

W. H. H. Co. is operating a new oil pool  
with special rules in Potomac-Oil Area, Lee  
County.

Case No.

1277

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Application, Transcript,  
Small Exhibits, Etc.

*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  
3-8691 2-2211

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

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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. :  
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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 of 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~~ 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 ~~the~~ Petastific 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. COOLEY: 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, Asa 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.

Asa Dearnley  
Notary Public-Court Reporter

My commission expires:  
June 19, 1959

# Memo

From  
ELVIS A. UTZ  
Gas Engineer

To ①

In any event the production  
string shall not be set higher  
than the Top of the Gates.

**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. 1277  
Order No. R-1039**

**APPLICATION OF THE OIL CONSERVATION  
COMMISSION OF NEW MEXICO AT THE  
REQUEST OF WILSON OIL COMPANY FOR  
AN ORDER ESTABLISHING A NEW OIL POOL  
WITH SPECIAL RULES AND REGULATIONS IN  
TOWNSHIP 20 SOUTH, RANGE 34 EAST, NMPM,  
IN THE POTASH-OIL AREA OF LEA COUNTY,  
NEW MEXICO.**

**ORDER OF THE COMMISSION**

**BY THE COMMISSION:**

This cause came on for hearing at 9 o'clock a.m. on July 17, 1957, at Santa Fe, New Mexico, before the Oil Conservation Commission of New Mexico, hereinafter referred to as the "Commission."

NOW, on this 26<sup>th</sup> day of August, 1957, the Commission, a quorum being present, having considered the application and the evidence adduced and being fully advised in the premises,

**FINDS:**

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

(2) That a new pool productive of oil from the Yates formation was discovered by the Wilson Oil Company, Muse Well No. 1, located in the NE/4 NE/4 of Section 21, Township 20 South, Range 34 East, NMPM, Lea County, New Mexico. Said well was completed on May 16, 1957, with the top of the perforations at 3513 feet.

(3) That the available geological information indicates that the probable productive limits of the common source of supply discovered by the said Muse Well No. 1 is as follows:

**TOWNSHIP 20 SOUTH, RANGE 34 EAST, NMPM  
Section 15: W/2 of SW/4  
Section 16: SE/4  
Section 21: E/2 and E/2 of NW/4  
Section 22: W/2 of W/2**

**all in Lea County, New Mexico.**

(4) That an oil pool should be created for the aforementioned common source of supply with horizontal limits as described above and that said pool should be known as the "Middle Lynch-Yates Pool."

(5) That certain portions of the Middle Lynch-Yates Pool lie within the boundaries of the Potash-Oil Area as defined by Order R-111-A.

(6) That all wells commenced in that portion of the Middle Lynch-Yates Pool which lies within the boundaries of the Potash-Oil Area, as defined by Order R-111-A, should be drilled and operated in accordance with the provisions of Order R-111-A; provided, however, that the operator of any such well should have the option of following either of the casing programs hereinafter set forth in lieu of the shallow-zone casing program prescribed by Order R-111-A:

ROTARY TOOLS CASING PROGRAM

Surface Casing to the top of the "Red Beds."

Cemented to surface.

Production Casing to be set below the base of the Tansill formation and tacked until it has been determined that commercial production has been obtained, in which event said production casing shall be cemented to the surface.

CABLE TOOLS CASING PROGRAM

Surface Casing to the top of the "Red Beds."

Upper Water Shut-Off Casing to be set in the Chinle formation.

Lower Water Shut-Off Casing to be set through the Santa Rosa formation and into the Dewey Lake formation.

Production Casing to be set below the base of the Tansill formation and tacked until it has been determined that commercial production has been obtained in which event said production casing shall be cemented to the surface; whereupon, all other strings of casing may be pulled.

(7) That all wells commenced in that portion of the Middle Lynch-Yates Pool which lies outside the Potash-Oil Area should be drilled and operated in accordance with the Commission Statewide Rules and Regulations.

-3-  
Case No. 1277  
Order No. R-1039

**IT IS THEREFORE ORDERED:**

1. That a new pool in Lea County, New Mexico, classified as an oil pool for Yates production, be and the same is hereby created and designated as the Middle Lynch-Yates Pool, consisting of the following described area:

**TOWNSHIP 20 SOUTH, RANGE 34 EAST, NMPM**  
Section 15: W/2 of SW/4  
Section 16: SE/4  
Section 21: E/2 and E/2 of NW/4  
Section 22: W/2 of W/2

2. That Special Rules and Regulations for the Middle Lynch-Yates Pool be and the same are hereby promulgated as follows:

**SPECIAL RULES AND REGULATIONS FOR THE MIDDLE LYNCH-YATES POOL:**

**RULE 1.** All wells commenced in that portion of the Middle Lynch-Yates Pool which lies within the boundaries of the Potash-Oil Area, as defined by Order R-111-A, shall be drilled and operated in accordance with the provisions of Order R-111-A; provided, however, that the operator of any such well shall have the option of following either of the casing programs hereinafter set forth in lieu of the shallow-zone casing program prescribed by Order R-111-A:

**ROTARY TOOLS CASING PROGRAM**

**Surface Casing** to the top of the "Red Beds."

Cemented to surface.

**Production Casing** to be set below the base of the Tansill formation and tacked until it has been determined that commercial production has been obtained, in which event said production casing shall be cemented to the surface.

**CABLE TOOLS CASING PROGRAM**

**Surface Casing** to the top of the "Red Beds."

**Upper Water Shut-Off Casing** to be set in the Chinle formation.

**Lower Water Shut-Off Casing** to be set through the Santa Rosa formation and into the Dewey Lake formation.

**Production Casing** to be set below the base of the Tansill formation and tacked until it has been determined that commercial production has been obtained, in which event said production casing shall be cemented to the surface; whereupon, all other strings of casing may be pulled.



-4-  
Case No. 1277  
Order No. R-1030

**RULE 2.** All wells commenced in that portion of the Middle Lynch-Yates Pool which lies outside the Potash-Oil Area shall be drilled and operated in accordance with the Commission Statewide Rules and Regulations.

**RULE 3.** The provision of paragraph (a) of Rule 104 of the Commission Statewide Rules and Regulations which requires wells located within one mile of a defined pool to be spaced, drilled, operated, and prorated in accordance with the regulation in effect in said pool shall not apply to the Middle Lynch-Yates Pool.

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

STATE OF NEW MEXICO  
OIL CONSERVATION COMMISSION

*E. L. Mechem*

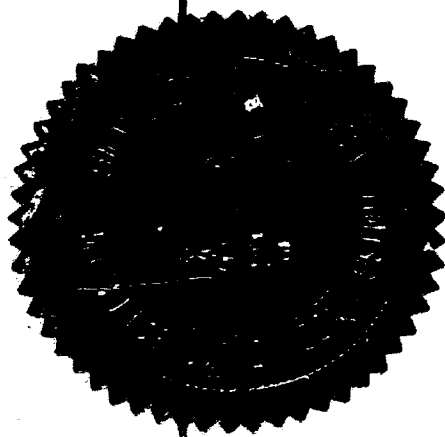
EDWIN L. MECHEM, Chairman

*Murray E. Morgan*

MURRAY E. MORGAN, Member

*A. L. Porter, Jr.*

A. L. PORTER, Jr., Member & Secretary



ix/

69

POTASH COMPANY OF AMERICA  
Carlsbad, New Mexico

July 12, 1957

Re: Case No. 1277

New Mexico Oil Conservation Commission  
P.O. Box 872  
Santa Fe, New Mexico

Attention: Mr. A. L. Porter, Jr.  
Secretary-Director

Gentlemen:

Potash Company of America hereby wishes to state that it offers no objection to whatever pool rules the Oil Conservation Commission will deem necessary under an amendment to R-111-A and incorporating the orders set in O.C.C. No. R-968, dated March 22, 1957.

The proposal of the applicant has been discussed with Mr. P. Lamb and we feel that in this particular area their evidence and request are adequate and reasonable.

Yours very truly,

/s/ D. E. Prots

D. E. Prots  
Chief of Exploration

DEP:mina

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BEFORE THE  
OIL CONSERVATION COMMISSION  
SANTA FE, NEW MEXICO  
*Wilson* EXHIBIT No. 9  
Case 1277



**Halliburton**

OIL WELL CEMENTING COMPANY

DUNCAN, OKLAHOMA

Box 8  
Livingston, N. M.  
July 13, 1957

Mr. Raymond Lamb  
Wilson Oil Company  
Box 1436  
Artesia, N. M.

Dear Sir:

I received your recent letter requesting a recommendation on cementing oil strings from surface to total depth of 3700' in wells near Section 21-T208-R34E in Lea County. You requested that the following conditions be met:

1. Protect oil and gas bearing formations
2. Protect possible potash bearing formations at approximately 2000-2200 feet.
3. The cement must adhere to the salt formations (900'-2000') as well as to the potash formations.
4. The maximum pressure on the oil and gas bearing formations should not exceed 3000 psi.

A salt saturated 50-50 Pozmix "S"-Portland cement-4% Gel used to cover the salt and potash formations will give adequate strength and adhere to the formations. The neat cement that you plan to use to cover the oil and gas zones will certainly give adequate protection.

If the oil string is cemented in one operation, the pressure exerted at 3700' will exceed 3000 psi. It could easily reach 3500 to 4000 psi. In order to reduce the pressure on the oil and gas zones to less than 3000 psi., a D. V. tool can be used at approximately 3100'. The D.V. tool should be placed opposite a tight formation such as limestone, anhydrite, or sandstone formation. By using such a tool, the maximum pressure on the formation at 3700' would not exceed 2100 psi. This is assuming that the mud weight would not exceed 9#. Enough regular neat cement should be used on the first stage to cover the D.V. tool. After opening the ports in the D.V. tool, circulation should be maintained for at least four hours before running the second stage.

If there is any additional information that you need, or any way that I can help you, please let me know and I shall be glad to do so.

Sincerely yours,

*Richard W. Robins*

Richard W. Robins  
Field Engineer

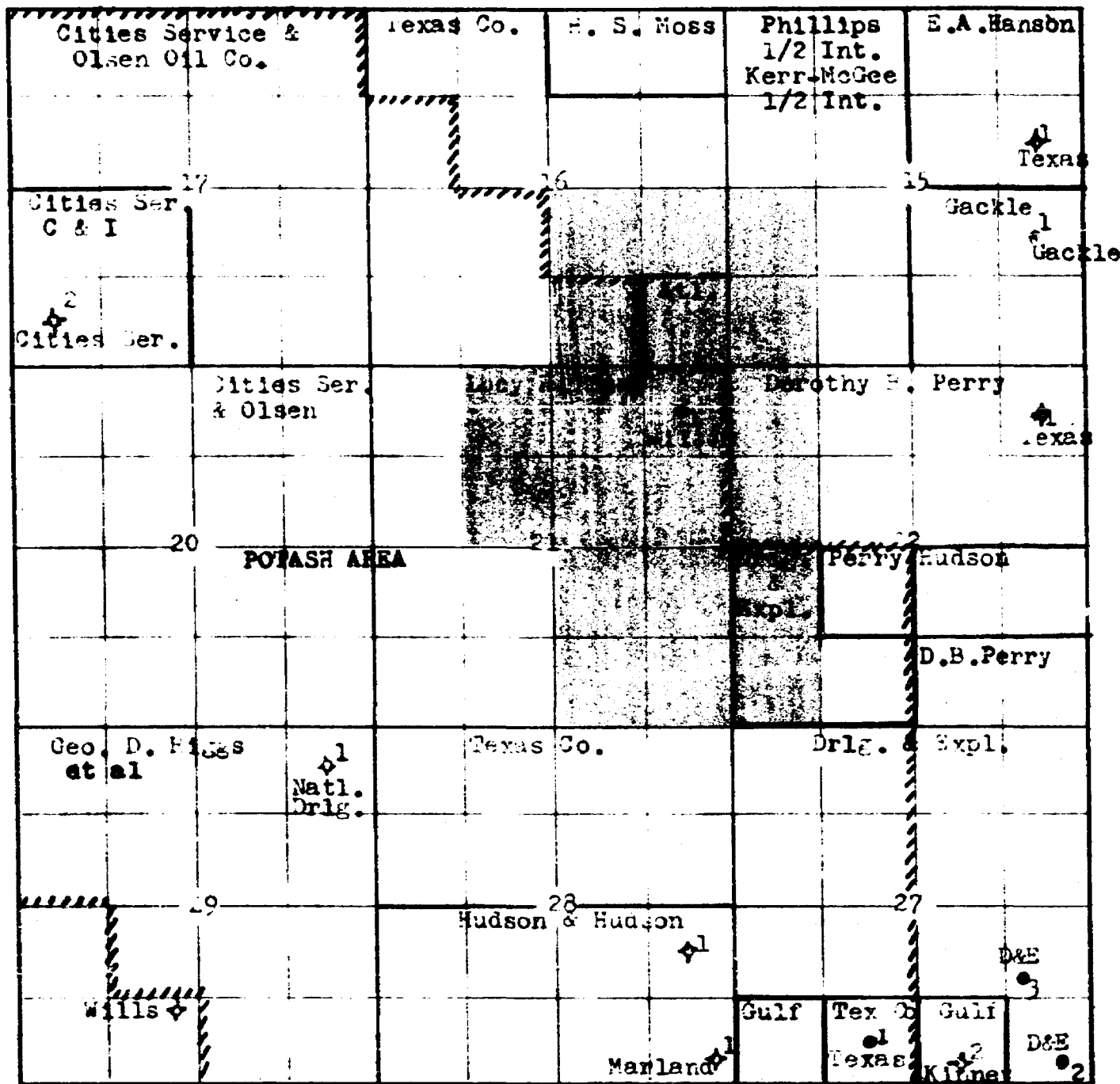
WR

cc: Mr. W. L. Hughes  
Mr. J. B. Livingston  
Mr. Joe W. Jones  
Mr. S. P. Arledge

BEFORE THE  
OIL CONSERVATION COMMISSION  
SANTA FE, NEW MEXICO  
*Wilson Co.* EXHIBIT No. 5  
CASE 12-77

## OWNERSHIP AND WELL PLAT OF PORTION OF TOWNSHIP 13S

TOWNSHIP 20S RANGE 34E COUNTY LEA STATE NEW MEXICO



Potash Company of America- holds Federal permits with lease application filed on Sec. 15, 17, 20, 21, 22, 27, 29, and S/2 of Sec. 28.  
Potash Company of America- holds State prospecting permit on Section 16.  
Unknown - North half Section 28, Patented land ownership unknown.

DOCKET: REGULAR HEARING JULY 17, 1957

Oil Conservation Commission 9 a.m., Mabry Hall, State Capitol, Santa Fe, NM

- ALLOWABLE: (1) Consideration of the oil allowable for August, 1957.
- (2) Consideration of the allowable production of gas for August, 1957, from the seven prorated pools in Lea County, New Mexico; also consideration of the allowable production of gas from the six prorated pools in San Juan and Rio Arriba Counties, New Mexico, for August, 1957.

CASE 1275: Application of Shell Oil Company for an exception to Rule 309 of the Commission Rules and Regulations to permit the transportation of oil from the basic lease prior to measurement, and to produce more than eight wells into a central plant, and to commingle production from the participating area of the Carson Unit with production from other wells in the area. Applicant, in the above-styled cause, seeks an order authorizing off-lease measurement of oil produced from the Bisti-Lower Gallup Oil Pool and an undesignated Lower Gallup Oil Pool in Township 25 North, Range 11 West, and Township 25 North, Range 12 West, San Juan County, New Mexico, by means of an automatic custody transfer system; and to authorize the production of more than eight wells into a central testing and measuring plant and further, to authorize the commingling of non-participating area production with participating area production in the Carson Unit, with royalty payments to be calculated by means of periodic production rate tests.

CASE 1276: Application of Amerada Petroleum Corporation for an order amending Order No. R-991 insofar as said order pertains to the Bagley-Lower Pennsylvanian Gas Pool, Lea County, New Mexico. Applicant, in the above-styled cause, seeks an order amending Order No. R-991 to extend the horizontal limits of the Bagley-Lower Pennsylvanian Gas Pool to include the S/2 Section 34, Township 11 South, Range 33 East, and the NE/4 Section 3, Township 12 South, Range 33 East, Lea County, New Mexico, and to increase the size of the standard drilling unit for said pool from 160 acres to 320 acres and to enter such other rules and regulations for said pool as the Commission may deem necessary.

CASE 1277: 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 Section 21, Township 20 South, Range 34 East, Lea County, New Mexico; and for the promulgation of special pool rules to govern future drilling in said pool in order to afford adequate protection for the potash deposits in the area.

CASE 1278: In the matter of the hearing called by the Oil Conservation Commission upon its own motion to permit Roy T. Short and the Hartford Accident and Indemnity Company and all other interested parties to appear and show cause why the Roy T. Short, et al, Millard Eidson No. B-3 Well located in the SW/4 SE/4 of Section 26, Township 16 South, Range 35 East, in the Shoe Bar Area of Lea County, New Mexico, should not be ordered plugged and abandoned in accordance with the Rules and Regulations of the Oil Conservation Commission of New Mexico.

CASE 1279: In the matter of the hearing called by the Oil Conservation Commission upon its own motion to permit Roy T. Short, M. N. Hamilton, Apache Basin Oil Company, and Basin Oil Company, and all other interested parties to appear and show cause why the hole located 660 feet from the South and West lines of Section 25, Township 16 South, Range 35 East, Lea County, New Mexico, should not be ordered plugged and abandoned in accordance with the Rules and Regulations of the Oil Conservation Commission of New Mexico.

CASE 1280: Application of Sunray Mid-Continent Oil Company for an order authorizing a pilot secondary recovery project in the Bisti-Lower Gallup Oil Pool in exception to Rule 701 of the Commission Rules and Regulations. Applicant, in the above-styled cause, seeks an order authorizing it to drill and operate a well at a point five feet southeast of the northwest corner of Section 6, Township 25 North, Range 12 West, San Juan County, New Mexico, for the injection of liquified petroleum gases and dry gas into the Lower Gallup formation of the Bisti-Lower Gallup Oil Pool for the purpose of secondary recovery of oil from said pool.

CASE 1281: Application of Skelly Oil Company for approval of an unorthodox oil well location in an undesignated oil pool in Rio Arriba County, New Mexico, in exception to Rule 104 of the Commission Rules and Regulations. Applicant, in the above-styled cause, seeks an order authorizing an unorthodox oil well location in an undesignated oil pool for its Jicarilla "B" Well No. 2 located 1590 feet from the South line and 990 feet from the East line of Section 31, Township 25 North, Range 5 West, Rio Arriba County, New Mexico. Said well was projected as a gas well in accordance with the Commission gas well location rules but was found to be productive of oil.

CASE 1282: Southeastern New Mexico Nomenclature case calling for an order creating new pools and extending and deleting certain areas from existing pools in Eddy and Lea Counties, New Mexico.

(a) Create a new oil pool for Grayburg production, designated as the Teague-Grayburg Pool, and described as:

TOWNSHIP 23 SOUTH, RANGE 37 EAST  
Section 20: SE/4

- (b) Create a new oil pool for Pennsylvanian production, designated as the Kennitz-Pennsylvanian Pool, and described as:

TOWNSHIP 16 SOUTH, RANGE 33 EAST  
Section 13: SE/4

- (c) Extend the Dollarhide-Drinkard Pool to include:

TOWNSHIP 24 SOUTH, RANGE 38 EAST  
Section 19: NW/4  
Section 20: W/2 SW/4

- (d) Extend the Drinkard Pool to include:

TOWNSHIP 22 SOUTH, RANGE 37 EAST  
Section 27: E/2 NE/4

- (e) Extend the Gladiola Pool to include:

TOWNSHIP 12 SOUTH, RANGE 37 EAST  
Section 25: N/2 NE/4

TOWNSHIP 12 SOUTH, RANGE 38 EAST  
Section 17: NW/4  
Section 18: N/2 NE/4

- (f) Extend the North Gladiola-Devonian Pool to include:

TOWNSHIP 11 SOUTH, RANGE 38 EAST  
Section 32: SE/4

TOWNSHIP 12 SOUTH, RANGE 38 EAST  
Section 6: SW/4  
Section 7: NW/4  
Section 8: NW/4

- (g) Extend the West Henshaw-Grayburg Pool to include:

TOWNSHIP 16 SOUTH, RANGE 30 EAST  
Section 4: SE/4  
Section 5: SE/4  
Section 8: NE/4

- (h) Extend the Langlie-Mattix Pool to include:

TOWNSHIP 23 SOUTH, RANGE 36 EAST  
Section 4: E/2 SE/4

- (i) Extend the Pearl-Queen Pool to include:

TOWNSHIP 19 SOUTH, RANGE 35 EAST  
Section 22: S/2 SE/4

- (j) Extend the Townsend-Welfcamp Pool to include:

TOWNSHIP 16 SOUTH, RANGE 36 EAST  
Section 6: W/2 SW/4

- (k) Extend the Terry-Blinebry Pool to include:

TOWNSHIP 21 SOUTH, RANGE 37 EAST  
Section 3: Lot 16  
Section 4: Lot 1

- (l) Delete the following area from the Blinebry Gas Pool:

TOWNSHIP 21 SOUTH, RANGE 37 EAST  
Section 3: Lot 16  
Section 4: Lot 1

CASE 1283: Northwestern New Mexico nomenclature case calling for an order extending existing pools in San Juan and Rio Arriba Counties, New Mexico.

- (a) Extend the Aztec-Pictured Cliffs Pool to include:

TOWNSHIP 28 NORTH, RANGE 9 WEST  
All of Sections 9, 10, 11, 12, 13, & 14  
Section 15: E/2 & SW/4  
Section 24: All

TOWNSHIP 31 NORTH, RANGE 11 WEST  
Section 34: All

- (b) Extend the Otero-Pictured Cliffs Pool to include:

TOWNSHIP 23 NORTH, RANGE 5 WEST  
Section 9: E/2  
Section 16: N/2

TOWNSHIP 24 NORTH, RANGE 5 WEST  
Section 13: SW/4  
Section 14: S/2  
Section 21: NE/4  
Section 22: N/2 & SE/4  
All of Sections 23, 24, & 25  
Section 31: S/2

- (c) Extend the South Blanco-Pictured Cliffs Pool to include:

TOWNSHIP 24 NORTH, RANGE 4 WEST  
Section 5: W/2

TOWNSHIP 27 NORTH, RANGE 8 WEST  
Section 4: All



- (d) Extend the Blanco-Mesaverde Pool to include:

TOWNSHIP 28 NORTH, RANGE 9 WEST  
Section 32: All

- (e) Extend the Bisti-Lowe. Gallup Oil Pool to include:

TOWNSHIP 26 NORTH, RANGE 13 WEST  
Section 36: NW/4

- (f) Extend the Verde-Gallup Oil Pool to include:

TOWNSHIP 31 NORTH, RANGE 14 WEST  
Section 18: All

TOWNSHIP 31 NORTH, RANGE 15 WEST  
Section 13: N/2

CONTINUED CASES

- CASE 1221: Application of the Oil Conservation Commission on its own motion for an order amending Commission Order R-586 insofar as it relates to the Byers-Queen and Tubb Gas Pools. Applicant, in the above-styled cause, seeks an order amending the Special Rules and Regulations for the Tubb Gas Pool to make provision in said rules for the regulation of oil wells completed within the defined limits of said pool; and further to consider the deletion of that portion of Order R-586 relating to the Byers-Queen Gas Pool.
- CASE 1261: Application of Gulf Oil Corporation and Western Oil Fields, Inc., for an order force pooling certain acreage in the Blinebry and Tubb Gas Pools, Lea County, New Mexico. Applicants, in the above-styled cause, seek an order force pooling the interests of all persons having any right, title or interest in the Blinebry and Tubb formations underlying the SW/4 Section 30, Township 22 South, Range 38 East, Lea County, New Mexico.
- CASE 1262: Application of Gulf Oil Corporation and Western Oil Fields, Inc., for an order force pooling certain acreage in the Blinebry and Tubb Gas Pools, Lea County, New Mexico. Applicants, in the above-styled cause, seek an order force pooling the interest of all persons having any right, title or interest in the Blinebry and Tubb formations underlying the SE/4 Section 30, Township 22 South, Range 38 East, Lea County, New Mexico.
- CASE 1263: Application of Gulf Oil Corporation and Western Oil Fields, Inc., for an order force pooling certain acreage in the Blinebry and Tubb Gas Pools, Lea County, New Mexico. Applicants, in the above-styled cause, seek an order force pooling the interests of all persons having any right, title or interest in the Blinebry and Tubb formations underlying the NE/4 Section 25, Township 22 South, Range 37 East, Lea County, New Mexico.

CASE 1264: Application of Gulf Oil Corporation and Western Oil Fields, Inc., for an order force pooling certain acreage in the Blinebry and Tubb Gas Pools, Lea County, New Mexico. Applicants, in the above-styled cause, seek an order force pooling the interests of all persons having any right, title or interest in the Blinebry and Tubb formations underlying the SE/4 Section 25, Township 22 South, Range 37 East, Lea County, New Mexico.

CASE 1265: Application of R. Olsen Oil Company for an order force pooling certain acreage in the Justis Gas Pool, Lea County, New Mexico. Applicant, in the above-styled cause, seeks an order force pooling the interests of all persons having any right, title or interest in the Glorieta formation of the Justis Gas Pool underlying the NE/4 Section 23, Township 25 South, Range 37 East, Lea County, New Mexico.

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OFFICE OF THE SECRETARY OF THE OIL FIELD



Santa Fe, New Mexico  
Telephone 2-2222

May 23, 1957

Mr. Earl C. [unclear]  
P. O. Box 221  
Santa Fe, New Mexico

Attention: Mr. E. L. Porter, Secretary, Director

Gentlemen:

Attached hereto you will find our application for the establishment of pool rules covering future drilling in the area of the Wilson Oil Company, [unclear] well. Said well located NW 1/4 Sec. 4, T20N, R34E, Los Alamos Co., New Mexico. Section 3 of Paragraph 1 of the [unclear] pool rules for [unclear] drilling.

The Wilson Oil Company is [unclear] obligations in the area. [unclear] hearing before the Oil Commission [unclear] a designated committee on the [unclear] date.

[unclear] place has been set for this hearing.

Sincerely yours,

WILSON OIL COMPANY

ILLEGIBLE

**Wilson Oil Company**



WILSON OIL COMPANY  
SANTA FE, NEW MEXICO  
MAY 13, 1957

New Mexico Oil Conservation Commission  
P. O. Box 871  
Santa Fe, New Mexico

Attention: Mr. A. L. Porter, Secretary-Director

Re: Request for final rules for new  
discovery in pooled area.

Gentlemen:

Wilson Oil Company, Inc., on May 13, 1957, completed the No. 1 well, located in the NE 1/4 of Section 1, Township 20 North, Range 10 East, Santa Fe County, New Mexico. The well being located at Section 1, Township 20 North, Range 10 East, Santa Fe County, New Mexico, with the royalty received by the Santa Fe County Government.

The discovery well was drilled in accordance with the permission from the Oil Conservation Commission, issued under Order R-968, on March 22, 1957, which directed an application to Order R-111A.

By the filing of this application, the Wilson Oil Company desires to establish final rules for future drilling in the surrounding the new oil discovery.

It is therefore requested that the Commission be set for a hearing before the Oil Conservation Commission or an agent designated by the Commission.

Respectfully submitted,

WILSON OIL COMPANY

By \_\_\_\_\_

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BEFORE THE  
OIL CONSERVATION COMMISSION  
SANTA FE, NEW MEXICO  
*Before* EXHIBIT NO. *2*  
PAGE *1277*

J. Don Huggens, Inc. #1 Federal	18	8-1-54	3825	9-5/8	60	Set		7	3492	900sx
Cities Service #2-A Jewett McDonald	19	9-24-44	3655	13	591	Set	10	800	Set	8-5/8 1560 150
The Texas Company #1 Elliott	22	1-15-35	3815	12	74	Set		8-1/4	1650	Set 7 3690 Set
Drillexco #1 Gorman	25	5-21-45	3825	16 13	190 564	Set Set	10-3/4	907	Set	8-1/4 1798 100
Drilling & Exploration #2 Fletcher A Federal	27	1-21-57	3699	13-3/8	70	Set	10	734	Set	8-5/8 1283 Set 5-1/2 3648 1700
E. E. Kenney #2 Gulf Federal	27	10-18-54	3341	13-3/8	100	50		8-5/8	1208	Set
Drilling & Exploration #3 Fletcher A Federal	27			13-3/8	70	50	10-3/4	716	Set	8-5/8 1233 Set
The Texas Company #2-B Lynch	27	8-1-34	3750	12-1/2	148	Set		8-1/4	1607	100
Continental Oil Co. #1 Flint	28	8-22-29	3840	20 15-1/2	25 585	Set Set	12	945	Set	10 1675 Set 8-1/4 3435 Set
National Drig & Prod. #1 H. A. Flint	29	7-27-43	3772	12-1/2	291	Set		8-1/4	1681	100 6-5/8 3618 Set
Wills et al #2 Flint	29	6-24-46	3368					8-5/8	1575	50
W. H. Black #1 Welch-Federal	30	7-2-54	3600	13-3/8	74	Set	10-3/4	625	Set	8-5/8 1145 Set
Leng & Unger #1 Wills-Federal	30	9-27-56	3192					8-5/8	1494	400
Neil H. Wills #1 Flint	30	7-26-45	3547	13	550	Set	10	882	Set	8 1555 Set
E. E. Kinney #1 Gulf Federal	34	5-21-54	3771				10	710	Set	8-5/8 1275 Set

Texas Company #1 Lynch A	34	3731							
Texas Company #3 Lynch A	34	3745	16 12-1/2	132 515	Set Set	10	879	Set	6-5/8 3975 708x
Texas Company #5 Lynch A	34	3798	13-3/8	138	50				5-1/2 3705 1650
Texas Company #8 Lynch	34	3768	13-3/8	124	Set	10-3/4	733	Set	8-5/8 1295 12 5-1/2 3689 900
Texas Company #9 Lynch Fed. A	34	3735				10-3/4	720	Set	5-1/2 3635 1100
Texas Company #10 B. Lynch-Fed. A	34	3726	13-3/8	85	Set	10-3/4	876	Set	5-1/2 3719 1200
Texas Company #11 E. Lynch-Fed "A"	34	3720				10-3/4	690	200	8-5/8 1258 Set 5-1/2 3685 1200
Drilling & Exploration #1 Fletcher A	35	3725	13-3/8	70	Set	10-3/4	754	Set	8-5/8 1272 Set 5-1/2 3680 1550
J. H. Elder #1 #1 Elder	35	3757	13-3/8	154	125				8-5/8 1300 Set 5-1/2 3700 650
J. H. Elder # #2 Federal	35	3747	13-3/8	123	125				8-5/8 1350 Set 5-1/2 3695 600
J. H. Elder #3 Federal	35	3736	13-3/8	95	125				8-5/8 1300 Set 5-1/2 3682 600
J. H. Elder #4 Federal	35	3736	13	143	Set	10-3/4	751	Set	8-5/8 1285 Set 5-1/2 3700 650
Emperor Oil Co. #1 Emperor Fed.	35	3734	13-3/8	80	Set				8-5/8 2030 Set 5-1/2 3680 1000
Phillips Petr. Co. #1 Neal	35	3775	8-5/8	145	175				5-1/2 3750 375

The Texas Company #6 H. Lynch "A"	35	8-1-52	3726	13-3/8	132	Set	10-3/4	782	Set	8-5/8	1311	Set	5-1/2	3666	2700 SX
The Texas Company #7 B. Lynch Federal	35	12-19-52	3707	13	105	Set	10-3/4	764	Set	8-5/8	1303	Set	5-1/2	3670	3670 SX
Wilson Oil Company #1 Ruise	21	5-13-57	3691	13-3/8	69	Set	10-3/4	669	Set	8-5/8	1217	Set	5-1/2	3555	800 SX
Phillips Petroleum Co. #1 Cruces	26	4-19-57	3705	8-5/8	171	125 SX							5-1/2	3643	450 SX
Phillips Petroleum Co. #2 Cruces	26	6-14-57	3718	8-5/8	157	150 SX.							5-1/2	3668	1710 SX
Drilling & Exploration #3 Fletcher "A"	27	3-25-57	3691	12-3/8	70	50 SX.	10-3/4	716	Set	8-5/8	1233	Set	5-1/2	3640	1680 SX
Hudson & Hudson #1 Hoover Federal	28	6-28-57	3736	13-3/8	72	Set	10-3/4	683	Set	8-5/8	1235	Set	7	3475	Set



Wilson Oil Company

(INCORPORATED UNDER THE LAWS OF NEW MEXICO)

WILSON OIL COMPANY  
SANTA FE, NEW MEXICO

May 23, 1917

N. M. Oil Conservation Commission  
P. O. Box 871  
Santa Fe, New Mexico

Attention: Mr. A. L. Porter, Secretary, Director

Gentlemen:

Attached hereto you will please find our application for the establishment of pool rules covering future drilling in the area of the Wilson Oil Company recently completed oil well. Said well located NE 1/4 SE 1/4 of Section 21, T20S R34E, Lea County, New Mexico. As required in Section 3 of Paragraph III, we wish to establish pool rules for future drilling.

The Wilson Oil Company has future drilling obligations in the area, therefore they request a hearing before the Oil Conservation Commission, or a designated examiner, at the earliest convenient date.

Very respectfully,  
place has been set for this hearing.

Sincerely yours,

WILSON OIL COMPANY

By \_\_\_\_\_

ILLEGIBLE

**Wilson Oil Company**

INCORPORATED UNDER THE LAWS OF THE STATE OF TEXAS



New Mexico Oil Commission  
P. O. Box 872  
Santa Fe, New Mexico

Attention: Mr. A. L. Porter, Secretary-Treasurer

Re: Request for approval of proposed  
Operating Agreement

Gentlemen:

Wilson Oil Company, on May 13, 1957,  
completed the No. 1 well, located in the NE 1/4 of Section 22,  
Township 22 North, Range 14 East, County of Santa Fe, New Mexico. The  
well being located in the NE 1/4 of Section 22, Township 22 North,  
Range 14 East, County of Santa Fe, New Mexico, with the royalty reserved by the State of New Mexico.

The discovery well was drilled from the  
Oil Commission, New Mexico, Order No. 1-111A, issued  
March 22, 1957, which authorized the drilling of a well in the NE 1/4 of Section 22, Township 22 North, Range 14 East, County of Santa Fe, New Mexico.

By the filing of this application, Wilson Oil Company  
desires to establish pool rules and operate drilling in the area  
surrounding the new oil well.

It is therefore requested that this matter be set down for  
a hearing before the Oil Commission, or so early as  
designated by the Commission.

Very respectfully,

WILSON OIL COMPANY

By \_\_\_\_\_

ILLEGIBLE

GENERAL OFFICES - FORT WORTH

26

C. W. SAMPSON  
SUPERINTENDENT

RICHARDSON AND BASS  
DISTRICT OFFICE  
MONAHANS, TEXAS

E. J. SCARBOROUGH  
CHIEF CLERK

July 6, 1957

Mr. N. Raymond Lamb  
Wilson Oil Company  
Box 1436  
Artesia, New Mexico

Dear Sir:

Reference is hereby made to your letter of June 17, 1957 and our telephone conversation of July 5, 1957 concerning your proposed casing and cementing program for the Yates Sand area in Section 21, T20S, R34E, Lea County, New Mexico.

We endorse your proposed casing and cementing program for this area and understand that you will present such program to the New Mexico Conservation Commission at a hearing on July 17, 1957 at which time testimony will be taken for the promulgation of field rules.

Yours very truly,

RICHARDSON & BASS

BY

E. J. SCARBOROUGH

SJS/wja

BEFORE THE  
OIL CONSERVATION COMMISSION  
SANTA FE, NEW MEXICO  
*Wilson Co.* EXHIBIT No. *6*  
CASE *1277*

27

**DRILLING AND EXPLORATION COMPANY, INC.**

P. O. BOX 2075

HOBBS, NEW MEXICO

July 1, 1957

BEFORE THE  
OIL CONSERVATION COMMISSION  
SANTA FE, NEW MEXICO  
*Wilson Co.* EXHIBIT No. 7  
CASE 1277

Wilson Oil Company  
Box 1436  
Artesia, New Mexico

Attention: Mr. N. Raymond Lamb

Gentlemen:

We have your letter of June 17, 1957 requesting our recommendations for possible field rules in the Potash Area. We are of the opinion that the casing program as set forth in Commission Order R-968 is adequate for cable tool operations.

With regards to rotary drilling at this depth, we are of the opinion that adequate protection can be given the potash deposits without the use of a salt string with the use of salt saturated water for a drilling fluid and provided that the oil string is cemented back to the surface. It might be well to provide that a caliper survey be run prior to running the oil string and that casing centralizers be spaced throughout the salt section.

In instances where the oil string is set in a dense limestone above the pay section and cemented to the surface, we feel that the salt section is given as much protection as is obtained by use of a salt string with the oil string "tacked" on bottom.

We have not inquired into the bottom hole pressure existing in your Muse No. 1, but the pressures encountered in our Fletcher "A" wells in the Lynch field are so low that migration of fluids would appear to be improbable.

Please feel free to call on us for any information or assistance that you may need.

Yours very truly,

DRILLING & EXPLORATION COMPANY, INC.

*D. C. Webb*

D. C. Webb  
Division Production Superintendent

DH

Case 1277

**Wilson Oil Company**

INCORPORATED UNDER THE LAWS OF NEW MEXICO



P. O. BOX 627

SANTA FE, NEW MEXICO

TELEPHONE 3-7141

May 23, 1957

N. M. Oil Conservation Commission  
P. O. Box 871  
Santa Fe, New Mexico

Attention: Mr. A. L. Porter, Secretary-Director

Gentlemen:

Attached hereto you will please find, our application for the establishing for pool rules covering future drilling in the area of the Wilson Oil Company recently completed oil well. Said well located NE/4 NE/4 of Section 21, T20S-R34E, Lea County, New Mexico. As required in Section 3 of Paragraph III, we wish to establish pool rules for future drilling.

The Wilson Oil Company has future drilling obligations in the area, therefore they request a hearing before the Oil Conservation Commission, or a designated examiner, at the earliest convenient date.

Please advise as soon as the date, time, and place has been set for this hearing.

Sincerely yours,

WILSON OIL COMPANY

By John H. Jones

## Wilson Oil Company

INCORPORATED UNDER THE LAWS OF NEW MEXICO



P. O. BOX 627  
SANTA FE, NEW MEXICO  
TELEPHONE 3-7141

May 23, 1957

New Mexico Oil Conservation Commission  
P. O. Box 871  
Santa Fe, New Mexico

Attention: Mr. A. L. Porter, Secretary-Director

Re: Request for pool rules for new  
discovery in potash area.

Gentlemen:

Wilson Oil Company, the applicant herein, on May 13, 1957, completed the No. 1 Muse, located in the NE/4 NE/4 of Section 21, Township 20 South, Range 34 East, Lea County, New Mexico. The well being located on Federal lease No. Las Cruces 070315, with the royalty reserved by the United States Government.

The discovery well was drilled by permission from the Oil Conservation Commission, granted under Order R-968, issued March 22, 1957, which covered an exception to Order R-111A.

By the filing of this application, the Wilson Oil Company desires to establish pool rules for future drilling in the area surrounding the new oil completion.

It is therefore requested that this matter be set down for a hearing before the Oil Conservation Commission or an examiner designated by the Commission.

Respectfully submitted,

WILSON OIL COMPANY

By 

E. 8

## THE TEXAS COMPANY

TEXACO PETROLEUM PRODUCTS



PRODUCING DEPARTMENT  
WEST TEXAS DIVISION

P. O. BOX 1720  
FORT WORTH 1, TEXAS

July 10, 1957

Wilson Oil Company  
Box 1436  
Artesia, New Mexico

Attention: Mr. N. Raymond Lamb

Gentlemen:

Reference is made to your letter dated June 17, 1957, addressed to our Mr. George Sleeper, wherein you requested certain information concerning the establishment of an adequate casing program for wells to be drilled in the vicinity of your Muse No. 1, NE<sup>1</sup>/<sub>4</sub> NE<sup>1</sup>/<sub>4</sub>, Section 21, T-20S, R-34E, Lea County, New Mexico.

The Texas Company concurs with the cable tool casing program which you employed in drilling your No. 1 Muse, whereby you mudded in your 13-3/8", 10-3/4", and 8-5/8" casing strings and pulled all three after setting and cementing the 5-1/2" string at a depth of 3555 feet.

For rotary drilling we recommend a two-string casing program consisting of approximately 300 feet of surface casing set into the redbeds and cemented to the surface and a production string set through the pay and also cemented to the surface. In order to employ this casing program, it will be necessary, of course, to keep the drilling fluid completely saturated at all times with salts common to the salt section while drilling below the surface string. The mudding off of the fresh water sands and the maintenance of a completely saturated drilling fluid should afford adequate protection to the salt section equivalent to that obtained in the casing program approved by the Commission in Order No. R-968 for drilling with cable tools.

With regard to your comments concerning the holding of a minimum hydrostatic head of cementing materials, we have no definite information on this point; however, in the event it is desirable to reduce slurry weight, we recommend that this be achieved by the use of Perlites rather than the use of gel cements, as the cement placed behind the production string should be saturated with salts common to the zones penetrated, and with suitable proportions, but not less than one percent of calcium chloride by weight of cement, as is

BEFORE THE  
OIL CONSERVATION COMMISSION  
SANTA FE, NEW MEXICO  
*Wilson Co* EXHIBIT No. *8*  
CASE *1277*

Page 2

July 10, 1957

outlined in Order No. R-111-A for cementing opposite the salt section.

If these recommendations meet with your approval and seem to follow the ideas which you may have gathered from other companies, there would seem to be no reason for a meeting of the operators prior to your July 17, 1957, hearing. In any event, however, The Texas Company would appreciate being informed prior to the hearing of the recommendations which Wilson Oil Company plans to make to the Commission concerning these matters.

Yours very truly,

THE TEXAS COMPANY



W. C. Lenz  
General Superintendent,  
Drilling and Production

HNW-JEB



*Cal 7*  
*ajc*

# POTASH COMPANY OF AMERICA

GENERAL SALES OFFICES - 1625 EYE STREET - N.W. - WASHINGTON 6 D.C.  
SOUTHERN SALES OFFICE - 408-9 CANDLER BLDG - ATLANTA - GA.  
MIDWESTERN SALES OFFICE - FIRST NATIONAL BANK BLDG - PEORIA - ILL.



REPLY TO: EXECUTIVE OFFICES  
MINES AND REFINERY  
CARLSBAD - NEW MEXICO

July 12, 1957

Re: Case No. 1277

New Mexico Oil Conservation Commission  
P. O. Box 871  
Santa Fe, New Mexico

Attention: Mr. A. L. Porter, Jr.  
Secretary-Director

Gentlemen:

Potash Company of America hereby wishes to state that it offers no objection to whatever pool rules the Oil Conservation Commission will deem necessary under an amendment to R-111-A and incorporating the orders set in O.C.C. No. R-968, dated March 22, 1957.

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.

Yours very truly,

D. E. Protz  
Chief of Exploration

DEP. nina

**POTASH COMPANY OF AMERICA**

CARLSBAD, NEW MEXICO

C  
O  
P  
Y

July 12, 1937

Re: Case No. 1377

New Mexico Oil Conservation Commission  
P. O. Box 371  
Santa Fe, New Mexico

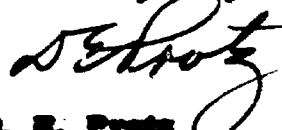
Attention: Mr. A. L. Porter, Jr.  
Secretary-Director

Gentlemen:

Potash Company of America hereby wishes to state that it offers no objection to whatever pool rules the Oil Conservation Commission will deem necessary under an amendment to R-111-A and incorporating the orders set in O. C. C. No. R-988, dated March 22, 1937.

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.

Yours very truly,

  
D. E. Pratt  
Chief of Exploration

DEP:mia

**POTASH COMPANY OF AMERICA**  
CARLSBAD, NEW MEXICO

29

RECEIVED JUL 1 1957

July 12, 1957

Re: Case No. 1277

C  
O  
P  
Y

New Mexico Oil Conservation Commission  
P. O. Box 871  
Santa Fe, New Mexico

Attention: Mr. A. L. Porter, Jr.  
Secretary-Director

Gentlemen:

Potash Company of America hereby wishes to state that it offers no objection to whatever pool rules the Oil Conservation Commission will deem necessary under an amendment to R-111-A and incorporating the orders set in O. C. C. No. R-663, dated March 22, 1957.

The proposal of the applicant has been discussed with Mr. R. Lamb and we find that in this particular area their evidence and request are adequate and reasonable.

Yours very truly,

*E. E. Probst*  
E. E. Probst  
Chief of Exploration

BEP:ams

BEFORE THE  
OIL CONSERVATION COMMISSION  
SANTA FE, NEW MEXICO  
*Wilson Co.* EXHIBIT No. 9  
CASE 1277

DIAGRAM OF PROPOSED CASING PROGRAM  
ROTARY TOOLS  
NEW POOL TWP 20 S RGE 34 E  
LEA COUNTY, NEW MEXICO

Case 1277

7-10-57 NRL

Q 27

Casing to be set in  
Top "Red Beds" - shut off  
surface waters. Cemented to surface

8 5/8"  
9 5/8"

RECENT, Caliche &  
Water Sands

CHINLE, Red Beds  
some rotten  
and  
Water Sands

SANTA ROSA, Red Beds  
Water Sands

DEWEY LAKE, Competent  
Silt Stone  
and Shales

RUSTLER - Anhydrite

SALADO - Salt, Potas.  
& Anhydrite

Production String be set at  
least 100' below Salado  
but above possible Seven  
Rivers producing zone

TANBIL - Anhydrite &  
Dolomite

YATES - Dolomite,  
Anhydrite &  
Sand beds

SEVEN RIVERS -  
Dolomite &  
Sand Beds

5 1/2"  
7"

BEFORE THE  
OIL CONSERVATION COMMISSION  
SANTA FE, NEW MEXICO  
*Wilson* EXHIBIT No. *4*  
CASE *1277*

DIAGRAM OF PROPOSED CASING PROGRAM  
CABLE TOOLS

NEW POOL TWP 20 S RGE 34 E  
LEA COUNTY, NEW MEXICO

Case 1277

7-10-57 NRL

23

Casing to be set in  
Top "Red Beds"- shut off  
surface waters.

*Surf. Csg.*

13 3/8"  $\Delta$

Casing to be set at about  
600 feet in Chinle- Shut off  
"Dry Cave" & Water Zones.

*Chinle Csg.*

10 3/4"  $\Delta$

Casing to be set at about  
1200' to shut off  
Santa Rosa water zone.

*Water shut off Csg.*

8 5/8"  $\Delta$

RECENT, Caliche &  
Water Sands

CHINLE, Red Beds  
some rotten  
and  
Water Sands

SANTA ROSA, Red Beds  
Water Sands

DEWEY LAKE, Competent  
Silt Stone  
and Shales

HUSTLER- Anhydrite

SALADO - Salt, Potash  
& Anhydrite

Production String be set at  
least 100' below Salado  
but above possible Seven  
Rivers producing zone

*production string to  
total depth in Yates  
to be tested under it.*

*can be determined whether  
any more production has been  
obtained. 26" 5 1/2"*

*production string 7"  
to be tested under it  
string may be pulled.*

TANSIE- Anhydrite &  
Dolomite

YATES -Dolomite,  
Anhydrite &  
Sand beds

SEVEN RIVERS-  
Dolomite &  
Sand Beds

BEFORE THE  
C. I. CONSERVATION COMMISSION  
SANTA FE, NEW MEXICO  
*Wilson* EXHIBIT No. 3  
CASE 1277

Casing Indicated in Suggested sizes