STATE OF NEW MEXICO

ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION

IN THE MATTER OF:	)	
	)	
APPLICATION OF YATES PETROLEUM CORPORATION FOR SPECIAL POOL RULES, EDDY COUNTY, NEW MEXICO.	)	CASE NO. 10145
	)	

REPORTER'S TRANSCRIPT OF PROCEEDINGS

EXAMINER HEARING

BEFORE: JIM MORROW, Hearing Examiner

November 28, 1990
10:45 a.m.
Santa Fe, New Mexico

This matter came on for hearing before the Oil Conservation Division on November 28, 1990, at 10:45 a.m. at Oil Conservation Division Conference Room, State Land Office Building, 310 Old Santa Fe Trail, Santa Fe, New Mexico, before Deborah LaVine, RPR, Certified Shorthand Reporter No. 252 and Notary Public, in and for the County of Santa Fe, State of New Mexico.

FOR: OIL CONSERVATION DIVISION

BY: DEBORAH LAVINE, RPR
Certified Shorthand Reporter

A P P E A R A N C E S

BEFORE: JIM MORROW, Hearing Examiner

FOR THE DIVISION:	ROBERT G. STOVALL, ESQ. General Counsel Oil Conservation Commission State Land Office Building 310 Old Santa Fe Trail Santa Fe, New Mexico 87501
FOR THE APPLICANT:	LOSEE, CARSON, HAAS & CARROLL, P.A. Attorneys at Law BY: ERNEST L. CARROLL, ESQ. 300 American Home Building Artesia, New Mexico 88211
FOR PREMIER PRODUCTION COMPANY:	CAMPBELL & BLACK, P.A. Attorneys at Law BY: WILLIAM F. CARR, ESQ. 110 North Guadalupe Suite 1 Santa Fe, New Mexico 87501

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I N D E X

November 28, 1990
Examiner Hearing
Case No. 10145

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EXAMINER MORROW: 10145.

MR. STOVALL: Application of Yates Petroleum Corporation for special pool rules, Eddy County, New Mexico.

EXAMINER MORROW: Call for appearances.

MR. CARROLL: Mr. Examiner, I'm Ernest Carroll of the law firm Losee, Carson, Haas & Carroll, Artesia, New Mexico. And I'm appearing here on behalf of Yates Petroleum, and I will have two witnesses.

MR. CARR: May it please the Examiner. My name is William F. Carr with the law firm of Campbell & Black, P.A., Santa Fe. I represent Mr. Larry Jones, d/b/a Premier Production Company, and I will have one witness.

EXAMINER MORROW: Will all the witnesses please stand and be sworn.

(THEREUPON, a discussion was held off the record.)

EXAMINER MORROW: Go ahead.

JANET RICHARDSON

the witness herein, having been first duly sworn by the Notary Public, was examined and testified as follows:

DIRECT EXAMINATION

BY MR. CARROLL:

Q. Would you please state your name, address and occupation.

A. Janet Richardson, 1108 Yates, Artesia, New Mexico. And I'm a landman for Yates Petroleum corporation.

Q. Ms. Richardson, are you familiar with the application that's being made by Yates Petroleum in this particular cause number?

A. Yes, I am.

Q. With respect to this particular application to modify the field rules and raise the GOR for this particular Avalon-Delaware pool, have you prepared an exhibit, a land plat, showing the area with which we are concerned?

A. Yes, I have.

(Applicant's Exhibit No. 1 was marked for identification.)

Q. I'd ask you to turn to Exhibit 1 then. Is this the exhibit that you have prepared?

A. Yes.

Q. Would you explain what is depicted by this exhibit for the examiner?

A. The blue is the Avalon-Delaware pool. We've just colored that in. And then the black outline shows the mile radius around that for the operators and other parties that we had to contact.

Q. With respect to this particular application then, Yates has given notice to all the operators within the pool and those who operate or own within one mile of the pool limits; is that correct?

A. Yes.

Q. And previous to this date, I have prepared, and you're aware that I've prepared, a certificate of mailing in compliance with Rule 1207, and that has been filed with the commission?

A. Yes, it has.

MR. CARROLL: Because that has previously been filed, we don't propose to present an exhibit today.

Q. (By Mr. Carroll:) Now with respect to the notices that have gone out, Ms. Richardson, Yates Petroleum has obtained certain waivers, have they not?

A. Yes, they have.

Q. Could you please list for the examiner the companies from whom waivers of no opposition with respect to this application have been received from.

A. We've received waivers from MWJ Producing Company; BHP Petroleum Company; Monsanto Oil Company; Marilow, Inc.; Chevron, USA; Mesa Petroleum Comapny; Bonneville Fuel Corporation; Hondo Oil & Gas Company; Barbara Faskin, the Estate of David Faskin; Kerr/McGee Oil Corporation; George Riggs; Barbara Oil, Inc.; and Oxy, USA, Inc.

MR. CARROLL: Mr. Examiner, I have not prepared an exhibit, but I do propose to file the original waivers which we have received from that group of people. And that is a list there on top of those.

EXAMINER MORROW: There's a list of each one of those?

THE WITNESS: Yes, it is.

MR. CARROLL: There's a list, yes. That's correct. I would pass this witness at this time, Mr. Examiner.

EXAMINER MORROW: Mr. Carr.

CROSS-EXAMINATION

BY MR. CARR:

Q. Ms. Richardson, when you list the waivers, are all of these individual companies or individuals operators of oil within the pool?

A. Three are within the pool, and the rest of them are within the one-mile boundary outside the pool.

Q. And which three are within the pool?

A. Chevron, USA, Inc., MWJ Producing Company, and Exxon Company, USA.

Q. And so the rest of these individuals, are all of these individuals operating wells within the area?

A. Yes.

EXAMINER MORROW: Which ones are within the pool again? I didn't find all those on this list.

THE WITNESS: Oh --

EXAMINER MORROW: Maybe they are.

THE WITNESS: No, they're -- just Chevron and MWJ are in the pool. Exxon is also in the pool, and we do not have a waiver from them.

MR. CARR: That's all I have.

MR. CARROLL: I have nothing further of this witness.

EXAMINER MORROW: The witness may be excused.

DAVID F. BONEAU

the Witness herein, having been first duly sworn, was examined and testified as follows:

DIRECT EXAMINATION

BY MR. CARROLL:

Q. Mr. Boneau, would you please state your full name, address and occupation?

A. My name is David Francis Boneau. I live at 1407 South 23rd Street in Artesia, New Mexico, and I work as an engineer for Yates Petroleum Corporation.

Q. Mr. Boneau, you have testified as a professional engineer before this commission many times in the past, have you not?

A. Yes, sir, I have testified here.

Q. And your credentials have been accepted?

A. Yes, sir.

MR. CARROLL: I would tender Mr. Boneau as an expert in the field of petroleum engineering, Mr. Examiner.

EXAMINER MORROW: Yes, sir, we accepted his qualifications. Would you spell your last name for me.

A. It starts with B as in baker, o-n-e-a-u, and I have a card for this lady.

EXAMINER MORROW: Thank you.

Q. (By Mr. Carroll:) Mr. Boneau, would you please summerize for the examiner the reasons for this application by Yates Petroleum.

A. I'd like to state clearly what Yates seeks in this application. We seek approval of a special pool rule for the Avalon-Delaware pool that sets a maximum gas/oil ratio limit of 7,500. There are currently no special pool rules for the Avalon-Delaware pool. The allowables are those established by the statewide rules, 40-acre spacing, 80 barrels of oil per day with a GOR limit of 2,000 so that the gas allowable is 160 mcf per day.

What Yates is asking is that the oil allowable be maintained at 80 barrels of oil per day, but we're seeking to have the gas allowable changed actually to 600 mcf a day via a GOR limit of 7,500. Do you want me to go into the reasons behind this?

Q. Let's, first of all, clarify on one thing. Yates Petroleum does operate a number of wells in this particular pool; is that correct, Mr. Boneau?

A. Yes, sir, that's correct. We operate eight wells in the pool.

Q. And at the present time, Yates, through those wells, are unable to produce the statewide allowable of 80 barrels per day; is that correct?

A. That's correct. Our concern really is directed at

two wells that are capable of making 80 barrels of oil a day. They produce with GORs about 4,000, and so the current rules essentially limit them to around 40 barrels of oil a day at the 4,000 GOR. If this application can be approved, we can increase production from those two wells, and maybe from some other wells, but from those two wells, to around 80 barrels of oil a day and maintain that 4,000 GOR. So they would produce about 300, 400 mcf a day. My main concerning to get the oil production to 80 barrels of oil per day.

Q. Now, Mr. Boneau, you have prepared certain exhibits today. Would you summarize basically what you intend to show by those exhibits.

A. Yes, I have eight exhibits to help show our case. The exhibits really try to do three things. The first ones introduce some basic facts about the Avalon-Delaware pool. And then I'm going to try to show that the high GORs occur in many wells throughout the pool and suggest that the high GORs are related to the completion intervals where oil and gas stringers in part of the formation exist in close proximity. And then thirdly, my exhibits will give some evidence that the reservoir energy will not be wasted if these higher GORs are allowed. Those are the things I'm going to try to do with these exhibits.

(Applicant's Exhibit No. 2 was marked for identification.)

Q. Then, Mr. Boneau, let us turn to Exhibit 2. And would you please explain what is shown or depicted by this exhibit and its significance with respect to the application being made by Yates.

A. Exhibit number 2 is a table that shows the 36 wells that have been drilled in the Avalon-Delaware pool along with some basic information on these wells. There are a couple of items I'd like to bring to the examiner's attention. Most of the development in the pool occurred in the time frame 1982, '83, '84. There were a couple wells before that, but they actually produced from a different part of the Delaware than the main development, which is the main concern of this hearing.

I'd also like to point out the perforated intervals in the wells. They extend over a large distance. Some of the wells have perforations around 2,500 feet in the Delaware. Some of the wells have perforations around 5,000 feet in the Delaware. The Delaware is a thick interval, and that's significant in our discussions here.

Of the 36 wells, 26 of them are producers. Five are shut in. Two were producers at LPNA. The one was converted to salt water disposal, and two were drilled and abandoned, never produced from the Delaware. I think those are the main points on Exhibit 2.

Q. Mr. Boneau, you stated that it was significant that

these completions exist over an area from 2,500 feet to 5,000 feet. What is that significance, if we might point that out to the examiner at this point?

A. The basic significance is that the Delaware is approximately 2,500 feet thick and the wells are completed in what I'm going to end up calling an upper, a middle and a lower portion. And the high GORs are associated with the middle and the lower portion, not with the upper portion. And further, our evidence suggests that the high GORs in the middle portion basically of the Delaware arise because there are what seem to be gas stringers in that middle section. And so there are stringers of oil and stringers of gas, and they get produced together because of the completion techniques. And that's where the high GOR probably originates rather than from an oil zone being so depleted that the GOR has gone way up. That's not the case. What seems to be the case is that there are gas and oil stringers in the middle Delaware that essentially are commingled in the well bore.

(Applicant's Exhibit No. 3 was marked for identification.)

Q. All right, Mr. Boneau. Why don't we turn now to Exhibit Number 3, and would you explain what that exhibit is and its significance.

A. We have two cross sections. We're not going to belabor a bunch of details on the cross section. But I think

the examiner needs to see a log and understand a couple of points. So Exhibit 3 is a cross section which we've labeled CC Prime, and it's a east/west cross section in the southern portion of the field. And generally in southeast New Mexico, the Delaware consists of what's called a Bell Canyon interval, a Cherry Canyon interval, a Brushy Canyon interval being the lowest. In this area, the Bell Canyon interval is absent, gone. You know, no other geologic explanation from me, but it's gone.

So here we're dealing with the Cherry Canyon is the upper interval, and lower down the well is the Brushy Canyon. There basically are probably only two points. The well to the left of the cross section is an MWJ well. It's completed around 4,750 feet, way down in the interval. The second well is an Exxon well, and it's completed around 3600 feet in an area I'd call the middle of this zone. The third well and some of the other wells, the third well is also an Exxon well, is completed near the top at about 2,800 feet. That's the first point is simply that different wells are completed in upper, middle and lower Delaware sections.

The only other point really is that, I think, a fairly quick look at the logs suggests that the pay zone consists of a lot of little intervals rather than a big main interval. So the logs look like there are what I'm calling a bunch of little stringers. Those are my two points on this

exhibit.

(Applicant's Exhibit No. 4 was marked for identification.)

Q. Thank you, Mr. Boneau. Let's turn now to what you have marked as Exhibit Number 4 and, if you would, likewise describe it and what its significance is with respect to this application by Yates.

A. Exhibit Number 4 is the other cross section. It is also an east/west cross section through the middle of the field. It basically has the same characteristics as I discussed on the other cross section. Really the only reason this one is included is because this cross section includes the Premier well. And that is the well on the left of this cross section, BB Prime, Premier Production Company, Eddy FV State Number 3. I think that some discussion of that well may come up later, and this is just a cross section that includes that well. You may notice it is completed around 2,700 feet in what I call the upper portion of the Delaware.

Q. Now this particular Premier well depicted on Exhibit Number 4, that is the only well that Premier has within this Avalon-Delaware pool; is that correct?

A. Yes, sir. I guess we should have covered that back on my Exhibit Number 2 that the operators in the pool are -- the biggest operator is Exxon with about 20 wells. Yates operates eight. MWJ operates three, and Premier operates one.

Q. Anything else with respect to Exhibit Number 4 that you'd like to point out?

A. In the middle well on Exhibit Number 4 at about 3500 feet, there's a little area colored in red. And that is a place where the crossover of the neutron density log shows up, and that is -- that crossover is evidence of gas. And it's a tiny piece of evidence to support my --

EXAMINER MORROW: What well is that in?

THE WITNESS: It's the middle one, Stonewall WM State Number 3, just below the top of the Brushy Canyon there. At least on mine, there's a little place colored in red where there's some crossover.

MR. STOVALL: We've got it.

A. And that's normally indicative of gas, and that's a little evidence in support of saying that there may be stringers that are mostly gas down in that zone.

(Applicant's Exhibit No. 5 was marked for identification.)

Q. (By Mr. Carroll:) Okay, Mr. Boneau. If you would next turn to Exhibit Number 5 and, likewise, explain what is depicted by this exhibit and its significance.

A. I believe this is the last of my exhibits on sort of the introduction to the pool. Exhibit Number 5 is a homemade map covering the heart of the Avalon-Delaware pool. And it simply shows underneath each well location the

cumulative production from each well. The three numbers in order are: The top number is thousands of barrels of oil; the middle number is thousands of barrels of water; the bottom number is mmcf of gas.

I really don't want to go through all the numbers, but the total production from the field has been about two and a half million barrels of oil, about 4.5 bcf of gas, and 5.2 or 5.3 million barrels of water. The wells all make water, typical of the Delaware, that is. The Exxon wells are the wells in the lease that's marked Yates C in section 31 and also the wells in section 32. They have -- the highest cums are from wells that are operated by Exxon. The Yates wells are in section 30.

The two wells that I referred to earlier where I think approval of this application could help us increase oil production are the ones marked EP Number 8, which is in Unit F at the top of the picture, and WM Number 3, which is in Unit N. Those are the two wells that we're going to have some additional data on that we think that this could really help.

EXAMINER MORROW: Tell me where those are again. I got lost by that 36, I suppose.

THE WITNESS: They're in section 30 which is in the top middle of the --

EXAMINER MORROW: Okay.

THE WITNESS: -- of the picture. The one just to the

left of where it says 30 is called EP Number 8, EP-8. It has a cumulative of 80,000 barrels of oil, 156,000 barrels of water and 259 mmcf. And the other one is two wells south of it, WM Number 3.

EXAMINER MORROW: All right.

A. So those are the two wells where we think we could produce 80 barrels a day instead of 30 or 40 if this were approved. I probably also should point out the Premier well is in section 25 to the west. I'm sure their people can tell you more about their well, but its cumulative is 5,000 barrels of oil, 72,000 barrels of water and less than one mmcf of gas. And we pointed out before it's completed in the upper interval, which we'll see has low GORs.

Q. (By Mr. Carroll:) Anything else with respect to Exhibit Number 5, Mr. Boneau?

A. The examiner may be interested that the field right now is producing about 600 barrels of oil per day, the pool, 1,500 barrels of water a day, and 1,250 mcf a day. So the poolwide GOR now is above 2,000.

(Applicant's Exhibit No. 6 was marked for identification.)

Q. If you'd turn now to your Exhibit Number 6, would you explain what that exhibit is and its significance.

A. With Exhibit Number 6, we get to the second part of what I was trying to show. I want to show that the high GORs

occur in many wells, it's not just a Yates problem, and try to show you that the high GORs occur in wells that are completed in the middle and the lower portion of the Delaware.

Q. Mr. Boneau, would you explain your legend, first of all, with respect to Exhibit Number 6.

A. I did not have a copy of Exhibit Number 6. Now that I have one, I'm able do what you said.

Q. All right.

A. Exhibit Number 6 is the same homemade drawing of the well locations that were in the previous Exhibit Number 5. But this one has numbers near the well locations that are the gas/oil ratio in 1989. That means that for each well, it's the amount of gas produced during 1989 divided by the amount of oil produced during 1989 expressed as cubic feet per barrel. And my first point is that the Yates wells in section 30 mostly have high GORs, 43, 4700, stuff like that. But there are other wells that have similarly high GORs. And there's kind of a swath going from northwest to southeast through the Exxon wells where GORs for Yates C-17 are 3727 and Yates C-12 is 3823. There are high GORs in wells other than the Yates wells. That's merely the first point.

The second point, I have also written next to each well location a letter that says either U, M, L or some combination of those. That simply indicates that the well is completed in the upper Delaware for U, the middle Delaware for

M, or the lower Delaware for L. I think if you look through the exhibits, you'll see that the high numbers go with the Ms and the Ls for the most part. And as a way to kind of summarize that, on the left side, I have an entry that says, Average GOR.

And if you take the arithmetic average for all the wells that are U wells that are completed in the upper, it is 1383, a relatively lower GOR. If you average the GORs for the wells completed in the middle, it's 3036. And the wells completed in the L have really high GORs, mainly because they make hardly any oil. But the average of those numbers is 10349. And I'm using that to suggest that the high GORs are associated with the middle and the lower Delaware where the logs suggest there may be gas stringers and that the upper Delaware produces more normal GORs. And the evidence suggests that the high GORs, you know, are not intrinsic to something Yates is doing wrong with its wells or Exxon is doing wrong with its wells. It's indigenous to the middle and lower reservoir.

Q. Mr. Boneau, this Exhibit Number 6 indicates that the Premier well in section 25 is shut in; is that correct?

A. Yes, sir, the Premier well in section 25 has not produced since 1986 when it was operated by Chevron.

(Applicant's Exhibit No. 7 was marked for identification.)

Q. Let's turn to your Exhibit Number 7. Would you explain what that exhibit is and its significance.

A. Exhibit Number 7 is exactly the same idea as Exhibit Number 6. It simply incorporates data from the first eight months of 1990, the most recent data we have. And the conclusion, the numbers are very similar to those for 1989, and the conclusions are quite similar to those. Actually the GORs in 1990 fieldwide are lower than they were in 1988, and we might take that as evidence that the fieldwide GOR is not going up through the ceiling. The fieldwide GOR is relatively stable from year to year.

(Applicant's Exhibits Nos. 8 and 9 were marked for identification.)

Q. If you would turn now to your exhibit that's marked Number 8, would you explain what this exhibit is and its significance.

A. Okay. The last two exhibits, Exhibits 8 and 9, are aimed at accomplishing my third goal which was to give some evidence that reservoir energy is not being wasted if higher GORs are allowed. Exhibit 8 shows the results of what I'd call a GOR test performed on our Stonewall EP Number 8 during the period August 2nd to 10th of 1990. This is a flowing well, and what we did was produce it at different choke sizes for a day at a time, measure the oil, gas and water produced. And this plot is a picture, a plot, of the oil rate versus the

GOR during that nine-day period.

Yes, there are nine points on there that each represent one day's production at a somewhat different oil rate. The picture shows that as the oil rate was increased from around 40 barrels of oil per day to 80 barrels of oil per day, the GOR, at least in my opinion, stayed constant at an average value around 4611. I think this is evidence that we could, if we were allowed to produce the oil at 80 barrels a day and the corresponding amount of gas, the GOR would not increase from what it is now and the energy in the reservoir would be used as efficiently in producing oil as it is now.

And you're going to ask me about Exhibit 9. Exhibit 9 shows the results of a similar test on the other well that we're mostly interested in, the Stonewall WM Number 3, a similar nine-day GOR test there showed that as the oil rate was increased from 40 to about 80 barrels of oil a day, the GOR stayed relatively constant, in my opinion, stayed constant at an average GOR value here of 4365. And so again there is evidence that no reservoir energy would be wasted if a higher GOR were allowd such that we could produce 80 barrels of oil a day. We could produce 80 barrels of oil per day out of these wells and still maintain an efficient use of the energy in the reservoir. And we think that that's the kind of evidence that you'd like to see to allow us to do that.

Q. Mr. Boneau, in your expert opinion then, will the

granting of this application by Yates cause a reduction or reduce the ultimate recoverable reserves from this particular pool?

A. The reserves from this pool will not be decreased if a higher GOR is allowed.

Q. And it is your expert opinion based upon the examples of the tests that you have run on the two wells, the Stonewall WM Number 3 and the Stonewall EP Number 8, that the speeding up or the increasing of the GOR -- or, excuse me, speeding up the production will not cause an increase in the rate of the GOR. I may have missed -- I may have butchered that.

A. I think you said that right.

Q. I'm not sure.

A. The evidence shows that these two wells are capable of producing 80 barrels of oil per day. They are now not permitted to produce that much because of the current GOR limit. The evidence shows that if that limit were changed as we're asking, these wells could produce 80 barrels of oil a day at the same GOR they currently have. The reservoir energy would be used just as efficiently as it is now. We'd get the oil faster. The country would get the oil faster. The royalty owners would get their money faster. Some good things would happen, and no bad things would happen.

Q. And it's also your opinion that there will be no

depletion of the drive mechanism then? I guess that's another facet of the conclusions that you've earlier drawn.

A. Yes, that's correct.

Q. Mr. Boneau, then will the granting, in your opinion, the granting of this application prevent waste?

A. Yes, sir.

Q. And will the granting of this application then protect correlative rights?

A. Yes, it will. There are essentially no correlative rights elements in this case, in my opinion.

Q. With respect to the situation of what is the effect upon the correlative rights in a situation where you have a well much like the Premier well which is completed only in the upper area of this particular formation as opposed to the other wells that are completed or producing from the middle and the lower parts of this formation? Is there any adverse effect on correlative rights because of that particular situation?

A. I guess we're anticipating the Premier people.

Q. Definitely, Mr. Boneau.

A. Definitely, is that the story?

Q. We are anticipating them, just so that we might as well deal with it now, Mr. Boneau.

A. I think we've shown good reasons to believe that the gas that causes the high GORs is not associated with the

upper part of the reservoir where the Premier well is completed. The gas was associated lower down in the reservoir where most of our wells are completed. And if we're producing excess gas, it is coming from the zone different from where the Premier well is completed.

I think another element of the correlative rights is simply related to the location of the wells. Our wells closest to the Premier wells are drilled 990 from that west line, whereas legal locations allow them to be as close as 330 to that west line. So our wells are located poorly if their intention was to drain hydrocarbons under the Premier lease. Their well is not being produced, and so correlative rights issues get real hazy there. In some sense, they're not trying. I can clearly state, you know, we're not trying to steal anything from them in the correlative rights area. Most everything we've done is opposite that conclusion.

Q. All right, Mr. Boneau. With respect to the exhibits that you have testified, numbers 2 through 9, were those exhibits either prepared by yourself or under your supervision and control?

A. You can tell by looking at them that most of them were prepared by me, and they all were prepared under my supervision, yes, sir.

Q. Mr. Boneau, I guess I'll ask you, the granting of this application in your estimation then or in your opinion

will not only benefit Yates Petroleum but the other operators in the pool?

A. It will benefit Yates Petroleum, and it will benefit Exxon, and it will benefit the other operators in the pool. And it will benefit the royalty owners. It will benefit all the people involved in this pool.

Q. Is there anything else that you would like to add at this time we have not covered which you feel is information that would be pertinent for the examiner to consider with respect to this application?

A. No, there's nothing else that I can think of at the moment.

MR. CARROLL: Mr. Examiner, at this time, I would move admission of Yates Exhibits 1 through 9.

EXAMINER MORROW: Yes, they're accepted.

(Applicant's Exhibits 1 through 9 were admitted into evidence.)

MR. CARROLL: Mr. Examiner, I would pass the witness at this time.

EXAMINER MORROW: Mr. Carr.

MR. CARR: May it please the examiner.

CROSS-EXAMINATION

BY MR. CARR:

Q. Dr. Boneau, you testified that if this application is approved, it will enable Yates and other operators to

produce the pool at a faster rate; is that correct?

A. Yes, sir, I believe that's a fair characterization.

Q. Do you have an opinion as to what impact this application if granted would have on ultimate recovery from the reservoir?

A. The evidence that we have is that it is neutral to the ultimate recovery, that it will not help nor hurt the ultimate recovery.

Q. What in your opinion is a reservoir drive mechanism?

A. I think you're talking about the oil portion of the reservoir?

Q. Yes, sir. Yes, sir.

A. And the drive mechanism there is solution gas drive, gas expansion.

Q. And so when you produce the gas out of those zones at a higher rate, you would be taking reservoir energy, isn't that correct, at a higher rate?

A. Well, in a normal solution gas drive reservoir, the worry is that by producing them harder, faster, whatever word you want to use, you produce some more oil but more and more gas, but a higher proportion of gas at a higher GOR, and that wastes reservoir energy. You're producing gas that doesn't bring oil with it, and you're also allowing the formation of free gas in the reservoir which hurts the relative

permeability to oil and water. You're doing things which hurt the oil production by allowing the GOR to increase.

Q. And you don't see that here?

A. And I don't see that here in the main parts of my evidence where the GOR does not increase over the small range we're talking about in this reservoir.

Q. And if I understood your testimony, and correct me if I'm wrong, you were stating that you thought there were separate gas producing zones that attributed to the high gas rates in some of these, is that correct, or gas stringers?

A. Yes, that's correct. And my evidence for that is I pointed to a crossover on a log there. But another kind of evidence is simply that on a reservoir engineering basis, the oil under these pressure/temperature conditions simply cannot hold this much gas, 4,000 GOR, that much gas simply could not be in the oil at the pressures and temperatures that are in this reservoir.

Q. Based on your understanding of this reservoir, would those gas stringers extend across the pool or are they isolated stringers that appear and disappear and might be present in some wells and not in others?

A. I doubt that they extend across the pool. They probably extend two wells or three wells or one well, two wells, three wells, half, partially across the pools.

Q. Are there some wells that might not have these gas

stringers in them?

A. Yeah, that's possible.

Q. And if that was the case, then a higher gas/oil ratio would in fact, if we had just a solution gas drive stringer producing in the well, it could in fact have an adverse impact on reservoir energy, could it not?

A. Well, it could. We're talking about two things, these gas stringers producing gas pretty much irrespective of anything else going on in the oil reservoir. And then the second thing I think we're talking about is whether faster production from the oil portion of the reservoir would result in an increased GOR, and you seem to be maybe assuming that it wouldn't result in an increased GOR. And I would at least like to suggest that over the low rates that we're talking about here, 80 barrels a day, it's not right to assume that that automatically would be catastrophic. It might not be any problem at all at those low rates. I would agree that if you try to produce 500 barrels a day or 300 barrels a day, what you're suggesting would happen. But at 80 barrels a day, it might not happen. And the evidence is confused because of these different complexities of the reservoir.

Q. You're not saying --

A. I hope that helps.

Q. I don't know.

A. It makes sense to me.

Q. You're not saying though that there aren't circumstances in wells that perhaps might be producing just from zones that are typical solution gas drive zones and that --

A. There might be those kind of wells, and a higher production rate from those kind of wells might do some harm. But there really isn't enough evidence here. There truthfully is not enough evidence that I can give you the right answer to that, and we're not talking about such high rates that I would be likely to assume that it would be a problem.

Q. In making your particular study on individual wells, you pick these, I think I'm right, these two wells, the EP-8 and the WM-3 which are the wells that are experiencing the highest gas/oil ratios, isn't that correct, at least of the wells you operate?

A. Well, all our wells have those high gas/oil ratios. These are the two wells that are capable of making 80 barrels a day and are now limited to the range of 30 or 40 because of the GOR limit. If you look at Exhibit 6 or 7, you'll see that the six Yates wells in the west half of 30 all have similar high GORs.

Q. It's possible that there might be free gas stringers in these wells that wouldn't be present in other wells in the pool too; isn't that correct?

A. That's possible. But we took some of these GOR

tests on those wells, on some of those wells. I didn't think it worthwhile to discuss them. One of the wells, you know, maybe we could increase production five barrels a day, maybe not. These were the two that we think will make a significant difference, and I wanted to emphasize those two in my testimony.

Q. If I look at your Exhibit Number 6, we really have the highest gas/oil ratios in wells that are producing from the middle Delaware sort of to a trend that extends through Section 28 and down slightly to the east through Section 31; is that correct?

A. I think you mean Section 30 and --

Q. I'm sorry. That's what I meant.

A. -- it's southeast through 31, yes.

Q. That's right. And that's where we're seeing these highest gas/oil ratios; isn't that correct?

A. Yes, and that's the same place that if the geologist, if our geologist, if I had plotted a sort of an outline of what I'm calling the middle reservoir, that would be the middle reservoir, that area.

Q. That is also structurally high to the wells off, I guess, to both the east and the west; isn't that true?

A. (No oral response.)

Q. Isn't there a structural high through this portion of the reservoir?

A. Yeah, that's true. And you may recall that the cross sections, I think, indicated that, but it indicated that it's a pretty subtle high. It's not a big mound. It's a -- we can go back and talk about those. But there is a high. The highest area is that area you're talking about.

Q. Would the fact that this is the higher portion of the reservoir have any impact on the fact that these wells are experiencing a higher gas producing rate?

(THEREUPON, a discussion was held off the record.)

A. What you say is the common wisdom in the --

Q. I'm just common now; right?

A. No, I'm pretty common too, Bill. The thrust of my testimony has been to try and say that this reservoir is different from the common preconception. It is high, and I can't tell you that it's different. It's slightly the high part of the reservoir, but the gas seems to be associated with these mostly gas zones. The GORs have always been high from the inceptions of the wells. And I think if you'll look at my first -- Exhibit Number 2 where some of the completions have high GORs, and I could bring up other facts, but the GORs have always been high. Our wells were shut in in 1984 and '85 because of overproducing gas because of the high GORs. The high GORs have always been there.

And the kind of reservoir you're talking about would start out okay and then as the production got out of

hand, the GOR would go up. And those things are not happening. These 3, 4, 5,000 GORs have been the story since the beginning of the pool. It's not getting any worse. To me, the most reasonable explanation is the one I tried to expound. And you may be right, but what I'm saying holds together better for me than what you're saying.

Q. Were you involved in making the decision to seek a 7,500 GOR for the pool?

A. Yes, sir.

Q. And if I look at your Exhibit Number 6 and try and find a gas/oil ratio, at least in the middle zone, the upper zone -- or the lower zone, there are some very high ones, as you indicated, because of low oil production. If I look at the middle zone on your Exhibit Number 6, I don't find a gas/oil ratio in excess of, I think, 4718; is that right?

A. That's correct.

Q. Why do you need 7,500?

A. We don't know if we need 7,500 or not frankly. The evidence indicates we need 5,000. And the rest is some cushion. I don't mean -- I don't know if the examiner decides what's reasonable. We discuss things in the range from 6,000 to 8,000 or something and decided on our own that 7,500 was a reasonable thing to ask for. But anything above about 5,000 is a cushion.

Q. I think you testified that the real benefit to

Yates would be that you could increase production on your EP Number 8 and your WM-3; is that correct?

A. Yes, sir.

Q. The other wells that you operate will also be able to produce at higher rates; is that not true? I mean, it applies to wells more than just the two?

A. Yeah, it applies. It applies to the other wells.

Q. And they will also benefit?

A. They will benefit but not to the extent of 40 barrels of oil per day.

Q. The EP Number 5, that well has been overproduced, has it not, in the past?

A. In the past it has, yes.

Q. And it would also benefit, would it not, from the higher gas/oil ratio that you're recommending?

A. Yes, it would benefit.

Q. If I look at your Exhibits 8 and 9, these are simply offered to show that as you increase the producing rate on these two wells that you really see no impact on gas/oil ratios; isn't that right?

A. Yes, sir.

Q. I mean, there's a line across here at an average of 4611, but from those points, it's kind of hard to pick 4611, isn't it? It's just scattered, and there's no impact that you see.

A. It's scattered, but there's no impact. I did not want to draw a squared line or some silly line indicating that there was some, you know, real significance to it.

Q. I wouldn't suggest your line would be silly. But both of these wells are structurally high on the reservoir, and both of them are producing from the middle zone; isn't that right?

A. Yes, sir. The WM-3 is also completed in the upper zone.

Q. And you don't see any potential for coning or the gas breaking out and leaking oil in the reservoir or any of the wells in the pool by what you're proposing?

A. No, sir, I don't. And I think I've shown evidence that that's not going to happen.

Q. And you don't see a correlative rights problem to the Premier well because you're actually farther away from Section 25 than you could be if you were at the closest standard location; is that right?

A. It is true that we are further away.

Q. Is that one of the reasons you didn't see an impact on correlative rights?

A. Yes, sir, that's one of the reasons.

Q. By moving to that 990 location, you're also moving up structure, are you not?

A. Yeah, we're moving -- I worked for Yates when the

well was drilled, and it wasn't my decision to go there, but I do know that they went there because it's closer to the middle of the reservoir and, we think, a more favorable location than it would have been moving out towards the edge where BFE Number 3 is.

Q. Of the presence of these gas stringers that are contributing the gas, you're reaching that conclusion based on the fact that you're not seeing a change in gas/oil ratio at different producing rates; is that right?

A. I would describe my logic, at least chronologically, as these GORs simply cannot exist in a solution gas drive reservoir. The oil will not hold that much gas. And in looking for an answer to what's going on, we look at the logs and see some crossover. We really don't have evidence where we -- we or Exxon or nobody has evidence that you go down and straddle the small zone and produced only gas. But my logic is that these GORs cannot be from the solution drive reservoir. There is evidence of thin zones and of gas crossover. And we kind of made a leap of faith to these gas stringers, but it does present a picture that at least fits the facts as I know them.

MR. CARR: That's all I have. Thank you.

EXAMINATION

BY EXAMINER MORROW:

Q. Mr. Boneau, in the early development of the field,

did you ever consider or were there ever any discussions that there should be more than one pool that it should be divided into, maybe upper and lower or Bell Canyon at least to Bell or Cherry Canyon and Brushy Canyon?

A. I do not recall any discussion of that. I think that's the only answer I can give to your question.

Q. How many of Exxon's wells will benefit from the increased GOR?

A. I know of --

Q. Approximately.

A. -- two or three that would benefit relatively directly. Their number 3 well, Yates C Number 3, and Unit B of 31 has high GORs. And from looking at their monthly production and how many days it's produced, I can tell that it's been shut in because of the high GOR. They're trying not to produce it. They tried to cut down the GOR on that one so that they could produce and pretty much without success. And they have restricted its production such that in August, it only produced 133 barrels of oil.

There are a couple others like that where I could see specific wells where there would be a direct benefit from this. I think a lot of their wells would benefit a little. But there are that one, and I cannot remember the numbers of the other ones. But there are several others when I was looking through the wells where they've been restricted in

producing, and I would think that they could open those wells back up if this were granted.

Q. Did the wells flow or are they pumped?

A. Both. Most of them are pumped. There are a couple that are -- well, there are a couple that flow. Ours have pumps on them, and they can -- they could flow. And if this were granted, we would be able to flow them and maybe save a little money there on the pumping charges.

Q. Do you pump those two that you used to illustrate the benefit that --

A. Yes. We pump them, but they're capable of flowing. They were flowing on these GOR tests in August of 1990.

Q. I believe you testified it's your opinion that the additional production which you would gain from these two wells and others to some extent would not affect offset leases; is that correct?

A. That's my belief. And I think it's based on that the -- our request would apply to the whole pool, and there are Exxon wells that would benefit, and I think they are close to our wells. Nothing is going to benefit the Premier well if it's shut in.

Q. Do you feel that there is any water drive from this large amount of water production that --

A. It seems like there's got to be.

Q. There would be some water drive?

A. I think there's got to be some water drive, yes. It would be foolish to say there's no water drive. And the only other answer is I don't know. I think there's some water drive.

EXAMINER MORROW: Any other questions?

MR. STOVALL: No.

EXAMINER MORROW: Mr. Carroll, do you have additional questions?

REDIRECT EXAMINATION

BY MR. CARROLL:

Q. The only additional thing I just want clarified, Mr. Boneau, on your Exhibit 6, and this is in relation to the questioning concerning a 7,500 GOR being recommended by Yates. There are wells in this pool which have a higher GOR than 7,500; is that correct? And in particular, I'm talking about section 36, if I'm reading the exhibit correctly.

A. Yes, there are wells that have a higher GOR than 7,500.

Q. And it is your recommendation that 7,500 would be a proper GOR limitation to be adopted by the commission if they were to grant the --

A. Yes, that's my recommendation.

MR. CARROLL: That's all I have.

EXAMINER MORROW: I think Mr. Carr had one.

MR. CARR: Just one question.

RECROSS-EXAMINATION

BY MR. CARR:

Q. 7,500 though wouldn't even help the wells in Section 36, would it? They're 11,000, all in excess of that. That's because they're from the lower zone.

A. You know, those wells make one barrel, two barrels, three barrels a day. And at 7,500 GOR, 11,000 GOR, they do not exceed the current mcf per day limit.

EXAMINER MORROW: So the difference would be the -- excuse me. Were you --

MR. CARR: I'm through.

EXAMINER MORROW: Let me ask a question then.

FURTHER EXAMINATION

BY EXAMINER MORROW:

Q. The difference in the 5,000 and 7,500 would be a gas limit of 400 a day or 600 a day, and so that's what we would be talking about --

A. Uh-huh, that's what we're talking about.

Q. -- how many wells would make more than 400 a day instead of how many would produce at a ratio higher than 7,500, I think.

A. Okay.

Q. And now I asked a question, and I just told you something.

A. The real answer to that question is the none of the

wells, today, no well could produce over 400 mcf a day and stay within the 80 barrels of oil, nobody. Today, nobody needs more than a 5,000 GOR is the answer to all your questions, and you all know that. The 7,500 is an attempt at some cushion for the next year or two.

EXAMINER MORROW: I don't believe we have anything further of this witness. He may be excused.

MR. CARROLL: Mr. Examiner, I've already moved admission of my exhibits, so this concludes our case in chief. We have no further witnesses.

EXAMINER MORROW: Okay. Mr. Carr?

MR. CARR: At this time, I call Mr. Larry Jones.

EXAMINER MORROW: You were sworn to start with, weren't you, Mr. Jones?

THE WITNESS: Yes, sir.

EXAMINER MORROW: Go ahead, Mr. Carr.

LARRY JONES

the witness herein, having been first duly sworn by the Notary Public, was examined and testified as follows:

DIRECT EXAMINATION

BY MR. CARR:

Q. Will you state your full name and place of residence, please.

A. Larry Dow Jones, 2404 Cerro Road, Artesia, New Mexico.

Q. Mr. Jones, by whom are you employed?
A. I'm self-employed.
Q. And what company or name do you conduct business under?
A. Under the name of Premier Production Company.
Q. Would you briefly review your experience in the oil and gas business for the examiner?
A. I moved to Artesia in 1966 and started acquiring various interests in oil and gas. And in late 1981, I decided to go into the business full-time.
Q. And since that time, how many wells have you drilled in southeastern New Mexico?
A. Approximately ten.
Q. How would you describe the nature of your current oil and gas business?
A. Well, I operate between 40 and 50 wells. And all my experience is hands on. I do my field work myself, and I do my own land work, operate my own land, do all the negotiations, of course, with outside the attorney, you know, when I need legal --
Q. And when you need a law firm in Artesia, who do you usually use, Mr. Carroll's firm?
A. That's correct.
Q. Are you familiar with the application filed in this case on behalf of Yates Petroleum Corporation?

A. Yes, I am.

Q. And are you familiar with the Avalon/Delaware pool?

A. Yes, I am, sir.

MR. CARR: At this time, Mr. Morrow, I would tender Mr. Jones as a practical oil man.

EXAMINER MORROW: We'll accept Mr. Jones as a practical oil man.

Q. (By Mr. Carr:) Mr. Jones, would you just briefly state what it is you seek by appearing in this case today.

A. Well, I seek a denial for this application.

Q. And generally state what your reasons are for that.

A. The reason, I think, is that this increased gas production will cause excess drainage on the adjacent acreage, which I own.

Q. Why don't we come through this and work with the two exhibits that you've prepared or had prepared.

A. Okay.

(Intervenor's Exhibit No. 1 was marked for identification.)

Q. And I'd like to direct your attention to what is marked as Jones Exhibit Number 1, and I'd ask you just to identify this for the examiner.

A. This is a copy of a Midland ownership map that has the sections involved and outlines the Avalon-Delaware pool.

Q. What do the shaded areas indicate on this plat?

A. The orange area with the red dots indicates the Yates acreage, and the red dots indicate the individual wells that they want to increase for.

Q. Were those the wells identified in the application?

A. Yes.

Q. What is the blue shaded acreage?

A. The blue shaded acreage is acreage that I own 100 percent of the working interest.

Q. Now in 25, there are a couple of tracts also, well, that are not shaded that are white. Do you have an interest in those tracts as well?

A. Yes, sir. In the bottom section, I own 20 acres by an agreement that I inherited and purchased in the lease from Chevron that they earned in drilling that Eddy FV-2. And in the top section that looks like an L, I have rights in that by an operating agreement.

Q. You have the operating rights throughout Section 25?

A. Yes, I do, sir.

Q. There's a green dot in the southeast of the southeast of 25. Would you identify that, please.

A. That's the well drilled by Gulf called the Eddy FV-3.

Q. And is that the one well on that tract that currently is completed in the Delaware?

A. Yes, it was an attempted completion in the Delaware.

Q. When did you acquire your interest in Section 25?

A. July 1st, 1990.

Q. I think it might be helpful at this time, Mr. Jones, if you would just review for the examiner your development plans for this tract.

A. Well, currently I'm in negotiation with Phillips Petroleum on a gas contract for this lease. I have two additional wells besides that, two deep wells that are completed in the -- one in the Penn section and one in the Atoka section. And these are low gas producers because they're bucking a 500-pound line pressure. And across the bottom part of that lease, Phillips has a low pressure gas line that we're negotiating a contract right at now. We haven't signed it, but we're negotiating. And it has a 25-pound line pressure. The significance of that is that it will tell us what we can do with the two deep Morrow wells. One is on the -- especially on the eastern half in the Eddy FV-1, if the gas isn't significant, our plans, of course, are to plug back up the hole and to perforate an interval in the Delaware that would correlate to the middle section of the Yates wells.

Q. Now what are your plans for the existing Delaware producer in the southeast of the southeast?

A. Sometime next year in 1991, our intention is to go into this well and to perforate the middle section of the Delaware. And there's an evidence in the part of the exhibit here, it has a log of the one where we're perforated.

(Intervenor's Exhibit No. 2 was marked for identification.)

Q. That's your Exhibit Number 2?

A. Yes, that's Exhibit Number 2. And Exhibit Number 3 of a cross section starting at about 3,490 feet that we plan on perforating which we feel like that we might be successful in completing this. And, of course, if we're successful, our intention is to go ahead and to continue drilling or to plug back that number one.

Q. Again, Mr. Jones, what's marked as Exhibit Number 2 is three pages; correct?

A. Right.

Q. And this is the log on the current Delaware producer?

A. Right, yeah, that identifies the log on it. That's the neutron density log.

Q. The first page of that shows the current perforated interval in that well?

A. Yes, sir.

Q. And then the second portion or the last page of this exhibit indicates the interval which correlates to the

middle Morrows -- or middle Delaware zones being produced by Yates in the offsetting tracts to the east; is that correct?

A. Yes, sir.

Q. And what you're saying is it's your intention to go back into this and try and make a completion that will correlate to the zone producing in the middle zone to the east?

A. Yes, sir.

Q. You've been present through the hearing, and you saw the cross sections that were offered by Dr. Boneau?

A. (Witness nods head.)

Q. And you concur in that basic interpretation of the reservoir?

A. Yes, I do.

Q. You indicated that you were concerned about potential drainage from your tract. Could you be a little more specific as to exactly why you have recommended that this application be denied and what impact you see it may have on your property?

A. Well, one thing is that we know that by his cross section as well as other geological cross sections of that that I've looked at that this, that the Yates and the Exxon wells sit on a high, that they are structurally high, and that my property, adjacent property, is structurally low. My feeling is that by them overproducing the gas, you know, or

the excess gas, it will encourage water to come in and to either water out our zone or to drain the energy from our reservoir.

Q. And the drainage would be a drainage of energy as well as hydrocarbons themselves?

A. That's true.

Q. In your opinion, if this application is granted, what impact will it have on you?

A. Well, it would be negative, just as I've said. I think it would hurt my rights because I own all the rights up and down. I don't just own the Delaware. I own them all.

Q. Conversely, Mr. Jones, if the application is denied, what impact do you think this would have on Yates and other operators in the pool?

A. I don't think it will be -- naturally, it's good for them because they'll have more money coming in. But I don't think it will hurt them over the pool over all. I think they're good wells, and they'll be able to produce as much as they would if they, you know, drained it fast.

Q. Do you concur with Dr. Boneau that if the application is granted that there would actually be virtually a neutral impact on ultimate recovery from the reservoir?

A. I do, yes.

Q. Do you believe that the reservoir can continue to be efficiently and effectively produced under the existing

rules?

A. Yes, I do.

Q. Were Exhibits 1 and 2 either prepared by you or compiled at your direction?

A. Yes, they were.

MR. CARR: At this time, Mr. Morrow, I'd move the admission of Jones Exhibits 1 and 2.

EXAMINER MORROW: Yes, we accept those.

(Intervenor's Exhibits 1 and 2 were admitted into evidence.)

MR. CARR: And that concludes my direct examination, Mr. Jones.

EXAMINER MORROW: Mr. Carroll, do you have questions?

MR. CARROLL: Yes, I do have. Could I have just a second here?

CROSS-EXAMINATION

BY MR. CARROLL:

Q. Mr. Jones, basically the root of the complaint that you have with this application is that you feel that oil which now exists under your tract or acreage in Section 25 will be drained from that section and pulled into Section 30 in kind of gross, overstated terms; is that correct?

A. Well, because it sits down, the gas/oil/water ratio, and we know that's a high producer of water, the Yates tract is, that that's exactly right. They'll take the energy

from that field. And as the oil is reduced from all the tracts, it'll allow the water to come in. That's what happens.

Q. Well, are you saying then that you feel that there are reserves under your tract and by the granting of this application, those producible reserves are going to be reduced?

A. Yes, I am.

Q. Do you have any estimate of what those producible reserves are that actually exist under your tract?

A. I don't have any estimate. The well that we're talking about, the only well that was drilled as a Delaware well, was never perforated in the same section that the Yates well was.

(THEREUPON, a discussion was held off the record.)

Q. Mr. Jones, you have reviewed the history of that well?

A. Yes, I have.

Q. And in fact when this well was originally drilled, it was perforated in other zones than were produced.

A. It was perforated down around 3700, and they swab tested it, I believe, for about 24 hours and set a cast iron bridge plug over it, the bore. That particular well, which I don't know if a 24 -- practically speaking, a 24-hour test is not a good test.

Q. I want to show you a card from PI which -- have you --
A. Yeah.
Q. Is that the card and the information that you've reviewed?
A. Yeah. I didn't get it from PI. I got it from the oil and gas commission.
Q. And what does this card show that the perforations were effective?
A. They were 3764 through 68, 3773 through 77, 3813 through 17, 3824 through 28.
Q. Now have you made a study or any estimation of how much those reserves would be reduced under your tract by a granting of this application?
A. No, I haven't. I haven't made a comprehensive, detailed -- I just feel like they will be because they are a down structure.
Q. Well, Mr. Jones, do you have any evidence -- well, first of all, these wells are drilled on 40-acre proration units, are they not?
A. That's the proration unit.
Q. Do you have any evidence that any of these wells in this particular formation will drain more than 40 acres?
A. No, not anything other than the common knowledge of geology that says what happens when gases and oil and water contact.

Q. Well, Mr. Jones, do you have any estimation of the amount of time that is going to be required for the production, the increased production, from the Yates wells to actually affect your well over in Section 25?

A. No, I don't.

Q. Mr. Jones, you agree with Mr. Boneau's testimony that the wells along the western edge of Section 30 are drilled farther away than they could have been drilled under present rules for this particular field?

A. That's true. There's a reason probably for it. It's probably geological or probably evident.

Q. And it's common geologic knowledge, as you referred to, that the farther a well is away from another well, the longer time it's going to take to affect that well by drainage?

A. I'm not going to answer. That's a technical question. I can't answer that.

Q. That's fine. Now the contract that you were talking about that you're in negotiation for. That's a sales contract, a gas sales contract, with Phillips?

A. Yes.

Q. Presently, have you prepared plans, AFEs, or any contracts for drilling or recompleting your FV Number 3 well?

A. We have started that. We have started an AFE. We haven't completed all the costs associated with or even

exactly what, you know, exactly initially the perforations and number of prorations which you'd have to have in order to complete an AFE.

Q. And so am I correct in assuming that you really have no timetable at this time with respect to doing that operation?

A. No, I intend to do that next year.

Q. Next year. Well, can you --

A. In 1991.

Q. Well, do you have any specific evidence which tells you or which would show to the commission that the granting of this application today will adversely affect through drainage of your location or your tract of land any time during the year of 1991?

A. Do I have any specific -- other than my testimony here and what we brought up, I don't have any other evidence.

MR. CARROLL: That's all I have.

EXAMINATION

BY EXAMINER MORROW:

Q. Mr. Jones, you indicated that you would continue drilling. I think I understood you to mean that if you were successful in this first recompletion, you would drill other wells; is that correct?

A. That's correct.

Q. Did you answer a question that was asked of you as

to your opinion on whether or not this increased rate would increase recovery from the reservoir or not?

A. Well, I concurred. You know, I don't think it will -- you know, I agree with Dave. I don't think it'll increase the recovery, total recovery. I just felt like --

Q. The -- excuse me. Go ahead.

A. I just felt like the increased recovery would, you know, encourage the water, oil -- any hydrocarbons that I have to go to the high part, you know, because we know that, you know, it's simply factual geology that it's going to float on the water and you're going to lose your energy up high. That's probably why they're up on the high, and that's why they've got the gas/oil problem.

Q. What's your opinion of the stringer theory?

A. Well, I think he has that stringer probably. But I don't know that unless he's isolated how -- you know, unless you isolate a perforation, and I assume again, I haven't -- I don't know Yates' production methods. I assume they're running all the lower perforations in the Delaware with the upper perforations and they're comingling those perforations. Whether they've isolated that or not, I have no idea. I think it probably could happen, but I don't know. It's kind of hard if you've got 40 perfs down there to know which one is giving the gas up, if you think it's just gas.

EXAMINER MORROW: Mr. Carr, have you got some additional

questions?

MR. CARR: I have no further questions.

EXAMINER MORROW: The witness may be excused.

MR. CARROLL: I have nothing further.

MR. CARR: I have a very brief closing statement, just a couple of comments, and Mr. Carroll can call me to task after I do that.

EXAMINER MORROW: Which one of you all is supposed to go first?

MR. CARR: I would go first. He is the applicant, so he gets to make me honest.

MR. CARROLL: The last word.

EXAMINER MORROW: You go ahead then.

MR. CARR: May it please the examiner, I simply in closing would note that the primary jurisdiction of the oil commission is the prevention of waste. As that term is defined in terms of underground waste, it is to prevent practices which tend to reduce the ultimate recovery of oil.

We've had one technical witness here. That's Dr. Boneau, and Dr. Boneau has stated that he believes that whether or not this application is granted, it's going to actually have a neutral impact on what is really ultimately recovered from the reservoir. So I really don't think you have a waste question here.

The question is whether or not by letting certain

operators get their share of the production faster whether or not there is going to be an adverse impact on other operators. As the applicant Yates comes in, it bears the burden of proof showing that it will not harm other operators. And they have presented data to you on two wells that are located structurally at the highest point in the reservoir. And because of their gas/oil ratios and how that gas/oil ratio changes at different producing rates, they have theorized that there is a gas stringer that is present in those wells that causes the high gas/oil ratio. We don't quarrel with that. We're not in a position to. We're not standing before you as engineering witnesses.

But we would point out that Dr. Boneau indicated that the stringers may connect well by well but not necessarily throughout the reservoir and that the data presented may show that they may be able to recover oil and gas faster from their wells, but they haven't shown that it will not hurt correlative rights of other operators like Premier located elsewhere on the reservoir. For that reason, we request the application be denied.

EXAMINER MORROW: Okay.

MR. CARROLL: Mr. Examiner, there is no doubt that Yates Petroleum has the burden of proof, and I think Yates Petroleum has carried that burden of proof. They have come and presented evidence for the fact that there are wells within

this pool that have the capability of producing the statewide allowable. And we must draw a distinction here that we're not coming in here and trying to increase statewide allowables or do anything such as that. We accept those as reasonable. And these allowables have been with us for many years. All we're saying or asking for this commission to do is allow us to produce that allowable. The way to allow us to produce that allowable is to increase the GOR.

Yates has presented evidence which shows that by increasing the GOR, there will be no harm to the reservoir. And if there's no harm to the reservoir, then there should be no harm to any of the other operators or anyone such as Mr. Jones. What I would characterize Mr. Jones' whole position today is, Hey, I got into this late. I just want to slow things down long enough for me to do what I want to do with my particular property. Mr. Examiner, I don't think that's proper. Mr. Jones came into this property, through his own testimony, late in the game. That's a risk. Every person has a right to produce the oil and gas under his property. And the persons that have this right to produce oil and gas have that right to do it so long as they don't do something which will prevent Mr. Jones from producing this gas or oil under his tract.

Increasing the GOR is not going to prevent Mr. Jones from producing his fair share of the oil and gas under

his tract. What's preventing him from producing it are two things. One, his well is shut in. Two, he may not have any oil under his land at all. And, three, it's just he's not ready to produce his well. Any of those considerations are not valid considerations for this commission to deny this particular application.

Furthermore, Mr. Jones has a burden himself. He has come in here and prophesized harm to himself, and yet he cannot tell us what reserves exist under his tract, what reserves could logically be drained from his tract by granting of this application. He can't even tell us whether or not there will even be any drainage and has presented absolutely no evidence. And we've got to go back to the whole premise of having the rules which decreed spacing, the allowables. The spacing is predicated on the fact that wells at certain formations should drain certain acreage. These wells are based on 40-acre spacing. The drainage here should be within that 40-acre spacing unit. And we also have the testimony and the knowledge that the wells closest to Mr. Jones' one well and his entire lease there along its east side are in fact farther away than the rules would have allowed them to be drilled.

So at least under the normal rules, the commission has already decreed that there should be no real complaint with respect to the aspect of drainage because the wells are

within the area which have already been deemed to be proper. So with that, Mr. Examiner, Yates has carried its burden. It's presented its evidence which shows that there is a real need.

And I must draw also attention to the fact that the commission has recently gone to the operators throughout the state of New Mexico and has asked them to provide suggestions whereby increased production could be gained from the oil fields of New Mexico, ways of increasing production without hurting the fields themselves or correlative rights. This, Mr. Examiner, is one of those solutions to that request by the commission that is put out to the operators. It is a way of increasing production within limits that have been with us for many years, the 80 barrels per day. It allows us to do it without causing waste, and it allows us to do it within the definition of correlative rights that this state has adopted, allows us to do that within those parameters. And for those reasons, we would ask that the application be granted.

EXAMINER MORROW: All right, Mr. Carroll. Anything further? Case 10145 will be taken under advisement.

MR. CARROLL: Thank you, Mr. Examiner.

EXAMINER MORROW: Let's take a five-minute break and then come back and hear the last case.

(The foregoing hearing was adjourned at the approximate hour of 12:10 p.m.)

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

REPORTER'S CERTIFICATE

I, DEBORAH LAVINE, RPR, a Certified Shorthand Reporter and Notary Public, DO HEREBY CERTIFY that I stenographically reported these proceedings before the Oil Conservation Division; and that the foregoing is a true, complete and accurate transcript of the proceedings of said hearing as appears from my stenographic notes so taken and transcribed under my personal supervision.

I FURTHER CERTIFY that I am not related to nor employed by any of the parties hereto and have no interest in the outcome hereof.

DATED at Santa Fe, New Mexico, this 21st of December, 1990.

DEBORAH LAVINE, RPR
Certified Shorthand Reporter
CSR No. 252, Notary Public

My Commission Expires:
August 6th, 1993