STATE OF NEW MEXICO

ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION

CASE 10,788, 10,790

EXAMINER HEARING

IN THE MATTER OF:

Application of Nearburg Producing Company for compulsory pooling, Eddy County, New Mexico

Application of Yates Petroleum Corporation for compulsory pooling, Eddy County, New Mexico

ORIGINAL

TRANSCRIPT OF PROCEEDINGS

BEFORE: DAVID R. CATANACH, EXAMINER

STATE LAND OFFICE BUILDING

SANTA FE, NEW MEXICO

August 12, 1993

A P P E A R A N C E S

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I N D E X

I N D E X (Continued)

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E X H I B I T S

NEARBURG PRODUCING COMPANY EXHIBITS:

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E X H I B I T S (Continued)

YATES PETROLEUM CORPORATION EXHIBITS

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WHEREUPON, the following proceedings were had at 4:05 p.m.:

EXAMINER CATANACH: Call the hearing back to order at this time and call Case 10,788.

MR. STOVALL: Application of Nearburg Producing Company for compulsory pooling, Eddy County, New Mexico.

Mr. Examiner, it appears that we may have a couple of applications for a similar area, and we might call Case 10,790 as well. The parties have also requested these be consolidated.

EXAMINER CATANACH: Mr. Stovall, would you please call Case 10,790?

MR. STOVALL: Application of Yates Petroleum Corporation for compulsory pooling, Eddy County, New Mexico.

EXAMINER CATANACH: Are there appearances in these cases?

MR. BRUCE: Mr. Examiner, Jim Bruce with the Hinkle law firm in Santa Fe, representing Nearburg Producing Company, and I have three witnesses to be sworn.

EXAMINER CATANACH: Additional appearances?

MR. CARROLL: Mr. Examiner, I'm Ernest Carroll of the Artesia law firm of Losee, Carson, Haas

& Carroll, and we'll be representing Yates Petroleum in both cases that are called.

We have three witnesses.

MR. STOVALL: Mr. Examiner, before we actually start with the presentation of evidence in this case, I think procedurally for the record, these are effectively competing force-pooling applications, if I understand from reading pre-hearing statements and the Applications. Yates has sought an application to pool to the base of the Morrow, the south half of Section 2 in Township 22 South, Range 24 East.

Nearburg seeks to pool to the base of the Cisco/Canyon, underlying the east half of Section 2, 22 South, 24 East.

Is it correct to say that both proposed well locations are on a Yates-owned lease? Is that --

MR. CARROLL: That's correct. This section, only the southeast quarter of the section is owned by Yates. The other remaining three quarters of the section are owned by Nearburg.

I would also like, with respect to the Application of Yates Petroleum, which is 10,790, to amend our location.

Apparently there was a miscommunication between myself and my client. The location that is in

the Application, which is 1990 from the east and south lines, sits right on a gorge, almost. It's a topographical. And our actual -- the Application that we have submitted to the OCD reflects a location of 1980 from the south line and 2130 feet from the east line, and I'd like our --

MR. STOVALL: That's orthodox?

MR. CARROLL: That is orthodox, I think, yes, sir. It is.

MR. STOVALL: Okay.

MR. CARROLL: But it was moved solely to make accommodations for this canyon that exists out there.

MR. STOVALL: As long as it's orthodox, I don't think that's a -- unless that's a material issue in the --

MR. CARROLL: I don't think so. But both Applications are for locations on the southeast quarter.

MR. STOVALL: Mr. Examiner, I think also in a discussion with the attorneys prior to the hearing it is my understanding that the only party each seeks to pool is the other. There are no other parties to be pooled in this hearing, and therefore I have advised them that I think it is not necessary -- that they can stipulate to the fact that they have had good faith

negotiations, have been able to reach an agreement, that each party is represented by counsel at the hearing, and we don't need extensive land testimony on the nature of negotiations; is that correct, gentlemen?

MR. BRUCE: That's correct, Mr. Stovall.

MR. CARROLL: Yes, that's correct.

MR. STOVALL: I also understand that --

MR. BRUCE: Mr. Stovall, if I could make one correction, Yates does seek to pool Nearburg Producing Company; Nearburg seeks to pool Yates Petroleum Corporation, Yates Drilling Company, Myco Industries, Inc., and Abo Petroleum Corporation.

MR. STOVALL: Mr. Carroll, are you representing all of those entities?

MR. CARROLL: Yes, sir. That's --

MR. STOVALL: Okay.

MR. CARROLL: As I think the Examiner is well aware, that's the sister companies of the Yates family.

MR. STOVALL: Well, I understand that they are, but we need to make sure that -- It doesn't change the procedural requirements.

MR. CARROLL: No.

MR. STOVALL: You will represent them all?

MR. CARROLL: That's correct, that's correct.

MR. STOVALL: Okay, I understand you also

have agreed on overhead rates for both drilling and producing rates. You're seeking the same rate, so that's not an issue.

MR. CARROLL: Both companies are seeking the same rates and also seeking the same penalty.

MR. STOVALL: Both are seeking a 200-percent penalty.

So the real focus of the testimony is going to be who is going to operate. I guess --

MR. BRUCE: Who will operate Cisco/Canyon.

MR. STOVALL: -- it's a geological question of who's going to go to -- Who operates is going to result in a question of what depth do you go to; is that correct? Nearburg doesn't want to go down to the Morrow?

MR. CARROLL: That's correct.

MR. STOVALL: And Yates wants to go through the Cisco but include the Cisco in the pooling --

MR. CARROLL: That's correct.

MR. STOVALL: -- Application; is that correct?

MR. BRUCE: Yes.

MR. STOVALL: And I assume that affects -- Other than that, are there any AFE costs, and have you compared AFEs to see if you are substantially similar

on AFE costs?

MR. CARROLL: We have compared them and they're --

MR. STOVALL: Other than depth?

MR. CARROLL: Well, according to our comparison, the AFE for Nearburg is about -- it is substantially higher than Yates.

MR. STOVALL: To the Cisco?

MR. CARROLL: To the Cisco. When you take out the -- There's one element that is not in our AFE that is in the Nearburg, and that is a pumping unit. We don't -- If we're going into the Morrow, we didn't include a pumping unit.

But when you take that pumping unit value out, then both AFEs are essentially the same or very close, within a few dollars.

But our AFE goes 2000 foot deeper. That's why I say there's a significant difference.

MR. STOVALL: Mr. Bruce --

MR. BRUCE: We will discuss them somewhat, but we wouldn't --

MR. STOVALL: Well, understanding -- In other words, let's throw it out if it's not a big issue. We recognize that AFE is really an estimate of what it's going to cost.

Does either party have any major concerns, with the exception of the pumping unit, as Mr. Carroll has pointed out, with the AFE costs? Or can we just enter those AFEs and --

MR. BRUCE: Well, we would probably put on some testimony. We think Yates understates their AFE.

MR. CARROLL: We intend to -- other than to call that fact to the attention of the Examiner, the discrepancy for the 2000 feet, we did not intend to get into a battle of the AFEs, because they're both here for the Commissioner to look at and examine, and I think -- We've got ours, and I'm sure they're -- I know they're going to put theirs in, and we were just going to leave it up to the Examiner.

MR. STOVALL: My inclination is to think -- Without speaking for the Examiner since I haven't consulted with him, my inclination is to think that the AFE is not going to be the determinative issue in this case, so I'd recommend that you not spend a lot of time. If you wish to point out a difference, Mr. Bruce, that's --

MR. BRUCE: We were going to be very brief.

MR. STOVALL: Any other things that you can agree on?

MR. CARROLL: I -- we've --

MR. BRUCE: I think we've stipulated that both parties have made reasonable efforts to get the other parties to pool.

There's no question on the overhead rates.

We can stipulate as to land ownership.

MR. CARROLL: Do we need to put a land witness on? I'll stipulate -- Your exhibits, put them in, you can say what you want to about them, and I would propose to do the same.

MR. BRUCE: I want my land witness to testify on two of the exhibits I was going to have him testify about, as opposed to the six or seven that I was originally going to have him testify.

MR. STOVALL: Well, it's -- Your Application is called first. We'll let you go first and --

MR. CARROLL: -- we'll see where it goes from there.

MR. STOVALL: -- and if you need to supplement that -- I know Ms. Richardson is really waiting to get up here and tell us all she knows about this area. She'll be disappointed if we don't put her on.

Why don't we put -- Let's put some numbers in. What's your overhead rates that you're --

MR. BRUCE: $5400 and $540.

MR. CARROLL: Yes, sir.

MR. STOVALL: 200-percent penalty?

MR. CARROLL: Yes.

MR. BRUCE: Yes.

MR. STOVALL: AFE is an estimate. That real battle comes after the well is drilled.

One thing that I would point out to Nearburg is that historically the Division does not consider a pumping unit to be an element of -- to be included in a penalty charge because a pumping unit is not a risk element. You don't put a pumping unit on until you've got a well. So it's not something against which a risk penalty should be assessed. That and any other surface production equipment. Since that is mentioned as a difference.

With that, the witnesses, please stand -- Ms. Richardson, you might as well stand, just in case.

(Thereupon, the witnesses were sworn.)

MR. BRUCE: Call Mr. Shelton to the stand.

ROBERT SHELTON,

the witness herein, after having been first duly sworn upon his oath, was examined and testified as follows:

DIRECT EXAMINATION

BY MR. BRUCE:

Q. Would you please state your name and city of

residence for the record?

A. My name is Bob Shelton. I'm a resident of Midland, Texas.

Q. And who do you work for and in what capacity?

A. Nearburg Producing Company. I'm a landman.

Q. Have you previously testified before the Division as a petroleum landman?

A. Yes, sir, I have.

Q. And were your credentials as an expert petroleum landman accepted as a matter of record?

A. Yes, they were.

Q. And are you familiar with the land matters involved in both the Nearburg and Yates cases?

A. Yes, sir, I am.

MR. BRUCE: Mr. Examiner, I tender Mr. Shelton as an expert petroleum landman.

EXAMINER CATANACH: Mr. Shelton is so qualified.

MR. BRUCE: Briefly, Mr. Shelton, Exhibits 1 and 3 and -- I believe the operating agreement is supposed to be attached to 3, and Exhibit 3A are merely copies of correspondence between you and Yates; is that correct?

A. Yes, proposing operations or exploratory units in the area concerning the development of these

lands and others.

Q. Okay. Now, originally Nearburg proposed unitizing this area, didn't it?

A. By a letter dated March 24th, 1993, we proposed to the Yates companies the formation of an exploratory state unit that would cover approximately 6200 acres, as I remember, for the -- for several tracts of land.

Q. Would you please refer to Nearburg Exhibit 2 and discuss what this shows for the Examiner?

A. This is a lease and well activity map that we prepared for the area representing leasehold acreage that we now own and leasehold acreage that we have owned in the past.

It also demonstrates the activity that Nearburg has had in this area. We have some eight to ten wells that we drilled, reworked or are in the process of doing.

You see the dates down below. When we have initiated our leasing program in this area was December 1st, 1978, was our first involvement in this area.

Throughout all of the 1980s and through into the 1990s, we've on a continuous basis operated wells, re-entered wells, tested wells, produced oil and gas wells, made farmouts for oil and gas wells to be

drilled, and we've been very active in this area for a long period of time.

Q. So for a several-mile radius around Section 2, you've been a major player for 15 years?

A. That is correct.

Q. Okay. Now, would you then refer to Nearburg Exhibit 4, which is the land plat, and just once again very briefly discuss your proposed unit and the ownership of that unit?

A. The proposed unit ownership that we have consists of 344.66 acres. It consists of the east half of Section 2, Township 22 South, Range 24 East.

Nearburg Exploration Company in the unit owns 184.66 acres of land, being more or less the north 184.66 acres of that acreage, lots 1 and 2 in the south half, northeast quarter. Ours is the State of New Mexico oil and gas lease.

Yates Petroleum, Abo, Myco Industries, Yates Drilling Company, unfortunately, each own the southeast quarter of that tract, consisting of 160 acres.

And on Exhibit 4 sets forth the ownership of each of the companies, both by acreage and by percentage.

Q. And Nearburg does own a majority interest in your proposed unit?

A. Yes, we do. We own a 53.57 percent interest in the east-half unit. Also Nearburg Exploration Company owns the entire west half under the same state oil and gas lease.

Q. So all of Section 2 except the southeast quarter is one state lease owned by Nearburg?

A. That is correct.

Q. Okay. Moving on to Exhibit 5, would you briefly identify those for the Examiner?

A. Exhibit 5 is an approved State Oil Conservation Division permit -- Application for Permit to Drill, deepen or plug back a well. It is for the re-entry and completion of the -- what is listed on Exhibit 4 of the Antweil Littlewalt well.

We are currently in the process of building the road. A rig will be on that location within just a very few days.

That acreage is under the permit already dedicated. It is west-half standup 344.66-acre unit. And that acreage to the base of the Cisco/Canyon, pursuant to this permit, is already dedicated to that well, and operations will be underway immediately.

Q. Okay. So that is already an approved west-half unit for that well --

A. Yes.

Q. -- which will be re-entered shortly?

A. And pursuant to that, the acreage in the southwest quarter from the surface to the base of the Cisco/Canyon is not available for -- is not available to Yates.

Q. And then the back couple pages of Exhibit 5 are your APD for the east-half unit; is that correct?

A. Yeah, that is a State Oil Conservation Division approved application also, or permit. That's for Big Walt 2 State Number 2 well, located 1650 feet from the south line, 1980 feet from the east line. It's an approved permit dedicating the east half to a 344.66-acre spacing unit.

Q. Now, both your well, your proposed well, and Yates's proposed well are in the southeast quarter, and they are on Yates's acreage; is that correct?

A. That is correct.

Q. Does Nearburg have any objection to a south-half unit for a Morrow test or a Morrow well?

A. For the testing of the Morrow formation only below the base of the Cisco/Canyon, we have no objection.

In fact, we'd be willing to farm out and make some voluntary agreement if that agreement covers only the Morrow formation and the permit is limited to the

Morrow formation.

We -- Our geology will show maybe a little different picture, but we certainly do not have any problem with a Morrow well being drilled there, if Yates chooses to do so, if it doesn't conflict with our approved permits and our approved acreage dedications.

Q. Okay.

A. And we will do our very best to work with Yates in a voluntary manner to see if that could be pursued, if they so choose.

Q. All right, thank you, Mr. Shelton.

Nearburg does request that it be named operator of the proposed well; is that correct?

A. We have approved permits, we'll be the operator of the well, the Littlewalt well, obviously we do, we have the majority interest, we own the majority of the section, we have approved permits.

And we also have an approved permit by the OCD for a saltwater disposal well located in the southwest quarter of Section 1, which is immediately adjacent. These wells, everybody will agree, I think, that they produce a lot of water.

It's imperative that somebody have a disposal well at or near, very close to this vicinity for the proper and costly [*sic*] disposal of water.

We have that permit, that well will be in place, and the disposal facilities will be in place by the time this well is drilled. And we have the superior method for disposing of salt water, which also will be very important to the operatorship of this tract.

Q. Okay. Is Exhibit 7, Mr. Shelton, my affidavit regarding notice given to Yates?

A. Yes, It is.

MR. BRUCE: Mr. Examiner, I would note for the record that we originally had some photographs which were marked Exhibit 6, which had to do with Yates's well location. But because it was moved, we're not going to submit those. And so for the record, there is no Exhibit 6.

EXAMINER CATANACH: Okay.

Q. (By Mr. Bruce) Mr. Shelton, in your opinion will the granting of the Nearburg Application and the denial of the Yates Application be in the interests of conservation, the prevention of waste and the protection of correlative rights?

A. Yes, sir, it will be.

Q. And were Exhibits 1 through 5 prepared by you or compiled from company records?

A. They were so.

MR. BRUCE: Mr. Examiner, at this time I'd move the admission of Exhibits 1 through 5 and 7.

MR. STOVALL: Question, Mr. Bruce. I've got a set of exhibits which were given to the Examiner. They start with Exhibit 4. Exhibit 4 appears to be a land plat. It looks like that.

MR. BRUCE: That's correct.

MR. STOVALL: Exhibit 3A appears to be a letter to Richardson, and Exhibit 5 is the APDs.

MR. BRUCE: That's correct.

MR. STOVALL: Now, I've got another set of exhibits here. Exhibit 4 is the letter to Ms. Richardson, Exhibit 5 is the land plat, and Exhibit 5 is the APD.

MR. BRUCE: Well, sue me. I --

MR. STOVALL: Mr. Carroll, are you looking for a client?

MR. BRUCE: 4 is supposed to be the land plat, 3A is the letter to Ms. Richardson --

MR. STOVALL: Okay.

MR. BRUCE: -- and 5 is the --

MR. STOVALL: I will re-mark this set. Never pass up an invitation.

Okay, now we've got that, then.

Go ahead, Mr. Examiner.

EXAMINER CATANACH: Now, what numbers are we admitting again?

MR. BRUCE: 1 through 5 and 7.

EXAMINER CATANACH: 1 through 5 and 7 --

MR. STOVALL: -- including a 3A.

EXAMINER CATANACH: -- including a 3A, will be admitted as evidence, with no objection from Mr. Carroll.

MR. CARROLL: No objection, no objection.

CROSS-EXAMINATION

BY MR. CARROLL:

Q. Just a few short questions.

Mr. Shelton, let's -- would you please -- And I just want to ask a few questions relative to some of your exhibits.

Would you turn to Exhibit Number 1?

A. Yes, I would.

Q. This particular proposal letter was written on March 24th, and you asked for an answer by the 26th, two days later; is that correct?

A. Well, we've been in a lot of discussions over the phone and everything about the subject matter, long before the letter was actually received.

Yes, it shows a timetable on the second page of March 28th for receive communications from Yates and

Santa Fe.

Q. All right. Now, Mr. Shelton, you made some comment that this involves something like 6200 acres, but the third page of your exhibit actually shows that some 12,965 acres were involved?

A. That is correct. I apologize. What is on our Exhibit 1 is correct.

Q. Now, Mr. Shelton, would you turn to the last page of this exhibit, which is a map, I believe?

A. Uh-huh.

Q. There is a hatched line that goes around, I guess, these 12,000 acres; is that correct?

A. That is correct.

Q. Now, you will agree with me that the well that has caused all the interest in this area was the Hickory well, which is a well that Yates Petroleum operates in Section 17. That's right down in this part of your exhibit? Do you agree with me?

A. There's a lot of wells of interest to Nearburg Exploration, many of which we have caused to be drilled, many of which are shown on our exhibit. Yes, there's a lot of wells of interest to Nearburg.

Q. All of the -- That gets to the next question. All of the wells that are depicted on your Exhibit 2 that Nearburg is involved in are all P-and-A'd wells,

aren't they?

A. They are, yes, sir, except for -- No, they're not. The Chama Federal well that's in there in Section 11 is not a P-and-A'd well.

Q. Well, you -- Okay.

A. It's P-and-A'd in the Morrow, because it was an uneconomic well in the Morrow.

But it's not P-and-A'd, no.

Q. All right. Now, your Exhibit Number 5 where you talk about the Antweil Littlewalt well, and you've talked about a drilling permit that has been issued by the OCD --

A. Yes, sir.

Q. -- wasn't the original permit that was requested from the OCD for a north-half proration unit rather than a west-half proration unit?

A. Well, our people in Hobbs filed the permits, and they were requested to file a permit without instruction as to what proration unit was to be formed. They inadvertently filed the north half.

And you'll notice within three days that was corrected. It was never intended to be a north-half; it was always a west-half unit.

Q. But it was filed as a north-half, wasn't it, Mr. Shelton?

A. Inadvertently, yes.

Q. Well, that's fine. It was filed.

Now, that location, the Littlewalt, is an unorthodox location for the west half, isn't it?

A. No, it is not.

Q. It is not unorthodox? Is it because it was drilled prior and was grandfathered in?

A. Well, my understanding of the field rules are that 660-660 is an appropriate location.

Q. Now, as for the west half it would be unorthodox, correct?

A. No, it is 660 from the north line.

Q. You're saying, Mr. Shelton, that for a west-half proration unit, that that well would be, if it were to be drilled today, spudded, would be an orthodox location?

A. I believe that's correct. My understanding of the field rules that Yates got approved at the last -- one of the recent hearings was that it was 660-660 --

Q. That's fine, Mr. Shelton.

A. -- or it is grandfathered in, either way, yes. They're 320-acre units.

MR. CARROLL: That's all I have, Mr. Examiner.

EXAMINATION

BY MR. STOVALL:

Q. Just a real quick question, Mr. Shelton.

We're talking about the Walt Number 2; is that the correct --

MR. CARROLL: Yes, we are talking about --

MR. STOVALL: Walt 2 State Well Number 1?

MR. CARROLL: That would be the Antweil.

THE WITNESS: That's the re-entry of the Antweil, that's correct.

Q. (By Mr. Stovall) Is that the one Mr. Carroll was asking you about?

A. Uh-huh, that's correct.

Q. Is it 660-660?

A. No, it is 2130 from the west line and 660 from the north line.

Q. So it's not orthodox; is that correct?

MR. CARROLL: We disagree with Mr. Shelton, and I'm just going to put my own witness on as to --

THE WITNESS: It's an existing wellbore for re-entry.

EXAMINATION

BY EXAMINER CATANACH:

Q. Mr. Shelton, do you know how deep that was originally drilled to?

A. It was originally drilled, I believe, to 7975.

Q. Which is -- Is that below the Cisco/Canyon?

A. That is sufficient to test the Cisco/Canyon. I'd have to defer that to our geologist to tell you whether or not it's actually below the depth of that formation.

EXAMINER CATANACH: Okay. I have no questions of the witness.

MR. BRUCE: I have no further questions of this witness.

EXAMINER CATANACH: Okay.

MR. BRUCE: Call Mr. Elger to the stand.

JERRY ELGER,

the witness herein, after having been first duly sworn upon his oath, was examined and testified as follows:

DIRECT EXAMINATION

BY MR. BRUCE:

Q. Would you please state your name and city of residence for the record?

A. Jerry Elger, Midland, Texas.

Q. And who do you work for and in what capacity?

A. For Nearburg Producing Company as exploration geologist.

Q. Have you previously testified before the

Division and had your credentials accepted as a matter of record?

A. Yes, I have.

Q. And are you familiar with the geology involved in both your Application, Nearburg's Application, and similarly the geology involved in the Yates Application?

A. Yes.

MR. BRUCE: Mr. Examiner, I tender Mr. Elger as an expert petroleum geologist.

EXAMINER CATANACH: He is so qualified.

Q. (By Mr. Bruce) Mr. Elger, if you would, refer to your Exhibit 8 and briefly for the Examiner discuss the Cisco/Canyon in the area of interest.

A. Exhibit 8 is a structure map generated on the top of the Cisco/Canyon Dolomite section in the subject area. As a matter of fact, it's more of a regional setting for where this subject acreage is located.

The color symbolism on the map, the green indicates Indian Basin gas field or gas production, is attributed to the Cisco/Canyon.

The orange represents that area where there appears to be a downdip oil leg to the gas cap for the Indian Basin.

And then as you progress to the east,

downdip, eventually the Cisco/Canyon dolomite contains only water.

The brown areas to the north and south represent areas where the Cisco/Canyon dolomite section is absent, grades into a basinal shale facies to the south, and a platform limestone to the north.

Also noted on this map is Exhibit Number 9, which will be cross-section A-A' of the Cisco/Canyon.

Q. Okay. Just looking at Section 2, Mr. Elger, you basically show -- or you hope Section 2 is productive of oil; is that correct?

A. That's correct.

Q. Because of structure, et cetera, it would -- in your opinion, is the west half better geologically than, say, the east half?

A. Yes, it is.

Q. Thank you.

A. I would also point out on this map, in conjunction with this map, that there are three completions out here that have been completed by Yates Petroleum as oil-producing wells.

Of course, the Hickory well in Section 17 of 22 South, 24 East, the Walt Canyon well in Section 3, and the Pardue Farms well in Section 27, 21-24.

So there are three current producers or

completed wells from the oil leg of the Cisco/Canyon dolomite.

Q. And as yet, you have very little information on the well in Section 3?

A. That's correct.

Q. Okay.

A. Other than perforations.

Q. Would you then move on to your Exhibit 9?

A. Exhibit 9 is a structural cross-section of the Cisco/Canyon in the wells immediately --

EXAMINER CATANACH: Hang on a second.

THE WITNESS: -- immediate vicinity of the subject acreage.

We include the Curtis Inman Walt Canyon Unit Number 1 in Section 3, which was re-entered by Yates Petroleum as the Number 1 Walt Canyon "AMA" Federal.

Production testing for that particular wellbore is indicated in the depth column in the red, completed interval.

The cross-section then goes to the Antweil Littlewalt well in the north half of Section 2, which is the well that Nearburg Producing Company will be re-entering and testing in the Cisco/Canyon dolomite reservoir.

To answer the land question that developed

earlier, that well did not drill all of the dolomite section within the Cisco/Canyon, but basically top-set the dolomite interval, ran several drill stem tests which had hydrocarbon shows.

The cross-section then goes to the north to the -- a plugged well drilled by Harvey Yates, Anadarko Federal 1 Y, Section 35, and again that shows the relationship, structural relationship on the top of the Cisco, as relative to the offsets to the west and to the north.

I would point out that an oil-water contact for the reservoir has been determined and put -- displayed on this cross-section in the bright green line.

That oil-water contact has been roughly estimated at subsea of minus 4050. And that's based on the three completions within the oil leg that I mentioned earlier, where the bottom perforations range from a subsea of minus 4063 to a minus 4042, the average being roughly around 4050.

And that same oil-water contact has been displayed back on section -- on Exhibit Number 8, on the Cisco/Canyon structure map, and that's where the dividing line between the orange and blue occurs. It's been dashed in on that display as the oil-water

contact.

Q. Mr. Elger, are you aware that Yates has proposed drilling to the Morrow?

A. Yes, I am.

Q. And have you prepared some exhibits on the Morrow geology in this area?

A. Yes, I have.

Q. Would you move on first to your Exhibit 10, identify it for the Examiner, and briefly discuss the Morrow prospects in this immediate area?

A. Exhibit 10 is a structure map on the top of the lower Morrow, and incorporated with this map are some production statistics within the area in question.

You'll see a number of orange dots that represent Morrow dry -- Morrow penetrations which were dry holes.

You see a number of green dots also, which are also Morrow penetrations which were Morrow producing wells.

There's a regional fault system out here that's pretty well documented.

One that's developed off to the east side of the prospect or to the -- subject acreage, and that's a major north-south -- or northeast-southwest oriented fault that I've named the Rock Tank Catclaw Draw fault,

and the name derives from the fact that the major portion of the Rock Tank Morrow gas field sits on the upthrown side of that block, fault block, on the south side of this map.

The Catclaw Draw Morrow gas field sits up in the upper right-hand corner of this map, and it is also a prolific Morrow gas producing field.

What is very dramatic about this fault system is the fact that once you move to the west side, downthrown side of that fault, basically you're in a regime of primarily dry holes in the Morrow.

Catclaw Draw field has produced roughly over 100 BCF of gas in the Morrow. The Rock Tank field has produced in excess of 50 BCF in the Morrow.

On the other side of the subject acreage, to the west, you'll see another fault that's downthrown to the east.

That fault I've titled the Indian Basin/Cemetery fault system. The Indian Basin Morrow gas field is situated primarily on the upthrown side of that fault. That field has accumulated roughly 38 BCF of gas in the Morrow.

And just to the north, in the upper left-hand corner of the map is the prolific Cemetery field, which has produced roughly 87, 88 BCF of gas from the Morrow.

Immediately when you cross into the east on the downthrown side of that fault, you pass again into this regime of dry holes in the Morrow.

The statistics for this area between the two fault systems are addressed on the top of this display. There's been 31 Morrow tests drilled to date between the two faults: 26 of those wells have been dry; four wells have produced from the Morrow.

All four combined, cumulative production of slightly over half a BCF with a 130-million-cubic-foot gas per well average.

There is one completion in progress, the Santa Fe well in the west half of Section 34 of 21-24, and verbal communication with Santa Fe, the operator of that well, indicates that it's probably a dryhole also in the Morrow.

Q. And you have an east-west cross-section on this map, B-B'. Would you move on to Exhibit 11 and just briefly touch on the high points of that cross-section?

A. It's an east-west cross-section.

It goes across this area of poor production within the Morrow. Across the right-hand side you can see I've displayed the Rock Tank fault, on the left-hand side the Indian Basin/Cemetery fault.

It is a stratigraphic cross-section that's hung on the datum of the Top and Lower Morrow.

Basically, it shows the nature of the sands within the Morrow clastic system and above the Morrow clastic system throughout the subject acreage.

Also included are drill stem tests and perforations or production tests for the various wells. And one of the major features it shows is that the -- displays, is that the Morrow sands are primarily fairly low porosity, but typically when they do develop porosity they have a tendency to be water-bearing.

This is probably attributable to the fact that the major fault system out here is not a sealing fault, so that when sand reservoirs are in communication with that fault the gas probably leaked to the upthrown sides.

Also on the display, on the far left-hand side, is the Yates re-entry of the old Pan Am well or Hickory well and the Upper Morrow sand that was production-tested in that well.

It's my understanding of testimony from previous hearings that that well may not be a commercial Morrow gas producer, even though it's on the upthrown side of the Indian Basin field fault system.

Q. Have you isopached any of these sands?

A. I've isopached three different units, and I've labeled what those units are on the cross-section.

I've generated an isopach map of just the Hickory sand by itself, which is an Upper Morrow sand.

I've isopached the total gross sand developed within the Middle Morrow system.

And then another isopach of total gross sand within the Lower Morrow system.

Those three isopach maps have been overlaid on the same structure map, top of the Lower Morrow that you saw on the Exhibit 10.

Q. And those are marked Exhibits 12, 13 and 14?

A. Yes.

Q. Would you move to all the exhibits and just run through them briefly, Mr. Elger?

A. Just briefly, what they show, the Hickory sand, which was perforated in the well in Section 17, is a sand that is present across the subject acreage but for the most part is either production tested or drill stem tested to be water-bearing.

And again I think there's probably a lack of a seal due to the fault, the Indian Basin/Cemetery fault system being a leaking fault system.

The Middle Morrow sand --

Q. Exhibit 13?

A. -- Exhibit 13 isopach, shows that again there are sands that do have a tendency to develop through this area.

It's not -- The 30 to 26 dry holes that have been displayed on the previous exhibit are not totally due to lack of sands, but again have a tendency to be water-bearing where they are encountered with porosity.

And then finally the Lower Morrow sand isopach shows that there are again some sands that develop in the Lower Morrow system, none in particular in across Section 2, but there are some Morrow -- it is developed across here, and they tend to be water-bearing when they have porosity.

Q. From a geological perspective, in your opinion, should Nearburg participate in a Morrow test?

A. Not at this time.

Q. In the future, assuming the well is only drilled to the Cisco/Canyon, could the well be deepened to the Morrow?

A. Yes, there is potential for the well at some future time to be deepened.

It's my understanding that Nearburg intends to run seven-inch casing production in their wellbore to production test the Cisco/Canyon interval.

Should that be a failure or should that at

some future time period be depleted, then there would be the capability of deepening this well the additional footage to test the Morrow.

Q. In your opinion, is the Cisco/Canyon the primary target in this area?

A. Yes, it certainly is.

It's Nearburg's view that by drilling a Morrow test at the proposed location would definitely result in economic waste and an actual delay of production from the Cisco/Canyon, which is really the true commercial zone of interest out here.

Q. Were Exhibits 8 through 14 prepared by you or under your direction?

A. Yes, they were.

Q. And in your opinion, is the granting of Nearburg's Application and the denial of Yates's Application, at least with respect to the Cisco/Canyon, in the interests of conservation and the prevention of waste?

A. Yes.

MR. BRUCE: Mr. Examiner, I move the admission of Nearburg Exhibits 8 through 14.

EXAMINER CATANACH: Exhibits 8 through 14 will be admitted as evidence.

MR. CARROLL: No questions.

EXAMINER CATANACH: Do you have any, Mr. Stovall?

MR. STOVALL: No.

EXAMINATION

BY EXAMINER CATANACH:

Q. Mr. Elger, on your Exhibit 10 in Section 11 you show a Morrow gas producer, a Morrow sand producer. Whose well is that? Do you know?

A. That well was originally drilled by Florida Exploration Company, which was subsequently, I think -- believe, bought out by Enron Oil and Gas.

And it is currently operated by Enron Oil and Gas, but it is currently not capable of commercial production from the Morrow, although I don't believe it's been totally plugged in the Morrow. It may have been plugged back, but...

Q. The number that you have listed, that's cumulative gas production?

A. Yes, it is.

Q. Do you know what interval it produced out of?

A. That well is on the cross-section, B-B', and again, the perforations are indicated in the depth column in red on that cross-section, which is Exhibit 11.

Q. Which well is it?

A. It's called the Florida Exploration well. It's the third from the left side, Morrow completion with a slash through it.

Q. Okay.

A. And it was completed from two different sands within the Middle Morrow, two different sands within the Lower Morrow.

Q. Okay. Do you know why that well has been abandoned?

A. It's no longer capable of commercial production.

Q. Did it water out?

A. That I could not answer. I don't know the answer.

Q. On your Morrow isopach maps, you do show Middle and Upper sand, Morrow sand, present in Section 2; is that correct?

A. On the Middle isopach map, there are sands present in Section 2, that's correct.

On the Lower Morrow Isopach map, the sands are extremely poorly developed, if they're even present.

Q. The Upper? How about the Upper?

A. The Hickory sand is definitely present, yes.

Q. The sands being present, why is it your

opinion -- or is it your opinion, that the Morrow would be non-productive in Section 2?

A. Because it would probably be water-bearing.

That seems to be the typical -- Typically out in this area, between these two major fault systems, once you develop reservoir-quality rock capable of containing hydrocarbons or water, in general, they contain water.

The same sands that exist that produce on the Rock Tank field, for example, are present on the downthrown side of the Rock Tank fault but are typically water-bearing, very suggestive of the fact that the faults themselves have been leaking-type faults where the reservoir is in communication with those fault systems, the gas migrated up into the upthrown side of the fault, to the reservoir on the upthrown side.

EXAMINER CATANACH: I have nothing further. The witness may be excused.

MR. STOVALL: One question for Mr. Shelton while we're waiting to get the next witness up.

MR. BRUCE: Sure.

MR. STOVALL: Is the ownership interest on the Nearburg acreage in Section 2 uniform throughout the north half and the west half?

MR. SHELTON: Yes, it is, sir.

TIM MacDONALD,

the witness herein, after having been first duly sworn upon his oath, was examined and testified as follows:

DIRECT EXAMINATION

BY MR. BRUCE:

Q. Would you please state your name for the record?

A. My name is Tim McDonald.

Q. Where do you reside?

A. In Dallas, Texas.

MR. STOVALL: Would you spell that?

THE WITNESS: MacDonald, M-a-c-D-o-n-a-l-d.

Q. (By Mr. Bruce) What is your occupation and who are you employed by, Mr. MacDonald?

A. I'm a petroleum engineer with Nearburg Producing Company.

Q. Have you previously testified before the Division as a petroleum engineer?

A. Yes, I have.

Q. And your credentials were accepted as a matter of record?

A. Yes, they were.

Q. And are you familiar with the matters involved in the drilling of your proposed well?

A. Yes, I am.

MR. BRUCE: Mr. Examiner, I would tender Mr. MacDonald as an expert engineer.

EXAMINER CATANACH: He is so qualified.

Q. (By Mr. Bruce) Mr. MacDonald, very briefly on the AFE that was attached to Exhibit 3, was that prepared by you or under your direction?

A. Yes, it was.

Q. Okay. And I think you were here when Mr. Carroll stated that Nearburg's costs seemed a little higher than Yates's.

If you could, just briefly, state what you think the costs are involved here.

A. Well, the one point I wanted to make was, it was not just the addition of the submersible pump.

When you have a Cisco/Canyon oil well, you need a tank bed or you need heater treater or a separator if it's -- It's a lot more surface facilities, and I believe the big difference is in the after casing points.

Q. Okay. And we'll get back to that in a minute, but have you studied the economics of this area?

A. Yes, we -- I've run economic case -- shown on Exhibit 15, that shows a Cisco/Canyon test and a Morrow

test.

Q. Okay. Would you briefly go down those items?

A. The Cisco/Canyon test, we used assumptions for reserves, production rates and declines, based on our experience in the Dagger Draw field.

And at current pricing with our AFEs we show that to be a very economic venture.

Q. What about the Morrow?

A. The Morrow, the first case that's shown is the reserves based on an average for the area, taken from Mr. Elger's map where they had the one good producing well, and I think there were three or four, maybe five, very marginal wells.

And we just took that average of 130,700 and ran with my AFE again, which was slightly higher than Yates's. But using those numbers it showed that that well would never pay out.

And in fact, we farmed out interest acreage into the Chama Federal well that's operated by Enron, and their accountings to us show that it's not nearly paid out, and it's been plugged from the Morrow.

Q. So from an engineering standpoint you don't recommend drilling to the Morrow either?

A. No.

Q. Do you have anything further you'd like to

say on Exhibit 15?

A. No.

Q. And on the AFEs, would you briefly go over what item 16 shows?

A. Exhibit 16 is just -- Based on our recent experience with Yates over in Dagger Draw, we found that their AFEs were typically, on an average, about 30 percent -- their costs were actually about 30 percent over what the AFE was.

My AFE in the Morrow is about 17 percent higher than theirs, and I feel like, you know, based on our experience that, you know, that may account for why I'm higher.

Q. Okay. Would you -- Are there potential problems in drilling through the Cisco/Canyon to the Morrow?

A. There are. We re-entered both the McKittrick Federal Com. in Section 11, the section south of us, and the M-H Federal Com. in Section 1, the section the east, and we had substantial lost-circulation problems, we had -- we had the -- I think we lost -- we had cement and a string of pipe in the hole, drill pipe in the hole. We just had numerous problems.

We did get both the wells down to the Morrow. I'm not saying it can't be done.

But with the amounts of fluid we were losing and the problems we had, you could definitely damage or harm your evaluation techniques that you could use in the Cisco/Canyon at a later date.

Q. I need to ask you a couple of questions. Do you have Nearburg's Exhibit 5 in front of you?

A. I believe I do. Which one is it?

Q. It's the APD.

A. Right.

Q. In Nearburg's plans for re-entering this well, are you planning on deepening the well?

A. No, we're just going to clean it out to the original TD and run pipe.

Q. Okay. Now, this well is 2130 feet from the west line; is that correct?

A. That's right.

Q. Now, when this APD was approved, what was the spacing in this area?

A. Forty acres.

Q. Forty acres. So at the time when this APD was approved, certainly under the 40-acre spacing rules, this location was standard; is that correct?

A. That's correct.

Q. Were Exhibits 15 through 17 prepared by you or under your direction?

A. Yes, they were.

Q. And in your opinion, is the granting of the Nearburg Application in the interests of conservation and the prevention of waste?

A. I believe so.

MR. BRUCE: Mr. Examiner, I move the admission of Nearburg Exhibits 15 through 17.

EXAMINER CATANACH: Exhibits 15 through 17 will be admitted as evidence.

Mr. Carroll?

CROSS-EXAMINATION

BY MR. CARROLL:

Q. Just a couple of questions.

Mr. MacDonald, have you performed any drainage studies with respect to this proposed re-entry of the Antweil Littlewell -- Littlewail, Littlewall, I'm not sure what that is -- well?

A. No, I don't know of any data, really. No, we haven't. There's never been production from it.

Q. Well, do you have -- In your professional experience as a petroleum engineer, can you represent to this Commission that that well in that unorthodox location up in the very northeast part of that west half is going to drain the entire west-half proration unit?

A. I can't until I see some production figures, production history.

Q. So at this point in time you don't even want to hazard a guess; is that correct?

A. No, I wouldn't

Q. Turning to Exhibit 16, are these the only four wells that Nearburg has participated in with Yates, or were there other wells?

A. They're the majority of them. They're all the ones in the Dagger Draw area, and I can't think of any -- There may be a couple others, but they're the only ones I could recall that I found in our records.

Q. All right. You are aware that Yates operates 138 wells out in the Dagger Draw area?

A. Yes, I am.

Q. Did you perform any study with respect to the 138 to see what the true representative figure is for Yates being over AFEs when it's drilling wells in the Dagger Draw area?

A. I don't have access to any of those numbers.

MR. CARROLL: That's all I have.

EXAMINER CATANACH: I don't have anything of the witness.

MR. BRUCE: I have no further witnesses, Mr. Examiner.

MR. CARROLL: Mr. Examiner, I do not propose to put on Ms. --

EXAMINER CATANACH: Long day, huh?

MR. CARROLL: Gosh, my mind is gone.

What I would do is, if we did -- The four exhibits that she was going to testify to were Exhibits 1 through 4. I think we've stipulated to most of the things already, and if there's no objection from Counsel I would just move their admission as evidence and part of the record.

MR. BRUCE: No objection.

EXAMINER CATANACH: Okay, Exhibits 1 through 4 will be admitted as evidence, Mr. Carroll.

MR. CARROLL: All right. Then we would at this time Call Brent May as a witness.

BRENT MAY,

the witness herein, after having been first duly sworn upon his oath, was examined and testified as follows:

DIRECT EXAMINATION

BY MR. CARROLL:

Q. Would you please state your name for the record?

A. Brent May.

Q. By whom are you employed?

A. Yates Petroleum.

Q. And in what capacity?

A. Petroleum geologist.

Q. Mr. May, have you had occasion to testify before the New Mexico Oil Conservation Division and had your credentials accepted as a petroleum engineer?

A. As a petroleum geologist, yes, I have.

MR. CARROLL: Excuse me, petroleum geologist. My mind is racing ahead.

Mr. Examiner, I would tender Mr. May as an expert in the field of petroleum geology.

EXAMINER CATANACH: Mr. May is so qualified.

MR. CARROLL: Thank you.

Q. (By Mr. Carroll) Mr. May, you are familiar with Yates Petroleum's Application for force pooling, and also that of Nearburg Producing Company?

A. Yes, I am.

Q. Have you prepared certain exhibits for presentation here before the Commission today?

A. Yes, I have.

Q. Why don't we turn to Exhibit Number 5, the first -- your first exhibit.

Would you please describe what that exhibit is and discuss the significance?

A. This is a stratigraphic cross-section, A-A', of the Upper Penn or what I term the Canyon.

You might note in the lower right-hand corner is showing the location of the cross-section.

Starting on the left side in -- with the Yates Petroleum Walt Canyon "AMA" Federal Number 1 in Section 3 of 22 South, 24 East, I'm showing the top of the Canyon dolomite, which is also the stratigraphic datum on this cross-section, and the base of the dolomite.

There were -- Originally, this well was drilled by, I believe, Curtis Inman back in the Sixties, and they ran several DSTs at the very top of the Canyon dolomite and did have reported oil shows from those DSTs.

The well was -- They did run pipe, I believe, into the very top of the Canyon and attempted completions and perforated and did have some small shows, but also had large amounts of water, so they eventually abandoned the well.

Yates Petroleum re-entered the well in approximately April of 1993. We attempted at first an open-hole completion below the old casing hole shoe, which was from 7942 to -64. We treated that, swabbed 138 barrels of water, and then squeezed. We then -- Excuse me, that was not the open-hole completion; we did perforate.

Then we attempted the open-hole completion below the cashing shoe with a packer set at 7955, we swabbed 377 barrels of water, and pumped 88 barrels of oil plus 2027 barrels of water and 72,000 cubic feet of gas.

We then ran a 3-1/2-inch liner, because the old facing was 4-1/2-inch. We perforated from 7995 to 8008, acidized, swabbed water, put it on a pump, and it IP'd on the pump for 110 barrels of oil, 65,000 cubic feet of gas per day, and 2370 barrels of water per day.

The next well in the cross-section is the Enron Chama Federal Com. Number 1 in Section 11 of 22 South, 24 East.

The well was drilled to the Morrow and was completed in the Morrow, and at that time -- that well was produced out of the Morrow and then recompleted in 8 of 1992.

Enron perforated from 8104 to 8114 and from 8143 to 8152. They put it on pump, and I have shown no records that they have treated the zone. Pumped six barrels of oil and 93 barrels of water per day. And as far as I know, as the Nearburg geologist stated, I don't think it's been plugged as of yet. But there's no current production from it.

In my opinion, this well has been properly

tested and could make a Canyon completion.

The next well in the cross-section, on the far right, is the Southern Union Shelby Federal Number 4 in Section 12 of 22 South, 24 East.

This well had a DST at the top of the Canyon dolomite and recovered 200 feet of water-cut drilling mud and 5700 feet of I believe sulfur water.

There was another DST lower down into the dolomite at 8315, at 8346. They did get gas to the surface after 15 minutes, but it was too small to measure, recovered 185 feet of drilling mud and 6140 feet of sulfur water.

They then attempted a completion and basically swabbed water, and then the well. And I believe later on -- or temporarily abandoned the well.

And later on, which I'll show on another cross-section, I believe Nearburg re-entered and deepened to the Morrow.

Q. Do you have anything further you'd like to discuss with the Examiner with respect to that exhibit?

A. No, I don't.

Q. All right. Turn to your Exhibit 6. Would you explain what that is for the record and discuss its significance?

A. Okay, this is a structure map with the top of

the Canyon dolomite as a datum. It shows a structural nose plunging to the southeast.

The proposed location is shown near the apex of the nose and updip of the wells to the southwest, and it is shown in green.

The proposed location is structurally similar to the Yates Petroleum Hickory ALV Federal Number 1 in Section 17 of 22 South, 24 East, which has been mentioned before.

The Hickory well, again, is the discovery well of the Indian Basin-Upper Penn Pool Associated, which produces oil from the Canyon dolomite and is geologically similar to the Dagger Draw-Upper Penn Pools.

The Walt Canyon "AMA" Federal Number 1 shown in Section 3 -- and it is currently shown on this as a dry hole, but it has been IP'd as I showed on the cross-section -- it also produces oil from the Canyon dolomite.

It appears that the proposed location should be structurally high enough to produce oil from the Canyon dolomite.

In fact, in my opinion it appears that all of Section 2 should be capable of producing, which is fairly similar, I think, to what the Nearburg geologist

said.

Q. With respect to that statement, I believe Mr. Elger stated that the west half had a better chance than the east half of producing from the Canyon.

Do you agree with that, or do you see any significant difference between east half as opposed to the west half?

A. You can get a little bit higher structurally, but in my opinion you're going to have four good wells in Section 2.

Q. All right. In your opinion, Mr. May, is there any advantage or any requirement that the proration units be made east-half, as opposed -- I mean, standups as opposed to laydowns?

A. Not in the Canyon, no.

Q. Okay. Any -- And I'm asking with respect -- any geological reasons that you're aware of?

A. Not in the Canyon.

Now, there are some that I -- When I get to the Morrow I can further expand upon.

Q. All right. Would you turn, then, to -- Is there anything further you'd like to discuss with respect to Exhibit 6?

A. No.

Q. Would you turn to Exhibit 7 and again

identify what it is for the record and then discuss its significance?

A. This is an isolith map which represents the Canyon dolomite and shows its limits.

I might point out that the values beside the wells with the plus sign indicate that the dolomite was not fully penetrated, and the true thickness is unknown.

Dolomite thicks occur in the northwest and southeast corners of the map, and the proposed location should have over 500 feet of dolomite, which is easily a sufficient amount of dolomite to be productive.

So again this reiterates that I believe that Section 2 should be productive for the Canyon.

Q. Anything further that you would like to discuss with respect to Exhibit 7?

A. No, there is not.

Q. Would you then turn to Exhibit Number 8?

A. This is basically the same -- Well, it is the same stratigraphic cross-section, A-A', except that it's in the Morrow section instead of the Canyon section.

Again, the reference map is shown in the lower right-hand corner.

The Morrow clastics, top of the Morrow

clastics, what I call the Morrow clastics, top of the Lower Morrow, which is also the datum and the base, loosely termed, that I call the base of the Morrow sands, are shown on this cross-section.

Again, starting from the left-hand side with the Yates Petroleum Walt Canyon Federal Number 1, you can show basically the lack of sand in this well.

There were a few DSTs, but they basically just recovered drilling mud.

And this well, again, is currently producing -- has been IP'd in the Canyon and is producing -- capable of producing oil.

The next well is again the Enron Chama Federal Com. Number 1 in Section 11.

This well had a DST in the upper part of what I call the Morrow clastics. It had a flow of gas to the surface in 45 minutes, flowed at a rate of 100,000 cubic feet of gas a day, recovered 1000 feet of water cushion and 210 feet drilling mud.

And then there was another DST in the bottom part of the Morrow clastics and the upper part of the Lower Morrow, and it recovered 1000 feet of water cushion and 1848 feet of slightly gas-cut muds, basically tight.

Now, Enron, I don't think, originally

completed this in the Morrow. I think it was the Florida Exploration, and they perf'd from 10,282 to 10,520, and that is the zone that did do approximately 400 cubic feet of gas and 1500 barrels of condensate and 29,000 barrels of water, and then was, as I stated earlier, just recently attempted for completion in the Canyon.

The next well was the Southern Union Production Shelby Federal Number 4. And like I say, I can be corrected, but I believe this well was re-entered by Nearburg and deepened to the Morrow, and it again shows a lack of sand.

And compared to the other two wells, the Enron well in the center has more sand, compared to the two wells on each side of the cross-section.

Q. All right. Would you turn next to your Exhibit Number 9 and again describe it for the record and explain its significance?

A. This is a structure map on top of the Lower Morrow.

It shows a structural nose plunging to the southeast which is similar to the Canyon structure map.

The proposed location, again, is near the apex of the nose and, I might point out, updip of several of the wells to the southeast which did produce

water.

And that's about all I had to show on this, is that it was -- The proposed location should be updip of many of the wells on the map.

Q. All right. If you'd turn to Exhibit Number 10, then.

A. This is an isolith map which represents the sands of the Morrow clastics section and shows the limits of the sand deposition. This isolith map is a clean sand map with a gamma-ray cutoff of 50 API units or less.

The map shows a sand thick trending through the east half of Section 2. I believe that these systems are fluvial channel-type systems.

The thickest section of the sand should yield the best chance to encounter reservoir-quality porosity or permeability.

Because the east half has a higher chance of being productive in the Morrow than the west half, a laydown spacing unit makes more sense.

The laydown would allow two wells to be drilled within the east half, plus more effective drainage would occur, whereas if you had a standup, this would allow only one well in the sand thick, and the drainage would be less effective.

Q. All right. Mr. May, you've now had a chance to review the Nearburg geological presentation with respect to the Morrow formation.

Did you discern, first of all, discern any significant differences between your geological presentation and Nearburg's presentation with respect to the existence or non-existence of the sand of the formation itself?

A. Of course, they did show the sand veering up a little bit further to the east and more in Section 1 than what I have, where mine was going in the east half of Section 2, and I see that as just an interpretation difference.

Also on Exhibit 10, I believe, where they were showing the various Morrow dry holes and producers, you might note that --

Q. You are referring, just for the record, to Nearburg's Exhibit Number 10; is that correct?

A. Yes, that is correct.

Q. All right.

A. You might note in Section 2 and due north of Section 2, there is very little Morrow control. And in my opinion, I feel like that gives us a chance to hit some more production.

The well in Section 11 did produce from the

Morrow.

Also, recently in Section 27, the Yates Petroleum Pan Am Pardue, we did deepen that well to the Morrow, encountered a Morrow sand, we tested it, it tested approximately a half a million a day.

We left that to go up to the Canyon, because the Canyon is much better production, but we left it behind pipe so we could later go back down and produce from the Morrow.

Also, we are currently completing a re-entry in Section 22 in the Morrow, and it so far, I believe, is -- has made around a half a million a day. But we are still currently working on that well.

Q. Mr. May, the purpose and, I think, the intent of this exhibit was to show that there were many more dry holes in the Morrow when you look at this very broad and large expanse of area.

Do you feel that this exhibit really has any significance with respect to what's happening geologically down in Section 2, the subject of both of these Applications?

A. Well, as I stated before, there's a big area right north of Section 2 for several miles that there's no control. And yes, if you bring in a large map and -- You can show a lot of dry holes in the area, and it

makes it look much more pessimistically than what could possibly be.

You also might note that the Nearburg geologist also mapped the structure on this, and he has shown the proposed location updip of several of the wet wells to the southeast.

Q. With respect to that issue about -- I think if you'll recall, Mr. Elger stated that in his opinion, the reason that this was not a good prospect in the Morrow was that he thought it would be water-bearing.

Do you agree with that opinion with respect to this proposed location?

A. I think we've got a good chance of getting updip and getting above the water.

Q. In your opinion, is this a reasonable risk that one normally takes with respect to this kind of well in this area?

A. Sure, and since we're definitely going -- Everybody wants to go to the Canyon. It's only maybe a couple thousand more feet to the Morrow and, in our opinion, that's not that big of a problem.

Q. Mr. May, do you have an opinion with respect to the issue of -- relating that opinion to geological concepts or concerns, to help the Commission, guidance of whether or not the proration unit should be standup

or laydown with relation to the evidence that you have in studying the Morrow formation?

A. As I stated before, on my Morrow iso sand lith, I'm showing a thick running through the east half of Section 2, and if you have standups you're only going to get one location in that thick.

If you have laydowns you can get two wells within that thick.

Q. Is there an advantage to getting two wells?

A. You could definitely -- You should be able to get Morrow production, more effectively drain that.

Q. All right. So there would be a concern there with respect to the issues that concern this Commission, and that's dealing with waste and the protection of correlative rights; is that correct?

A. That's correct.

Q. In your opinion, would the setting of a -- of the proration units on a laydown basis be consistent with the protection of correlative rights and the prevention of waste?

A. Yes, I do.

Q. Now, in relation to that, do you feel that by the granting of -- If the Commission were to establish laydown, do you feel that that would in any way harm the possibility of the obtaining of effective

production from the Canyon?

A. No, I sure don't.

Q. Do you feel that -- Do you have an opinion as to whether or not establishing laydowns with respect to your proposed well, would that in any way affect correlative rights or cause waste?

A. No, not in my opinion.

Q. Is there anything further that you would like to discuss with the Commission with respect to your Exhibits 5 through 10, Mr. May?

A. No, I think that's all.

MR. CARROLL: At this time, Mr. Examiner, I would move admission of Yates Exhibits 5 through 10.

EXAMINER CATANACH: Exhibits 5 through 10 will be admitted as evidence.

MR. CARROLL: And I pass the witness.

CROSS-EXAMINATION

BY MR. BRUCE:

Q. Mr. May, I forget which exhibit it was -- It might have been your first Exhibit, 5, where you talked about the Chama Federal Number 1 in the northeast quarter of Section 11.

A. The cross-section?

Q. Yeah, the cross-section. I don't know if you need the cross-section, but you were talking about

production from that well.

Are you aware that that well has never been tested with a submersible pump?

A. Yes, I'm aware of that, and that's why I believe that that well could possibly be a Canyon producer.

Q. So you wouldn't be surprised if Nearburg would try to acquire the well and plan to test it that way?

A. It wouldn't surprise me at all.

Q. Okay. Do you agree that in this area the Cisco/Canyon is the primary target?

A. Yes, it is the primary target, and I also think that the Morrow is a primary target too.

Q. But if the well is just drilled down to the Canyon, it could always be deepened later, could it not?

A. Yes, it could, but it would be much easier to do it now and much -- probably -- I'm not an expert on engineering costs, but I would guess it would be cheaper.

Q. Would you agree that the Morrow wells in this immediate area have had extremely limited success?

A. In the immediate area, yes, that's true, especially to the southeast downdip of the proposed

location.

Q. You have your Exhibit 10 --

A. Yes.

Q. -- in front of you, Mr. May?

A. Yes.

Q. I'll hand you what's been marked Nearburg Exhibit 18, and I'd like to compare your Exhibit 10 with Nearburg Exhibit 18.

First, if I could have you identify it, I believe that has a stamp on it, but it was a Yates Exhibit from Cases 10,628 and 10,629, which I believe had to do with, oh, some counter force pooling applications in Section 27 of 21 South, 24 East.

Were you the geologist for Yates in those cases, Mr. May?

A. Yes, I am -- Yes, I was.

Q. And was this prepared by you or under your direction?

A. Yes, it was.

Q. Now, in comparing Nearburg Exhibit 18 with your Exhibit 10, Exhibit 18 really shows the west half of 2, the west half of Section 2, to be a lot better than the east half of Section 2?

A. Yes, it does, and I can explain that.

At the time I made this map, I did not have

the deeper section of the log in Section 1, which I believe Nearburg had re-entered the well and deepened it, and I did not have -- I did not have that data at this point.

I did get that data later and incorporated it into the map I have now, and that's why it has -- you might note in Section 1 that that well is showing 60 feet of sand, and that pulled the thick over to the east.

Q. Okay. And that's the sole new data point you used?

A. Yes, it is.

Q. Okay. There was no other control to the north or to the west?

A. That's the one data point that caused me to move that --

Q. Okay. Now, looking at either one, there is a well in Section 34 and little circle around it. It has "57" by it. Do you know the status of that well?

A. I believe it's temporarily abandoned.

Q. In the Morrow?

A. I believe so, yes. That's the latest I've heard on it. Now, it may --

Q. Do you know if the well was -- if the Morrow in that zone was wet?

A. There was an upper sand in that Morrow well that was wet. It was a very nice, clean sand.

But there was another sand below it that was not wet, and that's my opinion.

Now, the Santa Fe geologist disagreed with me during this hearing, but that's my opinion.

Q. Okay. And now the -- I think you said the Nearburg well in the southwest quarter of Section 1, what was -- what happened in that well, do you know? In the Morrow?

A. I believe the Nearburg well in Section 1, in the Morrow, I believe that well was wet.

Q. Okay, and that was a dry hole?

A. Yes, sir.

Q. Even though it had 60 feet of --

A. Yes.

Q. -- of sand?

A. But it was wet downdip.

Q. Okay. Now, looking at this, you're showing kind of more of a northwest-southeast trend than you originally did.

A. Yes, and it's based on the well in Section 1 that pulled the thick over further to the east.

Q. Okay. Now, regardless, looking at any number of wells in this immediate area, many of the Morrow

wells are wet; is that correct?

A. The ones to the southeast of the proposed location, I believe, are the ones that are primarily wet.

Q. Okay, and I don't know if you were looking at Mr. Elger's Exhibit 10, which was a production map --

A. Yes.

Q. A lot of those Morrow wells which were further to the west were updip, and those were also wet, were they not?

A. Some of them he did show, yes, were wet, and those possibly could be in different sands too.

I'd have to -- That's a speculation on my part, and I'd have to go back and look at all the logs that far up, that far to the north.

Q. Okay. So there's still a lot of speculation here that the east half would be better than the west half as far as the Morrow goes?

A. Oh, sure, it's interpretive.

MR. BRUCE: That's all I have, Mr. Examiner.

EXAMINATION

BY EXAMINER CATANACH:

Q. Mr. May, you had mentioned earlier that Yates had completed a Morrow well in a section north of here -- I didn't catch the section -- or had tested a

Morrow well at half a million a day?

A. Yes, there was the Yates Petroleum Pan Am Pardue in Section 27. I believe it's in the southwest quarter.

We re-entered that well for the Canyon, deepened it to the Morrow, perforated the Morrow, tested it, made approximately a half a million a day, then came back up to the Canyon, because the Canyon was the primary target in that well.

But we are planning on, after the Canyon plays out, going back down after the Morrow.

EXAMINER CATANACH: Okay, I don't have anything else.

EXAMINATION

BY MR. STOVALL:

Q. One question, Mr. May. Who -- What would be Yates's primary objective with this well?

A. Both the Morrow and the Canyon.

Q. Who was responsible for requesting that Mr. Carroll prepare an application in this case and file it? Were you involved in that discussion at all?

A. I was -- I'm not sure I'm understanding your question.

Q. Did anybody provide Mr. Carroll with instructions with respect to the filing of this

Application?

A. Yes, employees of Yates did.

Q. Were you involved in that process?

A. I applied -- Based off my geology, I picked a location, gave that information to Land, and I assume they contacted Mr. Carroll.

Q. Well, my question -- Let me get to the direct question and the important question, is, How come the Application doesn't mention -- The Application comes in and says, We want to drill a Morrow gas well, and as long as we're here, let's pool from the surface to the base of the Morrow.

How come somebody didn't tell Mr. Carroll to say, We'd also like to be able to test the Cisco and --

A. To tell you the truth, I'm not sure why, because the Canyon is definitely a primary target out here, especially because of the three wells that Yates has production out in the Canyon in this area.

Q. Is anybody here from Yates today, do you know, that would have been involved in direct conversation with Mr. Carroll?

MR. CARROLL: Janet Richardson was responsible for my direction. She's standing here if you'd -- She's been sworn if you'd like to ask that question.

MR. STOVALL: Well, let's finish with Mr. May, then I might.

MR. CARROLL: I have no further questions.

EXAMINER CATANACH: The witness may be excused.

Would you like to recall Ms. Richardson?

MR. STOVALL: I was just -- yes, I -- So sorry, I was upstairs.

Ms. Richardson, you can stay put if you -- as long as you speak loud enough for the...

JANET RICHARDSON,

the witness herein, after having been first duly sworn upon her oath, was examined and testified as follows:

DIRECT EXAMINATION

BY MR. STOVALL:

Q. Were you the one that instructed Mr. Carroll?

A. Yes.

Q. Do you know why he didn't mention the Cisco at the time of the Application?

A. No, I just assumed that once you asked for the application, that your Morrow was your primary target, that all the zones between the Morrow and the surface and everything that you drilled would be included.

MR. STOVALL: Well, let me tell you what my

concern is at the moment, is, why couldn't we grant both of these Applications?

Yates says they want a Morrow well, and Nearburg says they want a Cisco well.

Based upon the Application, the allegation in the Application that the Applicant has a right to drill a Morrow well, a Morrow gas well, why can't we grant them both?

MR. CARROLL: Well, I think that that would be promoting waste. That would indicate -- unless you -- I'm not sure what you're talking about.

If you're talking about drilling two wells, I think that would be wasteful, to drill two wells.

MR. STOVALL: That might be.

MR. CARROLL: Some other -- You know, there's lots of ways to fashion what you may be talking about. I'm not saying that one could not do that.

But I can tell you legally why we do -- When we drill a well -- and it's always Yates's policy to test every formation all the way down; we never walk away from that. Their primary was the Morrow.

I drafted my petition, and I -- frankly, ever since we've had -- and I think the Commission is well aware of the problems that we've had with Mr. Grynberg over these issues about not pooling all the way from

the surface to the -- down.

That's just -- It is a policy, we always seek it, if that's what you're wanting to know, what our motivation was behind.

MR. STOVALL: I understand that, Mr. Carroll. The part that concerns me is because there were some discussions ahead of time, for myself I would like to have seen an application say, to test the Cisco and the Morrow to indicate -- in the supporting statements, not necessarily in the prayer. I think the prayer covers what you're looking for.

When I originally looked at these Applications I said, Oh, we've got a Morrow well and a Cisco well. It didn't even occur to me that there was --

MR. CARROLL: Well, all I can say is that in the future we will put the language "to test all formations from the surface to the target location."

But I mean, we just assumed that that was understood, because that's what everyone does.

EXAMINER CATANACH: Mr. Stovall, that was the first thing that occurred to me. So -- I understood what was going on.

MR. STOVALL: Well, I can't say that I didn't understand it, but...

MR. CARROLL: Our next witness will be Mr. Boneau.

DAVID F. BONEAU,

the witness herein, after having been first duly sworn upon his oath, was examined and testified as follows:

DIRECT EXAMINATION

BY MR. CARROLL:

Q. Would you please state your name, occupation and by whom you're employed, for the record?

A. My name is David Francis Boneau. I work as a reservoir engineering supervisor for Yates Petroleum Corporation in Artesia, New Mexico.

Q. You have previously testified before the Oil Conservation Division and had your credentials accepted as a reservoir engineer, have you not?

A. Yes, sir.

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

EXAMINER CATANACH: Mr. Boneau is so qualified.

Q. (By Mr. Carroll) Mr. Boneau, you have prepared certain exhibits for presentation in support of -- and also in reference to the Nearburg -- the two cases that are presently being heard by the Examiner,

have you not?

A. Yes, sir, that's correct.

Q. Would you please, because of the lateness of the hour, just begin with your Exhibit 11 and, as you go from one exhibit to the next, please identify them for the record.

But if you would, and I think it will speed things up, just discuss what they are and their significance with respect to this case.

A. Surely. Exhibit 11 is my attempt at a summary of the issues and the arguments in this case.

I think it's obvious by now that Yates seeks to operate a 320-acre spacing unit, roughly, and we want that to be the south-half spacing unit.

I listed some reasons and -- To be a positive engineer I list them, why you should approve Yates's Application.

Number one says that we all agree that the proposed locations are on Yates's lease, and we think that's a small argument why you might let Yates operate.

Mr. May, in the geology, has talked about how the Morrow, being on the east side, would best be developed with two laydown spacing units.

Item number three talks about AFEs, and

that's essentially an insignificant issue, and we're -- I welcome the opportunity to ignore that, as we agreed to.

I'd like to talk a little more in depth about the last three items.

Yates has a great amount of experience in the Dagger Draw-Upper Penn Pools, and we have experience in the Indian Basin-Upper Penn Associated Pool, and I've got an exhibit to talk about that.

We have gas, water and electricity systems built, being built and planned to handle a major development in this Indian Basin area.

And lastly, there's an issue about whether the proposed re-entry of Nearburg in the north half makes much sense in an orthodox sense.

That's supposed to be a preview of what we're talking about. I'm going to talk about, in Exhibit 12, Yates's experience in the Dagger Draw area and Indian Basin area, and there's probably some numbers here that are of interest to people.

In Dagger Draw Yates operates 138 wells and Nearburg operates nine wells, and some of those are very good wells. I've listed there the production number, and Yates has roughly ten times the wells and the production that Nearburg has in Indian Basin, in

Dagger Draw. Yates has about ten times the wells and the production in Dagger Draw that Nearburg has.

In Indian Basin there are three completed producing wells operated by Yates Petroleum, and those are the only wells in the Indian Basin-Upper Penn Associated Pool.

The Hickory Number 1 in Section 17 was potentialed for 480 barrels of oil, some gas, and about 1200 barrels of water in June.

At the bottom of the page it shows that that well has been production-tested for 10 days in June, and it -- during that time it produced an average of 452 barrels of oil a day, 456 MCF of gas a day, and 944 barrels of water a day.

That well will begin sustained production very soon. As you'll see, all the associated things that it needs to produce long-term are now in place.

The second well in the Indian Basin-Upper Penn Associated Pool is the Pan Am Pardue well in Section 27 of 21-24, and it was potentialed for 232 barrels of oil in June, and it's been sub-pumped for a total of five days over a period in June from June 14 to June 25th, and during those five days it produced an average of 392 barrels of oil a day, 1199 MCF of gas a day, and 1460 barrels of water a day. So it, so far,

is going better than its potential.

Those two are two very good wells in the Indian Basin-Upper Penn Associated Pool, and I think those two wells are the cause of people's excitement about this area.

The third well in the Indian Basin-Upper Penn Associated Pool is the Walt Canyon "AMA" Number 1, and it's actually the well closest to the Section 2 that's under discussion here. It was potentialed in June for 110 barrels of oil a day, and quite a lot of water, 2370 barrels of water a day.

And at the bottom of the page it shows that that well was production tested for 17 days in May and June, averaging 190 barrels of oil and 1780 barrels of water a day.

Yates then tried to shut off some of that water with a liner, and it didn't really help much.

The tests in June are shown there, and there are 112 barrels of oil a day and 2400 barrels of water.

The Walt Canyon is maybe in a slightly poorer part of the reservoir, but it's got a sort of unsatisfactory mechanical condition. It's being produced through a 3-1/2-inch liner, and that's a tough way to sub-pump a well.

I just thought it was important to summarize

Yates's experience in this Indian Basin-Upper Penn area, to develop an area, and up-to-date information just is hard to obtain, and I wanted the Examiner to see what the latest information was.

And Exhibit 13 and 14, address the -- how Yates will handle the gas and water from the Indian Basin wells, and specifically from the proposed well in Section 2, and it also addresses the issue of getting electricity to those wells.

So Exhibit 13 is a map with some colored lines on it indicating where the gas, water and electricity lines will go.

And Exhibit 14 is a description in words of the same thing.

So Yates's philosophy behind this whole thing is that this is a very promising area that will eventually have large-scale development.

The other part of our philosophy is that we have a huge amount of system installed in Dagger Draw, and we can carry the gas and water, et cetera, back to Dagger Draw and handle it through the gas plant that's been built there, and handle the water through the eight disposal wells that are now active in Dagger Draw.

Yates has the capacity to handle about 60,000

barrels of water a day in Dagger Draw, and we're currently disposing of about 40,000 barrels a day. So there's excess capacity in Dagger Draw.

So our philosophy is to carry the gas and water back to Dagger Draw.

The southernmost point of the Dagger Draw system is at the very top-left corner of Exhibit 13. It's a well there called Mojave, and it looks on the picture just a tiny dot, but that's where the Dagger Draw systems end and where the Indian Basin system would tie in.

So Yates has -- In the gas area, Yates has constructed a line shown in solid red from the Hickory north to the Gas Company of New Mexico line, and that's where the gas has been going during the part of time when the Hickory was producing Morrow gas and during the testing that I told you about just a few minutes ago.

Yates is completing construction of the gas lines north from the Gas Company of New Mexico line to the Mojave, and all that is being built today and will be finished in a matter of days.

Our proposal for the rest of the system is shown in the blue hatched lines, and Yates has staked and is seeking right of ways for gas lines, and

incidentally water lines, to go from the Hickory to the Walt Canyon "AMA" Number 1 and up to the Pan Am Pardue ALZ Number 1. Those gas lines will be capable of handling 12 million cubic feet of gas a day.

The water lines go -- follow the same route, take the same route, and they are in the same stage of completion.

The initial line from the Hickory north is completed.

The long line up to the Mojave is under construction right now, will be finished in a matter of days.

And the laterals off the Walt Canyon and Pan Am Pardue have been staked and right of way is being sought.

Yates has also installed its own electrical system. The Central Valley CVE line ends where it says "Start Yates Electrical Line" there at the intersection of Section 24 and 25. And Yates has built an electrical line south from there to the Hickory, about five miles.

Again, the plan is to carry this electrical line to the Walt Canyon and Pan Am Pardue and into the northeast part of the developing field via the right of way that's being sought right now.

Our operations people plan to have this entire system installed in 60 to 90 days.

I think the point of all that is that we have real plans to handle the wells drilled in this, handle gas and water from the wells drilled here. Yates is spending $1.5 million to install the line shown on Exhibit 13.

The last item, moving to Exhibit 15, involves the proposed Nearburg re-entry in the north half of Section 2, and Exhibit 15 is my idea of illustrating orthodox and unorthodox.

The well is located 2130 from the west line and 660 from the north line, and it's obviously in the central portion of the north half, and it's very much in the corner of the west half.

I'm confused by the talk of 40-acre spacing and 320-acre spacing, but the facts are that it is closer than 660 feet to the east line of the west half, and therefore I call it unorthodox for Indian Basin-Upper Penn Associated.

I think Exhibit 16 -- Do you want me to go ahead to Exhibit 16? Is that okay, Counselor?

Q. That's fine, go ahead.

A. Exhibit 16 is a letter that I wrote to Mike Williams of the Artesia NMOCD on July 23rd, 1993, and

it tries to address the status of the Walt Canyon 2 State Number 1.

Basically, it says that Nearburg sought a north-half spacing unit for that well on May 25th and sought a west-half spacing unit on May 28th and that both Yates and Nearburg has scheduled the hearings today.

And the words say it all, I think. It says, Please do not assign either a north-half or a west-half spacing unit to that re-entry before the Yates and Nearburg Applications can be heard on August 12th and decided by the NMOCD in Santa Fe.

I think that the right way is that the status of the re-entry is kind of in suspense, depending upon the outcome of this hearing, and I thought it was worth trying to call that situation to Mr. Williams' attention, and that was the purpose of that letter.

Q. Mr. Boneau, the field rules that have been adopted by the NMOCD for the Indian wells area allow that within each 320-acre proration unit two wells can be drilled; is that correct?

A. That's correct, yes.

Q. And in your professional opinion, do you feel that with respect to the -- this re-entry and its location relative to a west-half proration unit, will

that well drain the west half or have any significant chance of providing adequate drainage for the west half?

A. Well, it's obviously not going to drain all the west half, and I don't know that that's the question. But it is going to drain mostly oil and gas from the north half of Section 2.

Q. Well, that was my follow-up question, Mr. Boneau, and I think you guessed it, is that -- Relative to the situation already, the location of this one well, does it make more sense to have laydowns or standups?

A. I think the location of that re-entry is an argument for laydown 320s.

Q. With respect to the Application of Yates Petroleum that it's making before to allow the drilling of its proposed Morrow test in the southeast quarter and with laydown proration units and with Yates being operator, do you have an opinion with respect to whether or not the granting of that Application would promote correlative rights and prevent waste?

A. Yes, I have an opinion, and --

Q. What --

A. -- it is that the thing that you said would prevent waste and promote correlative rights.

Q. All right. In your professional opinion, do you feel, based on the experience of Yates Petroleum, that it would be better able to handle the known production problems that you have with this kind of well, and the unknown problems that can be encountered drilling in this part of New Mexico?

A. Yes, it's true that Yates has not drilled a Morrow well in this area, and Nearburg has -- maybe not drilled a Morrow well in this area. Yates has completed three re-entries, relatively difficult re-entries, but Yates has completed three re-entries, and I'm confident from that experience that we can drill a Canyon Morrow test.

Q. With respect to your review of the AFEs presented by both the companies, it is your -- do you have an opinion with respect to whether or not Yates can drill this well relative to the AFE that it has presented?

A. Yes, Yates can drill a well within the parameters of the AFE presented.

Q. And the AFE presented by Yates, was it lower than the AFE presented by Nearburg?

A. The bottom-line numbers on the -- If you compare the bottom-line numbers on the two AFEs, the Yates number is lower than the Nearburg numbers.

Q. All right. With respect to the issue of going ahead and drilling all the way to the Morrow first or drilling to the Canyon, producing it, and then re-entering it and drilling to the Morrow, do you have an opinion or any idea with respect to whether or not one alternative as opposed to the other would be cheaper or more costly or the risk higher or lower?

I hope you understood my question.

A. I hope you understand my answer.

Q. I'll take it for whatever it is.

A. You'll take it for whatever it is.

MR. STOVALL: Probably understand that better than the question, Mr. Boneau.

THE WITNESS: No, I think that the direct and the safer approach is to drill to the lowest target and start from there and complete your well on up from there.

Q. (By Mr. Carroll) In your experience, has that been the cheaper of the two methods?

A. Yes, that's normally cheaper. And anytime you run a liner, you're going to have a leaky liner and problems.

Q. The risks of re-entering the well, are they not also greater than drilling that well to the deeper depth originally?

A. Yes.

Q. Mr. Boneau, are there any other statements or opinions that you would like to render with respect to the exhibits that you've presented to the Commission?

A. No, sir.

MR. CARROLL: Mr. Examiner, I'd move the admission of Exhibits 11 through -- I believe it's 16?

THE WITNESS: Yes.

MR. CARROLL: -- 16.

EXAMINER CATANACH: Exhibits 11 through 16 will be admitted as evidence.

MR. CARROLL: I think I have moved admission of all of my exhibits.

I cannot remember if I did Mr. May's. If not, I move them all.

EXAMINER CATANACH: We will put them all in.

MR. CARROLL: All right.

MR. STOVALL: With respect to that, Mr. Bruce, I assume that Mr. Carroll is not moving the admission of your Exhibit 18?

MR. BRUCE: No, and --

MR. STOVALL: Unless you --

MR. CARROLL: No objection, no objection.

I'll pass the witness.

MR. BRUCE: I'll be pretty brief here.

CROSS-EXAMINATION

BY MR. BRUCE:

Q. As far as the AFE costs, Dr. Boneau, do you have any refutation of Nearburg's Exhibit 16 where it shows the average cost of the wells Nearburg has participated in in the Dagger Draw were over-run by -- any costs by 36 percent?

A. I saw that exhibit briefly. That's as much as I know, as I've seen of it, yes, sir.

Q. So you don't have anything to -- If you want to look at it. I mean, I'm just asking you if you have any evidence to refute the data shown on that exhibit.

A. My actual answer would be, I made a conscious decision about two weeks ago when we went over this, not to dig up details of the expenses that you charged us in the wells where you are our partner and -- not to look up this kind of stuff. I just think that you're going to get any answer you want, and I just didn't think it was worth going through that data.

Q. Are you aware that Santa Fe Energy Operating Partners has had an experience similar to Nearburg's in the Dagger Draw area, in Yates-operated wells?

A. I'm very aware that in the Pan Am Pardue hearing Nearburg -- or, I'm sorry, Santa Fe brought up in a little more detail a comparison of AFE and actual

costs. And in that time I addressed those issues and, at least in my mind, reconciled the numbers.

And the -- You asked this, and so, you know, in some sense you're getting into it. I have no way of saying that what I'm going to say about Santa Fe has any relation to your exhibit, you know.

But at that time the facts were that Santa Fe was counting as AFE cost some pump changes that were done three to six months after the well was completed.

It was counting some restimulation that was done three to six months after the well was completed.

It was counting some costs that were not applicable to the AFEs.

And there was some truth to the fact that the AFEs were -- that the costs were over AFEs, and that was mostly attributable to changing a casing program from the time the AFE was made to a more expensive and hopefully safer, environmentally sound, et cetera, casing program that was actually used when the well was drilled. Those kinds of things.

There were issues that, like I say, in my mind resolved that discrepancy.

I have no idea if any of that is applicable to the Boyd and the Boyd Hooper wells that are in your exhibit.

Q. Just like Nearburg and Yates had a difference of opinion, Santa Fe and Yates had a difference of opinion?

A. I'll agree to that, yes, sir.

Q. Now, as far as operators, even though Yates has re-entered a couple of wells in this immediate area, Yates isn't the only operator, is it? I mean, Nearburg has plans to re-enter, drill a few wells, Santa Fe Energy has similar plans?

A. When we had the hearing about the field rules, Nearburg people were here, Santa Fe people were here, some other people were here, and those people have acreage in the area that Brent May colored in green as the target --

Q. Okay.

A. -- Canyon producing area, yes.

And I expect that Nearburg will have some producing oil wells in the Indian Basin-Upper Penn Associated Pool.

Q. Now, I had a question on two of your wells. I think your Pardue Farms -- is that the name of it? -- ALV --

A. I call it Pan Am Pardue.

Q. Okay, Pan Am Pardue, fine. And then your Hickory well. On both of those now, they are completed

in the Cisco/Canyon, and it's shut in in the Morrow; is that correct?

A. The Hickory produced from the Morrow, was taken to the Morrow, it produced from the Morrow, it was shut in from the Morrow.

My memory is, it produced 200 million and has reserves of 250 million or something, based on pressures that I used to calculate reserves.

Anyway, it was shut in the Morrow.

Yates went up to test the Canyon, and all the rest followed.

Q. Now, on the Pan Am Pardue -- I want to use your terminology -- that one is producing in the Cisco and not in the Morrow?

A. That's correct.

Q. Okay.

A. It was deepened to the Morrow. The Morrow was tested briefly, and it's --

Q. All right, I just wanted to clarify that.

My question was, Do you have -- Does Yates have any experience in shutting in the Morrow for long periods of time in these wells and what might happen to the Morrow as a result?

A. Well, there are tales, somewhere between scientific fact and old wives' tales, that shutting in

the Morrow is dangerous, if that's what you're referring to.

Yates has experience where we've shut in the Morrow for extended periods of time and gone back and everything was fine.

Q. Did you plan --

A. I can't remember a bad experience, but I won't deny that there were bad experiences.

Q. Okay. Do you plan on -- Like with the Pan Am Pardue, do you plan on producing the Cisco/Canyon before you go back down to the Morrow?

A. Yes, the 400 barrels of oil a day is going to be better than 500 MCF of gas a day, yes, sir.

Q. Then one final issue I want to address, Mr. Boneau. On your Exhibit 13 you have the Exhibit with the electric lines and the water lines. And I think it's been mentioned in testimony, and you may be aware, that Nearburg does have a saltwater disposal well in the southwest quarter of Section 1, immediately offsetting the proposed unit. I think they may also have one in the southwest quarter of Section 35, immediately to the north.

What would be the comparative cost? I mean, couldn't it be as cheap or cheaper just to use those immediately offsetting saltwater disposal wells, rather

than extending these disposal lines?

Not only just the cost -- that cost itself, but what is the cost of operating this whole 8-inch gas, 8-inch water line that goes up to Dagger Draw, as opposed to just having a smaller system right in this immediate area?

A. I'd like to give you a couple answers.

We had a big disagreement in our company whether to oppose that Nearburg saltwater disposal application. And I guess saner has prevailed, but we do question the wisdom of injecting water that close to your producers.

As far as the costs go, our estimates are that the costs of handling water and gas are going to be comparable or less than the 40 cents a barrel that one of your papers mentions.

But I will admit that if we have three producers in this area, the costs are going to be high. If we have 25 producers in this area, the costs are going to be 20, 25 cents a barrel of water, and they're going to be as cheap or cheaper than Nearburg's.

Our plan is obviously for a bigger-scale development than your one SWD well is, and I don't know what the outcome will be, I don't know which of those approaches is right. But they're different approaches.

MR. BRUCE: I don't have anything further, Mr. Examiner.

EXAMINER CATANACH: I just have one question of Mr. Boneau.

EXAMINATION

BY EXAMINER CATANACH:

Q. Could you give me an estimate -- and I know it may be rough doing so -- but the incremental cost of drilling to the Morrow as opposed to stopping at the Cisco/Canyon?

A. I should know that better than I know. I'd say $150,000. $125,000 to $175,000.

Q. $125,000 to $175,000, somewhere in that range --

A. Somewhere in that range.

Q. -- approximately?

A. Yes, sir.

EXAMINER CATANACH: That's all I have.

MR. CARROLL: I have no further witnesses.

EXAMINER CATANACH: Nothing further, Mr. Bruce?

MR. BRUCE: Nothing further, Mr. Examiner.

EXAMINER CATANACH: Would you like to make brief closing statements, Counselors?

MR. CARROLL: I don't see any need for that.

Do you, Mr. Bruce? Do you want to?

If you get to say something, then I'll have to have a response.

MR. BRUCE: I would like to, Mr. Examiner.

EXAMINER CATANACH: Oh, okay, Jim, you can.

MR. BRUCE: I know you're just thrilled to extend the day.

EXAMINER CATANACH: Yeah.

(Off the record)

MR. BRUCE: I think as Mr. Stovall said up front, Mr. Examiner, there's two issues:

Are we going to have standup or laydown units?

And, who's the operator?

Frankly, Nearburg has an approved APD for the west half and will commence the Cisco/Canyon re-entry shortly.

Our position is that the southwest quarter is not available in the Cisco/Canyon or Yates --

MR. STOVALL: Mr. Bruce, let me ask you one question on that, and it is a legal question so I don't mind interrupting you.

MR. BRUCE: Sure.

MR. STOVALL: If the Division were to grant Yates's Application -- The land witness has testified

the interests are equal; there's no reason that couldn't be changed, is there, legally speaking?

MR. BRUCE: As far as an interest ownership standpoint?

MR. STOVALL: Correct.

MR. BRUCE: That is correct. But I think it goes beyond that.

I think Nearburg could form a north-half or west-half unit. That was my next point. It thinks the west half has better geology as far as the Cisco/Canyon goes. That's its basic reason, and I think that's a reasonable justification.

Cisco/Canyon is structurally higher, and it would rather do it in that fashion.

It seems Yates's primary reason for having south-half/north-half unit is based on the Morrow.

I just think that's too risky.

You look at the maps, the nearest Morrow well is the -- what is now a saltwater disposal well, the Nearburg MH Federal Number 1 well in the southwest quarter of Section 1. It was non-productive, and it was wet. Why would you want to be drilling two Morrow wells in the east half? We just don't see it.

As far as who goes to be the operator, I mean, Yates comes in and every hearing I'm at, it says

it operates X wells in the area or X wells in the state.

Well, you know, there's plenty of fine operators in the state.

The fact of the matter is, in this immediate area Nearburg is the major lessee. It has operations to the north, south, east and west. It owns 80 percent of this section -- it's an oversize section -- and it is by far the major interest owner in this section.

It has available saltwater disposal wells which are necessary because of the Cisco/Canyon producing large amounts of water.

And all those reasons, we think, militate in favor of naming Nearburg as the operator. We just see no reason to change the units that Nearburg has already gained approval of.

Thank you.

EXAMINER CATANACH: Mr. Carroll?

MR. CARROLL: In response, Mr. Examiner, I think that the issues have been very well delineated. Where do we put our proration units, and who operates?

The fact that there is an approved APD, I think, is totally irrelevant to that issue with respect to these two Applications. Just the way it was obtained and the question with respect to this one well

being in a very unorthodox position.

Nearburg first went after a north-half because that would have put it in an unorthodox location, and it could have had a better change of draining the location, and I think you ought to give some significance to it.

What happened is, I think Nearburg realized if he gerrymandered the proration units he could probably make an attempt to operate every swell in that section.

When Mr. Bruce draws or tries to call for some significance to the fact that Nearburg is a major lessee in this section, I think that calls for you giving some recognition to the fact that Yates is also a lessee in this section, and it has a right to drill a well on its acreage, and it is apparent that Nearburg is just trying to take that right away so that they can't operate any well on its acreage.

So -- And then when you throw in this, I guess, emotional language of Nearburg that it's too risky, what's too risky? There's not a risk one wherever you drill this well to the Morrow, to the Canyon. That is apparently the only considerations of Nearburg.

We're not risking anything that belongs to

Nearburg; all we're trying to do is ensure that Yates gets to test its mineral rights or its right to explore fully.

And with respect to doing the standups, its idea is very reasonable.

If that well pans out -- and there's good indication, good geological testimony to indicate that it could very well pan out -- the best way to drain that formation would be to have two wells drilled, one in the north half and one in the south half.

And again, the whole reason we're here is the consideration of waste and the protection of correlative rights. And that kind of information goes directly to it, and I think that's what's got to be controlling.

There's no doubt, Mr. Examiner, that this is not a case that has a whole bunch of factors that just cry out. It's pretty well evenly divided, and I think you're going to have to split the baby somewhere down the way so that everybody gets a fair chance to do what is reasonable out here and is not just motivated by their own self-aggrandizement or greed.

We need to think about the natural resources here, do what's reasonable with respect to the full development of them, and let everybody have a chance to

develop its rights.

That's the consideration, and that's all you're faced with.

Thank you.

EXAMINER CATANACH: Thank you, Mr. Carroll.

Is there anything further?

There being nothing further, Case 10,788 and 10,790 will be taken under advisement.

(Thereupon, these proceedings were concluded at 6:10 p.m.)

* * *

I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case No. 10788, 10790 heard by me on August 12 1993.

David R. Catanach, Examiner
Oil Conservation Division

CERTIFICATE OF REPORTER

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

I, Steven T. Brenner, Certified Court Reporter and Notary Public, HEREBY CERTIFY that the foregoing transcript of proceedings before the Oil Conservation Division was reported by me; that I transcribed my notes; and that the foregoing is a true and accurate record of the proceedings.

I FURTHER CERTIFY that I am not a relative or employee of any of the parties or attorneys involved in this matter and that I have no personal interest in the final disposition of this matter.

WITNESS MY HAND AND SEAL September 14th, 1993.

STEVEN T. BRENNER
CCR No. 7

My commission expires: October 14, 1994