

CASE 4946: Application of UNION  
TEXAS PETROLEUM FOR SPECIAL POOL  
RULES, LEA COUNTY, NEW MEXICO.

CASE No.

4946

Application,

Transcripts,

Small Exhibits

ETC.

BEFORE THE  
NEW MEXICO OIL CONSERVATION COMMISSION  
Santa Fe, New Mexico  
August 7, 1974

EXAMINER HEARING

IN THE MATTER OF: )  
 )  
Case No. 4946 being )  
reopened pursuant to the )  
provisions of Order No. ) Case No. 4946  
R-4581, Crosby-Fusselman )  
Associated Pool, Lea )  
County, New Mexico. )

BEFORE: Daniel S. Nutter, Examiner.

TRANSCRIPT OF HEARING

A P P E A R A N C E S

For the New Mexico Oil  
Conservation Commission: Thomas Derryberry  
Legal Counsel for the Commission  
State Land Office Building  
Santa Fe, New Mexico

For the Applicant: Paul W. Eaton, Jr., Esq.  
HINKLE, BONDURANT, COX &  
EATON  
Hinkle Building  
Roswell, New Mexico

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MR. NUTTER: Call Case Number 4946.

MR. DERRYBERRY: Case 4946, in the matter of Case Number 4946 being reopened pursuant to the provisions of Order Number R-4581, which order established temporary rules for the Crosby-Fusselman Associated Pool, Lea County, New Mexico.

MR. EATON: Paul Eaton, of the firm of Hinkle, Bondurant, Cox & Eaton, representing Union Texas Petroleum and we have one witness, Mr. Doyle Hartman.

(THEREUPON, the witness was sworn.)

DOYLE HARTMAN

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

DIRECT EXAMINATION

BY MR. EATON:

Q Would you please state your name and where you live and by whom you are employed and in what capacity?

A Okay. My name is Doyle Hartman. I live in Midland Texas. I am employed by the Union Texas Petroleum Corporation as Petroleum Engineer.

Q Have you previously testified before this Commission, Mr. Hartman?

A No.

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Q Will you please give us a background of your education and your work experience?

A Okay. I am a graduate of the Colorado School of Mines with a degree in Petroleum Refining Engineering. I worked for Atlantic-Richfield Company for six years as a Petroleum Engineer in Wyoming and in Oklahoma. I have worked for the last, approximately a year and a half for Union Texas Petroleum Corporation in Midland.

Q While working with Union Texas Petroleum Company, what areas have you worked in?

A The predominant area that I have worked in with Union Texas Petroleum has been in southeast New Mexico.

Q Are you familiar with the Crosby-Fusselman Associated Pool and the general area there?

A Correct, that is right.

MR. EATON: Are the witness's qualifications satisfactory, Mr. Hearing Officer?

MR. NUTTER: Yes.

Q (Mr. Eaton continuing.) Mr. Hartman, are you familiar with the special pool rules which were previously promulgated for this pool?

A Yes.

Q Will you state generally what those rules provide?

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A. Well, generally they provide three hundred and twenty acre spacing for oil wells, GOR limit for oil wells five thousand, the one GOR limit for gas wells twenty-five thousand for one with an allowable of three hundred and ten barrels per day per well. And it also provides that deviations, you know, can be made from this special ruling by the Commission where it feels necessary to show drainage of the oil reservoir.

Q. Do you have an opinion as to whether these rules should be made permanent on that basis?

A. Well, based on the evidence to date it appears that the Commission was correct in making the rule they did a year ago. We feel like it should be continued based on that evidence.

Q. Do you have exhibits to support that opinion?

A. The only additional evidence we are going to report at this time is the decline curve performance on the two wells that are in the Crosby-Fusselman Pool. These are the Crosby -- Union Texas Crosby Deep No. 1 and the Union Texas Crosby Deep No. 2 which is Exhibit Number Two, but we also refer to two of the exhibits that were shown last year.

Q. All right. Would you like to refer first to last

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year's exhibit and I forget the exhibit number that was introduced in the original case?

A. Right, the two exhibits that we are going to use from last year are the structure map on the Fusselman and also a cross section showing the producing zones within the Fusselman for the Crosby Deep No. 1 and the Crosby Deep No. 2 and all this will do is just bring out the argument that we used last year and the reason why the special ruling was requested.

Then, we will show the decline in curve performance which will tell -- substantiate that the rule at the time was correct.

MR. NUTTER: Have there been any additional wells drilled in here?

THE WITNESS: Yes, sir, they have.

MR. NUTTER: This map will reflect that change, this contour map?

THE WITNESS: There may have been one additional change down here where the additional well has been drilled but I don't believe so.

MR. NUTTER: Do you have any extra copies of this?

THE WITNESS: We brought extra copies in the event that the Commission would want them.

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But the completion on the additional well is in progress and there will be an attempt to complete in the Fusselman but we have no data on that completion at this time.

Q (Mr. Eaton continuing.) Please proceed.

A. Okay. The basic argument that was used last year to justify a larger spacing was the fact that the Fusselman zone has only approximately a forty-foot oil column.

The No. 1 when it was tested, tested an oil-water contact at minus fifty-eight hundred and a gas-oil contact at minus fifty-seven sixty.

A test on the Crosby Deep No. 2 also indicated that this data from the No. 1 is correct. What we would like to show is even though the Crosby Deep No. 2 appears to be on top of the structure the only Crosby development is down at this point here at approximately eighty-seven eighty to eighty-seven ninety is where the porosity development occurred within the Fusselman. This also happens to fall right between the interval of the water-oil contact at minus fifty-eight hundred and the gas-oil contact at fifty-seven sixty.

The decline curve performance on both wells indicates that we are straddling an oil -- are right in

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between in a narrow column, oil column, between the gas cap and the water table.

Q Do you have exhibits that reflect the decline curve?

A The decline curve does reflect, I believe, the performance of these wells and the argument was correct to start with and I would like to review them and give you some engineering logic.

Q All right. Please refer to what has been marked as Exhibit Number One.

A Well, we have got, we should have -- Exhibit Number One is right there, and this is Exhibit Number Two.

Q Exhibit Number One, Mr. Hartman, and first of all, Mr. Hartman, I would like to clarify one point. How many wells are in the pool, two wells, two producing wells?

A Two wells are producing.

MR. NUTTER: And one well is being completed?

A There is one completion cap going to be made.

MR. NUTTER: Now, you have got one well that is in the north end of the pool and that is on the north of this east-west fault?

A That is correct.

MR. NUTTER: And where is that on your cross section map?

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A. That is this well right here (indicating).

MR. NUTTER: And that is the Crosby No. 1?

A. That is correct and this is the producing interval right here (indicating).

MR. NUTTER: Is that an oil well or a gas well?

A. They are now definitely oil wells. I believe that the GOR performances plus the active water drive is what explains their behavior and the fact that they have not gone to gas as originally proposed.

MR. NUTTER: Now, this Crosby Deep No. 2 is in the center of this fault block in here, is that correct?

A. That is correct.

MR. NUTTER: And which one is it on this?

A. It is this one right here (indicating).

MR. EATON: On the right-hand side of the cross section.

MR. NUTTER: And the third well is being completed south of this south fault?

A. Yes, sir.

MR. NUTTER: Where is that being completed?

MR. EATON: And where is that, sir?

A. It should be completed right here, a re-entry into an abandoned Union well.

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MR. NUTTER: Is this on the exhibit that was introduced a year ago and is shown in the southwest-southeast of thirty-three as a gas well?

A. Well, I do not have the exhibit showing that but it would have to be, yes, sir, that is correct.

MR. NUTTER: Okay. And is that well on your cross section?

A. No, sir.

MR. NUTTER: Okay.

A. The completion work is just --

Q. (Mr. Eaton continuing.) What is the status of that well right now, Mr. Hartman?

A. They are in the process of completing it right now. They have made a completion in the McKee right now and they are testing it and plans are to come up and to also test the Fusselman.

MR. NUTTER: But the Fusselman has not been tested as yet?

A. That was tested while drilling but it has not been production tested and there were problems while drilling, drill pipe failure on the DST's.

MR. NUTTER: Go ahead with your explanation.

A. Okay. As you know, a year ago one of the concerns

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was the fact that these wells were likely to go to a very high GOR which is normal for an oil well in a short period of time.

But, that has not occurred. In my opinion there is a very obvious reason. We do have an active water drive within the Fusselman and, short periods when we get a very good pressure buildup indicating active water encroachment and we are dealing with approximately thirty-five degree gravity accrued and we should have a bottom hole pressure approximately thirty-two hundred psi and a solution GOR of approximately nine hundred to one.

What we feel has happened is that as the wells are pulled and if they are produced at a hard rate over a long period of time the GOR will increase but if they are produced at a more moderate rate the water drive is allowed to prevent gas from coning from the gas cap and this is essentially why we feel that the GOR has declined. This is the only way this type of a well the GOR could decline and we are dealing with an extremely active water drive.

One of our concerns is if the spacing was reduced and somehow the gas cap is allowed to be produced off and possibly coned, that quite a bit of the recoverable

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oil up into the gas cap and it would be lost as residual oil in the gas cap. We feel like spacing should be maintained as it is until the recoverable oil has been recovered. At that time gas associated with the oil will be allowed to be produced.

Q (Mr. Eaton continuing.) Do you want to continue to explain Exhibit Number One?

A Well, Exhibit Number One and Exhibit Number Two, both, show a similar type of performance, a decrease in GOR and a decline production. The decline production being due to the increase in water and we are now at a water of approximately eighty-three to eighty-five per cent on the Crosby Deep No. 2 which is Exhibit Number Two.

On the Crosby Deep No. 1 we are producing at a water cut at approximately forty-five per cent but due to the fact that we do have this active water we feel that an area sweep over time will allow us to recover all of the recoverable oil associated with this narrow oil ring.

Q What basic conclusions do you draw from Exhibits One and Two?

A Well, we draw the conclusions that we do have the reservoir energy there to sweep all of the oil in place. Due to the fact that we do have this active water drive, if

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the gas cap is allowed to be produced off it would cone oil up until the gas cap and would allow that to be -- it would be lost as residual oil and never recovered.

So, we thought that it would be in the best interest of Union Texas Petroleum and the state of New Mexico that the spacing be allowed and be held at three hundred and twenty acres.

Q Mr. Hartman, have you given any consideration to the economics of drilling wells on a smaller spacing than three hundred and twenty acres?

A Yes, sir, and it appears that due to the fact that porosity development in the Fusselman can be erratic and that it may not be profitable to drill additional wells. This is one of our bigger concerns is because of the erratic porosity development in the Fusselman zone.

In the Crosby Deep No. 3, the well in which the completion attempt is going to be made, did not show near as good a porosity development as the Crosby Deep No. 2, for example. This is what could make the economics unprofitable from the standpoint of additional development.

Q Is it your opinion then, that that well spaced on three hundred and twenty acres in this pool will efficiently and effectively drain?

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A. Yes, sir, I think we have an excellent chance of that occurring due to the fact that we have a very active water drive. If it weren't due to the water drive that we have there it probably would be less likely to occur than it is with this active water drive and the fact that we are dealing with a very damp porosity development.

MR. EATON: That's all, and we offer into evidence Exhibits One and Two.

MR. NUTTER: Applicant's Exhibits One and Two will be admitted into evidence.

(THEREUPON, Applicant's Exhibits One and Two were admitted into evidence.)

MR. EATON: I have no further questions of Mr. Hartman.

CROSS EXAMINATION

BY MR. NUTTER:

Q. Mr. Hartman, with reference to your Exhibits One and Two here -- now, take the Crosby Deep No. 2, which is Exhibit Number Two?

A. Yes, sir.

Q. Let me see if I am reading this right. It would appear that the rate of production for the month of June would be something like sixty-seven hundred barrels of oil?

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A. No, sir. These rates are on barrels of oil per day, or barrels per day, the oil rates are. That would be sixty-seven per day what was the producing rate in June of 1974.

Q Okay. So then, we are using the normal scale on the exhibit?

A. That is correct.

Q So, that would be sixty-seven barrels of oil per day?

A. That is correct.

Q Now, on the GOR, would the June GOR be twenty-one hundred and something or would it be -- would the GOR be --

A. It is twenty-one hundred. The figures in parentheses on the scale, those are for the GOR reading.

Q Okay.

A. All of the other figures refer to the left-hand side --

Q The tubing pressure would be seven hundred pounds?

A. Yes, sir, seven hundred and fifty pounds.

Q And the accumulative oil production is read on the right-hand side?

A. That is correct.

Q And this would be sixty-seven thousand approximately?

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A. That is correct.

Q. Okay. I guess the same type of reading would apply to the other chart on Exhibit Number One except we don't have tubing pressure labeled and that would be the line with the little stars on it?

A. That is correct.

Q. Okay. Now, the water cut on the two wells that you mentioned was about eighty-five per cent?

A. It is approximately eighty-five per cent or -- yes, it is approximately -- it should be about eighty -- it is not plotted on this particular curve -- it is plotted as seventy-eight and a half in the month of April.

Q. And the water cut on the other well is in the forty to fifty per cent range?

A. That is correct.

Q. Now Mr. Hartman, in looking at this reservoir and this information that you have presented here today, it looks like to me -- I don't see why we are calling this an associated reservoir with a classification for gas wells. I don't see any evidence of a gas well in here.

A. I agree with you.

Q. It looks like to me that you have got a clear-cut case of an oil well and if you are after wide spacing there

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is no reason to camouflage it and call it an associated reservoir with three hundred and twenty acre spacing for gas wells and then they are producing as oil wells.

Is that what you really want? You have got an oil reservoir here, haven't you?

A. We are producing out of an oil reservoir with the Crosby Deep No. 1 and the Crosby Deep No. 2.

Q. And it definitely has a gas cap on the top of it?

A. From the original tests, the DST's and perforation tests on the Crosby Deep No. 1, this was the conclusion that was drawn plus the fact that we are, due to the performance of the GOR performance we have to be very close to a gas cap because there is no way that that oil could be in solution or that gas could be in solution where we were talking about initial GOR's in the range of five thousand to one, say for example, on the No. 2 here. That gas has got to be coming from a gas cap. That has to be a pure gas zone.

Q. Well, prudent operation of the wells in the past year though both of the GOR's are coming down very well.

A. By not pulling them hard, that is correct.

Q. Are the wells producing at capacity or are you limiting the production on them?

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A. No, sir, they are not producing at capacity. This is one thing, and additional study is going to have to be made on as to what is the optimum rate in which to produce them. But you notice on the No. 2 the production was down in the month of May to roughly thirty-five barrels per day. This was over a period where the artificial lift equipment was being installed and due to the time it took for the installation of this equipment to occur the water drive had a chance to catch up with the withdrawals that had been made from the reservoir and the pressures built and if you will notice we also have a pretty good decrease in the GOR for that period of time also.

Q. Well now, had the oil been flowing up until May when you were installing --

A. That is correct. The decision had been made when the well had died several times and the decision was made to go ahead and install artificial lift equipment.

Q. Is the other well pumping or flowing?

A. The other well is flowing at this time and we feel with the water cut and so forth, that it will be put on artificial lift equipment.

Q. But this water cut is nothing like the other well as of now, is it?

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A. That is correct.

Q. Do you think that the retention of the five thousand to one limiting ratio is necessary in this pool?

A. No, sir, I really don't because the spacing, I think, is our biggest concern -- the GOR being that it has fallen like this -- it is not really that necessary and probably -- high GOR's indicate maybe there is a too high of a withdrawal rate.

Q. And what is dedicated to the two wells, the south half of twenty-eight is dedicated to the No. 1 and the north half of thirty-three is dedicated to the No. 2?

A. Yes, sir, right.

Q. And if you complete this other well down in the southwest and southeast of thirty-three as a Fusselman producer, it would be dedicated to the south half of thirty-three, I presume?

A. I believe that would probably be the spacing, yes.

Q. Now, this lease map shows all kinds of ownership here of these leases. Is this a unit or a communitized area?

A. It is communitized.

Q. It is all communitized?

A. That is correct.

HARTMAN-CROSS

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Q I see.

A It is very difficult lease work also.

MR. NUTTER: Are there any further questions of Mr. Hartman? You may be excused. Do you have any further witnesses, Mr. Eaton?

MR. EATON: No, sir. In connection with your last question, I might say that it is my understanding that both of the wells are under three hundred and twenty acre communitization agreements.

(THEREUPON, the witness was excused.)


MR. NUTTER: Does anyone have anything further in the case of 4946? If not, we will take the case under advisement.

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STATE OF NEW MEXICO )  
 ) ss.  
COUNTY OF SANTA FE )

I, SIDNEY F. MORRISH, Court Reporter, do hereby certify that the foregoing and attached Transcript of Hearing before the New Mexico Oil Conservation Commission was reported by me, and the same is a true and correct record of the said proceedings, to the best of my knowledge, skill and ability.

*Sidney F. Morrish*  
SIDNEY F. MORRISH  
Court Reporter

I do hereby certify that the foregoing is  
a complete record of the proceedings in  
the Examiner hearing of Case No. 4946  
heard by me on 8/7, 1974  
 Examiner  
New Mexico Oil Conservation Commission

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BEFORE THE  
NEW MEXICO OIL CONSERVATION COMMISSION  
Santa Fe, New Mexico  
July 10, 1974

EXAMINER HEARING

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IN THE MATTER OF:	)	
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BEFORE: Daniel S. Nutter, Examiner.

TRANSCRIPT OF HEARING

A P P E A R A N C E S

For the New Mexico Oil	
Conservation Commission:	Thomas Derryberry, Esq.
	Legal Counsel for the Commission
	State Land Office Building
	Santa Fe, New Mexico

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MR. NUTTER: We will call next Case No. 4946.

MR. DERRYBERRY: Case 4946. In the matter of Case No. 4946 being reopened pursuant to the provisions of Order No. R-4581, which order established temporary rules for the Crosby-Fusselman Associated Pool, Lea County, New Mexico.

We have a letter from Clarence Hinkle, Attorney for the Applicant stating as follows: (Reading) We represent Union of Texas Petroleum who was the original proponent of the special pool rules and due to the unavailability of witnesses for Union of Texas on both July 10th and July 24th, please consider this as a motion on behalf of Union of Texas to continue this Case until the Examiner Hearing on August 7th. (End of reading.)

MR. NUTTER: Case No. 4946 will be continued until the Examiner Hearing scheduled to be held at this same place at 9:00 A.M., August 7, 1974.

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STATE OF NEW MEXICO )

) SS.

COUNTY OF SANTA FE )

I, RICHARD L. NYE, Court Reporter, do hereby certify

that the foregoing and attached Transcript of Hearing before

the New Mexico Oil Conservation Commission was reported by

me, and the same is a true and correct record of the said

proceedings, to the best of my knowledge, skill and ability.

Richard Taylor

RICHARD L. NYE, Court Reporter

I hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case No. 4946 heard by me on 2/10, 1974.

*[Signature]*, President  
New Mexico Oil Conservation Commission

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BEFORE THE  
NEW MEXICO OIL CONSERVATION COMMISSION  
Santa Fe, New Mexico  
July 10, 1974

EXAMINER HEARING

IN THE MATTER OF:

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Pool, Lea County, New Mexico.

CASE 4946

BEFORE: Daniel S. Nutter, Examiner.

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For the New Mexico Oil

Conservation Commission: Thomas Derryberry, Esq.  
Legal Counsel for the Commission  
State Land Office Building  
Santa Fe, New Mexico

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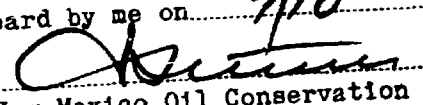
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STATE OF NEW MEXICO )  
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RICHARD L. NYE, Court Reporter

I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case No. 4946 heard by me on 7/10, 1974.  
 Examiner  
New Mexico Oil Conservation Commission

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BEFORE THE  
NEW MEXICO OIL CONSERVATION COMMISSION  
OIL CONSERVATION COMMISSION CONFERENCE ROOM  
STATE LAND OFFICE BUILDING  
SANTA FE, NEW MEXICO  
May 23, 1973

## EXAMINER HEARING

IN THE MATTER OF:

Application of Union Texas Petroleum  
for special pool rules, Lea County,  
New Mexico.

Case No. 4946

BEFORE: Elvis A. Utz  
Examiner

TRANSCRIPT OF HEARING

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1 MR. UTZ: Case 4946.

2 MR. CARR: Case 4946: Application of Union Texas  
3 Petroleum for special pool rules, Lea County, New Mexico.

4 MR. EATON: Paul Eaton of Hinkle, Bondurant, Cox and  
5 Eaton representing the Applicant. We have two witnesses.

6 MR. UTZ: Are there other appearances in this case?

7 (No response)

8 MR. UTZ: Let the record show there were none.

9 WILLIAM F. MANHGRAF

10 was called as a witness and, after being duly sworn according  
11 to law, testified as follows:

12 DIRECT EXAMINATION

13 BY MR. EATON:

14 Q Please state your name, by whom you are employed, and  
15 in what capacity?

16 A William F. Manhgraf, I'm a Geologist for Union Texas  
17 Petroleum.

18 Q Have you previously testified before the Commission before?

19 A No, I have not.

20 Q Mr. Manhgraf, would you give us your educational background  
21 and your work experience?

22 A Yes. I have a Bachelor of Science degree from the  
23 University of North Carolina in geology. I graduated in  
24 1949. I did two years of graduate work towards a Masters  
25 degree, but I was interrupted by the Korean War. When I

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1 returned from the Korean War I came to work in the West  
 2 Texas area and for the last 20 years, I have worked in  
 3 the West Texas Permian Basin area. I have worked, in  
 4 rough figures, three years for Signal Gas; three years for  
 5 the Buffalo Oil Company; 11 years for the Cavett Corporation;  
 6 and three years for Union Texas Petroleum as a geologist.

7 Q Are you familiar with the geology of the area in which  
 8 the Crosby-Fusselman Pool is located?

9 A Yes, I was very closely familiar with the drilling of two  
 10 wells we have in the field and have prepared the two  
 11 exhibits here.

12 MR. EATON: Are the witness' qualifications satis-  
 13 factory?

14 MR. UTZ: Yes, they are.

15 Q (By Mr. Eaton) You are familiar with this application,  
 16 are you not?

17 A Yes.

18 Q Basically what is the company seeking?

19 A We are seeking special field rules for the Crosby-Fusselman  
 20 Field which involve 320-acre spacing, limiting the gas-oil  
 21 ratio for an oil field to 5000 to one. This has been  
 22 declared a combination reservoir and a well is classified  
 23 an oil well if the GOR is less than 25,000 to one and a  
 24 gas well if it is greater than 25,000 to one.

25 Q Mr. Manhgraf, I refer you to what has been marked as



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1 Applicant's Exhibit 1 and ask for your explanation of  
2 the exhibit.

3 A Exhibit 1 is a map contoured on the top of the Fusselman  
4 and provides the geological background for our hearing  
5 today. It shows that we have a structural trap for  
6 the entrapment of hydrocarbons. The map is based primarily  
7 on four wells which penetrated the Fusselman. With the  
8 estimated points we were able to make from the isopack  
9 from the Devonian to the Fusselman a large amount of  
10 Devonian control exists in the area. This was developed  
11 Devonian structure before the Fusselman was found, so  
12 the structure is nothing new.

13 The two Fusselman wells that Union Texas has drilled  
14 are circled on your map for identification. They are  
15 in the south half of Section 28 and the north half of  
16 Section 33. The Number 1 Well is the discovery well and  
17 is in the south half of Section 28.

18 The structure is anticlinal and it's located on the  
19 west edge of the central basin platform. It seems to be  
20 similar to the dip called a Sandia type and it has typical  
21 platform trend from the northwest to the southeast with  
22 a fault on the east side of the structure.

23 I have shown several cross faults across the structure  
24 and there is reasonably conclusive evidence that these  
25 are present. There may be others that exist but I feel

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1 that these are certainly there.

2 The dash line on the exhibit represents the cross  
3 section which will be shown in Exhibit 2 in just a minute.

4 The red arrow that is colored on your exhibit repre-  
5 sents that portion of the Fusselman reservoir which is  
6 gas. This is above the gas-oil contact of minus 5760.  
7 The green area represents the oil column present. The  
8 blue area is below 5800 which is water bearing.

9 The Crosby Deep Number 1 Well in the south half of  
10 Section 28 was a gas well and the south half of Section 28  
11 was communitized and dedicated for production purposes to  
12 that well. The Crosby Number 2 was an oil well and the  
13 north half of Section 33 is unitized as to operators, but  
14 pending this hearing there has been no communitization.

15 Q You are saying that the north half of Section 33 has  
16 working interests?

17 A Yes. The maximum gas column as we can see it is seen in  
18 our Number 2 Well and would be 179 feet of potential gas  
19 column. Potentially there could be as much as 238 feet of  
20 possible gas column.

21 The maximum gross oil column is 40 feet. The two  
22 wells that we have producing only exhibited roughly ten  
23 feet of net pay within that 40 feet of gross interval.

24 Q Mr. Manhgraf, please refer now to what has been marked  
25 for identification as Exhibit No. 2 and explain this exhibit.

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1 A As I have previously mentioned, Exhibit No. 2 represents  
2 the cross section as shown by the dashed lines on  
3 Exhibit 1. The color coding is identical to that shown  
4 on Exhibit 1. That is, red represents the gas column  
5 potential in the Fusselman and the green is the oil, and,  
6 of course, the water is colored blue.

7 The section represents a cross-section view of the  
8 north flank. By structure, it takes in three of the four  
9 wells that I have previously mentioned as having penetrated  
10 the Fusselman formation. It takes in our two wells, the  
11 Number 1 and 2 Crosby Deep Wells, plus the Anderson Number  
12 1 which tested Fusselman, but which was found to be water  
13 bearing.

14 The scales of the cross section, both horizontal and  
15 vertical, are one inch to 100 feet.

16 The wells which, as you might notice, are in the upper  
17 part of the structure vary from six to ten degrees. Now,  
18 based on our sub-surface data, they may get as high as  
19 15 degrees further down the flank. The Crosby Deep Number  
20 1 was potentialized as a gas well from perforations 8744  
21 to 8800. The potential was calculated on open flow at  
22 6.104 million. Perforations below that depth were  
23 primarily water bearing, or largely water bearing.

24 The Crosby Deep Number 2 potentialized as an oil well  
25 flowing 455 barrels of oil per day. Now, we have determined

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1 the oil-water contact, based on testing in the Crosby  
2 Deep Number 1 at perforations of 8810 to 8816 and 8826  
3 to 8834 at 35 to 40 per cent water. We feel like the  
4 oil-water contact is approximately between these perfor-  
5 ations.

6 We have located the gas-oil contact as minus 5760  
7 based on performance data of the Crosby Deep Number 1 Well.

8 As you can see by the Crosby Deep Number 2 Well,  
9 there is only one very good zone of porosity which was  
10 determined in the Number 2 Well which we feel is right  
11 in the oil column which allows us maximum oil recovery.  
12 This well, even though it potentialled relatively water  
13 free, immediately after the potential, we started making  
14 water. As soon as this happened, the gas-oil ratio started  
15 going up which demonstrated that we are very close to the  
16 gas-oil contact -- to the oil-water contact and that's a  
17 very thin oil column.

18 In brief summary, it appears we have a relatively  
19 thick gas column in the Fusselman formation and a thin  
20 oil column in the Devonian.

21 If you will refer to the left-hand well on our cross  
22 section which has been produced for a long time, this is  
23 the Olsen Number 1 Eva Owens. This well demonstrated the  
24 same kind of situation as we have. It was completed as  
25 an oil well and came in very well potentialling at 1314

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1 barrels a day. However, you will notice the total pro-  
2 duction was only 35,789 barrels of oil.

3 Q You are talking about the Olsen Number 1 Eva Owens?

4 A Yes.

5 Q And this well has evidenced performance similar to what  
6 you anticipate from your Crosby Deep Number 1 and Number  
7 2 Wells?

8 A Yes. It's hard to draw an analogy of how much oil we  
9 are going to recover, but I do say that I feel like we  
10 have a similar reservoir situation.

11 Q And is that the conclusion that we are drawing from this  
12 Exhibit No. 2?

13 A Yes, that we have a thick gas reservoir with a thin oil  
14 column.

15 Q Were Exhibits 1 and 2 prepared by you or under your super-  
16 vision?

17 A Yes, they were.

18 MR. EATON: We offer Exhibits 1 and 2 into evidence,  
19 Mr. Examiner.

20 MR. UTZ: Without objection, Applicant's Exhibits 1  
21 and 2 will be entered into the record of this case.

22 (Whereupon Applicant's Exhibits 1 and 2 were accepted  
23 in evidence.)

24 MR. EATON: I have no further questions of this  
25 witness.

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2 BY MR. UTZ:

3 Q Where is the Olsen Number 1 Eva Owens located?

4 A It's in the southwest corner of Section 21. It is shown  
5 as an abandoned oil well and the dashed line goes through  
6 the well.

7 Q That was a Devonian producer?

8 A Yes, it was.

9 Q And it's abandoned now?

10 A Yes, sir.

11 Q The Crosby Deep Wells are substantially deeper than the  
12 Fusselman zone, is that right?13 A Yes, some seven or eight hundred feet -- I'm sorry, I didn't  
14 understand your question. They are deeper than the  
15 Devonian.

16 Q These wells are completed in the Devonian also?

17 A No, sir. There is a producing Devonian well on the pro-  
18 ration unit already, but not in our wells.

19 Q Your wells are single completions?

20 A Yes, they are single completions.

21 Q Both of them.

22 A Yes.

23 Q Are you asking for horizontal limits.

24 A Between the wells?

25 Q Well, horizontal limits for the Crosby-Fusselman Pool.

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1 A Have they already been established?

2 Q Have they?

3 A We are showing the horizontal limits on our map and they  
4 are represented by the green line. We are showing the  
5 horizontal limits of our reservoir in the south half of  
6 Section 28 and the north half of Section 33.

7 Q You don't know whether the Commission has designated these  
8 as yet?

9 A As I understand it, the Commission accepted our Number 1  
10 Well and allowed us to communitize that, beyond that, I'm  
11 not sure.

12 Q You do consider this one pool though?

13 A As you can see by the cross section, I don't believe that  
14 the fault affects this reservoir.

15 MR. UTZ: Are there any other questions of the  
16 witness?

17 (No response)

18 MR. UTZ: He may be excused.

19 (Witness excused)

20

21 DONALD B. WELLS

22 was called as a witness and, after being duly sworn according  
23 to law, testified as follows:

24 DIRECT EXAMINATION

25 BY MR. EATON:

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1 Q Please state your name, by whom you are employed, and  
2 in what capacity.

3 A Donald B. Wells, District Engineer for Union Texas Petroleum  
4 in Midland.

5 Q Have you previously testified before the Commission in that  
6 capacity?

7 A Yes, sir -- I wasn't District Engineer, but I have testified.

8 Q Were your qualifications accepted as a Petroleum Engineer?

9 A Yes, they were.

10 MR. UTZ: You are familiar with this case?

11 THE WITNESS: Yes, sir.

12 MR. UTZ: The witness is qualified.

13 Q (By Mr. Eaton) And you are familiar with the application,  
14 are you not?

15 A Yes, sir.

16 Q Are you familiar with the production characteristics of the  
17 two Crosby Deep Wells in the Crosby-Fusselman Pool?

18 A Yes, I am.

19 Q Would you please give the production history of those two  
20 wells?

21 A Yes, sir. Very briefly to reiterate what has already been  
22 stated, the Number 1 Well was the initial discovery well  
23 of the Crosby-Fusselman Pool. The well was completed and  
24 potentialized as a gas well in March, 1972. Prior to our  
25 final completion, we tested several zones in the well and



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1 this did produce water below where we made our final  
2 completion. The final completion was made at a Sub-C  
3 depth of minus 5754 to 5768.

4 The Number 2 Well was completed in February, 1973,  
5 as a completed oil well flowing 455 barrels of oil per  
6 day. I might call your attention to the fact that there's  
7 an overlap of two feet in these perforations in the two  
8 wells. The Number 2 Well was an oil well that is cur-  
9 rently making half of its amount of liquid in water.

10 Q I call your attention to what has been marked as Exhibit  
11 3 and ask you to state what that represents, Mr. Wells.

12 A This is just a production curve of both wells. We have  
13 exhibited what the gas-oil ratio, oil production, and  
14 flowing tubing pressure is on the Number 1 Well and  
15 similar information on the Number 2 Well with the addition  
16 of the water production it has made since completion.

17 I would like to call your attention to the flowing  
18 tubing pressure being identical in both wells --

19 Q What does that mean?

20 A We feel this is an indication that these two wells are  
21 communicated even though we have evidence, we feel con-  
22 clusive evidence, that there is a fault between the wells.  
23 The flowing pressure is identical on both wells and the  
24 characteristics of both wells are identical with the ex-  
25 ception of the water production in the Number 2 Well.

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1 We have in the last week started making water on the  
2 Number 1 Well, so we feel this substantiates our previously  
3 known data that the oil column is very thin and that  
4 water underlies that.

5 The dotted line you see on Exhibit 3 is an extra-  
6 polation of our flowing tubing pressure. Assuming the  
7 producing rate stays identical, which we realize is  
8 completely hypothetical, but if you assume that the  
9 producing rate stays constant and the tubing pressure  
10 continues to decline both of these wells will reach zero  
11 pressure or die in May of 1974. If we go ahead and assume  
12 that we will produce a constant rate until that time, we  
13 will have produced accumulative production from both  
14 wells of 180,000 barrels of oil. From the log analyses  
15 and using our structure map, we have calculated some 720,000  
16 barrels of oil in place in the Crosby-Fusselman Pool.  
17 With a 25% recovery factor, from looking at the other  
18 Fusselman pools in New Mexico, this is a good average  
19 recovery factor. Twenty-five per cent comes out to exactly  
20 180,000 barrels which appears what we will produce from  
21 both wells.

22 Q What essential conclusions can you draw from Exhibit No. 3?

23 A We feel that the two wells are exhibiting identical pro-  
24 ducing characteristics and we conclude that they will  
25 drain all of the reservoir that exists there.

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1 Q Mr. Wells, directing your attention to what has been  
2 marked for identification as Exhibit 4, would you please  
3 state what this exhibit portrays?

4 A Yes, sir. This is a summary of our reservoir data indica-  
5 ting the porosity range, average porosity, and water  
6 circulation. There were various factors we used to  
7 determine what the oil in place was. At the bottom you  
8 will see 720,000 barrels of oil in place and with our  
9 recovery factor of 25 per cent, it will be 180,000 barrels  
10 of recoverable oil for the pool.

11 Q You are asking in part for 320-acre spacing for oil  
12 wells with 80-acre allowables, are you not?

13 A That's right.

14 Q What is the basis for your request for that spacing?

15 A We feel that the evidence that I have just mentioned,  
16 180,000 barrels of recoverable oil from the pool, doesn't  
17 justify additional drilling. Our calculations of the  
18 value of this oil and associated gas is only some \$623,000.  
19 The Number 2 Well cost us \$223,000 to drill with similar  
20 cost for the Number 1 Well. So we are not going to make  
21 an excessive amount of profit if we stop where we are.  
22 We feel that we have demonstrated that we can prevent  
23 waste by depleting the oil that's there with the two  
24 wells we have.

25 Q Do you think there is any likelihood of anyone else seeking

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1 to drill an additional oil well in this area?

2 A As we see the picture we presented in our Exhibit No. 1,  
3 we don't think there is that possibility. We feel we can  
4 protect the correlative rights by having 320-acre spacing  
5 so royalty owners will receive their just participation  
6 in the oil reservoir and they will also receive their  
7 just revenues from the gas.

8 Q You are asking for a limiting GOR of 5,000 to one, is that  
9 correct?

10 A Yes.

11 Q What is the basis for that request?

12 A Our Number 2 Well, which was potentialed as an oil well,  
13 started out with a very low GOR. This immediately in-  
14 creased substantially and, as you will notice in Exhibit  
15 3, it stabilized slightly in excess of 5,000 to one. We  
16 feel that this indicates that it won't deter us in any  
17 way from our ultimate recovery. It won't cause any  
18 waste, it won't deplete the pressure at a rate that  
19 would cause loss of oil, yet it will allow us to produce  
20 at a rate that will give us a reasonable return on our  
21 investment.

22 Q I believe you also asked for classifications of oil and  
23 gas wells, did you not?

24 A Yes, sir, that's right. We have done this in the interest  
25 of protecting correlative rights. There are different

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1 revenue interests or ownership interests in the gas  
2 depending upon whether a well is classified as a gas  
3 well or an oil well. We feel this is a reasonable  
4 suggestion as the gas that is associated with the oil  
5 by definition belongs to the oil owner and he will get  
6 his percentage of the oil and yet he won't receive more  
7 than his share of the gas.

8 Q What gas-liquid hydrocarbon ratio are you asking for?

9 A We have asked for a definition of an oil well to be  
10 less than 25,000 to one. At such time as a well produces  
11 a ratio greater than 25,000 to one, it will be reclassified  
12 as a gas well.

13 Q Have all the working interest owners in these areas, the  
14 south half of Section 28 and the north half of Section 33,  
15 consented or agreed to your application?

16 A Yes, all working interests are in agreement with our  
17 application.

18 Q Do you know of any other cases or precedents for larger  
19 spacing with smaller allowables?

20 A Yes, there are a number of pools in New Mexico that have  
21 spacing like this. An example is the Vita-Penn Pool. *Vada*  
22 They have 160-acre spacing with an 80-acre allowable. The  
23 Lea-Devonian has 160-acre spacing with only a 40-acre  
24 allowable.

25 Q Mr. Wells, have you prepared some suggested special rules

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1 for this pool for the consideration of the Commission?

2 A Yes, sir.

3 Q And are those rules what has been marked as Exhibit No.  
4 5?

5 A Yes, sir.

6 Q Mr. Wells, in your opinion, would the administration of  
7 the pool on the basis of the suggested rules be in the  
8 interest of conservation and prevent waste and protect  
9 correlative rights?

10 A Yes, sir. We feel that very definitely we can drain all  
11 of the hydrocarbons in the Crosby-Fusselman Pool from  
12 the wells that we have and in this way, we can protect  
13 correlative rights and the people in each half section  
14 will participate in the wells as they now exist and we  
15 won't spend money unnecessarily.

16 Q Were Exhibits 3, 4, and 5 prepared by you or under your  
17 supervision?

18 A Yes, sir.

19 MR. EATON: We move for the admission of Exhibits  
20 3, 4, and 5, Mr. Examiner.

21 MR. UTZ: Without objection, Exhibits 3, 4 and 5 will  
22 be entered into the record of this case.

23 (Whereupon Applicant's Exhibits 3, 4, and 5 were  
24 admitted into evidence.)

25 MR. EATON: I have no further questions of Mr. Wells.

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BY MR. UTZ:

Q Mr. Wells, what is the producing GOR in the Crosby-Fusselman Pool right now?

A It's shown on the map. I'm sorry but it's about a month out of date. It was 9500 to one it looks like.

Q Then by asking for 5,000 to one, you will actually have a restricted well here?

A Unfortunately, yes.

Q I notice you are producing these wells at close to 200 barrels a day.

A Yes, sir, approximately 185.

Q What is the depth allowable for this pool? It's more than that, isn't it?

A Oh, yes. For 80 acres, I believe it's 317 or 320. I'm sorry but I don't know the exact number.

Q Would the fact that you started producing water from the Crosby Deep Number 1 cause you to believe that maybe you ought to curtail your production rate a little?

A Sir, we feel that with the very thin oil column we have, we are going to produce water. The Number 2 Well started producing water immediately, so we feel the oil column is very thin and we are going to have to live with what we have. Perhaps curtailment might momentarily help, but --

Q Then it's your plan to produce the Number 1 Well at

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1 approximately the same rate?

2 A Yes, sir. The Number 1 and Number 2 Wells will be pro-  
3 duced very similarly. This is to protect correlative  
4 rights. We would like to produce the Number 1 a little  
5 faster, but we don't want to waste any oil. You will  
6 notice that the Number 1 Well doesn't show any water,  
7 but in the last week, we started making some water on  
8 the Number 1 Well. The Number 2 Well has made essentially  
9 80 barrels of water a day since it was completed.  
10 There is, between the bottom perforation in the Number  
11 2 and the bottom perforation in the Number 1 Well, a  
12 difference of eight feet, so the water is right there.

13 Q Do you know what the depth allowable for this area is?

14 A For 80 acres?

15 Q Yes.

16 A I'm sorry -- I'd almost say it was 317, but I'm not posi-  
17 tive.

18 Q I'm asking because I would like to know what the gas allow-  
19 able is.

20 A It would allow us to produce about one million and a half  
21 feet of gas per day which is somewhat less than we are  
22 doing now. The Number 1 currently produces 1.187 million  
23 feet of gas per day and 163 barrels of liquid. As I  
24 said, last week it started making some water and at that  
25 time the GOR was 11,521 on the Number 1 Well.



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1 Q You are requesting that this be called an associated  
2 pool?

3 A Yes, sir. And this would require reclassification of  
4 our Number 1 Well to an oil well.

5 MR. UTZ: Are there other questions of the witness?

6 (No response)

7 MR. UTZ: He may be excused.

8 (Witness excused)

9 MR. UTZ: Are there statements in the case?

10 (No response)

11 MR. UTZ: The case will be taken under advisement.

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dearnley, meier &amp; mc cormick

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1216 FIRST NATIONAL BANK BLDG. EAST • ALBUQUERQUE, NEW MEXICO 87108

1 STATE OF NEW MEXICO )  
2 ) ss.  
3 COUNTY OF BERNALILLO )

4 I, RICHARD E. MCCORMICK, a Certified Shorthand Reporter,  
5 do hereby certify that the foregoing and attached Transcript  
6 of Hearing before the New Mexico Oil Conservation Commission  
7 was reported by me; and that the same is a true and correct  
8 record of the said proceedings, to the best of my knowledge,  
9 skill and ability.

10   
11 CERTIFIED SHORTHAND REPORTER

22 I hereby certify that the foregoing  
23 is a true and correct copy of the  
24 record of the hearing of the New Mexico Oil Conservation Commission  
25 held on May 7, 1953, at 4946  
New Mexico Oil Conservation Commission

dearnley, meier &amp; mc cornick

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1216 FIRST NATIONAL BANK BLDG. EAST • ALBUQUERQUE, NEW MEXICO 87108

1	<u>I N D E X</u>		
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7	Direct Examination by Mr. Eaton		11
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10	<u>EXHIBITS</u>	<u>Offered</u>	<u>Admitted</u>
11	Exhibit 1 - map contoured on the top of the Fusselman	5	9
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dearnley, meier &amp; mc cormick

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BEFORE THE  
NEW MEXICO OIL CONSERVATION COMMISSION  
OIL CONSERVATION COMMISSION CONFERENCE ROOM  
STATE LAND OFFICE BUILDING  
SANTA FE, NEW MEXICO  
Wednesday, May 9, 1973

EXAMINER HEARING

IN THE MATTER OF:

Application of Union Texas Petroleum for  
special pool rules, Lea County, New Mexico.

Case No. 4946

BEFORE: Daniel S. Nutter,  
Examiner

TRANSCRIPT OF HEARING

dearnley, meier & mc cormick

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1216 FIRST NATIONAL BANK BLDG. EAST • ALBUQUERQUE, NEW MEXICO 87108

1 MR. NUTTER: We will call next Case Number 4946.

2 MR. CARR: Case 4946, application of Union Texas  
3 Petroleum for special pool rules, Lea County, New Mexico.

4 MR. NUTTER: As the docket states, this case will  
5 be continued to the Examiner Hearing scheduled to be held  
6 at 9:00 o'clock A.M., May 23, 1973, at this same place.

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dearnley, meier & mc cormick

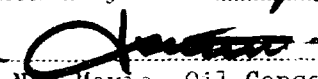
209 SIMMS BLDG., P.O. BOX 1092, PHONE 243-6691, ALBUQUERQUE, NEW MEXICO 87103  
1216 FIRST NATIONAL BANK BLDG. EAST ALBUQUERQUE, NEW MEXICO 87108

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R E P O R T E R ' S   C E R T I F I C A T E

I, JOHN DE LA ROSA, a Court Reporter, do hereby certify  
that the foregoing and attached Transcript of Hearing before  
the New Mexico Oil Conservation Commission was reported by me;  
and that the same is a true and correct record of the said  
proceedings to the best of my knowledge, skill and ability.

  
COURT REPORTER

I do hereby certify that the foregoing is  
a complete record of the proceedings in  
the Examiner hearing of Case No. None  
heard by me on 4/9, 1973  
, Examiner  
New Mexico Oil Conservation Commission

dearnley, meier &amp; mc cormick

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1216 FIRST NATIONAL BANK BLDG. EAST • ALBUQUERQUE, NEW MEXICO 87108

BEFORE THE  
NEW MEXICO OIL CONSERVATION COMMISSION  
OIL CONSERVATION COMMISSION CONFERENCE ROOM  
STATE LAND OFFICE BUILDING  
SANTA FE, NEW MEXICO  
April 25, 1973

## EXAMINER HEARING

IN THE MATTER OF:

Application of Union Texas  
Petroleum for special pool  
rules, Lea County, New Mexico.

Case No. 4946

BEFORE: Richard L. Stamets  
Examiner

TRANSCRIPT OF HEARING

dearnley, meier &amp; mc cormick

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1 MR. STAMETS: The hearing will come to order, please.  
2 We will call first Case 4946.

3 MR. CARR: Case 4946, Application of Union Texas  
4 Petroleum for special pool rules, Lea County, New Mexico.

5 MR. STAMETS: Continued, right?

6 MR. CARR: Continued. Mr. Examiner, Union Texas  
7 Petroleum has requested that Case 4946 be continued.

8 MR. STAMETS: To May 23?

9 MR. CARR: That's right.

10 MR. STAMETS: Case 4946 will be continued to May 23rd.

11 \* \* \* \*

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dearnley, meier &amp; mc cormick

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1216 FIRST NATIONAL BANK BLDG. EAST • ALBUQUERQUE, NEW MEXICO 87108

1 STATE OF NEW MEXICO )  
2 ) ss.  
3 COUNTY OF BERNALILLO )

4 I, JANET RUSSELL, a Certified Shorthand Reporter,  
5 do hereby certify that the foregoing and attached Transcript  
6 of Hearing before the New Mexico Oil Conservation Commission  
7 was reported by me; and that the same is a true and correct  
8 record of the said proceedings, to the best of my knowledge,  
9 skill and ability.

10  
11 Janet Russell  
12 CERTIFIED SHORTHAND REPORTER  
13  
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22 I do hereby certify that the foregoing is  
23 a complete record of the proceedings in  
24 the Examinee hearing of Case No. 4946  
25 heard by me on April 29, 1973.  
Richard J. Stam, Examiner  
New Mexico Oil Conservation Commission



# OIL CONSERVATION COMMISSION

STATE OF NEW MEXICO  
P. O. BOX 2088 - SANTA FE  
87501

**I. R. TRUJILLO**  
**CHAIRMAN**

**LAND COMMISSIONER**  
**ALEX J. ARMIJO**  
**MEMBER**

**STATE GEOLOGIST**  
**A. L. PORTER, JR.**  
**SECRETARY - DIRECTOR**

**September 3, 1974**

Mr. Paul Eaton  
Hinkle, Bondurant, Cox & Eaton  
Attorneys at Law  
Post Office Box 10  
Roswell, New Mexico 88201

Re: CASE NO. 4946  
ORDER NO. R-4581-A  
Applicant:  
Union Texas Petroleum

Dear Sir:

Enclosed herewith are two copies of the above-referenced Commission order recently entered in the subject case.

Very truly yours,

N. L. Porter, Jr.

A. L. PORTER, Jr.  
Secretary-Director

ALP/ir

Copy of order also sent to:

Hobbs OCC                          x        
Artesia OCC                                        
Aztec OCC                                      

Other \_\_\_\_\_

BEFORE THE OIL CONSERVATION COMMISSION  
OF THE STATE OF NEW MEXICO

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

CASE NO. 4946  
Order No. R-4581-A

IN THE MATTER OF CASE NO. 4946 BEING  
REOPENED PURSUANT TO THE PROVISIONS  
OF ORDER NO. R-4581, WHICH ORDER  
ESTABLISHED TEMPORARY RULES FOR THE  
CROSBY-FUSSELMAN ASSOCIATED POOL,  
LEA COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on August 7, 1974,  
at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this 3rd day of September, 1974, the Commission,  
a quorum being present, having considered the testimony, the  
record, and the recommendations of the Examiner, 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 cause and the subject  
matter thereof.

(2) That by Order No. R-4581, dated June 29, 1973, Special  
Rules and Regulations for the Crosby-Fusselman Associated Pool  
were promulgated, which rules included provisions for 320-acre  
spacing and proration units and a limiting gas-oil ratio of  
5,000 cubic feet of gas per barrel of oil.

(3) That subsequent to the original hearing of this case,  
additional reservoir and production information has become avail-  
able which indicates that the Crosby-Fusselman Associated Pool  
is an oil reservoir rather than an associated oil and gas reservoir.

(4) That said Crosby-Fusselman Associated Pool should be  
reclassified and designated the Crosby-Fusselman Pool.

(5) That the pool should continue to be developed on 320-  
acre spacing.

(6) That the producing history of the pool indicates that  
a limiting gas-oil ratio in excess of 4,000 cubic feet of gas  
per barrel of oil is unnecessary for the efficient and economic  
development of the pool.

-2-  
CASE NO. 4946  
Order No. R-4581-A

(7) That wells in the subject pool should continue to be assigned a special depth bracket allowable of 310 barrels of oil per day.

(8) That effective October 1, 1974, the Special Pool Rules and Regulations for the Crosby-Fusselman Associated Pool should be rescinded and new Special Rules and Regulations for the Crosby-Fusselman Pool should be promulgated to take effect on that date.

IT IS THEREFORE ORDERED:

(1) That effective October 1, 1974, the Crosby-Fusselman Associated Pool in Lea County, New Mexico, is hereby reclassified as an oil pool and designated the Crosby-Fusselman Pool with vertical limits comprising the Fusselman formation and horizontal limits comprising the following described area:

LEA COUNTY, NEW MEXICO  
TOWNSHIP 25 SOUTH, RANGE 37 EAST, NMPM  
Section 28: S/2  
Section 33: N/2

(2) That effective October 1, 1974, the Special Rules and Regulations for the Crosby-Fusselman Associated Pool, Lea County, New Mexico, are hereby rescinded and Special Pool Rules and Regulations for the Crosby-Fusselman Pool, Lea County, New Mexico, are hereby promulgated as follows:

SPECIAL RULES AND REGULATIONS  
FOR THE  
CROSBY-FUSSELMAN POOL

RULE 1. Each well completed or recompleted in the Crosby-Fusselman Pool, or in the Fusselman formation within one mile thereof, and not nearer to or within the limits of another designated Fusselman Pool shall be spaced, drilled, operated, and produced in accordance with the Special Rules and Regulations hereinafter set forth.

RULE 2. Each well shall be located on a standard unit containing 320 acres more or less, comprising any two contiguous quarter sections of a single governmental section being a legal subdivision of the United States Public Land Surveys, provided that for purposes of these rules a unit consisting of between 316 and 324 contiguous surface acres shall be considered a standard unit.

RULE 3. The Secretary-Director of the Commission may grant an exception to the requirements of Rule 2 without notice and hearing when an application has been filed for a non-standard unit and the unorthodox size or shape of the unit is necessitated by variation in the legal subdivision of the United States Public Land Surveys or the following facts exist and the following provisions are complied with:

- (a) The non-standard unit consists of quarter quarter sections of lots that are contiguous by a common bordering side.
- (b) The non-standard unit lies wholly within a standard proration unit for the well under the applicable provisions of Rule 2 above and contains less acreage than a standard unit.
- (c) The applicant presents written consent in the form of waivers from all offset operators and from all operators owning acreage in the standard proration unit in which the non-standard unit is situated which acreage is not included in said non-standard unit.
- (d) In lieu of Paragraph (c) of this rule, the applicant may furnish proof of the fact that all the aforesaid operators were notified by registered or certified mail of his intent to form such non-standard unit. The Secretary-Director may approve the application if no such operator has entered an objection to the formation of such non-standard unit within the 30 days after the Secretary-Director has received the application.

RULE 4. Each well shall be located no nearer than 660 feet to the nearest side boundary of the tract, nor nearer than 1980 feet to the nearest end boundary of the tract, nor closer than 330 feet to any quarter quarter section or subdivision inner boundary.

RULE 5. The Secretary-Director may grant an exception to the requirements of Rule 4 without notice and hearing when an application has been filed for an unorthodox location necessitated by topographical conditions or the recompletion of the well previously drilled to another horizon. All operators offsetting the proposed location shall be notified of the application by registered or certified mail and the application shall state that such notice has been furnished. The Secretary-Director may approve the application upon receipt of written waivers from all operators offsetting the proposed location or if no objection to the unorthodox location has been entered within 20 days after the Secretary-Director has received the application.

RULE 6. Top unit allowable for a standard proration unit (316 through 324 acres) shall be a 320-acre depth bracket allowable of 310 barrels per day subject to the market demand percentage factor for allowable purposes and in the event there is more than one well on a 320-acre proration unit the operator may produce the allowable assigned the unit from the wells on the unit in any proportion.

The allowable assigned to a non-standard proration unit shall bear the same ratio to a standard allowable as the acreage in such non-standard unit bears to 320 acres.

-4-

CASE NO. 4946  
Order No. R-4581-A

RULE 7. A limiting gas-oil ratio of 4000 cubic feet of gas per barrel of oil is established for the pool.

IT IS FURTHER ORDERED:

(1) That the locations of all wells presently drilling to the Crosby-Fusselman Pool are hereby approved; that the operator of any well having an unorthodox location shall notify the Hobbs District Office of the Commission in writing of the name and location of the well on or before October 15, 1974.


(2) That pursuant to Paragraph (a) of Section 65-3-14.5, NMSA, 1953 contained in Chapter 271, Laws of 1969, existing wells in the Crosby-Fusselman Pool shall have dedicated thereto 320-acres in accordance with the foregoing pool rules; or pursuant to Paragraph (c) of said Section 65-3-14.5, existing wells may have non-standard spacing or proration units established by the Commission and dedicated thereto.

Failure to file new Forms C-102 with the Commission dedicating 320-acres to a well or to obtain a non-standard unit approved by the Commission within 60 days from the date of this order shall subject the well to cancellation of allowable until said Form C-102 has been filed or until a non-standard unit has been approved and subject to said 60 days limitation each well presently drilling to or completed in the Crosby-Fusselman Pool shall receive no more than 1/4 of a standard allowable for the pool.

(3) That jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.


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

STATE OF NEW MEXICO  
OIL CONSERVATION COMMISSION

  
I. A. TRUJILLO, Chairman

ALEX J. ARMIJO, Member

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

  
S E A L

jr/

Dockets Nos. 24-74 and 25-74 are tentatively set for hearing on August 21 and September 4. Applications for hearing must be filed at least 22 days in advance of hearing date.

DOCKET: EXAMINER HEARING - WEDNESDAY - AUGUST 7, 1974

9 A.M. - OIL CONSERVATION COMMISSION CONFERENCE ROOM,  
STATE LAND OFFICE BUILDING, SANTA FE, NEW MEXICO

The following cases will be heard before Daniel S. Nutter, Examiner, or Richard L. Stamets, Alternate Examiner:

CASE 4749: (Reopened) (Continued from the July 10, 1974, Examiner Hearing)

In the matter of Case No. 4749 being reopened pursuant to the provisions of Order No. R-4338-A, which order continued special rules for the Humble City-Strawn Pool, Lea County, New Mexico. All interested parties may appear and show cause why said pool should not be developed on 40-acre spacing.

CASE 4946: (Reopened) (Continued from the July 10, 1974, Examiner Hearing)

In the matter of Case No. 4946 being reopened pursuant to the provisions of Order No. R-4581, which order established temporary rules for the Crosby-Fusselman Associated Pool, Lea County, New Mexico. All interested parties may appear and show cause why said rules should not be rescinded.

CASE 5282: (Continued from the July 24, 1974, Examiner Hearing)

Application of Union Texas Petroleum Corporation for downhole commingling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the downhole commingling of Jalmat and Langlie-Mattix production in certain of its wells in the Langlie-Jal Unit Area, currently being waterflooded under authority of Commission Order No. R-4051.

CASE 5287: Application of Mobil Oil Corporation for compulsory pooling, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Pennsylvanian formation underlying the N/2 of Section 12, Township 21 South, Range 26 East, adjacent to the Burton Flats-Morrow Gas Pool, Eddy County, New Mexico, to form a standard 320-acre unit to be dedicated to applicant's Federal 12 Com Well No. 1 to be drilled at a previously approved unorthodox location 660 feet from the North and East lines of said Section 12. Also to be considered will be the cost of drilling and completing said well and the allocation of such costs, as well as actual operating costs and charges for supervision. Also to be considered is the designation of applicant as operator of the well and a charge for risk involved in drilling said well.

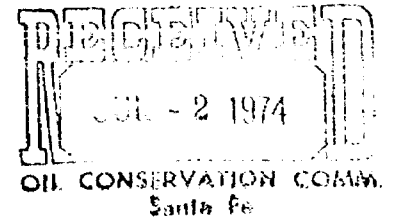
CLARENCE E. HINKLE  
W. E. BONDURANT, JR.  
LEWIS C. COX, JR.  
PAUL W. EATON, JR.  
CONRAD E. COFFIELD  
HAROLD L. HENSLEY, JR.  
STUART D. SHANOR  
C. D. MARTIN  
PAUL J. KELLY, JR.

LAW OFFICES  
HINKLE, BONDURANT, COX & EATON  
600 HINKLE BUILDING  
POST OFFICE BOX 10  
ROSWELL, NEW MEXICO 88201

TELEPHONE (505) 822-6510

July 1, 1974

MIDLAND, TEXAS OFFICE  
521 MIDLAND TOWER  
(915) 683-4691



Oil Conservation Commission  
Box 2088  
Santa Fe, New Mexico 87501

Gentlemen:

Appearing on the examiner's docket for July 10 is Case No. 4946 which is being reopened pursuant to the provisions of Order R-4581 which order established temporary rules for the Crosby-Fusselman Associated Pool, Lea County.

We represent Union Texas Petroleum who was the original proponent of the special pool rules and due to the unavailability of witnesses for Union Texas for both July 10 and July 24, please consider this as a motion on behalf of Union Texas to continue this case until the examiner's hearing on August 7.

Yours sincerely,

HINKLE, BONDURANT, COX & EATON

BY 

CEH:cs

DOCKET MAILED

Date 7-25-74  
For Aug 7<sup>th</sup>



CASE 5272: In the matter of the hearing called by the Oil Conservation Commission on its own motion to permit Consolidated Oil and Gas, Inc., United States Fidelity & Guaranty Company and all other interested parties to appear and show cause why the Consolidated Oil and Gas, Inc., Price Well No. 1 located in Unit N, Section 15, Township 31 North, Range 13 West, San Juan County, New Mexico, should not be recompleted as a single-zone well or be plugged and abandoned in accordance with a Commission-approved plugging program.

CASE 5273: In the matter of the hearing called by the Oil Conservation Commission on its own motion to permit Eastern Petroleum Corporation, United States Fidelity and Guaranty Company and all other interested parties to appear and show cause why the following wells should not be abandoned in accordance with a Commission-approved plugging program:

Castillo #1 located in Unit P, Section 35, Township 20 North, Range 7 West, McKinley County, New Mexico;

Chopup #1 located in Unit N, Section 30, Township 19 North, Range 6 West, McKinley County, New Mexico;

Chacra Mesa #1 located in Unit B, Section 14, Township 19 North, Range 7 West, McKinley County, New Mexico;

Blackjack #1 located in Unit P, Section 12, Township 21 North, Range 9 West, San Juan County, New Mexico;

Pornada #1 located in Unit H, Section 27, Township 18 North, Range 7 West, McKinley County, New Mexico.

CASE 4749: (Reopened)

In the matter of Case No. 4749 being reopened pursuant to the provisions of Order No. R-4333-A, which order continued special rules for the Humble City-Strawn Pool, Lea County, New Mexico. All interested parties may appear and show cause why said pool should not be developed on 40-acre spacing.

CASE 4946: (Reopened)

In the matter of Case No. 4946 being reopened pursuant to the provisions of Order No. R-4581, which order established temporary rules for the Crosby-Fusselman Associated Pool, Lea County, New Mexico. All interested parties may appear and show cause why said rules should not be rescinded.

CASE 5110: (Continued from January 16, 1974)

In the matter of the hearing called by the Oil Conservation Commission on its own motion to consider the institution of gas prorationing in



# OIL CONSERVATION COMMISSION

**STATE OF NEW MEXICO**

P. O. BOX 2088 - SANTA FE

87504

GOVERNOR  
BRUCE KING  
CHAIRMAN

LAND COMMISSIONER  
ALEX J. ARMIJO  
MEMBER

STATE GEOLOGIST  
A. L. PORTER, JR.  
SECRETARY - DIRECTOR

July 3, 1973

Mr. Paul Eaton  
Hinkle, Bondurant, Cox & Eaton  
Attorneys at Law  
Post Office Box 10  
Roswell, New Mexico 88201

Re: Case No. 4946

Order No. R-4581

**Applicant:**

**Union Texas Petroleum**

Dear Sir:

Date ~~6-22-68~~ for July 10<sup>th</sup> log

Enclosed herewith are two copies of the above-referenced Commission order recently entered in the subject case.

Very truly yours,

A. L. Porter, Jr.

A. L. PORTER, Jr.  
Secretary-Director

ALP/ir

Copy of order also sent to:

Hobbs OCC **x**

Artesia OCC

**Aztec OCC**

Other \_\_\_\_\_

BEFORE THE OIL CONSERVATION COMMISSION  
OF THE STATE OF NEW MEXICO

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

CASE NO. 4946  
Order No. R-4581

APPLICATION OF UNION TEXAS PETROLEUM  
FOR SPECIAL POOL RULES, LEA COUNTY,  
NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on May 23, 1973,  
at Santa Fe, New Mexico, before Examiner Elvis A. Utz.

NOW, on this 29th day of June, 1973, the Commission,  
a quorum being present, having considered the testimony, the  
record, and the recommendations of the Examiner, 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 cause and the  
subject matter thereof.

(2) That the applicant, Union Texas Petroleum, seeks the  
promulgation of special rules and regulations for the Crosby-  
Fusselman Pool, Lea County, New Mexico, including a provision  
for classification of oil wells and gas wells, 320-acre spacing  
for all wells, and a limiting gas-oil ratio of 5000 to one.

(3) That while the said Crosby-Fusselman Pool is presently  
classified as a gas pool, the evidence adduced indicates it is  
in fact an associated oil and gas reservoir.

(4) That said Crosby-Fusselman Pool should be classified  
and designated the Crosby-Fusselman Associated Pool and special  
rules and regulations should be promulgated therefore.

(5) That the reservoir characteristics of the subject  
pool indicate that the gas and oil area can be efficiently and  
economically drained and developed on 320-acre spacing.

(6) That the reservoir characteristics of the subject  
pool presently available justify the definition of an oil  
well in said pool as a well producing with a gas-liquid ratio  
of less than 25,000 cubic feet of gas per barrel of liquid  
hydrocarbons.

(7) That the reservoir characteristics of the subject pool presently available justify the establishment of a gas-liquid ratio limitation of 5,000 cubic feet of gas per barrel of liquid hydrocarbons.

(8) That special rules and regulations providing for 320-acre gas and oil well spacing should be promulgated for the subject pool in order to prevent the economic loss caused by the drilling of unnecessary wells, avoid the augmentation of risk arising from the drilling of an excessive number of wells, prevent reduced recovery which might result from the drilling of too few wells, and otherwise prevent waste and protect correlative rights.

(9) That the special rules and regulations should provide for the classification of a gas well as a well producing with a gas-liquid ratio of 25,000 or more cubic feet of gas per barrel of liquid hydrocarbons in order to afford to the owner of each property in the pool the opportunity to produce his just and equitable share of the oil or gas, or both, and for this purpose to use his just and equitable share of the reservoir energy.

(10) That the depth bracket allowable for oil wells in the subject pool should be 310 barrels of oil per day in accordance with Rule 505 of the Commission Rules and Regulations.

(11) That the temporary special rules and regulations should establish proration rules for gas wells in order to prevent waste and protect correlative rights.

IT IS THEREFORE ORDERED:

(1) That effective July 15, 1973, the Crosby-Fusselman Pool is hereby classified as an associated oil and gas reservoir and designated the Crosby-Fusselman Associated Pool with vertical limits comprising the Fusselman formation and horizontal limits comprising the following-described area:

LEA COUNTY, NEW MEXICO  
TOWNSHIP 25 SOUTH, RANGE 37 EAST, NMPM  
Section 28: S/2  
Section 33: N/2

(2) That, effective June 15, 1973, Special Rules and Regulations for the Crosby-Fusselman Associated Pool, Lea County, New Mexico, are hereby promulgated as follows:

SPECIAL RULES AND REGULATIONS  
FOR THE  
CROSBY-FUSSELMAN ASSOCIATED POOL

RULE 1. Each well completed or recompleted in the Crosby-Fusselman Associated Pool or in the Fusselman formation within

(7) That the reservoir characteristics of the subject pool presently available justify the establishment of a gas-liquid ratio limitation of 5,000 cubic feet of gas per barrel of liquid hydrocarbons.

(8) That special rules and regulations providing for 320-acre gas and oil well spacing should be promulgated for the subject pool in order to prevent the economic loss caused by the drilling of unnecessary wells, avoid the augmentation of risk arising from the drilling of an excessive number of wells, prevent reduced recovery which might result from the drilling of too few wells, and otherwise prevent waste and protect correlative rights.

(9) That the special rules and regulations should provide for the classification of a gas well as a well producing with a gas-liquid ratio of 25,000 or more cubic feet of gas per barrel of liquid hydrocarbons and should provide for a gas-liquid ratio of 5,000 cubic feet of gas per barrel of liquid hydrocarbons in order to afford to the owner of each property in the pool the opportunity to produce his just and equitable share of the oil or gas, or both, and for this purpose to use his just and equitable share of the reservoir energy.

(10) That the depth bracket allowable for oil wells in the subject pool should be 310 barrels of oil per day in accordance with Rule 505 of the Commission Rules and Regulations.

(11) That the temporary special rules and regulations should establish proration rules for gas wells in order to prevent waste and protect correlative rights.

IT IS THEREFORE ORDERED:

(1) That effective July 15, 1973, the Crosby-Fusselman Pool is hereby classified as an associated oil and gas reservoir and designated the Crosby-Fusselman Associated Pool with vertical limits comprising the Fusselman formation and horizontal limits comprising the following-described area:

LEA COUNTY, NEW MEXICO  
TOWNSHIP 25 SOUTH, RANGE 37 EAST, NMPM  
Section 28: S/2  
Section 33: N/2

(2) That, effective June 15, 1973, Special Rules and Regulations for the Crosby-Fusselman Associated Pool, Lea County, New Mexico, are hereby promulgated as follows:

SPECIAL RULES AND REGULATIONS  
FOR THE  
CROSBY-FUSSELMAN ASSOCIATED POOL

RULE 1. Each well completed or recompleted in the Crosby-Fusselman Associated Pool or in the Fusselman formation within

one mile thereof, and not nearer to or within the limits of another designated Fusselman Pool, shall be spaced, drilled, operated, and produced in accordance with the Special Rules and Regulations hereinafter set forth.

RULE 2. (a) Each well shall be located on a standard unit containing 320 acres, more or less, comprising any two contiguous quarter sections of a single governmental section, being a legal subdivision of the United States Public Land Surveys provided that for the purposes of these rules, a unit consisting of between 316 and 324 contiguous surface acres shall be considered a standard unit.

RULE 3. The Secretary-Director of the Commission may grant an exception to the requirements of Rule 2 without notice and hearing when an application has been filed for a non-standard unit and the unorthodox size or shape of the unit is necessitated by a variation in the legal subdivision of the United States Public Land Surveys, or the following facts exist and the following provisions are complied with:

(a) The non-standard unit consists of quarter-quarter sections or lots that are contiguous by a common bordering side.

(b) The non-standard unit lies wholly within a standard proration unit for the well under the applicable provisions of Rule 2 above and contains less acreage than a standard unit.

(c) The applicant presents written consent in the form of waivers from all offset operators and from all operators owning interests in the standard proration unit for the well in which the non-standard unit is situated and which acreage is not included in said non-standard unit.

(d) In lieu of paragraph (c) of this rule, the applicant may furnish proof of the fact that all of the aforesaid operators were notified by registered or certified mail of his intent to form such non-standard unit. The Secretary-Director may approve the application if no such operator has entered an objection to the formation of such non-standard unit within 30 days after the Secretary-Director has received the application.

RULE 4. Each well shall be located no nearer than 660 feet to the nearest side boundary of the tract nor nearer than 1980 feet to the nearest end boundary of the tract nor closer than 330 feet to any quarter-quarter section or subdivision inner boundary.

Case No. 4946  
Order No. R-4581

RULE 5. A well shall be classified as a gas well if it has a gas-liquid ratio of 25,000 or more cubic feet of gas per barrel of liquid hydrocarbons. Any well completed in and capable of producing from the Crosby-Fusselman Associated Pool and not classified as a gas well shall be classified as an oil well.

RULE 6. That the limiting gas-oil ratio shall be 5,000 cubic feet of gas for each barrel of oil produced.

RULE 7. An oil well which has 320 acres dedicated to it shall be permitted to produce only that amount of gas determined by multiplying the top unit oil allowable for the pool by the limiting gas-liquid ratio for the pool. In the event there is more than one oil well on a 320-acre oil proration unit, the operator may produce the allowable assigned to the 320-acre unit from the wells on the unit in any proportion.

A gas well shall be permitted to produce that amount of gas obtained by multiplying the top unit oil allowable for the pool by the limiting gas-liquid ratio for the pool and by a fraction, the numerator of which is the number of acres dedicated to the particular gas well and the denominator of which is 320. In the event there is more than one gas well on a 320-acre gas proration unit, the operator may produce the amount of gas assigned to the unit from the wells on the unit in any proportion.

RULE 8. The operator of each newly completed well shall cause a gas-liquid ratio test to be taken on the well upon recovery of all load oil from the well, provided however, that in no event shall the test be commenced later than 30 days from the date of first production unless the well is connected to a gas-gathering facility and is producing under a temporary gas allowable assigned in accordance with Rule 11. Any well which is shut in shall be exempted from the gas-liquid ratio test requirement so long as it remains shut in. The initial gas-liquid ratio test shall be taken in the manner prescribed by Rule 9. If the gas-liquid ratio is 2,000 cubic feet of gas per barrel of liquid hydrocarbons, or more, the operator shall not produce the well until beneficial use can be made of the gas.

RULE 9. Gas-liquid ratio tests shall be taken on all wells during the months of March and September of each year. The initial gas-liquid ratio test shall suffice as the first semi-annual test. Tests shall be 24-hour tests, being the final 24 hours of a 72-hour period during which the well shall be produced at a constant normal rate of production. Results of such tests shall be filed on Commission Form C-116 on or before the 10th day of the following month. At least 72 hours prior to commencement of any such gas-liquid ratio tests, each operator shall file with the appropriate district office of the Commission a test schedule for its wells specifying the time

each of its wells is to be tested. Copies of the test schedule shall also be furnished to all offset operators. The Commission District supervisor may grant exceptions to the above test requirements where it is demonstrated that wells produce no liquids.

Special tests shall also be taken at the request of the Secretary-Director and may also be taken at the option of the operator. Such special tests shall be taken in accordance with the procedures outlined hereinabove, including notification to the Commission and offset operators.

RULE 10. An initial shut-in pressure test shall be taken on each gas well and shall be reported to the Commission on Form C-125.

RULE 11. Any well completed after the effective date of these rules shall receive an allowable only upon receipt by the appropriate Commission district office of Commission Forms C-104 and C-116, properly executed. The District Supervisor of the Commission's district office is hereby authorized to assign a temporary gas allowable to wells connected to a gas transportation facility during the recovery of load oil, which allowable shall not exceed the number of cubic feet of gas obtained by multiplying the daily top unit allowable for the pool by the limiting gas-liquid ratio for the pool.

RULE 12. The initial balancing date shall be 7 o'clock a.m. April 1, 1974. Subsequently, the date 7:00 a.m. April 1 of each year shall be known as the balancing date, and the twelve months following this date shall be known as the gas proration period.

RULE 13. Any gas well which has an underproduced status as of the end of a gas proration period shall be allowed to carry such underproduction forward into the next gas proration period and may produce such underproduction in addition to the allowable assigned during such succeeding period. Any allowable carried forward into a gas proration period and remaining unproduced at the end of such gas proration period shall be cancelled.

RULE 14. Production during any one month of a gas proration period in excess of the allowable assigned to a well for such month shall be applied against the underproduction carried into such period in determining the amount of allowable, if any, to be cancelled.

RULE 15. Any well which has an overproduced status as of the end of a gas proration period shall carry such overproduction forward into the next gas proration period, provided that such overproduction shall be compensated for during such succeeding period. Any well which has not compensated for the



overproduction carried into a gas proration period by the end of such proration period shall be shut in until such overproduction is compensated for. If, at any time, a well is overproduced an amount equalling three times its current monthly allowable, it shall be shut in during that month and each succeeding month until the well is overproduced less than three times its current monthly allowable.

RULE 16. The allowable assigned to a well during any one month of a gas proration period in excess of the production for the same month shall be applied against the overproduction carried into such period in determining the amount of overproduction, if any, which has not been compensated for.

RULE 17. The Commission may allow overproduction to be compensated for at a lesser rate than would be the case if the well were completely shut in upon a showing after notice and hearing that complete shut in of the well would result in material damage to the well or reservoir.

RULE 18. The monthly gas production from each gas well shall be metered separately and the gas production therefrom shall be reported to the Commission on Form C-115 in order to reach the Commission on or before the 24th day of the month next succeeding the month in which the gas was produced. The operator shall show on such report what disposition has been made of the produced gas.

RULE 19. Each purchaser or taker of gas shall submit a report to the Commission so as to reach the Commission on or before the 15th day of the month next succeeding the month in which the gas was purchased or taken. Such report shall be filed on Form C-111 with the wells being listed in the same order as they are listed on the appropriate proration schedule.

RULE 20. Failure to comply with any provision of these rules shall result in the immediate cancellation of allowable assigned to the affected well. No further allowable shall be assigned until all rules and regulations have been complied with. The Secretary-Director shall notify the operator of the well and purchaser in writing of the date of allowable cancellation and the reason therefor.

RULE 21. All transporters or users of gas shall file gas well-connection notices with the Commission as soon as possible after the date of connection.

RULE 22. Allowables to wells whose classification has changed from oil to gas or from gas to oil as the result of a gas-liquid ratio test shall commence on the first day of the month following the month in which such test was reported, provided that a plat (Form C-102) showing the acreage dedicated to the well and the location of all wells on the dedicated acreage has been filed.

-7-

Case No. 4946  
Order No. R-4581

IT IS FURTHER ORDERED:

(1) That the locations of all wells presently drilling to or completed in the Crosby-Fusselman Associated Pool or in the Fusselman formation within one mile thereof are hereby approved; that the operator of any well having an unorthodox location shall notify the appropriate district office of the Commission in writing of the name and location of the well on or before August 1, 1973.

(2) That, pursuant to Paragraph A. of Section 65-3-14.5, NMSA 1953, contained in Chapter 271, Laws of 1969, existing oil wells in the Crosby-Fusselman Associated Pool shall have dedicated thereto 320 acres and existing gas wells in said pool shall have dedicated thereto 320 acres, in accordance with the foregoing pool rules or, pursuant to Paragraph C. of said Section 65-3-14.5, existing wells may have non-standard spacing or proration units established by the Commission and dedicated thereto.

Failure to file new Forms C-102 with the Commission dedicating 320 acres to an oil well or 320 acres to a gas well or to obtain a non-standard unit approved by the Commission within 60 days from the date of this order shall subject the well to cancellation of allowable.

Until said Form C-102 has been filed or until a non-standard unit has been approved, and subject to said 60-day limitation, each well presently drilling to or completed in the Crosby-Fusselman Associated Pool as an oil well or in the Fusselman formation within one mile thereof as an oil well shall receive no more than a standard 40-acre allowable for the depth of this pool.


(3) That this cause shall be reopened in July, 1974, to permit operators in the subject pool to appear and show cause why the special rules promulgated herein should remain in effect.

(4) That jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

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

STATE OF NEW MEXICO  
OIL CONSERVATION COMMISSION

  
I. R. TRUJILLO, Chairman

ALEX J. ARMILLO, Member  
  
A. L. PORTER, JR., Member & Secretary

Check 490  
Approved 8-23-73  
Ken 5-39-73

Amount given is just spent  
for columns for the Cadeby  
Dusselm and associated Pools  
Amount 320. A.C. spending 50000  
S.D.R. - 25,000. Has not been  
ification. none in depth  
radio. this is all for the  
& U.S. etc.

John F. K.

CLARENCE E. HINKLE  
W. E. BONDURANT, JR.  
LEWIS C. COX, JR.  
PAUL W. EATON, JR.  
CONRAD E. COFFIELD  
HAROLD L. HENSLEY, JR.  
STUART D. SHANDR  
C. D. MARTIN  
PAUL J. KELLY, JR.

LAW OFFICES  
HINKLE, BONDURANT, COX & EATON

600 HINKLE BUILDING  
POST OFFICE BOX 10

ROSWELL, NEW MEXICO 86201

April 18, 1973

TELEPHONE 505-622-6510

MIDLAND, TEXAS OFFICE  
521 MIDLAND TOWER  
(512) 683-4631

Mr. Daniel S. Nutter  
Oil Conservation Commission  
P. O. Box 2088  
Santa Fe, New Mexico 87501

Re: Case No. 4946  
Union Texas Petroleum Division  
Allied Chemical Corporation

Dear Mr. Nutter:

Yesterday we asked that the above case be continued to May 9, 1973 so that the application of Union Texas Petroleum for special pool rules could be readvertised. It now appears that I have a conflict with the May 9th hearing, and Mr. Hinkle also would not be able to attend. Therefore, we request that the hearing on the application be continued to the May 23rd hearing date.

Yours very truly,

HINKLE, BONDURANT, COX & EATON

*Paul W. Eaton, Jr.*  
Paul W. Eaton, Jr.

PWE/jw

cc: Mr. Don Wells

DOCKET MAILED

Date 5-11-73  
for 5/23/73

(Case 4965 continued from page 2)

above-described producing interval to be designated Buffalo Valley Upper-Pennsylvanian Gas Pool. Applicant also seeks the adoption of special rules for said proposed new pool similar to the pool rules for the presently existing pool; applicant further seeks approval for the dual completion of the above-described well to produce from both of the aforesaid two pools.

CASE 4966: Application of Read & Stevens, Inc. for compulsory pooling, Chaves County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests underlying the N/2 of Section 36, Township 12 South, Range 30 East, Chaves County, New Mexico, to be dedicated to a well to be drilled to the Queen formation in Unit B of said Section 36, in the Southeast Chaves Queen Gas Area. Also to be considered will be the cost of drilling and completing said well and the allocation of such costs as well as actual operating costs and charges for supervision. Also to be considered is the designation of applicant as operator of the well and a 200 percent charge for risk involved in drilling said well.

CASE 4967: Application of John M. Etcheverry for dissolution of a standard proration unit and the creation of two non-standard proration units, Lea County, New Mexico. Applicant, in the above-styled cause, seeks the dissolution of the standard 160-acre proration unit comprising the SW/4 of Section 29, Township 14 South, Range 34 East, West Tres Papalotes-Pennsylvanian Pool, Lea County, New Mexico, dedicated to the Mark Production Company Etcheverry Well No. 1 located in Unit L of said Section 29, and the creation of two non-standard 80-acre proration units, one comprising the N/2 and the other the S/2 of the SW/4 of said Section 29; the first unit would be dedicated to the aforesaid Etcheverry Well No. 1 and the second unit would be dedicated to a well proposed to be drilled in Unit P of said Section 29.

CASE 4968: Application of Benjamin K. Horton for the amendment of Order No. R-1814, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks the amendment of Order No. R-1814 to provide for the dissolution of the 344.28-acre non-standard unit approved by paragraph 4 of said order which unit comprises all of partial Section 11 plus Lot 4 and the SW/4 SW/4 of partial Section 12, Township 28 North, Range 13 West, Basin-Dakota Pool, San Juan County, New Mexico. Applicant proposes the creation of a 275.36-acre non-standard unit comprising all of the aforesaid partial Section 11 only to be dedicated to his Federal Well No. 2 located 1190 feet from the South line and 2210 feet from the East line of said Section 11.

CASE 4946: (Continued and Readvertised)

— Cont to May 23

Application of Union Texas Petroleum for special pool rules, Lea County, New Mexico. Applicant, in the above-styled cause, seeks

(Case 4946 continued from page 3)

the promulgation of special pool rules for the Crosby-Fusselman Pool, Lea County, New Mexico, including a provision for classification of oil wells and gas wells, 320-acre spacing for all wells, and a limiting gas-oil ratio of 5000 to one. (This case will be continued to the May 23rd Examiner Hearing.)

CASE 4885: (Continued and Readvertised)

In the matter of the hearing called by the Oil Conservation Commission on its own motion to permit John Lemley and Juanita Franks and Aetna Casualty and Surety Company and all other interested parties to appear and show cause why the Lemley and Franks Greathouse Well No. 1, located in Unit F of Section 10, Township 23 North, Range 1 West, Rio Arriba County, New Mexico, should not be plugged and abandoned in accordance with a Commission-approved plugging program.

CLARENCE E. HINKLE  
W. E. BONDURANT, JR.  
LEWIS C. COX, JR.  
PAUL W. EATON, JR.  
CONRAD E. COFFIELD  
HAROLD L. HENSLEY, JR.  
STUART D. SHANOR  
C. D. MARTIN  
PAUL J. KELLY, JR.

LAW OFFICES  
HINKLE, BONDURANT, COX & EATON

600 HINKLE BUILDING

POST OFFICE BOX 10

ROSWELL, NEW MEXICO 88201

TELEPHONE 505 822-6510

MIDLAND, TEXAS OFFICE  
521 MIDLAND TOWER  
(815) 683-4691

May 4, 1973

New Mexico Oil Conservation Commission  
P. O. Box 2088  
Santa Fe, New Mexico 87501

Attention: Mr. Daniel S. Nutter

Re: Case No. 4946

Union Texas Petroleum Division  
Allied Chemical Corporation

Gentlemen:

To the extent that it is necessary to amend the application of March 30, 1973 of Union Texas Petroleum to make clear that the applicant seeks 320 acre spacing for oil wells as well as gas wells, please consider this letter as so amending the application.

Yours very truly,

HINKLE, BONDURANT, COX & EATON

*Paul W. Eaton, Jr.*  
Paul W. Eaton, Jr.

PWE/jw

cc: Mr. Donald B. Wells

DOCKET: EXAMINER HEARING - WEDNESDAY - MAY 23, 1973

9 A.M. - OIL CONSERVATION COMMISSION CONFERENCE ROOM,  
STATE LAND OFFICE BUILDING, SANTA FE, NEW MEXICO

The following cases will be heard before Elvis A. Utz, Examiner, or Richard L. Stamets, Alternate Examiner:

CASE 4683: (Reopened) (Continued from the April 11, 1973 Examiner Hearing)

In the matter of Case 4683 being reopened pursuant to the provisions of Order No. R-4286, which order established special rules and regulations for the West Tres Papalotes-Pennsylvanian Pool, Lea County, New Mexico, including a provision for 160-acre proration units. All interested parties may appear and show cause why said pool should not be developed on less than 160-acre units.

CASE 4946: (Continued from the May 9, 1973 Examiner Hearing)

Application of Union Texas Petroleum for special pool rules, Lea County, New Mexico. Applicant, in the above-styled cause, seeks the promulgation of special pool rules for the Crosby-Fusselman Pool, Lea County, New Mexico, including a provision for classification of oil wells and gas wells, 320-acre spacing for all wells, and a limiting gas-oil ratio of 5000 to one.

CASE 4966: (Continued from the May 9, 1973 Examiner Hearing)

Application of Read & Stevens, Inc. for compulsory pooling, Chaves County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests underlying the N/2 of Section 36, Township 12 South, Range 30 East, Chaves County, New Mexico, to be dedicated to a well to be drilled to the Queen formation in Unit B of said Section 36, in the Southeast Chaves Queen Gas Area. Also to be considered will be the cost of drilling and completing said well and the allocation of such costs as well as actual operating costs and charges for supervision. Also to be considered is the designation of applicant as operator of the well and a 200 percent charge for risk involved in drilling said well.

CASE 4969: Application of Amoco Production Company for a special depth bracket allowable, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks the assignment of a special depth bracket allowable of 764 barrels of oil per day for the Tocito Dome Pennsylvanian "D" Oil Pool, San Juan County, New Mexico, to replace the current regular depth bracket allowable for said pool of 382 barrels per day.

CASE 4970: Application of Robert G. Cox for directional drilling, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks authority to re-enter his Federal "EA" Well No. 1, a crooked hole the surface location of which is 330 feet from the North and West lines of



DOCKET: EXAMINER HEARING - WEDNESDAY - APRIL 25, 1973

9 A.M. - OIL CONSERVATION COMMISSION CONFERENCE ROOM,  
STATE LAND OFFICE BUILDING - SANTA FE, NEW MEXICO

The following cases will be heard before Richard L. Stamets, Examiner, or Daniel S. Nutter or Elvis A. Utz, Alternate Examiners:

*(Continued & Rescheduled)*  
CASE 4946: Application of Union Texas Petroleum for special pool rules, Lea County, New Mexico. Applicant, in the above-styled cause, seeks the promulgation of special pool rules for the Crosby-Fusselman Pool, Lea County, New Mexico, including a provision for classification of oil wells and gas wells, ~~80-acre spacing for oil wells,~~ 320-acre spacing for <sup>all</sup> gas wells, and a limiting gas-oil ratio of 5000 to one.

CASE 4947: Application of Tom Brown, Inc., for compulsory pooling, and a non-standard unit, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests underlying the N/2 of Section 13, Township 22 South, Range 26 East, South Carlsbad Field Extension, Eddy County, New Mexico, to form a non-standard 336.6-acre unit to be dedicated to a well to be drilled 1680 feet from the North line and 1980 feet from the East line of said Section 13.

Also to be considered will be the costs of drilling said well, a charge for the risk involved, a provision for the allocation of actual operating costs, and the establishment of charges for supervision of said well.

CASE 4948: Application of Skelly Oil Company for an unorthodox oil well location, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to re-complete its R. R. Sims Well No. 7 located 2200 feet from the South and West lines of Section 3, Township 23 South, Range 37 East, Lea County, New Mexico, as a producing oil well in its Penrose "A" waterflood project, Langlie-Mattix Pool, said well being an unorthodox location closer than 330 feet to another well producing from the same pool. Applicant further seeks an administrative procedure for approval of further in-fill development at unorthodox locations in its Penrose "A" Unit Area.

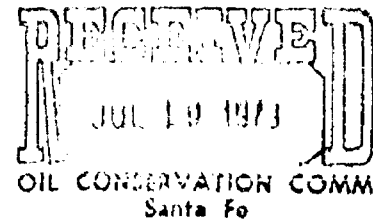
CASE 4949: Application of Skelly Oil Company for the amendment of Order No. R-1069-B, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks the amendment of Order No. R-1069-B, which order promulgated special pool rules for the Bisti Lower-Gallup Oil Pool, San Juan County, New Mexico. Applicant seeks the adoption of rules for the classification of gas wells in said pool and the dedication of 320 acres thereto.

JAMES T. JENNINGS  
SIM B. CHRISTY IV  
ROGER L. COPPLE  
BRIAN W. COPPLE  
ROBERT G. ARMSTRONG

LAW OFFICES OF  
JENNINGS, CHRISTY & COPPLE  
1012 SECURITY NATIONAL BANK BUILDING  
P. O. BOX 1180  
ROSWELL, NEW MEXICO 88201

TELEPHONE 622-8432  
AREA CODE 505

July 18, 1973



New Mexico Oil Conservation Commission  
P. O. Box 2088  
Santa Fe, New Mexico 87501

Attention: Mrs. Ida Rodriguez

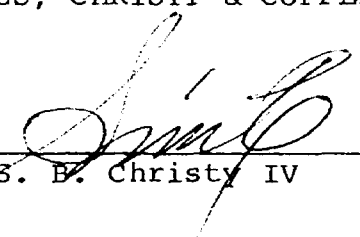
Re: Case 4946  
Order R-4581

Dear Ida:

Returned herewith is the transcript and exhibits in  
the captioned and I thank you for the use of the same.

Best personal regards,

JENNINGS, CHRISTY & COPPLE

By   
S. B. Christy IV

SBC/jy  
Encls.

CROSBY FUSSELMAN POOL

RESERVOIR DATA

Porosity Range	4 - 14%
Average Porosity	7%
Water Saturation	15%
Formation Volume Factor	2.2
Gross Oil Thickness	40'
Net Oil Thickness	10'
Gross Gas Thickness	179'
Net Gas Thickness	40'
Recovery Factor (estimated)	25%
Bottom Hole Temperature	126°F
Oil in Place	720,000bb1
Recoverable Oil(@ 25% RF)	180,000bb1
Gas in Gas Column	5400mmcf

BEFORE EXAMINER UTZ	
OIL CONSERVATION COMMISSION	
EXHIBIT NO.	4
CASE NO.	4946
Submitted by	Union Texas Petroleum
Hearing Date	5-23-73

SUGGESTED  
SPECIAL RULES AND REGULATIONS  
FOR THE  
CROSBY FUSSELMAN POOL  
LEA COUNTY, NEW MEXICO

- RULE 1. Each well completed or recompleted in the Crosby Fusselman Pool or in the Fusselman formation within one mile of said pool, and not nearer to nor within the limits of another designated Fusselman pool, shall be spaced, drilled, operated, and prorated in accordance with the Special Rules and Regulations hereinafter set forth.
- RULE 2. Each well completed or recompleted in the Crosby Fusselman Pool shall be located on a unit containing 320 acres, more or less, which shall comprise any two contiguous quarter sections of a single governmental section, being a legal subdivision (half section) of the United States Public Land Survey. For these rules, a unit consisting of between 316 and 324 contiguous surface acres shall be considered a standard unit.
- RULE 3. Each well shall be located no nearer than 660 feet to the nearest side boundary line of the designated tract nor closer than 1980 feet to the nearest end boundary line nor closer than 330 feet to any quarter-quarter section or subdivision inner boundary.
- RULE 4. ✓ A well shall be classified as an oil well if it has a gas-liquid hydrocarbon ratio of less than 25,000 cubic feet of gas per barrel. A well shall be classified as a gas well if it has a gas-liquid ratio of 25,000 or more cubic feet of gas per barrel of liquid hydrocarbons. The simultaneous dedication of any acreage to an oil well and a gas well is prohibited.
- RULE 5. ✓ The limiting gas-oil ratio for oil wells in the Crosby Fusselman Pool shall be 5,000 cubic feet of gas per barrel of oil.
- RULE 6. A 320 acre proration unit in the Crosby Fusselman Pool shall be assigned a proportional factor of 4.0 for allowable purposes.
- RULE 7. An oil well which has 320 acres dedicated to it shall be permitted to produce an amount of gas determined by multiplying the top unit oil allowable for the pool by the limiting gas-liquid ratio for the pool. In the event there is more than one oil well on a 320 acre oil proration unit, the operator may produce the allowable assigned to the 320 acre unit from the wells on the unit in any proportion.

DEPARTMENT OF
OIL CONSERVATION
UNIT NO. 5
CASE NO. 4946
Operator: Union Texas Petroleum
File No. J-23-73

Case 4946

CLARENCE E. HINKLE  
W. E. BONDURANT, JR.  
LEWIS C. COX, JR.  
PAUL W. EATON, JR.  
CONRAD E. COFFIELD  
HAROLD L. HENSLEY, JR.  
STUART D. SHANOR  
C. D. MARTIN  
PAUL J. KELLY, JR.

LAW OFFICES  
HINKLE, BONDURANT, COX & EATON

521 MIDLAND TOWER  
MIDLAND, TEXAS 79701

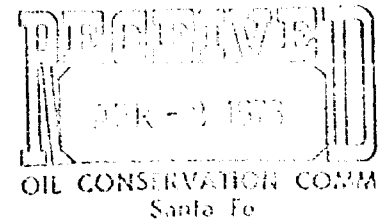
March 30, 1973

TELEPHONE 915 683-4691

ONLY MESSRS. COFFIELD & MARTIN  
LICENSED IN TEXAS

ROSWELL, NEW MEXICO OFFICE  
600 HINKLE BUILDING  
(505) 622-6510

Oil Conservation Commission  
State Land Office Building  
P. O. Box 2088  
Santa Fe, New Mexico 87501



Attention: Ida Rodriguez

Re: Crosby Fusselman Pool  
Lea County, New Mexico  
S $\frac{1}{2}$  Section 28 and All Section 33,  
Township 25 South, Range 37 East, NMPM  
Union Texas Petroleum Division,  
Allied Chemical Corporation

Gentlemen:

This confirms my telephone conversation today with Ida Rodriguez, requesting, on behalf of Union Texas Petroleum, that there be placed on the first available hearing docket, Union Texas Petroleum's application for certain matters pertinent to the above-referenced Crosby Fusselman Pool. In this connection, I am submitting this letter in triplicate and respectfully request that it be considered the formal application for hearing. It is my understanding that the matters requested may be placed on the docket for April 25.

For your information, I am enclosing a reproduced copy of Union Texas Petroleum's letter of March 29, 1973, instructing us to proceed in this regard and outlining the matters which they would like to present to the Commission. As noted in Union Texas Petroleum's letter of March 29, they will request the following at the hearing:

1. 320 acre spacing
2. Limiting gas oil ratio for oil well of 5000/1
3. Combination reservoir
  - (a) Oil well if gas oil ratio is less than 25,000/1
  - (b) Gas well if gas oil ratio is greater than 25,000/1
4. Oil allowable based on 80 acres for the depth bracket

DOCKET MAILED

Date 5-11-73

5/23/73

DOCKET MAILED

Date

DOCKET MAILED

Date 4-12-73

March 30, 1973

Allied Chemical has also provided us, at this time, with a Crosby Area Plat in the scale of one inch to 1000 feet. It is my understanding that for purposes of initiating a hearing on the matters requested, it will not now be necessary to submit a plat of this type. However, if such a plat is essential, please advise.

You may ultimately conclude that the matters to be covered should be carried under more than one docket number. If this is the case, we would respectfully request that all of the above matters be set such that they can be considered on the same day. If any additional information is needed in order to process the application for the hearing requested, please call Conrad E. Coffield in our Midland, Texas office, 915-683-4691; or Paul W. Eaton, Jr. in our Roswell, New Mexico office, 505-622-6510.

Thank you.

Very truly yours,

HINKLE, BONDURANT, COX & EATON



Conrad E. Coffield

CEC:lh

xc: Mr. Donald B. Wells  
Union Texas Petroleum Division  
Allied Chemical Corporation  
1300 Wilco Building  
Midland, Texas 79701

xc: Mr. Paul W. Eaton  
Hinkle, Bondurant, Cox & Eaton  
P. O. Box 10  
Roswell, New Mexico 88201



Union Texas Petroleum Division

**ALLIED CHEMICAL CORPORATION**

1300 WILCO BUILDING • MIDLAND, TEXAS 79701

915, 682-0515

*Case 4946*

March 29, 1973

**RECEIVED**

MAR 30 1973

Hinkle, Bondurant, Cox and Eaton  
521 Midland Tower  
Midland, Texas 79701

HINKLE, BONDURANT, COX & EATON  
MIDLAND, TEXAS

Attention: Mr. Conrad Coffield

Re: Crosby Fusselman Pool  
Lea County, New Mexico

Gentlemen:

Confirming our conversation in your office on February 7, 1973, please request a hearing before the New Mexico Oil Conservation Commission for field rules in the Crosby Fusselman Pool.

There are presently two wells completed in the Fusselman, both of which are operated by Union Texas Petroleum. The Crosby Deep No. 1 is located in Unit N, 330 feet from the south line and 1980 feet from the west line of Section 28, T-25-S, R-37-E, Lea county, New Mexico, and is currently classified a nonprorated gas well, to which 320 acres are assigned. Crosby Deep No. 2 has recently been completed as an oil well from the Fusselman. It is located in Unit G, 1650 feet from the north line and 2310 feet from the east line of Section 33, T-25-S, R-37-E, Lea County, New Mexico. Location of the wells is indicated on the attached plat.

We would like to ask for the following at the hearing:

- (1) 320 acre spacing
- (2) Limiting GOR for oil well of 5000/1
- (3) Combination reservoir
  - (a) Oil well if GOR less than 25000/1
  - (b) Gas well if GOR greater than 25000/1
- (4) Oil allowable based on 80 acres for the depth bracket.

Should you need additional information or copies of the map, or have any questions concerning our application, please contact me at your convenience.

Yours truly

UNION TEXAS PETROLEUM

*Donald B. Wells*

Donald B. Wells

District Petroleum Engineer

DBW:rd  
attachment

DRAFT

jr/

BEFORE THE OIL CONSERVATION COMMISSION  
OF THE STATE OF NEW MEXICO

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

CASE NO. 4946

Order No. R- 4581-A

IN THE MATTER OF CASE NO. 4946  
BEING REOPENED PURSUANT TO THE  
PROVISIONS OF ORDER NO. R-4581,  
WHICH ORDER ESTABLISHED TEMPORARY  
RULES FOR THE CROSBY-FUSSELMAN  
ASSOCIATED POOL, LEA COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on August 7, 19 74  
at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this        day of September, 1974, the Commission,  
a quorum being present, having considered the testimony, the record,  
and the recommendations of the Examiner, 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 cause and the subject  
matter thereof.

(2) That by Order No. R-4581, dated June 29, 1973, Special  
Rules and Regulations for the Crosby-Fusselman Associated Pool  
were promulgated, which rules included provisions for 320-acre  
spacing and proration units and a limiting gas-oil ratio of 5,000  
cubic feet of gas per barrel of oil.



1 -2-

2 CASE NO. 4946

3 Order No. R-4581-A

4 (3) That subsequent to the original hearing of this case,  
5 additional reservoir and production information has become available  
6 which indicates that the Crosby-Fusselman Associated Pool is an oil  
7 reservoir rather than an associated oil and gas reservoir.

8 (4) That said Crosby-Fusselman Associated Pool should be  
9 reclassified and designated the Crosby Fusselman Pool.

10 (5) That the pool should continue to be developed on 320-acre  
11 spacing.

12 (6) That the producing history of the pool indicates that  
13 a limiting gas-oil ratio in excess of 4,000 cubic feet of gas  
14 per barrel of oil is unnecessary for the efficient and economic  
15 development of the pool.

16 (7) That wells in the subject pool should continue to be  
17 assigned a special depth bracket allowable of 310 barrels of oil  
18 per day.

19 ~~(8) That the special pool rules promulgated for the subject~~  
20 ~~pool should establish proration rules for gas wells in order to~~  
21 ~~prevent waste and protect correlative rights.~~

22 (9)<sup>B</sup> That effective October 1, 1974, the Special Pool Rules  
23 and Regulations for the Crosby-Fusselman Associated Pool should be  
24 rescinded and new Special Rules and Regulations for the Crosby-  
25 Fusselman Pool should be promulgated to take effect on that date.

26 IT IS THEREFORE ORDERED:

27 (1) That effective October 1, 1974, the Crosby-Fusselman  
28 Associated Pool in Lea County, New Mexico, is hereby reclassified  
29 as an oil pool and designated the Crosby-Fusselman Pool with  
30 vertical limits comprising the Fusselman formation and ~~the~~  
31 horizontal limits comprising the following described area:  
32

1 -3-

2 CASE NO. 4946

3 Order No. R-4581-A

4 LEA COUNTY, NEW MEXICO  
5 TOWNSHIP 25 SOUTH, RANGE 37 EAST, NMPM  
6 Section 28: S/2  
7 Section 33: N/2

8 (2) That effective October 1, 1974, the Special Rules and  
9 Regulations for the Crosby-Fusselman Associated Pool, Lea County,  
10 New Mexico, are hereby rescinded and Special Pool Rules and Regul-  
11 ations for the Crosby-Fusselman Pool, Lea County, New Mexico, are  
12 hereby promulgated as follows:

13 SPECIAL RULES AND REGULATIONS  
14 FOR THE  
15 CROSBY-FUSSELMAN POOL

16 RULE 1. Each ~~pool~~<sup>well</sup> completed or recompleted in the Crosby-  
17 Fusselman Pool, or in the Fusselman formation within one mile  
18 thereof, and not nearer to or within the limits of another  
19 designated Fusselman Pool shall be spaced, drilled, operated,  
20 and produced in accordance with the Special Rules and Regulations  
21 hereinafter set forth.

22 RULE 2. Each well shall be located on a standard unit con-  
23 taining 320 acres more or less, comprising any two contiguous  
24 quarter sections ~~of~~<sup>of</sup> a single governmental section being a legal  
25 subdivision of the United States Public Land Surveys, provided that  
26 for purposes of these rules a unit consisting of between 316 and  
27 324 contiguous surface acres shall be considered a standard unit.

28 RULE 3. The Secretary-Director of the Commission may grant  
29 an exception to the requirements of Rule 2 without notice and hearing  
30 when an application has been filed for a non-standard unit and the  
31 unorthodox size or shape of the unit is necessitated by variation  
32 in the legal subdivision of the United States Public Land Surveys  
or the following facts exist and the following provisions are  
complied with:

1 -4-

2 CASE NO. 4946

3 Order No. R-4581-A

4 (a) The non-standard unit consists of quarter quarter  
5 sections of lots that are contiguous by a common  
6 bordering side.

7 (b) The non-standard unit lies wholly within a standard  
8 proration unit for the well under the applicable  
9 provisions of Rule 2 above and contains less acreage  
10 than a standard unit.

11 (c) The applicant presents written consent in the form  
12 of waivers from all offset operators and from  
13 all operators owning <sup>acreage</sup> ~~interests~~ in the standard  
14 proration unit ~~for the well~~ in which the non-standard  
15 unit is situated ~~in~~ which acreage is not included  
16 in said non-standard unit.

17 (d) In lieu of Paragraph (c) of this rule, the applicant  
18 may furnish proof of the fact that all the aforesaid  
19 operators were notified by registered or certified mail  
20 of his intent to form such non-standard unit. The  
21 Secretary-Director may approve the application if  
22 no such operator has entered an objection to the  
23 formation of such non-standard unit within the  
24 30 days after the Secretary-Director has received  
25 the application.

26 RULE 4. Each well shall be located no nearer than 660 feet  
27 to the nearest side boundary of the tract, nor nearer than 1980  
28 feet to the nearest end boundary of the tract, nor closer than  
29 330 feet to any quarter quarter section or subdivision inner  
30 boundary.

31

32

1 -5-

2 CASE NO. 4946

3 Order No. R-4581-A

4 RULE 5. The Secretary-Director may grant an exception to the  
5 requirements of Rule 4 without notice and hearing when an applica-  
6 tion has been filed for an unorthodox location necessitated by  
7 topographical conditions or the recompletion of the well previously  
8 drilled to another horizon. All operators offsetting the proposed  
9 location shall be notified of the application by registered or  
10 certified mail and the application shall state that such notice  
11 has been furnished. The Secretary-Director may approve the  
12 application upon receipt of written waivers from all operators  
13 offsetting the proposed location or if no objection to the unorthodox  
14 location has been entered within 20 days after the Secretary-Director  
15 has received the application.

16 RULE 6. <sup>Top unit allowable for a</sup> standard proration unit (316 through 324 acres)  
17 shall be ~~assigned~~ <sup>per day</sup> a 320-acre <sup>depth</sup> bracket allowable of 310 barrels  
18 subject to the market demand percentage factor for allowable  
19 purposes and in the event there is more than one well on a 320-acre  
20 proration unit the operator may produce the allowable assigned the  
21 unit from the wells on the unit in any proportion.

22 The allowable assigned to a non-standard proration unit shall  
23 bear the same ratio to a standard allowable as the acreage in such  
24 non-standard unit bears to 320 acres.

25 RULE 7. A limiting gas-oil ratio of 4000 cubic feet of gas  
26 per barrel of oil is established for the pool.

27 IT IS FURTHER ORDERED:

28 (1) That the locations of all wells presently drilling to the  
29 Crosby-Fusselman Pool are hereby approved; that the operator of  
30 any well having an unorthodox location shall notify the Hobbs  
31 District Office of the Commission in writing of the name and  
32 location of the well on or before October 15, 1974.

1 -6-  
2 CASE NO. 4946  
3 Order No. R-4581-A

4 (2) That pursuant to Paragraph (a) of Section 65-3-14.5,  
5 NMSA, 1953 contained in Chapter 271, Laws of 1969, existing  
6 wells in the Crosby-Fusselman Pool shall have dedicated thereto  
7 320-acres in accordance with the foregoing pool rules; or pursuant  
8 to Paragraph (c) of said Section 65-3-14.5, existing wells may have  
9 non-standard spacing or proration units established by the  
10 Commission and dedicated thereto.

11 Failure to file new Forms C-102 with the Commission dedicating  
12 320-acres to a well or to obtain a non-standard unit approved by  
13 the Commission within 60 days from the date of this order shall  
14 subject the well to cancellation of allowable until said Form  
15 C-102 has been filed or until a non-standard unit has been approved  
16 and subject to said 60 days limitation each well presently drilling  
17 to or completed in the Crosby-Fusselman Pool shall receive no more  
18 than 1/4 of a standard allowable for the pool.

19 (3) That jurisdiction of this cause is retained for the  
20 entry of such further orders as the Commission may deem necessary.

21 DONE at Santa Fe, New Mexico, on the day and year herein-  
22 above designated.

23  
24  
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26  
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32

BEFORE THE OIL CONSERVATION COMMISSION  
OF THE STATE OF NEW MEXICO

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

APPLICATION OF UNION TEXAS PETROLEUM  
FOR SPECIAL POOL RULES, LEA COUNTY,  
NEW MEXICO.

CASE NO. 4946

Order No. R-4581

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on May 23, 1973, 1973  
at Santa Fe, New Mexico, before Examiner Elvis A. Utz.

NOW, on this        day of June, 1973, the Commission,  
a quorum being present, having considered the testimony, the record,  
and the recommendations of the Examiner, 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 cause and the subject  
matter thereof.

(2) That the applicant, Union Texas Petroleum, seeks the  
promulgation of special rules and regulations for the Crosby-  
Fusselman Pool, Lea County, New Mexico, including a provision for  
classification of oil wells and gas wells, 320-acre spacing for  
all wells, and a limiting gas-oil ratio of 5000 to one.

(3) That while the said Crosby-Fusselman Pool is presently  
classified as a gas pool, the evidence adduced indicates it is in  
fact an associated oil and gas reservoir.

(4) That said Crosby- Fusselman Pool should be classified and designated the Crosby-Fusselman Associated Pool and special rules and regulations should be promulgated therefore.

(5) That the reservoir characteristics of the subject pool indicate that the gas and oil area can be efficiently and economically drained and developed on 320-acre spacing.

(6) That the reservoir characteristics of the subject pool presently available justify the definition of an <sup>OIL</sup> ~~an gas~~ well in said pool as a well producing ~~liquids with an API~~ gravity of ~~\_\_\_\_\_ or more or~~ <sup>less than</sup> with a gas-liquid ratio of 25,000 ~~more~~ cubic feet of gas per barrel of liquid hydrocarbons.

(7) That the reservoir characteristics of the subject pool presently available justify the establishment of a gas-liquid ratio limitation of 5000 cubic feet of gas per barrel of liquid hydrocarbons.

(8) That special rules and regulations providing for 320-acre gas and oil well spacing should be promulgated for the subject pool in order to prevent the economic loss caused by the drilling of unnecessary wells, avoid the augmentation of risk arising from the drilling of an excessive number of wells, prevent reduced recovery which might result from the drilling of too few wells, and otherwise prevent waste and protect correlative rights.

(9) That the special rules and regulations should provide for the classification of a gas well as a well producing ~~liquids with an API gravity of \_\_\_\_\_ or more or~~ with a gas-liquid ratio of 25,000 or more cubic feet of

gas per barrel of liquid hydrocarbons and should provide for a gas-liquid ratio of 5,000 cubic feet of gas per barrel of liquid hydrocarbons, in order to afford to the owner of each property in the pool the opportunity to produce his just and equitable share of the oil or gas, or both, and for this purpose to use his just and equitable share of the reservoir energy.

(10) That the depth bracket allowable for oil wells in the subject pool should be 310 barrels of oil per day in accordance with Rule 505 of the Commission Rules and Regulations.

(11) That the temporary special rules and regulations should establish proration rules for gas wells in order to prevent waste and protect correlative rights.

IT IS THEREFORE ORDERED:

(1) That effective JULY 15, 1973, the Crosby-Fusselman Pool is hereby classified as an associated oil and gas reservoir and designated the Crosby-Fusselman Associated Pool with vertical limits comprising the Fusselman formation and horizontal limits comprising the following-described area:

TOWNSHIP 25 SOUTH, RANGE 37 EAST, NNPM  
LEA COUNTY, NEW MEXICO

Section 28 : S 1/2  
Section 33 : NW 1/2

(2) That, effective JUNE 15, 1973 Special Rules and Regulations for the Crosby-Fusselman Associated Pool, Lea County, New Mexico, are hereby promulgated as follows:

SPECIAL RULES AND REGULATIONS  
FOR THE  
CROSBY-FUSSELMAN ASSOCIATED POOL

Rule 1. Each well completed or recompleted in the Crosby-Fusselman Associated Pool or in the Fusselman formation within one mile thereof, and not nearer to or within the limits of another designated Fusselman Pool, shall be spaced, drilled, operated, and produced in accordance with the Special Rules and Regulations hereinafter set forth.



Rule 2. (a) Each ~~gas~~ well shall be located on a standard unit containing 320 acres, more or less, comprising any two contiguous quarter sections of a single governmental section, being a legal subdivision of the United States Public Land Surveys. **PROVIDED THAT FOR THE PURPOSES OF THESE RULES, A UNIT CONSISTING OF BETWEEN 316 AND 324 CONTIGUOUS SURFACE ACRES SHALL BE CONSIDERED A** (b) ~~Each oil well shall be located on a standard unit containing 320 acres, more or less, consisting of any two governmental quarter sections.~~ **STANDARD UNIT.**

Rule 3. The Secretary-Director of the Commission may grant an exception to the requirements of Rule 2 without notice and hearing when an application has been filed for a non-standard unit and the unorthodox size or shape of the unit is necessitated by a variation in the legal subdivision of the United States Public Land Surveys, or the following facts exist and the following provisions are complied with:

(a) The non-standard unit consists of quarter-quarter sections or lots that are contiguous by a common bordering side.

(b) The non-standard unit lies wholly within a standard proration unit for the well under the applicable provisions of Rule 2 above and contains less acreage than a standard unit.

(c) The applicant presents written consent in the form of waivers from all offset operators and from all operators owning interests in the standard proration unit for the well in which the non-standard unit is situated and which acreage is not included in said non-standard unit.

(d) In lieu of paragraph (c) of this rule, the applicant may furnish proof of the fact that all of the aforesaid

operators were notified by registered or certified mail of his intent to form such non-standard unit. The Secretary-Director may approve the application if no such operator has entered an objection to the formation of such non-standard unit within 30 days after the Secretary-Director has received the application.

Rule 4. ~~Each oil well shall be located within 150 feet of the center of the quarter-quarter section. Each well drilled in a known gas productive area and to which is dedicated 320 acres~~  
**EACH WELL**  
shall be located no nearer than 660 feet to the nearest side boundary of the tract nor nearer than 1980 feet to the nearest end boundary of the tract **nor closer than 330 feet to any quarter-quarter section or subdivision inner boundary.**

Rule 5. A well shall be classified as a gas well if it ~~produces liquids with an API gravity of \_\_\_\_\_ or more or if it~~ has a gas-liquid ratio of **25,000** or more cubic feet of gas per barrel of liquid hydrocarbons. Any well completed in and capable of producing from the Crosby-Fusselman Associated Pool and not classified as a gas well shall be classified as an oil well.

Rule 6. That the limiting gas-oil ratio shall be 5,000 cubic feet of gas for each barrel of oil produced.

Rule 7. An oil well which has 320 acres dedicated to it shall be permitted to produce only that amount of gas determined by multiplying the top unit oil allowable for the pool by the limiting gas-liquid ratio for the pool. In the event there is more than one oil well on a 320-acre oil proration unit, the operator may produce the allowable assigned to the 320-acre unit from the wells on the unit in any proportion.

A gas well shall be permitted to produce that amount of gas obtained by multiplying the top unit oil allowable for the pool by the limiting gas-liquid ratio for

the pool and by a fraction, the numerator of which is the number of acres dedicated to the particular gas well and the denominator of which is 320. In the event there is more than one gas well on a 320-acre gas proration unit, the operator may produce the amount of gas assigned to the unit from the wells on the unit in any proportion.

Rule 8. The operator of each newly completed well shall cause a gas-liquid ratio test to be taken on the well upon recovery of all load oil from the well, provided however, that in no event shall the test be commenced later than 30 days from the date of first production unless the well is connected to a gas-gathering facility and is producing under a temporary gas allowable assigned in accordance with Rule 11. Any well which is shut in shall be exempted from the gas-liquid ratio test requirement so long as it remains shut in. The initial gas-liquid ratio test shall be taken in the manner prescribed by Rule 9. If the gas-liquid ratio is 2,000 cubic feet of gas per barrel of liquid hydrocarbons, or more, the operator shall not produce the well until beneficial use can be made of the gas.

Rule 9. Gas-liquid ratio tests shall be taken on all wells during the months of March and September of each year. The initial gas-liquid ratio test shall suffice as the first semi-annual test. Tests shall be 24-hour tests, being the final 24 hours of a 72-hour period during which the well shall be produced at a constant normal rate of production. Results of such tests shall be filed on Commission Form C-116 on or before the 10th day of the following month. At least 72 hours

prior to commencement of any such gas-liquid ratio tests, each operator shall file with the appropriate district office of the Commission a test schedule for its wells specifying the time each of its wells is to be tested. Copies of the test schedule shall also be furnished to all offset operators. The Commission District supervisor may grant exceptions to the above test requirements where it is demonstrated that wells produce no liquids.

Special tests shall also be taken at the request of the Secretary-Director and may also be taken at the option of the operator. Such special tests shall be taken in accordance with the procedures outlined hereinabove, including notification to the Commission and offset operators.

Rule 10. An initial shut-in pressure test shall be taken on each gas well and shall be reported to the Commission on Form C-125.

Rule 11. Any well completed after the effective date of these rules shall receive an allowable only upon receipt by the appropriate Commission district office of Commission Forms C-104 and C-116, properly executed. The District Supervisor of the Commission's district office is hereby authorized

to assign a temporary gas allowable to wells connected to a gas transportation facility during the recovery of load oil, which allowable shall not exceed the number of cubic feet of gas obtained by multiplying the daily top unit allowable for the pool by the limiting gas-liquid ratio for the pool.

RULE 12. The initial balancing date shall be 7 o'clock a.m. ~~April, the first~~, 1974. Subsequently, the date 7:00 a.m. ~~April, the first~~ of each year shall be known as the balancing date, the twelve months following this date shall be known as the gas proration period.

RULE 13. Any gas well which has an underproduced status as of the end of a gas proration period shall be allowed to carry such underproduction forward into the next gas proration period and may produce such underproduction in addition to the allowable assigned during such succeeding period. Any allowable carried forward into a gas proration period and remaining unproduced at the end of such gas proration period shall be cancelled.

RULE 14. Production during any one month of a gas proration period in excess of the allowable assigned to a well for such month shall be applied against the underproduction carried into such period in determining the amount of allowable, if any, to be cancelled.

RULE 15. Any well which has an overproduced status as of the end of a gas proration period shall carry such overproduction forward into the next gas proration period, provided that such overproduction shall be compensated for during such succeeding period. Any well which has not compensated for the overproduction carried into a gas proration period by the end of such proration period shall be shut in until such overproduction is compensated for. If, at any time, a well is overproduced an amount equalling three times its current monthly allowable, it shall be shut in during that month and each succeeding month until the well is overproduced less than three times its current monthly allowable.

RULE 16. The allowable assigned to a well during any one month of a gas proration period in excess of the production for the same month shall be applied against the overproduction carried into such period in determining the amount of overproduction, if any, which has not been compensated for.

RULE 17. The Commission may allow overproduction to be compensated for at a lesser rate than would be the case if the well were completely shut in upon a showing after notice and hearing that complete shut in of the well would result in material damage to the well or reservoir.

Rule 18. The montly gas production from each gas well shall be metered separately and the gas production therefrom shall be reported to the Comission on Form C-115 in order to reach the Commission on or before the 24th day of the month next succeeding the month in which the gas was produced. The operator shall show on such report what disposition has been made of the produced gas.

Rule 19. Each purchaser or taker of gas shall submit a report to the Commission so as to reach the Commission on or before the 15th day of the month next succeeding the month in which the gas was purchased or taken. Such report shall be filed on Form C-111 with the wells being listed in the same order as they are listed on the appropriate proration schedule.

Rule 20. Failure to comply with any provision of these rules shall result in the immediate cancellation of allowable assigned to the affected well. No further allowable shall be assigned until all rules and regulations have been complied with. The Secretary-Director shall notify the operator of the well and purchaser in writing of the date of allowable cancellation and the reason therefor.

Rule 21. All transporter<sup>s</sup> or users of gas shall file gas well-connection notices with the Commission as soon as possible after the date of connection.

Rule 22. Allowables to wells whose classification has changed from oil to gas or from gas to oil as the result of a gas-liquid ratio test shall commence on the first day of the month following the month in which such test was reported, provided that a plat (Form C-102) showing the acreage dedicated to the well and the location of all wells on the dedicated acreage has been filed.

IT IS FURTHER ORDERED:

- (1) That the locations of all wells presently drilling

to or completed in the Crosby-Fusselman Associated Pool or in the Fusselman formation within one mile thereof are hereby approved; that the operator of any well having an unorthodox location shall notify the appropriate district office of the Commission in writing of the name and location of the well on or before ~~August 1, 1973~~ <sup>AUGUST 1, 1973</sup>.

(2) That, pursuant to Paragraph A. of Section 65-3-14.5, NMSA 1953, contained in Chapter 271, Laws of 1969, existing oil wells in the Crosby-Fusselman Associated Pool shall have dedicated thereto 320 acres and existing gas wells in said pool shall have dedicated thereto 320 acres, in accordance with the foregoing pool rules or, pursuant to Paragraph C. of said Section 65-3-14.5, existing wells may have non-standard spacing or proration units established by the Commission and dedicated thereto.

Failure to file new Forms C-102 with the Commission dedicating 320 acres to an oil well or 320 acres to a gas well or to obtain a non-standard unit approved by the Commission within 60 days from the date of this order shall subject the well to cancellation of allowable.

Until said Form C-102 has been filed or until a non-standard unit has been approved, and subject to said 60-day limitation, each well presently drilling to or completed in the Crosby-Fusselman Associated Pool as an oil well or in the Fusselman formation within one mile thereof as an oil well shall receive no more than a standard 40-acre allowable for the depth of this pool.

1 ← ~~(3) That the first operator in the subject pool to obtain a gas connection shall immediately notify the Santa Fe office of the commission of such connection.~~

<sup>3</sup>  
(4) That this cause shall be reopened ~~one year from~~ *in July, 1974,*  
~~the date of said gas connection~~ to permit operators in the  
subject pool to appear and show cause why the special rules  
promulgated herein should remain in effect.

<sup>4</sup>  
(5) That jurisdiction of this cause is retained for the  
entry of such further orders as the Commission may deem  
necessary.

DONE at Santa Fe, New Mexico, on the day and year herein-  
above designated.

STATE OF NEW MEXICO

OIL CONSERVATION COMMISSION

I. R. TRUJILLO, Chairman

ALEX J. ARMIJO , Member

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

S E A L

ac/