request which seeks an order creating a new pool, and for the promulgation of new pool rules to govern future drilling within the pool located within the Potash Area.

We have one witness, Mr. Raymond Lamb. Will you stand and be sworn?

MR. PORTER: Mr. Cooley, will you swear the witness?

(Witness sworn.)

RAYMOND LAMB

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

DIRECT EXAMINATION

By MR. LOSEE:

Q Will you state your name to the Commission, please?

A Raymond Lamb.

Q By whom are you employed? A Wilson Oil Company.

Q In what capacity?

A Vice President in charge of production and engineering.

Q Have you previously testified before this Commission as an engineering expert? A I have.

MR. LOSEE: Are Mr. Lamb's qualifications accepted?

MR. PORTER: They are.

Q In connection with this application, have you notified the oil and gas lease holders in and offsetting the proposed new pool?

A I have notified Richardson and Bass, The Texas Company, Atlantic Refining Company, Drilling and Exploration Company, Kerr-McGee Oil Industries, and the Phillips Petroleum Company.

Q Have you also notified of this application, the Potash Company of America? A I have.

Q Do they hold the potash permits and leases in the proposed new pool and offsetting the proposed new pool?

A That is right.

Q Will the replies that you have be introduced in evidence?

A They will.

Q After the completion of your No. 1 Muse, did you file a Form C-123 with the Commission? A That is correct.

Q Proposing a new pool be created?

A It was filed immediately upon completion, and made certain recommendations for the creation of a new pool.

Q I hand you what has been marked Exhibit No. 1 and ask if you will state to the Commission what the exhibit is.

(Marked Wilson's Exhibit No. 1, for identification.)

A Exhibit No. 1 is a plat showing the ownership of oil and gas leases, and also designating the Federal potash permits, also the producing wells and the dry holes drilled in the area. Also indicated on this plat is our recommendation for the new pool designation, and it is colored in blue.

Q Will you read the description that you propose to have located within this new pool?

A It will be described as the West half Southwest Quarter, Section 15, Southeast Quarter Section 16, the East half and the East half of the Northwest of Section 21, the West half of the West half of Section 22 in Township 20 South, Range 34 East, Lea County, New Mexico.

Q Why do you propose that this area be designated as a new pool?

A Based upon the geological information obtained from the wells drilled in the area, including the discovery well, it is our opinion that this area will cover the primary producing area.

Q What name do you suggest that this new pool be designated?

A We suggest the name Middlelynch because of the possibility of the Lynch Pool extending to the North and eventually including the area. The reason for not using the name North Lynch, there is already a North Lynch.

Q I'll hand you what has been marked Exhibit 2, and ask if you will state what the instrument is.

(Marked Wilson's Exhibit No. 2,  
for identification.)

A Exhibit 2 is a tabulation of casing records on all wells drilled in the Township 20 South, Range 34 East. This information is taken from the records of the Oil Conservation Commission files and the United States Geological Survey. It is a tabulation to assist in determining previous casing programs. It was submitted in Case 1215, but has been revised to include new drilling in the area.

Q Did the information contained in this casing record assist you in making the recommendations for the field rules of this new pool?

A It did.

Q I hand you what has been marked Exhibit 3, and ask if you will identify the instrument.

(Marked Wilson's Exhibit No. 3,  
for identification.)

A Exhibit 3 is a diagram of the proposed casing program for cable tools to cover the drilling in the area defined in the new

pool, and is identical to the casing program proposed in Case 1215.

The exact sizes of casing have been indicated, however, they are submitted as an example and it is not expected that other operators should be forced to comply with these particular sizes.

Q Would you state what this exhibit shows as recommendations for cable tools and where the casing will be set?

A As an example, the 13 3/8" casing will be set on the top of the Red Bed formation, and will shut off all surface waters from recent beds; another string at approximately 600 feet which will be in the Chinle formation, and will shut off water and dry cave zones; a third string of 8 5/8" to be set approximately 1200 feet, which will be through all shallow waters including the Santa Rosa, and this string of casing to be set in the Dewey Lake formation. The oil string to be set below the Salado and the Tansil and into the Yates formation, and will serve as the oil string.

Q Do you recommend to the Commission the information contained on this exhibit for cable tool holes in the proposed new pool?

A I do.

(Marked Wilson's Exhibit No. 4, for identification.)

Q I hand you what has been marked Exhibit 4 and ask if you will identify the instrument.

A Exhibit 4 is a similar diagram for rotary drill holes, and it indicates that surface pipe shall be set in the top of the Red

Bed formation and cemented solid, the oil string to be set below the Salado and Tansil and into the Yates formation, and this particular string will be cemented solid in the event production is obtained. I might repeat that on the cable tool oil string, that string will also be cemented solid.

Q You have also on this exhibit, designated the size of casing. Is it your intention to recommend to the Commission that a specific size casing be entered in the order for the field rules?

A It is not.

Q Would that matter be left to the individual operator?

A It should be left to the operator himself, because he has certain factors to take into consideration, whether the well should be deepened or possible pay zone, or whether he has set the casing to extend to his total rights.

Q In your opinion will the casing programs for both a cable tool and rotary hole protect the oil and gas and potash reserve?

A It will adequately protect the oil, gas and potash deposits.

Q Mr. Lamb, Order R-111-A of the Commission with reference to the salt protection string, which I assume in your recommendation to be the same as the production string, provides that fluid used to mix with the cement shall be saturated with salts common to zones penetrated, and with suitable proportions but with not less than one thousand percent of calcium chloride by weight of cement. Do you feel this requirement should be included in the pool rules for the new pool?

A Taking into consideration the information we have obtained in drilling the No. 1 Muse, we have found that it is advisable to stay away from excessive hydrostatic head pressure after cement slurries. In this case we, of necessity, need to lighten the slurry to a minimum, and one other precaution we need to take is for flash setting of cement and use of saturated salt brines and calcium chlorides.

Q With reference to your feeling that the cement slurry should be lightened, what would occur if it were too heavy?

A It is our feeling that the cement has a good possibility of entering the producing formation. For example, at the time the discovery well was hydrofract, the hydrostatic head of fluid was approximately 1200 pounds and the breaking pressure was 1800 pounds, which gives a total of 3,000 pounds.

Q In other words, unless this slurry is lightened by the use of some other mixture, there is a possibility that it would penetrate the producing formation?

A That is correct. Also would lead to a hazard of imperfect job in the protection of the potash.

Q You mentioned a possibility of the flash setting of the cement by the use of the saturated brine solution. Would you explain that a little further as to what causes the flash setting?

A Well, I am no expert on the chemistry of cement, but it is my understanding that a high proportion of calcium chloride and used

with a saturated brine which could possibly contain magnesium chloride, will cause a flash setout of the cement and would set in the casing rather than behind it.

(Marked Wilson's Exhibit No. 5, for identification.)

Q I hand you what has been marked Exhibit No. 5 and ask if you will state what the instrument is.

A Exhibit 5 is a letter received from the Halliburton Oil Well Cementing Company, received in reply to an inquiry which I made on June 17, which outlines their idea as to the method of cementing wells in this area. They suggest a mixture of cement Pozmix and Gel with a controlled chloride brine. I realize that they are patented products of Pozmix, cannot be entered into an order of the Commission. However, I feel that various other products, Perlitz and so forth, could be used as a substitute in this particular item.

Q Do Halliburtons, in this letter, make reference to the necessity for the use of a D. V. tool in the cement?

A The reference to D. V. tool is a two-stage tool which would let an operator cement the lower section and later cement the upper section by means of opening of perforations. We feel that there is a hazard to the operator as well as to the possibility of later hydrofracting the potash zone, and that this particular tool should not be used as far as we are concerned.

Q Actually, Mr. Lamb, are you purporting to testify as to an expert on the question of what type of cement should be used in this area?

A I am not. My contacts so far have given me a wide range of information from the saturated salt brine neat cement mixture and as one researcher put it, fresh water and neat cement will do about as well as any cotton-picking thing you can get.

Q Is it your recommendation that the Commission study the information you have furnished, and to provide an adequate cementing program?

A That is correct. We have two problems in the oil production, and that is the lightening of the cement slurry and the control of the flash setting which would give us problems. Any other recommendations that can be had to insure the protection of the potash, we are interested in undertaking those too.

Q Mr. Lamb, Order R-111-A of the Commission provides that when a well is plugged and abandoned, a solid cement plug will be set in the well. Do you feel that such a solid cement plug is necessary in this area when a well is plugged and abandoned to properly protect the oil and gas and the potash reserves?

A It is not necessary that a complete solid cement plug be set through the entire potash section. The problem, as I understand it, is a migration of the bottomhole fluids into the salt section, and this particular item could be solved by cement.

plug below the Salado into the Tansil and Yates, and a similar possible contamination could come from fresh waters above, which could be remedied by cement plug at the top of the Rustler or the top of the Salado. The interval in between to give maximum protection should be filled with a heavy mud.

Q Mr. Lamb, Order R-111-A requires that with reference to, before any new wells are drilled, that the notice of intention be given to each of the potash operators in the area, and that they be allowed ten days within which to object to such new location. Do you feel that such a precautionary measure is necessary in the proposed new pool area?

A At the present time there is only one potash permit holder in the area identified as the new pool, and we have had full cooperation with them. There are no mine shafts within approximately fifteen miles of this area, and none so far as I know are now being proposed. Therefore, we feel that this is an undue burden on the oil and gas producer.

Q Mr. Lamb, will the casing program and the other recommendations that you have made to the Commission for the new field rules, compared to the requirements under Order R-111-A, provide any economic savings to an operator, oil and gas operator in the area?

A It will save the oil and gas driller approximately \$7500 to \$10,000 per well.

Q Do you feel that the program you have outlined will adequately

protect the potash and the oil and gas reserves in the area?

A I do.

Q I hand you what has been marked Exhibit 6 and ask if you will identify the instrument.

(Marked Wilson's Exhibit No. 6, for identification.)

A Exhibit 6 is a reply to my letter of June 17 from Richardson and Bass which endorses our proposed casing and cementing program.

(Marked Wilson's Exhibit No. 7, for identification.)

Q I hand you what has been marked Exhibit 7 and ask you to identify the instrument.

A Exhibit 7 is a letter in reply to a letter from the Drilling and Exploration Company, Incorporated, which approves our cable tool casing program. There is one exception in which they recommend the use of a caliper survey and centralizers. The centralizers, in my opinion, are not necessary and should be left to the ~~option~~ option of the operator himself. The reason that we feel that the centralizer is not necessary through the salt section, any solution of the formation in the drilling will be a solution of the salt and the harder, more dense anhydrate stringers will tend to centralize the casing to a better degree than centralizers randomly spaced through the section.

Q Does this letter from Drilling and Exploration also refer

to the low pressure that exists in their Lynch Pool?

A Mr. Webb, in his letter, refers to their Fletcher "A" lease in the Lynch Pool in which he mentioned the low hydrostatic head of the fluid. That does not conform to the area in which we are discussing. We have a higher pressure as high as 1100 pounds casing pressure on one of the zones, and that has not been the case on their Fletcher lease.

Q I hand you what has been marked Exhibit 8 and ask you if you will identify it.

(Marked Wilson's Exhibit No. 8,  
for identification.)

A Exhibit 8 is a letter in reply to my letter of June 17, from The Texas Company, dated June 10th. It covers the casing program as we have it outlined, and also as outlined in Order R-968.

Q Do they generally approve the program you now recommend to the Commission?

A They do, and they recommend that the cement slurry be lightened by the use of Perlite rather than a large volume of Gel with the cement.

Q I hand you what has been marked Exhibit 9 and ask if you will identify the instrument.

(Marked Wilson's Exhibit No. 9,  
for identification.)

A Exhibit 9 is a letter from the Potash Company of America addressed to the Oil Conservation Commission in regard to our casing

program as proposed here.

Q Does the Potash Company of America approve this program?

A Their last paragraph reads: "The proposal of the applicant has been discussed with Mr. R. Lamb and we feel that in this particular area their evidence and request are adequate and reasonable".

Q Do you have any statements you would like to make to the Commission, any further statements in support of this application?

A I have none.

Q With the exception of the letters that have been marked as exhibits, did you prepare, or were the other exhibits prepared under your supervision?

A All other exhibits were prepared by me.

MR. LOSEE: The applicant moves for the introduction of the Exhibits 1 through 9 to be introduced in evidence in this case.

MR. PORTER: Are you through with the witness?

MR. LOSEE: Yes. I have moved for the introduction of the Exhibits 1 through 9.

MR. PORTER: Without objection, the Exhibits 1 through 9 will be received. Does anyone have a question of Mr. Lamb?

Mr. Mankin.

MR. MANKIN: Warren Mankin of the Oil Conservation Commission.

**CROSS EXAMINATION**

By MR. MANKIN:

Q I note from your Exhibit No. 1 that you propose to set up this new pool approximately one and a quarter sections. On what basis do you propose to set this large an area up? Is it on structure map, and if so, is such available?

A Well, the area which I have indicated is my interpretation from a geological standpoint, that is possibly productive as far as this well is concerned. I might also add that it is our feeling that the well, however, is producing from the Yates, that there is a possibility of Seven Rivers production in this area as identified, and we have suggested that the producing formation be identified as Yates-Seven Rivers.

Q You also indicated previously that there was more than one zone in the Yates which you had found in this particular well, is that true?

A That is true.

Q All zones, however, are contained within the vertical limits as you prescribed them in the Yates?

A That is right.

Q Did you drill deep enough to determine that the Seven Rivers was productive?

A In this particular well it was productive. However, the pipeline company wouldn't buy it, it was water.

Q You indicated previously in Exhibit 9 that you had discussed the proposed rules with the Potash Company of America, which is

the potash lessee in the area? A Yes.

Q Were these rules as to casing program, both rotary and cable tool, explicitly discussed with him?

A Yes, and he was aware of the casing program and rotary tools that we made in Case 1215, and was present and made no objection, and that stand has continued through all our discussions.

Q I take it from your comment from Halliburton's Exhibit, the letter in Exhibit 5, that you do not agree that a D. V. tool in this type of installation would be proper, as you might damage the potash reserves, is that correct?

A That is our feeling. If you used a D. V. tool opposite the potash section, there is a reasonable chance that you would hydrofract the potash instead of the possible producing horizon. I might mention that the Halliburton field men, at the time we set the casing on the discovery well, recommended against the D. V. tool.

Q I want to get clear on exhibits which I had, it showed Exhibit 3 as being the rotary program, I believe you corrected your own. That is actually Exhibit 4, the rotary program?

A The rotary program is Exhibit 4.

Q Exhibit 3 is the cable tool program?

A That's right.

Q What problems would be encountered if the Commission didn't see fit to set up a field as large as you have proposed in one and

one quarter sections. What problems would be encountered if that was cut to a smaller amount?

A I see no immediate problems except that we feel that it's a reasonable area. We are also aware that it is across a forty from the Lea Pool designation which includes the East half of Section 15. So at the present time, the proposed acreage which you would desire to set up is very close to the Lea Pool as shown in Section 15, and is about two miles from the Lynch Pool, is that correct?

A That's right. This designation of areas is purely our own interpretation, and as far as the reduction of it, we see no hardship to us.

Q In other words, if it was cut down, it could be handled in the future if the pool was set up and the casing program was set up, the extension of the pool could take care of the problems you might have, reasonable amounts within a mile or so?

A Yes.

MR. MANKIN: I believe that's all I have.

By MR. PORTER:

Q Mr. Lamb, in your design of the rotary hole, you have a four string casing in mind, would you recommend that they mud lined the first three, the two middle strings, or rather cement lined those two?

A Are you referring to cable tools or rotary?

Q Cable tools.

A In the cable, the first three would be muddy.

Q The first three?

A The first three muddy. The oil string would be cemented to the surface.

MR. PORTER: Mr. Nutter.

By MR. NUTTER:

Q When would you run your production string, after drilling into the producing horizon and testing it, or prior to drilling into it, or just what?

A On our reference to that particular point, there are two zones which Mr. Mankin mentioned. The first one is a higher pressure than the lower one, and it is necessary in the operation, practical field operation, to set the oil string through the first zone at least.

Q So you have to drill through it and into the second probably before running your oil string?                   A Yes.

Q How much money is saved by your proposal of using several cement plugs to block off the Salado formation rather than one column of cement throughout the well bore?

A I don't have that figure. However, my personal feeling from experience in this particular area, about twenty years, I feel that the potash is better protected by the plug and the mud than it is with a solid column of cement.

Q The only objective is not to save money but you think you get better protection that way?

A We are willing to save money too. The amount of cement would be one thousand, or sacks at one twenty a sack, plus the truck charge.

MR. NUTTER: Thank you.

MR. PORTER: Anyone else have a question of the witness:

MR. HERBERT: Herbert, representing Southwest Potash.

By MR. HERBERT:

Q Mr. Lamb, you had an Exhibit No 2 which I believe was casing records of the various wells in the area?

A Yes .

Q What is the purpose of that exhibit?

A It is a tabulation to assist the Commission for determining the casing pattern that has previously been used in the area.

Q Have those holes been drilled after order R-111?

A (Interrupting) Some of them were.

THE REPORTER: Will you repeat your question?

MR. PORTER: We can't hear you Mr. Herbert.

MR. HERBERT: What I referred to, is the older wells in the areas, in the potash area, have been badly cased. Those I don't believe should be taken into consideration in the record for the Commission, wells that have been cased after Order R-111-in the recent times are applicable. I have one other question.

Q The letter that you read from the Potash Company of America in which they said they would follow your recommendations. Was that for the casing and including the cementing of the salt area?

A If you will recall, I made recommendations on casing. I made no specific recommendations on cement. We had two problems as far as the oil production was concerned, that is the weight of the slurry and the flash setting.

Q What was Potash Company's reaction to your proposal of not cementing completely through the salt section?

A I think the letter itself is evidence.

Q It doesn't mention it, as you read it.

A May I have your question again?

Q Did they agree to the plug of the well without cementing through the salt section solid?

A The plugging was not discussed with Mr. Price.

Q That's what I wanted. They didn't agree to that?

A Right.

Q The point I'm trying to bring out for the Commission is that I don't believe any new evidence has been brought in to say that lll rule referring to the cementing of the salt section should change the present lll-A ruling. I believe the salt section should be cemented solid, not with plugs. We have found evidence that plugs are not altogether adequate.

MR. HERBERT: That is all.

MR. PORTER: Anyone else have a question? Mr. Cooley.

By MR. COOLEY:

Q Mr. Lamb, is your proposed casing program, as evidenced in

Exhibit 3 and 4, proposed as alternative casing programs to those outlined in R-111-A? A In lieu of.

Q In lieu of or as an alternative?

A If an operator wants to go ahead and set his pipe in accordance with R-111, we have no objection. However, I feel we have an adequate program on both of these exhibits.

MR. PORTER: Any further questions?

MR. LOSEE: I have one question of the witness.

RE-DIRECT EXAMINATION

By MR. LOSEE:

Q Mr. Mankin asked if you had any objection to the reduction in the size of the proposed new pool from what you have recommended. Would that statement also be applicable in the event new field rules were necessary if the pool were extended from a restricted size?

A Might I have that one again?

Q Would you have any objection if the pool as outlined here in your recommendations to the Commission, if the Commission saw fit to restrict it at this time and provide in the new field rules for the pool that they would not be applicable except for the area as presently defined? Would you, or would you not, want to come back in and secure new field rules for an extended pool?

A If I understand the rules of the Commission, I think that if you extended the Middlelynch to include the additional

acreage, you naturally would extend the field rules for that pool to cover the new area.

MR. LOSEE: No further questions.

RE-CROSS EXAMINATIONS

By MR. PORTER:

Q Mr. Lamb, I notice that you recommended that we dispense with the ten day waiting period upon filing of notice of intention to drill in this particular area? A Yes.

Q Have any of the potash companies concurred in this recommendation?

A I have not discussed this particular item with any of the potash companies. I will say this, that the cooperation that we have received in the drilling of our first well with the Potash Company of America, has certainly been appreciated, and any cooperation in the future naturally will carry the same weight. If we have an area that we think might be of importance to them, they certainly will be notified. At the present time there are no mining operations in the area; neither as far as I know are there any core operations in the area.

Q Potash Company of America is the only potash lease holder in the proposed pool?

A They own all of the potash under the pool as defined, and according to my record hold all potash permits in a nine section area covered by this plat.

MR. PORTER: Any further questions of the witness? If not he may be excused.

(Witness excused.)

MR. PORTER: Does anyone have a comment or a statement? Mr. Wade.

MR. WADE: L. M. Wade, Texas Company. As was noted on Exhibit No. 1 of Wilson's presentation, The Texas Company has acreage which is included in the pool limits as proposed regardless of whether the pool limits are carried as recommended or whether they are deleted, the Texas Company will definitely be concerned with the outcome. I would like to state that the letter which was introduced as Exhibit 8 from The Texas Company was primarily intended as recommendations, but at this time we would like to go on record as stating that we do concur with Wilson in their recommendations for pool rules and casing program and cementing program.

MR. PORTER: Any more statements? Mr. Losee.

MR. LOSEE: Just one statement with reference to Wilson's position. As we interpret the Commission's Order R-111-A, upon discovery of oil and gas in the Potash Oil Area, the Commission shall promulgate pool rules for the affected area after due notice and hearing. Although we went over each of the requirements of R-111-A, it is our position that a complete new program of field rules should be made applicable to this pool, and if the Commission

feels that there should be inserted in these new field rules the requirement that the notice of intention be served upon the potash companies, we feel that should be done in an order instead of requiring the operator to comply with R-111-A, except as to the existing order, applying to the pool rules.

In other words, that a complete new order for the pool be set up rather than an exception to Order R-111-A.

MR. PORTER: Mr. Cooley, did you have a comment on that?

MR. COOLEY: Yes, sir. What could be accomplished other than by excepting the particular pool here from the individual provision of Rule R-111-A?

MR. LOSEE: Well, as long as the Commission looks at everything in Order R-111-A, even outside of some things we have covered in our testimony, we have no objection. I'm trying to look down the road and see that we don't have something drawn that says operators in the Middlelynch can case it this way otherwise they shall comply with R-111-A. Down the line there might be some objectionable part that doesn't stick out and might be difficult to comply with and cumbersome.

MR. CODLEY: This Middlelynch falls within the order of R-111-A unless there is an exception that is justified, the Commission would not be justified in deleting any of the provisions from the rule to that pertaining to the Middlelynch Pool.

MR. LOSEE: I am merely placing my interpretation upon my

order. I am sure if the Commission agrees with what R-111-A was intended when it was drawn, it may be draw this order based upon the interpretation, of course.

MR. PORTER: Anyone else have anything to say on this case? We will take the case under advisement. We will recess until nine o'clock tomorrow morning and we will begin with Case 1278.

C E R T I F I C A T E

STATE OF NEW MEXICO )  
: SS  
COUNTY OF BERNALILLO )

I, *Ada Dearnley*, Court Reporter, do hereby certify that the foregoing and attached transcript of proceedings before the New Mexico Oil Conservation Commission at Santa Fe, New Mexico, is a true and correct record to the best of my knowledge, skill and ability.

IN WITNESS WHEREOF I have affixed my hand and notarial seal this *8<sup>th</sup>* day of August, 1957.

*Ada Dearnley*  
\_\_\_\_\_  
Notary Public-Court Reporter

My commission expires:  
*June 19, 1959*