STATE OF NEW MEXICO

ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION :

MAY /

IN THE MATTER OF THE HEARING CALLED BY THE OIL CONSERVATION DIVISION FOR THE PURPOSE OF CONSIDERING:

APPLICATIONS OF NEARBURG EXPLORATION COMPANY AND YATES PETROLEUM CORPORATION case Nos. 11,233 and 11,234 (Consolidated)

REPORTER'S TRANSCRIPT OF PROCEEDINGS

EXAMINER HEARING

BEFORE: DAVID R. CATANACH, Hearing Examiner

April 7th, 1995 Santa Fe, New Mexico

This matter came on for hearing before the Oil
Conservation Division on Friday, April 7th, 1995, at the
New Mexico Energy, Minerals and Natural Resources
Department, Porter Hall, 2040 South Pacheco, Santa Fe, New
Mexico, before Steven T. Brenner, Certified Court Reporter
No. 7 for the State of New Mexico.

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* * *

WHEREUPON, the following proceedings were had at 1 1:30 p.m.: 2 EXAMINER CATANACH: Call Case 11,233. 3 MR. RAND CARROLL: Application of Nearburg 4 5 Exploration Company for compulsory pooling, Eddy County, New Mexico. 6 Are there appearances in this 7 EXAMINER CATANACH: 8 case? 9 MR. KELLAHIN: Mr. Examiner, I'm Tom Kellahin of the Santa Fe law firm of Kellahin and Kellahin, appearing 10 on behalf of the Applicant, and I have four witnesses to be 11 12 sworn. 13 EXAMINER CATANACH: Additional appearances in 14 this case? MR. CARROLL: Mr. Examiner, I'm Ernest Carroll of 15 the Artesia law firm of Losee, Carson, Haas and Carroll, 16 and I'm here today on behalf of Yates Petroleum. 17 We are in opposition to the Application of 18 Nearburg Exploration, and I have three witnesses. 19 EXAMINER CATANACH: Okay, it's my understanding, 20 21 gentlemen, that we are going to hear this case in conjunction with Case 11,234; is that correct? 22 MR. KELLAHIN: Mr. Examiner, I would so request, 23 and seek to have Case 11,234 consolidated with this case 24 for purposes of taking testimony. 25

1	EXAMINER CATANACH: At this time we'll call Case
2	11,234.
3	MR. RAND CARROLL: Application of Yates Petroleum
4	Corporation for compulsory pooling, Eddy County, New
5	Mexico.
6	EXAMINER CATANACH: Are there additional
7	appearances in either of these cases?
8	There being none, can I get the witnesses in
9	these cases to stand and be sworn in?
10	(Thereupon, the witnesses were sworn.)
11	MR. KELLAHIN: Call Mr. Bob Shelton, Mr.
12	Examiner.
13	ROBERT G. SHELTON,
14	the witness herein, after having been first duly sworn upon
15	his oath, was examined and testified as follows:
16	DIRECT EXAMINATION
17	BY MR. KELLAHIN:
18	Q. Mr. Shelton, for the record, sir, would you
19	please state your name and occupation?
20	A. Robert G. Shelton. I'm a landman with Nearburg
21	Exploration Company.
22	Q. On prior occasions have you testified before the
23	Division and qualified as an expert in the area of
24	petroleum land management?
25	A. Yes, sir, I have.

1	Q. With regards to the two pooling cases that are
2	involved before the Examiner today that involve a spacing
3	unit in North Dagger Draw, would you describe for us
4	whether or not you had any involvement in the land portion
5	of those transactions?
6	A. Yes, sir, I've been intimately involved in the
7	preparation of these exhibits and working on the case and
8	the proposals to Yates Petroleum and their companies.
9	MR. KELLAHIN: We tender Mr. Shelton as an expert
10	petroleum landman.
11	EXAMINER CATANACH: He is so qualified.
12	Q. (By Mr. Kellahin) Mr. Shelton, to orient the
13	Examiner, let me have you turn to what we've marked as
14	Nearburg Exhibit 1. It's identified as a locator map.
15	What is the source of this map?
16	A. This is a map I prepared to simply identify where
17	the land is in conjunction with the more established area
18	of the Upper Pennsylvanian-Dagger Draw North Pool.
19	As you can see, on the left side of the map is
20	the main body of the pool.
21	And then where it says Fairchild 13 Number 2
22	well, shows a round open circle which indicates Nearburg
23	Exploration Company's proposed location, which is the

The red boxes in here are only to identify areas

subject of this compulsory pooling.

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on which Nearburg and Yates have operations where Yates is the operator of those 160-acre units.

And we'd like to point out that in those units

Nearburg Exploration Company has anywhere from a fivepercent to a 50-percent interest, and by virtue of its

voluntary agreement with Yates, none of those units have
been pooled, and we've been agreed in the past voluntarily
to participate in those wells without being before the

Commission in those units.

- Q. What were the basis for Nearburg's agreement to consent on a voluntary basis for a solution concerning operatorship for those other six spacing units?
- A. Operations in the area and also division of ownership.
- Q. All right. In these other six spacing units,
 Yates collectively had a larger percentage than Nearburg?
- A. All except for one, which is the Boyd "X" spacing unit, where it's 50-50.
- Q. Okay. When we get over to the southeast of the southwest quarter of 13, farther to the east of this display, there's the words "Fairchild 13 Number 2". What does that reference?
- A. That references Nearburg's proposed well name for the well that's shown by the circle on the map, 1980 from the west, 660 from the south of Section 13.

1	Q. The proposed location that Nearburg is requesting
2	is 1980 from the west and 660 from the south?
3	A. That is correct.
4	Q. And are we within what the Division currently has
5	established to be wells subject to the rules and
6	regulations of the North Dagger Draw-Upper Penn Pool?
7	A. I believe we are. Our well in the northwest
8	quarter of Section 24, a completion report has been filed
9	on it for the Cisco/Canyon and the Dagger Draw North-Upper
10	Pennsylvanian Pool, and we are within one mile of that
11	completion report filing.
12	Q. So we can keep the well names separate between
13	the two companies' proposals, yours is the Fairchild 13-2?
14	A. Right.
15	Q. And how do we know the Yates' naming of their
16	proposed wells?
17	A. Their name for the well is the Bert APB, I
18	believe, Number 1.
19	Q. Okay. Is there a difference in location between
20	the two operators or the two proposed operators?
21	A. Yes, there is. Their location is 660 out of the
22	south and west.
23	Q. You have testified before the Division in other
24	compulsory pooling matters involving Yates and/or other
25	companies?

A. Yes, sir.

- Q. As part of that process, do you normally prepare an ownership map?
 - A. Yes, sir, I do.
- Q. Describe for us the information you utilize to develop an ownership map.
- A. Initially we use the ownership reports prepared by field land personnel, and in addition to that, in this case, we have received two title opinions rendered by Mr. Rudy Woerndle of Midland, Texas, which we used to prepare the ownership exhibit you see before you.
- Q. All right, sir. Let's turn to that ownership display. It's marked as Nearburg Exhibit Number 1 -- I'm sorry, Exhibit 2, is it?
 - A. Correct.
- Q. All right. The size involved here includes what?

 The --
- A. The diagram indicates a 160-acre spacing unit for the proposed well in the Dagger Draw North-Upper Pennsylvanian Pool.
- Q. All right. Based upon the available information you had concerning the division of interests, what have you displayed?
- A. I've displayed the current ownership of record and the current ownership as set forth in Mr. Woerndle's

- title opinions, representing Nearburg Exploration Company to have 66.67 percent, Yates Petroleum Corporation 23.33, Yates Drilling 3.33, Abo Petroleum Corporation 3.33, and Myco Industries 3.33, with a total 100-percent ownership.
- Q. This is -- How would we make the conversion to a working interest percentage for participation in and paying for the costs of the well?
- A. Nearburg Exploration Company would have twothirds interest. The Yates Companies would have one-third.
- Q. Off the record and prior to the hearing, the attorneys involved and the Examiner with Division Counsel discussed what has been characterized as a disputed interest with regards to a lease that was once held by Yates from a particular individual named Walter Holmquist, I think it is.
 - A. That is correct.

- Q. All right. Does this calculation at this point include a resolution of that disputed lease interest?
- A. This calculation represents Nearburg to have ownership of that particular interest, which changes our interest from 50 percent to 66.67 percent.
- Q. All right. So the disputed lease interest from Holmquist under this spreadsheet, is attributed to the Nearburg interest?
 - A. That is correct.

Q. All right. Let's turn now to the chronology, if you will, of your activities concerning the well.

Give us your first recollection of the initial contact by either party concerning a well as an additional well in this spacing unit.

- A. The first contact or proposal that was received on this well was -- The proposal was made by Yates

 Petroleum Corporation. It was received by us on March 3rd,

 1995, and it proposed their well, the Bert APD, I believe,

 and their proposal was 660-660.
- Q. Prior to that proposal, do any of the workinginterest owners have a producing well in this pool, in this spacing unit?
 - A. Not in this spacing unit, no.
- Q. So currently, as we speak today, this 160-acre spacing unit does not yet have a Cisco/Canyon well in it?
 - A. That is correct.

- Q. What, if anything, did you then do, Mr. Shelton, concerning the proposal by Yates for a well in the southwest quarter of this section at their proposed location?
- A. We reviewed their proposal, we looked at their location and determined that their location would be a significantly higher risk than the one we would prefer to drill.

We on March 7th sent a well proposal of our own to Yates Petroleum and the other working interest owners of the Yates entities, proposing our location 1980 from the west, 660 from the south.

Both of them are Cisco/Canyon locations, approximately 8000 feet.

- Q. Other than negotiations between Nearburg and the Yates Companies collectively -- I'll refer to them as "Yates" for simplicity -- are there any other working interests involved in the negotiating process?
 - A. No, there's not.
- Q. After sending your proposal to Yates, which was the March 7th date --
 - A. Correct.

- Q. -- did you have further discussion, negotiations or responses from Yates about your proposal?
- A. Yes, I did, I talked to Yates personnel one other time on another matter, which was a communitization agreement on another well drilled in the Dagger Draw field, and at that time I proposed that this case be settled, that we, Nearburg, be allowed to operate the well.

And in exchange, there is a compulsory pooling filed by both parties in the northeast quarter of Section 24, which -- I will refer back to the Exhibit 1 map -- is a direct offset diagonally to the southeast of the subject of

this hearing, which covers the northeast quarter of Section 24, and --

Q. All right, let me stop you right there.

In the northeast quarter of 24 to the south is another proposed 160-acre spacing unit for production from this pool?

- A. From the same source of supply as the Cisco/Canyon, same spacing and same field rules.
- Q. All right. And Nearburg and Yates have competing pooling cases on file with the Division for operations in that spacing unit?
 - A. For April 20th docket.
 - Q. All right.

A. And I simply suggested, and by this letter which evidences the same, I requested that we voluntarily agree to settle both these hearings and not bring them before the Examiner.

Nearburg would operate the one in the southwest quarter, because we had the superior working interest, and also in the northeast quarter we were allowing Yates to operate, although they do not necessarily have the superior interest. There's -- That interest is broken up between the Johnsons, the Lodewicks and other people who are currently unleased, which I'm assuming both sides are attempting to lease.

It is unknown at the time of that hearing who will have the larger working interest.

Regardless, Nearburg is willing to acquiesce to their operatorship in the northeast quarter in exchange for their agreement to let us operate the southwest quarter and do away with all these hearings completely.

- Q. That information is set forth on your Exhibit
 Number 3?
 - A. Yes, it is.

- Q. And this is a letter that you wrote?
- A. That is a letter that I prepared and wrote and sent to Doug Hurlbut, Yates Petroleum.
- Q. Were you able to initiate a solution on a voluntary basis between Yates and Nearburg with regards to this well, based upon this proposed solution?
- A. No, there was no -- I talked -- There was no written response at all to this proposal.

I talked to Douglas Hurlbut about a week later and asked him if there was any response from them.

And they said no, that he -- I was again talking to him on another subject. I brought this up, and he said no, there was not -- there wasn't any response to it, that it wouldn't be settled, it would go before the Division.

Q. You described earlier the indication that this current exploration in Dagger Draw was some distance from

the main Dagger Draw development that was occurring to the 1 2 west? That is correct. 3 Α. What is the approximate distance between the main 4 0. 5 Dagger Draw and what we're now seeing --

- A. It's approximately --
- -- in this area? Q.

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- Well, from the main development of Dagger Draw, it's four miles from the -- three to four miles from any existing main production in the field.
- Have you prepared, Mr. Shelton, a display or a Q. map to show the various activities by Nearburg, Yates and others in this particular area so that we can see the status of the development?
- Yes, I have. It's shown as Exhibit 4, which is a Α. base map, and I'll go through it very briefly.
- All right, give us a chance to unfold it, and Q. then we'll have you talk about it.
- This exhibit simply sets forth the areas centered Α. around Section 13. Again, in Section 13, 19-25, you can see the location symbol location and Fairchild 13 Number 2 well description.

What this does is show the area of wells right around here. Again, the main portion of the Dagger Draw field is off to the west. This shows the activity in the area conducted over the recent -- over years by Nearburg.

On the right, southeast part of this map, you can see --

- Q. Let me get myself oriented here. In Section 13, the symbol that you've displayed here is the Fairchild 13-2?
- A. Our location that we have proposed for this hearing, that's correct.
- Q. All right, what is the source of the information that you have put on this display?
- A. The information is our drilling well records and oil and gas lease records from actual operated wells that Nearburg has done since 1985 -- 1984, 1985 -- in this immediate area.
 - Q. How current is this information?
 - A. It's within the last 30 days, 60 days.

The last well we drilled out here, as you can see in Section 24, is the Fairchild 24 Number 1 well, which is a well that Nearburg operates, which is the direct offset to the spacing unit proposed in this hearing. We operate that well. That well was completed in February of 1995. That's the last activity that I'm aware of -- That is the last activity I'm sure of by Nearburg in this area.

Q. All right. Give us a relationship of the various operators' activities. Do you have a way to tell us which

of these wells, if any of them, are operated by Yates or any of the Yates entities?

A. As -- I'm not an expert on the Yates wells which they operate in the area. I know they have wells in Section 3, they have one well in Section 15 and one well in Section 14. I'm not sure of other wells they have in the area.

Nearburg, in this area, as you can see by the map, is operated, drilled -- is either dry and abandoned or currently has producing in excess of 17 wells in this immediate area and has a lot of experience, both in operational and in geologic land areas in this immediate area.

Our first least in this area of an activity was taken on February 9th, 1981, as displayed on the map, and we have constantly been very active in this area in leasing and in drilling since that day.

Q. Let's turn to the specifics, now, Mr. Shelton, of your proposal back to the Yates entities.

What is your first written communication to Yates that specifically identifies this well proposal by spacing unit and by well location?

A. Our proposal was made to Yates, again, in response to their proposal of their location, received by us March 3rd.

Our letter was mailed March 7th, 1995. 1 As shown on the green card, it was received by Yates on March 8th, 2 1995. 3 We proposed a location of 1980 from the west, 660 4 from the south in Section 13. 5 We've also submitted with our proposal an AFE 6 estimating the costs to drill and complete the well and an 7 operating agreement by which we designate Nearburg 8 9 Producing Company as the operator. This letter is a copy of the original. 10 Q. The original was executed by you? 11 Yeah, on the second page is the original executed 12 It for some reason didn't copy well, and so I made 13 an extra copy of it just for the text of the letter. 14 15

All right. Did you transmit, then, with your Q. well proposal an itemized estimate of well costs for Yates' consideration?

- Yes, we do. We have an AFE which Mr. McDonald Α. will go through here briefly, which was prepared by him, estimating the cost of the proposed operation.
- Q. And that submittal also included a proposed operating agreement for the parties' consideration?
 - Yes, it did. Α.

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Okay. Let me direct your attention back to Q. Exhibit Number 2. You've identified the potential

interests of the parties with what we now believe to be a disputed interest by Yates for what I will characterize as the Walter Bert Holmquist lease? Α. Correct. Have you taken a lease from Mr. Holmquist? Q. Yes, we have, and it is recorded in Eddy County. Α. For what percentage interest within the spacing Q. unit have you taken that lease? That interest of Mr. Holmquist covers one-sixth Α. interest in the southwest quarter spacing unit. Within the southwest quarter spacing unit, are Q. all the interests undivided among that spacing unit? Yes, sir, they are. Α. If we exclude from both parties' ledger, if you 0. will, the disputed Holmquist interest, how would the percentages change on Exhibit 2? On Exhibit 2, if you take the one-sixth interest Α. away from us, we would have 50 percent. And assuming Yates does not have that one-sixth interest either, their interest would be one-third. Totaling 83.33 percent, the remaining interest not taken into consideration, Nearburg would still have the majority

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interest in the spacing unit.

MR. KELLAHIN: Mr. Examiner, at this point in the

Number 6, and at this point I'll make a tender of proof.

Prior to the hearing there was discussion with the Examiner about this issue, and I propose that we might solve your -- this issue by a tender of proof, and I would propose to ask this witness at this point the chronology of events and sequences with regards to Nearburg taking the disputed lease interest, their knowledge and notice about whether or not Yates still had a lease recorded or otherwise concerning that interest.

I understand there's an objection forthcoming to this, and in terms of efficiency, we would request at this point that the chronology would substantially refer to my tender of proof as to this matter, and it's set forth on Exhibit 6.

EXAMINER CATANACH: Would you still cross- -- Would you still examine your witness about this evidence, Mr. Kellahin?

MR. KELLAHIN: Not at this point, Mr. Examiner. If there's an objection and if you should sustain the objection, then Mr. Shelton and I will go on to other topics.

MR. ERNEST CARROLL: I'm confused. Mr. Kellahin, do you intend to put on Mr. Woerndle to testify to the title opinion also?

MR. KELLAHIN: I do so.

MR. ERNEST CARROLL: What then is Mr. Woerndle going to testify to? Because it seems like -- I don't now what I'm objecting to and what I'm cutting myself off from cross-examining.

What do you plan to do with Mr. Woerndle?

MR. KELLAHIN: I propose to call Mr. Woerndle,

Mr. Examiner, to authenticate the two title opinions that

are Nearburg's proposed Exhibits 7 and 8.

I will ask Mr. Woerndle, based upon his inspection of the record, what is his professional opinion as an oil and gas title examiner as to the various interests.

I will then ask him to take into consideration the disputed lease that is of concern to Mr. Carroll, and we will do the calculations accordingly with his testimony. But I will have him authenticate the title opinions.

The difference here is that Mr. Shelton has information concerning whether or not Nearburg had knowledge and information about a lease that Yates has taken from Holmquist but did not place of public record, and the issue then becomes one of whether or not there was any actual notice by Nearburg of the lease that Yates failed to record.

It is that topic that you have advised me that you don't want to address, and so my purpose is to

construct the presentation so that that issue has been carefully separated from the other issues that you've decided you wanted to hear.

MR. ERNEST CARROLL: Mr. Examiner, I think what we've got here is six one way, half a dozen the other.

One, normally we don't call attorneys to testify as to the ownership or the need to authenticate a title opinion.

Mr. Shelton has already testified as to the numbers and what it would be with different -- the ownership.

By putting on the authentication, we are getting into the issues which this Division cannot or does not have the jurisdiction to decide. It is unnecessary, and basically it is redundant.

I will stipulate that this is Mr. Woerndle's title opinion. I have no problem with it.

I cannot stipulate that these actions occurred on this chronology of things, nor are they necessary to this hearing. Again, these go to the issue of whether or not there's a valid lease, who had notice, all of those issues of that determination.

Mr. Shelton has testified that it is his opinion, if you -- as to what they have, and whether -- and it's based on -- and it's already acknowledged there's a

contested issue.

That's all this Commission [sic] needs to know, and that's stipulated to.

There is a contested issue as to 16 percent, and it will have to be dealt with differently. The Division will have to fashion an order to that, to -- how to handle that upon the resolution of that disputed ownership. We don't need to get into that.

And so, one, I'm going to object to any -- I object to any further testimony about this fact, but I'm not going to -- If there's a tender, I have to be able to tender my objections to these things.

I think this is ridiculous, and we're getting farther and farther afield, and I think this is the point that we were discussing earlier.

MR. KELLAHIN: I'm going to try one more time,
Mr. Examiner, see if I can make this abundantly clear to
Mr. Carroll.

The reason that this Exhibit 6 is presented to you is because all the topics that are addressed in this go to the issue of the disputed interest, and I'm not stipulating to anything.

What I'm doing is offering you a tender of proof, and you as an Examiner have to make a decision.

If you accept my tender of proof, then we're

going to talk about this disputed interest.

If you reject my tender of proof, then I have the tender in writing as an exhibit that I can show to any appellate body on that issue, and I have carefully preserved it so that we don't have to go through this discussion more than a few more minutes.

And if you rule against me, then we move on to the next issue. And that's how I see us doing this.

MR. ERNEST CARROLL: I will object, then, to his tender of proof, and I will -- If that is sustained, my objection, then I will likewise tender during my case just some admission of exhibits to be considered with respect to that, and we won't have any testimony, and I can live with that.

MR. RAND CARROLL: Well, Mr. Kellahin, your tender of proof is just Nearburg's version of what happened during this oil and gas lease, right?

MR. KELLAHIN: Exactly right, Mr. Carroll.

MR. RAND CARROLL: And Exhibits 7 and 8 are title opinions rendered by Mr. Woerndle; is that correct?

MR. KELLAHIN: Yes. And those title opinions, now, are going to deal with the entire title. And when I call him, I will separate out of my discussion with him the disputed interest.

MR. RAND CARROLL: Mr. Carroll has agreed to

stipulate to the authenticity of these two title opinions. 1 2 I guess I don't understand why we have to get into the title opinions. 3 MR. KELLAHIN: So that you will recognize how to 4 calculate out the disputed interest and how you apportion 5 6 the remaining interests that are not in dispute. MR. RAND CARROLL: Didn't Mr. Shelton just 7 testify as to that? 8 9 MR. KELLAHIN: He did, based upon his testimony as a landman as to that issue. 10 But I think I'm still entitled to call the expert 11 in that area, to say that yes, this is what he's done. 12 And that's also my proposal. And if you decide 13 that I cannot do that, you'll need to decide accordingly. 14 But I do not propose to withdraw Mr. Woerndle as 15 16 a witness. MR. RAND CARROLL: Mr. Carroll, do you have any 17 disagreement with Mr. Shelton's testimony, other than the 18 19 one-sixth interest that's in dispute? 20 MR. ERNEST CARROLL: As to the ownership, there 21 is a 50-percent ownership in Nearburg, which we recognize that they own. And if that's what you just asked me, no, 22 23 we do not dispute that 50 percent. 24 The only thing in dispute with Exhibit 2 that Mr. Shelton has presented is the ownership of the Holmquist 25

interest. We contend we own it, they contend they own it. 1 That's -- All of the rest of the ownership, we are in 2 complete agreement with Mr. Shelton's testimony. 3 EXAMINER CATANACH: Mr. Kellahin, will your 4 witness describe a different interest than has been 5 described by Mr. Shelton in regards to the interest 6 7 ownership in the disputed interest? MR. KELLAHIN: No, sir, Mr. Woerndle will testify 8 consistently with Mr. Shelton's opinion, and the 9 calculation is as Mr. Shelton has represented it to you. 10 EXAMINER CATANACH: Well, then, why do we need to 11 hear his testimony? If you agree with Mr. Shelton, why do 12 13 we need to hear it again? MR. KELLAHIN: If you decide that you don't want 14 to hear it, that's your decision. I submit to you that 15 he's here to be called as a witness to authenticate the 16 exhibit. He's certainly well within your --17 MR. RAND CARROLL: Mr. Carroll has already 18 19 stipulated as to the authenticity of the exhibit. 20 MR. KELLAHIN: And then all you have to do, now, 21 is decide that you do not need to hear Mr. Woerndle's testimony, because it is cumulative. And that is the 22 23 ruling from the bench that I would recommend. 24 MR. RAND CARROLL: That's what I recommend too. 25 EXAMINER CATANACH: We're going to rule thusly,

Mr. Kellahin. 1 MR. KELLAHIN: As I've suggested? 2 EXAMINER CATANACH: As you've suggested. 3 MR. KELLAHIN: All right, sir. 4 To make the record clear, I understand there's an 5 objection to the chronology, because it gets into a 6 disputed subject matter for which there is an objection. 7 That's my tender of proof, and I would suggest 8 that it's timely now for the Examiner to rule that he will 9 10 not consider the issues as described in a summary fashion on Exhibit 6, and then we can move on. 11 12 (Off the record) MR. RAND CARROLL: Mr. Kellahin, so you're 13 offering Exhibit Number 6 into the record, now, as an 14 exhibit? 15 MR. KELLAHIN: I am offering it as a summary of 16 my tender of proof, rather than sit here and read it to you 17 as a tender of proof. 18 I know there's an objection to it, and I suggest 19 your solution is simply to take it as a tender of proof and 20 direct me not to engage in this topic. 21 MR. RAND CARROLL: Rule thusly. 22 MR. ERNEST CARROLL: As I understand it, he's 23 24 asking that the exhibit be admitted for the limited purpose

of being a tender of proof, and I don't object to that.

EXAMINER CATANACH: Okay, we will accept that 1 exhibit as a tender of proof --2 MR. KELLAHIN: All right, sir. 3 4 EXAMINER CATANACH: -- and I will direct you to 5 discontinue your line of questioning on it. 6 MR. KELLAHIN: Thank you, sir. (By Mr. Kellahin) All right, Mr. Shelton. 7 0. 8 preparing the joint operating agreement and comparing it to 9 the one submitted to you by Yates, are there any material differences between you and Yates within the context of the 10 forms themselves, excluding all the attachments? 11 There is some differences. Ours is a 1982 form. 12 As I remember, you all's submission is a 1977 form. 13 There's some inherent differences in the form. 14 There's differences also in Exhibit A, which sets 15 forth, again, the interest that we believe we own, versus 16 the interest that Yates submitted under their operating 17 18 agreement. 19 And on Exhibit C there was a very slight 20 difference in the overhead rate charged -- proposed to be 21 charged for the drilling well rate between the two 22 operating rates. Give us the two choices on the drilling and 23 Q. 24 producing well rates.

As I remember Yates', their producing-well rate

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Α.

was \$540, and on our producing well rate it is \$540.

Drilling well rate on our operating agreement is \$5640; and as I remember their drilling well rate, it was \$5400.

- Q. Is that difference a matter of significance to you on behalf of Nearburg and how this case should be resolved?
 - A. It is insignificant.

- Q. When we look at the differences in form, is it a matter of significance to you as a landman, to which form the Division directs the parties to apply in terms of handling this transaction?
- A. We prefer the 1982 form, Yates prefers the 1977.

 The Division doesn't require execution of the operating agreement at all, so I don't think that's a matter even of -- a reason to be discussed.
- Q. If operations are awarded to Nearburg, then for those issues that are not resolved in a pooling order, do you propose to operate as if you were subject to the 1982 form or the 1977 form?
 - A. The 1982 form.
- Q. All right, sir. Let me direct your attention now to Exhibit Number 7. Would you identify this information?
- A. Exhibit Number 7 is a supplemental drilling title opinion prepared by Mr. Rudy Woerndle of Midland, Texas, who is a certified oil and gas attorney for New Mexico.

What does this document supplement, Mr. Shelton? Q. 1 It supplements Exhibit Number 8, which is a title 2 Α. opinion dated January 26th, 1995, done also by Mr. 3 Woerndle, as to the south half of Section 13. 4 We had this title opinion supplemented, dated 5 March 23rd, 1995, for the purpose of ownership as to the 6 southwest quarter only, which is the subject of this 7 hearing. 8 Exhibit 7, then, would be apportioned to the 9 Q. southwest quarter of 13? 10 That is correct. 11 Α. When we look at the title opinion, have you 12 relied upon this title opinion in your testimony with 13 regards to how you prepared and presented Exhibit Number 2? 14 It is the basis from which I prepared it. 15 Α. Let's turn to page 2. When this title opinion is 16 Q. summarized, how did you go about extracting from the 17 calculation or summary of interest the disputed interest? 18 If I were to extract the disputed interest, I 19 would deduct it from both parties, since it's unresolved. 20 And in doing so, it would leave Nearburg Exploration 21 Company with a 50-percent interest and Yates Petroleum, et 22 23 al., with a one-third interest. Since it's in dispute, it is only fair that it be 24

taken from both parties, because it will be the subject of

1	litigation, and it cannot be credited to either.
2	Q. If you do that, then the change to make on page 2
3	in the summary of the working interest would leave all the
4	Yates interests unchanged at that point?
5	A. That is correct.
6	Q. And to subtract it arithmetically
7	A from Nearburg
8	Q from the Nearburg's interest, and that would
9	reduce the 66 2/3
10	A. Fifty percent
11	Q to 50 percent?
12	A and yield a sum of 83.33 percent.
13	MR. KELLAHIN: All right, sir. That concludes my
14	examination of Mr. Shelton.
15	We move the introduction, with the exception of
16	Exhibit 6, which has already been ruled on, of Exhibits 1
17	through 5, and then Exhibits 7 and 8.
18	EXAMINER CATANACH: Any objections, Mr. Carroll?
19	MR. ERNEST CARROLL: No.
20	EXAMINER CATANACH: Exhibits 1 through 5 and 7
21	and 8 will be admitted as evidence.
22	Mr. Carroll?
23	CROSS-EXAMINATION
24	BY MR. ERNEST CARROLL:
25	Q. Mr. Shelton, looking at your Exhibit Number 1,

your locator map --1 2 Α. Yes, sir. -- the 160 proration unit just directly south of 3 Q. the area where we are now involved in looking at, which 4 would be the northwest quarter of Section 24, you operate a 5 well in that section, do you not? 6 7 We operate that proration unit. All right, and a well -- The Fairchild Number 1 8 0. well is drilled in that proration unit; is that correct? 9 That is correct. 10 Α. Yates Petroleum owns an interest in that well, do 11 Q. 12 they not? Yes, they do. 13 Α. They have approximately a one-eighth working 14 Q. interest; is that correct? 15 I believe with the interest they acquired from 16 17 Harvey E. Yates, they do have that interest, if I'm not 18 mistaken. 19 0. Now, Mr. Shelton, just prior to the time of the proposal of -- the two proposals in March, there was 20 21 actually an earlier proposal for a well to be drilled in the southwest quarter of Section 13, was there not? 22 23 Yes, there was. Α.

And that's dated in December of 1994?

That may very well be so.

24

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Q.

Α.

1	Q. And it was a proposal by Nearburg to drill a
2	Morrow test in the southwest quarter of Section 13?
3	A. That is correct.
4	Q. Yates You had conversations with Yates
5	Petroleum concerning the drilling of a Morrow well in the
6	southwest quarter of Section 13 during the latter part of
7	1994 and the early part of 1995?
8	A. That is correct.
9	Q. At that time, Yates indicated that they were not
10	willing to, one, drill a Morrow well or, two, entertain
11	your being the operator of a Morrow well in that section?
12	A. I believe that is true.
13	Q. In that proposal of December 27th, 1994, it was a
14	typical proposal, just like the later one that you have
15	introduced as Exhibit I think it was dated March 7th.
16	It had a cover letter, AFEs, the same kinds of information,
17	did it not?
18	A. I don't remember it. I don't have it with me,
19	and I'm not familiar with it right now.
20	MR. ERNEST CARROLL: What is your last exhibit
21	number? Twelve?
22	MR. FANT: Twelve.
23	Q. (By Mr. Ernest Carroll) I'm going to show you
24	what I've marked as Exhibit 13, Yates Exhibit 13, and ask
25	you to look at that and see if you recognize it.

I recognize it as a well proposal from Nearburg 1 Α. Exploration on the Fairchild 13 Number 1 well. 2 Okay, and that would have been a Morrow test? 3 Q. 4 Α. Yes. In that packet there is a joint operating 5 0. 6 agreement; is that not correct? 7 Yes, that is correct. Α. And on the Exhibit A -- Now, for a Morrow test 8 9 that would be a 320-acre? 10 That's correct, and this was proposed as a south-Α. 11 half unit. So really, the representation that I think may 12 have been inadvertently drawn from your earlier testimony 13 is that there was conversation between Yates and Nearburg 14 15 concerning this area of concern, prior to the March -- two March letters that you have introduced into evidence; is 16 17 that correct? Oh, for the purpose of a Morrow well, which at 18 Α. 19 that location has now been withdrawn and is not applicable 20 to this hearing. 21 0. I understand, but at least there was conversation going on between Yates and Nearburg concerning it? 22 23 Yes, there was. Α. Now, there was an Exhibit A to the -- to that 24 Q.

joint operating agreement, was there not?

A. Yeah, I'm sure there was. 1 And in that Exhibit A on December 27th, you 2 Q. credited Yates with ownership of that Holmquist lease, did 3 you not? 4 I do not know. Let me look. 5 Α. At least -- Let me rephrase my question. 6 Q. On Exhibit A, you show Yates with one quarter of 7 a 320-acre proration unit; is that correct? 8 Let me address your first question. I have 9 Α. examined the exhibit to this operating agreement, and 10 nowhere on it do I find the Walter Bert Holmquist lease. 11 You only list Nearburg's lease in that exhibit; 12 is that correct? 13 MR. KELLAHIN: Mr. Examiner, I have a point of 14 procedure to object to. My objection is that you have 15 directed the parties, particularly me and my case, not to 16 17 engage in the discussion about the disputed Holmquist 18 lease. It's therefore inappropriate for Counsel to 19 20 cross-examine my witness on a subject matter for which I was precluded from making a direct examination. 21 MR. ERNEST CARROLL: What -- I'm trying to just 22 23 build a foundation for my tender of an exhibit which I

think should be treated just the same as Mr. Kellahin's,

which -- The exhibit will be three leases. They are a

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lease dated in 1992, 1987 and 1982, which show Yates owning 1 or having leased this subject tract. 2 I think it is relevant, it is the countervailing 3 evidence to Exhibit 6. 4 All I'm trying to do -- And I will tender this. 5 I can tender this testimony and -- because Mr. Shelton is 6 7 not being cooperative here --MR. KELLAHIN: I object to the 8 characterization --9 MR. ERNEST CARROLL: Well, I'll withdraw that. 10 MR. KELLAHIN: -- of my witness as not being 11 12 cooperative. He's attempting to do a submittal of proof to you 13 in an improper way, and he knows how to do it right. It's 14 15 not through the cross-examination of Mr. Shelton. MR. ERNEST CARROLL: Well, I don't agree with Mr. 16 Kellahin. 17 But what I am going to show is that on Exhibit A, 18 that's a 320-acre proration unit. I tender that in the 19 east half of the south half -- or the east quarter --20 Nearburg owns 100 percent. 21 The other 160, it would have been -- as we 22 contend, we own 50, they own 50. 23 When you combine those two 160s for the 320, that 24 shows that we owned a quarter of that proration unit, they 25

1 own three-quarters. That is what is reflected on Exhibit A, a quarter 2 ownership in Yates because of our ownership of 50 percent 3 4 of the southwest quarter. 5 I offer that as a tender of proof. 6 I then offer three exhibits, and I will -- the 7 three -- Excuse me, three leases I will tender as Exhibit 8 14. 9 They are, one, an oil and gas lease dated December 10th, 1981, from Mr. Walter Holmquist to the Yates 10 entities. 11 The second page is a lease dated February 1st, 12 13 1987, from Walter Holmquist to the Yates entities. And the third is another five-year lease dated 14 October 24th, 1991, to the Yates entities. 15 16 And I would suggest that these two exhibits, 13 and 14, be treated the same as Mr. Kellahin's Exhibit 17 Number 6. 18 19 MR. KELLAHIN: Mr. Examiner, we need to have you 20 make a decision. My objection to the cross-examination of 21 this witness on this issue. MR. ERNEST CARROLL: I think I withdrew my cross-22 23 examination. 24 EXAMINER CATANACH: Did you? 25 MR. RAND CARROLL: Did you?

MR. ERNEST CARROLL: Yes, sir. And then I'll 1 make the tender of proof, so I don't think that's a 2 3 necessary decision. 4 EXAMINER CATANACH: Okay, that takes care of Mr. Kellahin's objection. 5 Do you have any objection to the admission of 6 7 these exhibits as tender of proof, Mr. Kellahin? MR. KELLAHIN: Yes, sir, that both parties be 8 9 treated consistently with this issue. 10 EXAMINER CATANACH: I thought we did. MR. KELLAHIN: I thought so too. We object to 11 the tender of proof on his leases here that bring into 12 question what happens with the 16 percent. 13 14 EXAMINER CATANACH: Okay. MR. KELLAHIN: If we might have copies of those 15 subsequent to the hearing, or if you have copies now, that 16 would -- I would appreciate it. 17 18 EXAMINER CATANACH: So Yates' tenders of proof 19 will be accepted at this time. 20 MR. KELLAHIN: I want to make sure the record is 21 clear, Mr. Examiner. 22 These were submitted as tenders of proof for only the purpose of filling in his tender. 23 We object to them being admitted as evidence for 24 25 your consideration on the topic of the disputed interest.

MR. ERNEST CARROLL: They're to be treated like 1 Exhibit 6, and I think they should be kept together. 2 MR. RAND CARROLL: They won't be treated as 3 exhibits, they won't be evidence; they'll be tenders of 4 5 proof. MR. ERNEST CARROLL: Yes, sir. I'll go ahead and 6 7 give you those so that you can... (By Mr. Ernest Carroll) Mr. Shelton, addressing 8 9 Exhibit Number 4, which is your large land plat, frankly, I 10 just -- I may have not heard. I really didn't understand 11 what the purpose of this exhibit -- What's the significance 12 of it, bottom line, for admission of this exhibit? This exhibit demonstrates Nearburg's operatorship 13 Α. of wells in this area over a period beginning in 1981 and 14 15 shows our consistent, sustained operatorship and lease ownership in this area and how many wells we've drilled --16 17 and how many wells we operate in this area, as opposed to four miles away where you get into Dagger Draw, the proper 18 19 Dagger Draw currently developed field. You will agree with me that Yates Petroleum was 20 21 likewise engaged in leasing during 1981 out here in this particular area? 22 23 I have no knowledge of that whatsoever. I do not Α. 24 know what Yates did in 1981.

You're also aware that Yates Petroleum operates

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Q.

many more wells than Nearburg does in the Dagger Draw field?

- A. Not in this area, they don't.
- Q. With respect -- I was a little confused as to your testimony as to what is the drilling rate, overhead rate, that you are proposing or recommending for adoption.

You have indicated that there is -- between the two proposals, there is a small dollar difference. But what rate are you asking the Commission to impose, no matter who gets operatorship in this area, with respect to this --

- A. We will agree with a rate of \$5400 for a drilling well and \$540 for a producing well rate.
 - Q. Exhibit Number 3, your letter of March 29th --
 - A. Yes.

- Q. -- 1995, first of all, this particular quarter section of Section 24, what is the ownership interest of Nearburg?
 - A. Current ownership of Nearburg is 11.25 percent.
- Q. This is a quarter section where there are more than just the two parties, Yates and Nearburg; is that not true?
- A. The Lodewicks and the Johnsons also own interest, whose interest is currently uncommitted, and either party, I assume, could end up with that interest.

So Nearburg's interest could be as large as more 1 than 50 percent. 2 You're also aware that the Johnsons and Lodewicks 3 have a very consistent practice of either joining or going 4 nonconsent with respect to the drilling of wells out in 5 this area? 6 7 That is not true. The Johnsons lease to Nearburg Α. Exploration Company and the Fairchild well directly to the 8 west into the Fairchild 24 well. 9 So I don't think you could say at all that they 10 have a consistent pattern of joining or going nonconsent. 11 12 They are a lessor in that well. Well, you know the Lodewicks are represented by 13 Q. Jim Jennings and that they don't lease? You have 14 15 approached them for a lease for this particular quarter section and they've denied it, have they not? 16 I know they have not leased to us in this 17 Α. There is leases that they've granted in the past. 18 19 Q. And the Johnsons, likewise, have denied a lease 20 to you in this quarter section? That's correct. 21 Α. So it's not a possibility right now that Nearburg 22 0. would end up with greater than 50 percent interest in that 23 well? 24

We are continuing to negotiate with them.

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Α.

You also know that HEYCO, Harvey E. Yates 1 Q. 2 Company, owns slightly over 20 percent? 3 20.3125 percent. Α. And you're also aware of their election, based 4 upon the two proposals that have been sent out here to go 5 with the Yates group, allow them to -- ? 6 7 No, I am not aware of that. I have had Α. conversations with the land manager at HEYCO within the 8 9 last week, and that was not the expression I got from her 10 at all. But you're not aware of the conversations that 11 0. 12 they have had with them, particularly Sherry Darr; is that not who you're talking to? 13 Sherry Darr is who I'm talking to. 14 Α. 15 All right. But you're not aware of the Q. conversation that occurred in the last week with Yates 16 17 Petroleum where she has indicated that she would go with 18 that? I have no knowledge of that. 19 The point being, is that in this particular 20 quarter section which you have -- which has been the 21 subject of this offer of compromise, Nearburg only controls 22 23 11.25 percent; is that correct? 24 Α. That is correct.

25

Q.

Now, one interesting thing, I want -- would like

for you to explain the purpose of the blind copy notation going to Mr. William J. LeMay.

What was the purpose of sending this letter to Mr. LeMay and not, one, indicating to Yates Petroleum that you sent it to him?

- A. I think it's important for Mr. LeMay and the Examiners to know that we are attempting to settle these hearings before they come before them, so that they're not back between Yates and Nearburg for operatorship, that we are trying to endeavor to truly not bring cases that don't need to be brought before the Examiner.
- Q. Well, then, Mr. Shelton, wouldn't you agree with me that if you're making that information known or available to Mr. LeMay, it should likewise be made known to Yates Petroleum at the same time?
- A. As far as I understand, it was. My -- this was not -- As you can see, it was signed for me. I was out of town at the time, and when that letter was sent to Yates, it was my understanding that it was sent to you with the copy noticed on it, that it would go to William J. LeMay.
- Q. But that's not the purpose of a "BCC" notation, is it?
- A. My copy of it has "carbon copy: William J. LeMay" on it.
 - Q. And the notation "BCC" prior to it?

Α. Right. 1 And this technically means that this was a blind 2 Q. 3 copy that was only sent -- no notice was sent to the addressee of it? 4 5 Α. Was there notice on your letter too? 6 Q. No. 7 A. Well, like I say, I was out of town. 8 fully intended for notice to be given to you all. MR. ERNEST CARROLL: Mr. Catanach, I have no 9 further questions. 10 11 EXAMINER CATANACH: Any redirect? Oh, no, sir. 12 MR. KELLAHIN: 13 EXAMINER CATANACH: Just a couple, Mr. Shelton. 14 **EXAMINATION** BY EXAMINER CATANACH: 15 The original proposal for this well was sent by 16 Q. Yates on March 3rd, is that correct? 17 Received by us March 3rd, that's correct. 18 Α. 19 Q. Received. That wasn't submitted as an exhibit, 20 was it? No, it wasn't. I assume it will be. 21 Α. I want to ask you a little bit about -- I believe 22 Q. you testified that in this area you have been able to reach 23 an agreement with Yates, a voluntary agreement on six 24

spacing units?

A. That the Commission -- These units were never brought before the Commission. They were voluntarily agreed on by Nearburg, where Nearburg acquiesced and allowed Yates to operate.

Q. All six of these proposed units, you allowed Yates to operate?

A. That is correct.

- Q. Have you reached an agreement with Yates on any other spacing units that they have allowed you to operate, voluntary agreement?
- A. We had succeeded to one or more agreements where we operate by succession of interest under an old operating agreement.

As I understand, in the northeast quarter of Section 31 they have an interest where we operate, they have a quarter interest, that was not an agreed-to operating agreement. That agreement originally was between us and Conoco, 50-50. Yates filed a lawsuit against Conoco, as I understand it, ended up with 25 percent. It was also a succession.

Yes, the northwest quarter of Section 22 that we operate, Yates has a -- I believe a 1-percent interest in there, or a very small percent.

We have 87 -- We have 90-some percent. We operate that. They did agree voluntarily.

There was a 1984 operating agreement covering the east half of Section 22 where we operate, and again they have a very small interest.

And I believe those are the only two.

- Q. With regards to some of these spacing unit issues that have been resolved voluntarily by Yates and Nearburg, can you again briefly summarize some of the criteria that was used in determining who would operate these spacing units?
 - A. The amount of ownership was the main criteria.

And also it was very important, and one determining factor was -- Remembering these units were entered into some years ago, at the time they were entered into, production, actual production facilities, pipelines in the area, electrical service, all other things were also a matter of importance to us, which those circumstances have now changed on the surface to the extent that they're not really describable here.

But as in the case of the northwest quarter of Section 29, at the time that was drilled, our facilities were far removed from that, and they had a 75-percent interest, we had a 25-percent interest, so we agreed to them operating.

I would say surface occupancy of operator facilities and ownership were the two criteria on the basis

of which we made our decision. 1 EXAMINER CATANACH: I have nothing further of the 2 witness. 3 Mr. Shelton may be excused. 4 MR. KELLAHIN: Mr. Examiner, at this time we'd 5 call Mr. Tim McDonald. 6 7 TIM McDONALD, the witness herein, after having been first duly sworn upon 8 9 his oath, was examined and testified as follows: DIRECT EXAMINATION 10 BY MR. KELLAHIN: 11 Mr. McDonald, would you please state your name 12 and occupation? 13 My name is Tim McDonald. I'm a petroleum 14 Α. engineer for Nearburg producing in Dallas, Texas. 15 Mr. McDonald, on prior occasions have you 16 testified before this Division in the field of petroleum 17 18 engineering? 19 Yes, I have. With regards to this particular issue before the 20 21 Examiner today, have you made a comparison between the 22 Nearburg AFE and the Yates AFE? 23 Α. Yes, I have. 24 In addition, are you familiar with the 25 availability of surface facilities to support this well if

the operatorship is awarded to Nearburg? 1 Yes, I am. 2 Α. MR. KELLAHIN: We tender Mr. McDonald as an 3 4 expert petroleum engineer. 5 EXAMINER CATANACH: He is so qualified. (By Mr. Kellahin) Mr. McDonald, let's have you 6 Q. 7 take what's marked as Exhibit 12. The base map is a 8 Midland Map Company map, I assume? 9 Α. That's correct. All right. Are you satisfied that it is 10 reasonably current and accurate for the purposes that we're 11 about to discuss? 12 Yes, I think it is. 13 Α. On top of that map you have caused certain 14 information to be superimposed. Before we talk about the 15 details, what is your purpose and objective in sponsoring 16 this exhibit? 17 Well, basically it's to show that we have water 18 19 lines, electric lines and surface facilities installed on 20 our Nearburg Fairchild 24 Number 1 well, which is the 21 adjacent 160 to the 160 in discussion here, and to show that we can handle -- economically handle the production 22 23 from the proposed well. 24 Why is that an issue in your mind as an engineer, Q.

when you look at potential Cisco/Canyon production in this

particular portion of the pooled area?

A. Well, based on our tests on our Fairchild, or our limited tests, we anticipated making a considerable amount of water, comparable to the Dagger Draw proper field.

So in order to operate the well economically, you have to have a saltwater disposal system in place.

- Q. Describe for us the components that you've identified to be issues of importance to the Examiner concerning servicing this well if Nearburg's operatorship is awarded to Nearburg.
- A. That shows our Akeman [phonetic] saltwater disposal well and a line that we've constructed running up to the Fairchild 24 Number 1 well. It shows the electric line that we've installed from the road down to the 24 well, and it shows the tank battery that we're currently installing on the Number 24 location that we would most likely propose to use also as the 13 Number 2 well.
- Q. What's the current status of the Fairchild 24
 Number 1 well, the well to the south of this dispute?
- A. It's currently shut in, waiting on a gas line to be installed, gas sales line.
- Q. What type of facilities are required for servicing the Fairchild 13 Number 2 well if the Division awards the operatorship to Nearburg?
 - A. Well, we certainly need a heater treater and a

free-water knockout separate from the 24 with metering equipment, so we would meter the two wells separately.

And then, depending on the volumes that were produced out of 24 and the 13, the tank battery may be sufficient that we have now. We might have to add to that.

- Q. Were you involved in designing and equipping the Fairchild 24 Number 1 well, in terms of its equipment?
 - A. Yes.

- Q. Let me ask you, sir, to turn to Exhibit Number

 13. Did Mr. Shelton provide you with a copy of the Yates

 AFE?
 - A. At some point he did. I'm not sure exactly when.
- Q. All right. When we look at this spreadsheet, then, Exhibit Number 13, before we talk about the details, describe for us what you were doing.
- A. All I was doing was trying to categorize -Obviously, the level of detail in the two AFEs are
 different, so you really can't look at them line item by
 line item and make a comparison.

I was trying to look at a gross overall difference in the two AFEs and try to sort out areas where there were large discrepancies in cost.

Q. If you take the Yates AFE and the Nearburg AFE as we'll see them in the package and lay them side by side, then it's rather difficult to make a line-item-by-line-item

comparison? 1 Right, they don't look very much alike at all. 2 Α. They're formatted in a different way? 3 Q. 4 Α. Right. Do you have experience in preparing AFEs? 5 Q. Yes. 6 A. What is that experience? 7 Q. Well, I've been preparing AFEs for several years 8 Α. in this area. 9 Who prepares Nearburg's AFEs for this area when 10 Q. 11 they are to be prepared? Generally myself, with some assistance from our 12 13 field personnel. When you reorganize the information for Exhibit 14 0. 13, then, you are trying to put components in each AFE by 15 which you then can make a direct comparison? 16 The best I could, yes. 17 Α. When we look at the bottom lines of significance 18 19 to you as an engineer in making comparisons of the two 20 AFEs, without going through the entire spreadsheet let's find the logical subdivisions of costs and have you show us 21 22 the comparisons as forecast by each company.

contract in place for \$14.50 a foot, whereas the Yates AFE

on the drilling footage rate, and we currently have a

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24

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Okay. I think the major difference that I see is

showed \$17.50, which, at a depth of 8200 feet, would be 1 approximately a \$25,000 difference. 2 I believe Yates' AFE was actually 8500 feet, so 3 there's some distortion in that cost. I think theirs was 4 \$149,000 and ours was \$118,000. 5 We feel geologically that the 8200 feet should be 6 7 deep enough for this test. When you're trying to make a judgment about 8 9 comparing AFEs, is the drilling footage rate an item of concern for you? 10 Yes, it's a major portion of the dryhole cost, 11 certainly. 12 And in this instance, you have contracted price 13 Q. of \$14.50 a foot? 14 That's correct. 15 A. And the Yates AFE, when that's examined, that's 16 based upon \$17 a foot? 17 I believe it's \$17.50. 18 Α. \$17.50? Both companies are proposing to use a 19 footage rate for drilling the well? 20 We are. By judging from their AFE, I presume 21 A. 22 they are. When we go down the spreadsheet, find another 23 Q. 24 point of substantial significant difference between the two 25 AFEs.

A. Really, on the first page, you know, it looks like the cementing of the production casing -- our experience out there is -- you know, we've been -- It's been costing us about \$30,000. They were showing \$38,000. I guess that's an \$8000 difference.

Really, the rental, drilling tools and equipment is misleading, because their AFE categorizes -- We break ours out in more detail than that, so even though there's a big difference there, we pick up those costs in other areas. So that's not really significant.

Q. Okay.

- A. Really, on the second page, on the completion,
 ours --
 - Q. Well, let's get down to the bottom line on the first page.
 - A. All right.
 - Q. When you total these numbers up, what do each proposal show?

The net effect, when the comparison is made on the total intangibles, you've got a \$54,600 number in parentheses?

- A. Right.
 - Q. What does that mean?
- A. That's the total -- That's the completion and dryhole intangible difference. It's the intangible dryhole

costs and completion costs, the difference in the two AFEs.

- Q. And if a number is in a parentheses, what does that signify?
 - A. It signifies that Nearburg's number is less.
- Q. Okay. When we look at the bottom-line entry at that point, the \$54,600 is the volume -- the total dollars higher at this point in the AFE comparison for the Yates AFE than the Nearburg AFE?
 - A. That's right.

Q. All right. Let's turn to the second page.

When we look at the second page and look at the tangible costs, so we don't have to go through all these entries, find the ones that are of importance to you that represent a significant difference.

A. Well, certainly the artificial lift equipment.

There's about a \$30,000 difference there, and that's

probably based on them -- a different size of artificial

lift equipment than we're anticipating using there.

I believe that whatever is actually used, the cost would be the same to either party. But based on our experience in the Fairchild well, we feel like we can get by with less equipment, apparently.

- Q. There's a significant price differential two columns down?
 - A. Right.

1	Q. There's a \$5000 difference. To what is that
2	attributed?
3	A. Well, the tank battery, we actually included in
4	this AFE \$15,000 for a tank battery.
5	We feel like most likely we'll be able to get the
6	Commission's approval to use common surface storage
7	facilities, anyway, but we won't have to even spend that
8	\$15,000, or at least just a part of it.
9	Q. Is that an item, in your opinion, that represents
10	a significant difference in analyzing the two AFEs?
11	A. Yes.
12	Q. And can you quantify the difference as
13	represented on the two AFEs?
14	A. Well, they're showing \$20,000, we're showing
15	\$15,000.
16	I suspect that if we're allowed to use the common
17	facilities it may cost us, you know, more like \$5000. So
18	maybe a \$15,000 difference.
19	Q. All right. As we move down the column, then,
20	what is the next entry that's of importance to you?
21	A. Well, obviously the \$50,000 on the separator,
22	heater treaters, and I don't know all that's included in
23	Yates' in that category. I would presume it includes
24	flow lines, saltwater-disposal gathering lines.
25	I don't know where their system is in this area

but, you know, it seems awfully high for surface equipment. 1 Based upon your knowledge -- Where is their 2 0. closest facilities, based upon your knowledge, that could 3 service this well if they're awarded operatorship? 4 I really don't know. 5 A. Okay. When we go down the AFE, then, what is the 6 Q. 7 next entry that's of importance? 8 Well, I think those are the major -- the 9 highlights. When you total all the tangibles, the \$58,920 10 Q. number is in parentheses? 11 12 Α. Right. And that represents the excess of the Yates AFE 13 Q. over the Nearburg AFE? 14 That's correct. 15 Α. And when you combine the tangible and the 16 0. intangible, what is the total differential? 17 It looks like \$113,520. Α. 18 19 Q. That their AFE is higher than yours? 20 Α. That's correct. MR. KELLAHIN: That concludes my examination of 21 22 Mr. McDonald. We move the introduction of his Exhibits 12 and 23 13. 24 EXAMINER CATANACH: Exhibits 12 and 13 will be 25

1 admitted as evidence. 2 Mr. Carroll? CROSS-EXAMINATION 3 BY MR. ERNEST CARROLL: 4 Mr. McDonald, the term AFE -- or the numbers used 5 Q. in an AFE, these are just estimates, are they not? 6 7 That's correct. A. Have you done a study to determine what 8 9 Nearburg's percentage or rate of success has been in complying with or coming close to drilling the wells in 10 this area in accordance with their AFEs? 11 Back in time we did. It's been a couple years A. 12 13 ago. You are aware that that study showed that 14 0. Nearburg consistently averages more for actual cost than 15 what their AFEs are? 16 I believe that was correct. 17 Α. Now, this particular AFE, you did not prepare it, 18 Q. 19 did you? 20 Α. Yes, I did. 21 You did prepare it? Q. Yes. 22 Α. As I understood your testimony, Mr. Kellahin 23 0. asked when you first saw it, and you indicated that Mr. 24 25 Shelton showed it to you?

MR. KELLAHIN: No, I was representing the Yates 1 AFE. 2 (By Mr. Ernest Carroll) Okay. So you prepared 3 Q. this AFE? 4 5 A. Right. Can you tell me why your signature was not on the 6 AFE submitted to Yates or in the Exhibit 5 that Nearburg 7 has tendered to Mr. Shelton? 8 9 A. I would suspect my initials are on it under "prepared", are they not. 10 Okay. TRM, would that be --11 Q. That would be --12 Α. -- your initial? 13 Q. Now, are you in the habit of just having someone 14 type that in, or do you sign these AFEs? What is the 15 procedure? Do you just have some secretary type one out, 16 or do you individually prepare an AFE? 17 I individually prepare them on my computer. 18 Α. You indicated that one of the key differences on 19 0. the intangibles was the drilling footage rate; is that 20 21 correct? That's correct. 22 A. You said that you had a contract in place on the 23 Q. 24 drilling? 25 A. That's correct.

1 Q. Who is that contract with? 2 Α. Peterson Drilling Company. And does that in-place drilling contract right 3 Q. now specify that they will drill this particular well, the 4 5 Fairchild Number 2 well, at that rate? Yes, it does. 6 A. 7 Q. So you've already -- When did you contract with 8 Peterson? 9 Well, we have a -- It's a multi-well contract Α. 10 that covers a given area, and in certain areas the price is 11 such, and in other areas it's a different price. Well how many more wells do you have on that 12 13 Peterson contract? Are you saying it's just limited to an 14 X amount of wells? Or is it every well that Nearburg wants 15 to drill in a certain area, you get this footage rate? 16 A. In the past it was originally set up for five or 17 six wells, and we've extended it from time to time under 18 the same terms. 19 Well, have you had conversation with Peterson Q. 20 Drilling at this time, since there's been somewhat of a 21 drilling boom out there, to verify with them that they will 22 drill this particular location at that footage rate? 23 Yes, I have. Α. And when did that conversation take place? 24 Q.

I believe we talked to them last week.

25

Α.

Who did you talk to? 1 Q. 2 Α. I suppose Ray Peterson. Suppose? 3 Q. 4 Α. Ray Peterson. Well, did you do the talking, or did someone else 5 0. 6 do the talking? 7 Actually, it may have been our drilling 8 superintendent, Butch Lewis, may have talked to him. 9 Q. All right. It wasn't you, though? I talked to him in general terms about the 10 11 contract. I can't recall if I talked about the specific well. 12 You made a comment that there was a difference in 13 0. 14 the total amount of hole projected to be drilled, Nearburg 15 projecting a somewhat shallower hole; is that correct? 16 Α. That's right. And in your estimation, that was sufficient hole? 17 Q. 18 Α. That's right. 19 Q. Why do you drill beyond the TD? What is the 20 purpose of drilling more hole below the objective in these 21 Delaware wells? Well, in these Cisco/Canyon wells --22 Α. 23 Excuse me, I don't mean Delaware, I meant Q. 24 Cisco/Canyon.

We generally try to drill the whole Cisco/Canyon

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Α.

interval and then drill enough rathole below that to run 1 our logging tools. 2 Just to run the logging tools? Is that the only 3 purpose for drilling rathole? 4 No, also for your cementing operations. 5 Α. What about the use of a submersible pump, Mr. 6 Q. 7 McDonald? Also, use of a submersible pump, that's --8 A. 9 All right, and that is probably the key purpose Q. of drilling a deeper rathole, deeper than the objective, so 10 11 as to accommodate these submersible pumps, which have 12 become the boon to this field? That is an important reason also. 13 Α. Now, you've indicated that you think you can save 14 Q. some money by instituting a common tank battery? 15 A. Right. 16 Mr. McDonald, do you know of any examples of a 17 Q. common tank battery being used out here in the Dagger Draw 18 19 field? Yates has three or four of them that we've 20 approved. They've sent us notices to agree with, and we've 21 complied with them, gone along with it. 22 All right. But what that means is that there has 23 Q. 24 to be an agreement; is that correct?

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Α.

That's correct.

And Nearburg at this time has not done anything 1 Q. concerning an agreement as far as using a common tank 2 3 battery? 4 Α. No, that would generally be done after the well, 5 after we know we've made a well. 6 Q. But -- And then after the agreement, then it has 7 to be approved by the OCD; is that correct? That's correct. 8 9 Now, you indicated that you were unaware of the Q. 10 saltwater disposal facilities of Yates Petroleum; is that 11 correct? 12 Α. That's right. 13 Q. Then you're unaware of Yates' saltwater disposal 1.4 well up in the northeast of the northwest of Section 14? 15 The dryhole well there, it says --16 The Cotton Federal. Now that you've pointed it 17 out, I've heard of it over the years. But, you know, I 18 haven't studied their disposal systems at all. 19 All right. So you have heard of the fact that Q. Yates does have a disposal well in that particular area? 20 I believe I have. 21 Α. 22 Q. And that disposal well is closer than the Akeman State saltwater disposal well? 23 24 A. It's closer than the well --

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Q.

It's closer to --

1	A it's not closer than our Birchout [phonetic]
2	24 gathering line.
3	Q. But the disposal well is closer?
4	A. The well is, yes.
5	Q. All right. There are costs associated with
6	pumping water over a long distance, are there not?
7	A. There can be, yes.
8	MR. ERNEST CARROLL: I have no other questions.
9	EXAMINATION
10	BY EXAMINER CATANACH:
11	Q. Mr. McDonald, what was the proposed TD on the
12	Yates AFE?
13	A. I believe it was 8500.
14	Q. So that 8500 depth is included in the footage
15	rate or footage
16	A. Right, that
17	Q cost?
18	A \$149,000 is included in that.
19	So like I believe I testified, it's more like a
20	\$25,000 difference rather than a \$30,000.
21	Q. Okay. Mr. Carroll indicated that Nearburg had
22	conducted a study on its drilling costs.
23	Do you recall approximately what percentage
24	higher the actual drilling costs came over, came in on
25	the

A lot less than Yates' was. I don't recall. Ι 1 think -- I don't recall, I don't. Ten to 15 percent, the 2 way I recall, but I could be wrong. 3 Did you also express an opinion about Yates' 4 5 drilling? 6 Yes, that was, I think, the purpose of the study, 7 yes. And I don't recall what theirs was. I know it was 8 more than Nearburg's, though. 9 Q. So would you consider those two factors to cancel each other out, essentially? 10 It's been our history -- You know, it's been our 11 experience that our AFEs are usually more accurate than 12 13 theirs. EXAMINER CATANACH: Okay, I have no further 14 15 questions. MR. KELLAHIN: Do you want to take another 16 17 witness before you have a break, Mr. Examiner? I'm down to my geologic presentation. 18 19 EXAMINER CATANACH: Is it long? MR. KELLAHIN: I don't know, 20, 30 minutes. 20 21 (Off the record) EXAMINER CATANACH: Let's take a few minutes 22 23 here. 24 (Thereupon, a recess was taken at 2:53 p.m.) 25 (The following proceedings had at 3:10 p.m.)

All right, call the hearing 1 EXAMINER CATANACH: back to order. 2 Call your next witness, Mr. Kellahin. 3 JERRY ELGER, 4 5 the witness herein, after having been first duly sworn upon 6 his oath, was examined and testified as follows: 7 DIRECT EXAMINATION BY MR. KELLAHIN: 8 Mr. Elger, for the record would you please state 9 Q. your name and occupation? 10 Jerry Elger. I'm a geologist for Nearburg 11 Α. Producing company. 12 And where do you reside, sir? 13 0. In Midland, Texas. 14 Α. You're going to have to speak up. The hum of 15 Q. this fan is pretty irritating, I think, at this end of the 16 17 room, so speak up. Now, that microphone is not going to help you; 18 19 that's just for the court reporter. So you'll have to keep 20 the volume of your voice up. 21 On prior occasions, have you testified before the Division Examiner and been qualified by this agency as an 22 23 expert in matters of petroleum geology? 24 Yes, I have. Α. Have you previously testified before the Division 25 Q.

concerning geologic interpretations that you have made for 1 portions of the North Dagger Draw Upper Pennsylvanian Pool? 2 A. Yes, I have. 3 When Mr. Nearburg and his various employees look 4 for a geologist on staff to handle geologic 5 interpretations, it's you, is it not, sir? 6 7 Α. That's correct. Were you asked to make a further geologic 8 9 investigation of the geologic matters surrounding Yates' proposed location as it compared to what Nearburg was 10 11 proposing as a location within this quarter section? Yes, I was. 12 A. And have you done all that work? 13 Q. 14 I have. Α. And based upon that work, do you now have 15 Q. opinions and conclusions about the appropriate location at 16 17 which to put this well? 18 A. Yes, I have. 19 MR. KELLAHIN: We tender Mr. Elger as an expert 20 petroleum geologist. 21 EXAMINER CATANACH: He is so qualified. (By Mr. Kellahin) Mr. Elger, when you're looking Q. 23 in your office for the tools of your trade to apply to this

particular issue, what are the kinds of things that you're

going to want to look at as a geologist to make decisions

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for this portion of what is identified as the east edge of 1 North Dagger Draw? 2 You're going to want to utilize the full suite of 3 Α. electric logs, porosity logs, sonic logs, density neutron 4 logs, resistivity logs, whatever is available, whatever has 5 been run in the wells. 6 A full suite of mud logs is very helpful. 7 Ιt helps ascertain where the oil-water contacts occur. 8 9 And of course, whatever seismic would be available. 10 With regards to the geologic log information, did 11 Q. you have all that information for all the wells in this 12 area? 13 Yes, I did. 14 Α. 15 Are there any wells operated in this area by any Q. other operator for which you did not have logs? 16 17 A. No. In terms of the mud logs, did you have available 18 all mud logs? 19 I had the majority of the mud logs that are for 20 Α. wells that were drilled on my Exhibit Number 14. 21 In addition, did you have available to you any 22 Q. seismic data? 23 24 Α. Yes, we did. 25 And how was that information of use to you as a Q.

geologist?

- A. It helps determine -- Well, the reflection surface at the top of the Canyon carbonate section is a very good seismic reflector, and we utilized our seismic information in this area to determine the highs and lows of the top of the Canyon.
- Q. When you're looking at taking that information and organizing it and evaluating it in a particular way, what kind of maps do you want to look at in order to reach conclusions?
 - A. It depends on what's relevant.
- Q. That's what I want you to tell me. What's relevant for this?
- A. In this case, what's relevant is the pay section in the Fairchild 24 Number 1, in the northwest quarter of Section 24, that we've drilled and operated by Nearburg Producing Company.
- Q. Well, why is that going to be important to you?

 Isn't that simply the kind of production we're getting in

 North Dagger Draw, farther to the west?
- A. Well, it's a little bit different than -- You'll see on some of the displays I have that it is a little bit different than what's present and producing over in the Dagger Draw field.
 - Q. So what kind of map would you produce?

- A. I produced a structure map on the top of the dolomite reservoir, which was compiled utilizing both subsurface well control and seismic, and I also utilized the mud logs available to me.
- Q. Is structure going to be a matter of significance to you as a geologist when we look at your maps?
 - A. It is in this case, yes.

- Q. And why is it in this case?
- A. Because we think the base of the pay section in the producing well is very close to the oil-water contact.

And again, it's a little bit different -- Well, if I could refer to my Exhibit 14 and start in this collection of exhibits, you'll understand a lot better why all this information ties together and is relevant to the proposed locations in the southwest quarter of Section 13.

- Q. All right. In addition to mapping the structure, are there any other critical maps that you as a geologist would prepare to address this issue?
 - A. Yes, in this case there is.
 - Q. And what may they be?
 - A. That's the thickness of the pay.
 - Q. And why is that important?
- A. Because the pay appears to pinch out to the west, updip to the west, into a grade from a porous dolomite facies into a nonporous dolomite reservoir rock.

And because of that, there is a different oil-1 water contact in this area than there is for what's known 2 3 for -- recognized for Dagger Draw. Are there any other additional mapping components 4 5 that you need to prepare in order to make a comprehensive 6 judgment about where to put these wells? Those are the main ingredients, all of the 7 A. subsurface control, the well logs, the seismic. 8 9 Q. Having done all that work, what is your 10 conclusion about the appropriate location for this well? 11 Should it be, as Yates has proposed it to be, 660 12 out of the corner? Or should it be, as Nearburg proposed it, 1980 13 from the west line, 660 from the south? 14 15 It should be as Nearburg proposed. Α. And why, sir? 16 Q. Well, because as my exhibits will show, their 17 Α. 18 proposed location appears to be structurally low to the Nearburg producing well in the northwest quarter of Section 19 20 24. And in the case -- If there is reservoir rock 21 present at that location, it would be below the water 22 contact and water-bearing, not hydrocarbon-bearing. 23 Also, that well is situated to the west of the 24

Nearburg proposed location and in close proximity to -- at

least I've interpreted in close proximity to the pinchout 1 or the gradation of the reservoir rock into the tight 2 nonreservoir limestone facies. 3 The productive portion of the reservoir in this 4 5 area is going to be in the dolomite, is it not? A. That's correct. 6 And when we move into the limestone, the 7 ο. limestone in this area is not going to produce 8 9 hydrocarbons? That's correct. Α. 10 Did Mr. Shelton come to you with Yates' well 11 proposal as to its location? 12 Yes, he did. 13 Α. And what if any reaction did you have to that? 14 Q. My first reaction was that it would be -- could 15 be both low and tight, and there would be a high degree of 16 risk in drilling that location. 17 And were you able to make that judgment based 18 Q. upon work that you had already conducted? 19 Yes, I did. 20 Α. Were you the geologist that helped locate the 21 Q. Fairchild 24 Number 1 well to the south? 22 23 Yes, I was. Α. 24 And so you already had knowledge and information Q.

about where to put the well in the southwest quarter of

this section?

A. Well, when we originally drilled the well in Section 24, it was proposed to drill as a Morrow location. And we encountered a hydrocarbon show in the Canyon dolomite, opposite where we ended up perforating and completing the well.

And based on the drill stem tests that we took across that interval and the results of that drill stem test, I immediately undertook mapping of that particular interval to see where the extent of it could potentially occur.

- Q. Let's look to see the results of your work product, Mr. Elger. If you'll look at what we've marked as Exhibit 14, does this represent your work?
 - A. Yes, it does.
- Q. Before we talk about the interpretation, set the stage for the information that we're seeing.
- A. Okay, there's three colors displayed on this exhibit. The gray line that -- The gray line is roughly where I've interpreted the pinchout of the dolomite pay section.

You'll see the well in Section 23, at A in Section 23, is colored gray, and also a well down in a section that's east of 25 has been colored gray. The gray indicates wellbores where the Upper Canyon is completely a

limestone nonreservoir section.

The blue indicates -- follows structure and indicates where we've interpreted the oil-water contact for the dolomite reservoir in the Upper Canyon.

And the green, of course, represents the well as producing -- or has a dolomite reservoir section producing from the Upper Canyon.

- Q. Will your geologic control points in terms of log information be displayed on a cross-section that we'll look at in a minute?
 - A. Yes.
- Q. When we're looking at data to support the location of the oil-water contact, what information will we have to show?
- A. We'll have some drill stem tests. And of course what we don't have is evidence, but what I have is the mud logs on three of the wells that -- well, all of the wells that are displayed on Exhibit Number 15.
- Q. And when we look at the Upper Canyon reservoir limits, when we make that transition from dolomite into purely the lime section, what evidence are we going to have to support that conclusion?
- A. That's displayed very dramatically on the density neutron logs and the PE curves used -- density neutron logs.

Q. Set the geologic setting for us when we look at this particular area and how it compares in similarity or contrasts to what we -- more commonly known as the main portion of the North Dagger Draw Pool.

A. Well, as Bob testified earlier, we're two or three miles east of the main development that's occurring in the Dagger Draw field.

When we drilled and proposed the well in the northwest quarter of Section 24 as a Morrow location, based on all of the offsetting control, we really didn't anticipate the Canyon to be productive here because, as you can see, where -- and again, this is a top-of-dolomite structure map, Exhibit 14. All of these subsea datums are well below the minus-4300-foot subsea datum which Conoco and Yates and everybody else has testified numerous times before the Commission as being the lowestmost oil in the Dagger Draw field.

- Q. Before this activity, the perception of the water at minus 4300 was that it was farther west of this area?
 - A. That's correct.

- Q. And with the drilling of this Morrow attempt in Section 24, then, you have found new information that shows that we have the dolomite here that is oil-productive?
- A. That's correct. The top of the dolomite in this well in Section 24 is 65 feet structurally below to that

4300 subsea datum which everybody had recognized as the oil-water contact.

Q. All right, let's --

- A. So there has to be another explanation to why there's hydrocarbons in this well.
- Q. Let's come back to Exhibit 14 in a minute, but let's look at the cross-section so we can get the vertical profile of the reservoir.

Take a moment and open up Exhibit Number 15.

Your line of marcation for the cross-section is shown on Exhibit 14, is it not?

- A. Yes, it is.
- Q. Let's start with A, which is the far left of Exhibit 15 and represents the westernmost well. Starting at that point, take us across the cross-section from left to right.
- A. Okay, that well was originally drilled by Amoco Production Company, and it was re-entered by Nearburg Producing Company and completed as a Morrow gas producer.

The Upper Canyon -- And I just might take a second to show you the subdivisions in this local area of the Canyon itself. They're displayed just above the title block on the right-hand side of the cross-section, the Upper Canyon, Middle Canyon and Lower Canyon. I was able to define those particular units and follow those units to

all of the wellbores that have penetrated the map section in Exhibit Number 14.

Now, the well drilled at A, the Upper Canyon section, was completely a limestone section. There was no dolomite whatsoever in the Upper Canyon.

The immediate northeast offset, drilled by

Nearburg, again, as the Fairchild 24 Number 1 in the

northwest quarter of Section 24, encountered a dolomite

section in the lower portion of the Upper Canyon, and I've shaded that dolomite section as pink on all of the crosssections.

The perforations are also marked in the depth column on that well log.

- Q. All right, let's use that well as the marker well. That's the well that discovered this portion of the dolomite being oil productive in this vicinity, is it not?
 - A. Yes.

- Q. Take us vertically, going from top down, then, and show us how you were able to establish a point on the logs that identified for you as a geologist that you were dealing with a feature that would correspond to the top of the Canyon Bank. Is that not a marker point for you?
- A. The Canyon Bank is that surface that's been shaded in -- well, on these cross-section displays it's the top blue line.

And what you have is a shale package that sits on top of a carbonate package. In some instances it's a dolomite, but in this whole local area it's a limestone, that interface.

That's the interface that we utilized off -- or were able to determine from synthetic seismograms, was a very good reflection surface, and it was incorporated into the seismic interpretations that we applied to the area.

- Q. All right. To refine the structural interpretation that you had made with just the conventional log information, you had the additional benefit of the seismic line?
 - A. Yes.

- Q. Let's go back to Exhibit 14 now, and show the Examiner the line location that you have utilized and integrated into your geologic presentation.
- A. Okay. That line has been defined -- or called -- or displayed on Exhibit 14 as line 5070, and it's an east-west line that traverses the bottom of Sections 13 and 14.

 Actually -- It actually ends in Section 18. And it traverses through the proposed Nearburg location in Section 13 and also the proposed Yates location in Section 13.
- Q. All right. When we look at the seismic data and if we look at data point 1080 on the seismic line, that's going to be your closest data point to the proposed Yates

location?

- A. Yes, it is.
- Q. And when we get to the seismic line and look at data point 1090, that's going to be very close in proximity to where you're proposing to put the well?
 - A. Yes.
- Q. We're using the Fairchild 24-1 well as our marker well, and you have told us that you can mark the top of the Canyon bank with this reflection between the shale and the limestone?
 - A. Yes.
- Q. Can you see that event or feature as a reflection in the seismic line?
 - A. Yes, very -- It's very bright, very dramatic.
 - Q. Let's go to the seismic line.

All right, before we look at that issue, help us organize Exhibit 16 so that we see where we are in relation to the marker line of the seismic run on Exhibit 14.

- A. Well, again, the end of the line is over where I've got "East" and identified the Canyon over in the time column, just above the title block. That is the actual end of line 5070, and it proceeds for some distance to the west.
- Q. All right. On the seismic line you have shown a horizontal marker point and have labeled it on the far

right as "Canyon"? 1 2 A. Yes. What does that mean? 3 0. Well, that's what the geophysicists, again, 4 Α. utilizing synthetic seismograms, a number of them out in 5 6 this area, identified as this reflection surface, the 7 interface of the Wolfcamp shales on top of the Canyon 8 carbonate. 9 Q. And have you integrated with your conventional 10 11

- geologic information and confirmed the validity of the seismic?
 - Α. Yes.

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- So that you and the geophysicists are both Q. agreeing on what is the top of the reflection for the top of the Canyon Bay?
 - Yes, it ties very well. Α.
- All right. Let's take the yellow line. What is Q. the significance of the yellow line?
- The yellow line is just internally within the Α. Canyon, and it identifies and highlights what the actual interface surface is doing as you traverse along the line and through the proposed locations.
- Are you able to measure or quantify the distance Q. in a vertical sense as we move across the top of this structure?

1	A. Yes.
2	Q. When we look at data point 1080 on Exhibit Number
3	16
4	A. Yes.
5	Q it's shown at the top of the display, and that
6	corresponds to the Yates location?
7	A. Yes.
8	Q. As you project that line down through the seismic
9	data, what does it show you when you get to the Canyon?
10	A. It shows me that the Yates proposed location is
11	in a syncline or a low.
12	Q. When you move over to data point 1090 that
13	corresponds to the Yates proposed location, and project
14	that down into the Canyon portion of the formations, what
15	does it show you in relation to the Yates location?
16	A. It shows me that they're drilling in a syncline -
17	- that they're proposed to drill a well in a syncline.
18	Q. Which well has the more favorable position, based
19	upon the seismic data?
20	A. The Nearburg proposed location, and it was
21	Again, it was picked utilizing incorporating the seismic
22	and the subsurface well control.
23	Q. How much Are you able to quantify the degree
24	of advantage in the reservoir between the Yates location

and the Nearburg?

A. To some degree. There's a slight margin of error, but when you incorporate all of the well control you can get it fairly close.

- Q. Approximate for us how much footage we gain in structure at the Nearburg location.
- A. The contour interval on the structure map is 50 foot. We could gain 30, 35 feet of structural advantage over the Yates proposed location.

And again, let me point out that that's very important, because if I can refer back to Exhibit Number 15, which is the cross-section, and go back to the Fairchild 24 well which Nearburg drilled and completed in the Canyon, the entire pay section is only a matter of 20-some feet thick.

So if we're 20 or 30 feet low and you -- the base of that dolomite section in that wellbore is at the water contact, what that in effect does is move your entire pay section below water.

Q. We've looked at the first two wells on the cross-section. You've projected with the seismic information what we should see in terms of a structural position for the Yates well location.

Help us understand what your concerns are about moving this well to the west and how it may approach the Upper Canyon reservoir limits.

A. Again, the dip direction is to the east, so you're moving updip to the west, towards Dagger Draw.

The whole interpretation of the trap for hydrocarbons in the Fairchild well is that that dolomite package, as you proceed to the west, pinches out. And it's very dramatic in these first two wells. It's absolutely gone over in this Parino Com well over in Section 23.

What we're afraid of is that at the Yates proposed location the same thing is going to happen: As you move to the west, the farther west you go, the less likely you are to retain this dolomite reservoir package.

If I could draw -- if you would take a straight edge, for instance, and draw a line from the Nearburg Lakewood 18 well, which is at A' on the cross-section, that well has very little dolomite remaining present in the Upper Canyon. It's almost absent. It's right at that termination of that pay package.

If I could draw a straight line from that wellbore between the Parino Com and the Fairchild well, you would see that even the Nearburg proposed location is at risk of this dolomite section being not present, but it's even much greater risk at the Yates proposed location.

Q. Let's go back to the cross-section, Exhibit 15. We've left with the marker well, which is the Fairchild 24-1.

85 Have you perforated, or has Nearburg perforated the entire productive interval of the dolomite? A. Yes. ο. Take us through the rest of the projection as we move from left to right, then. Α. Well, the projection simply follows what our seismic and subsurface control are telling us, and that's that the -- you could drop downdip from the Fairchild 24 well to the Yates proposed location, and that dolomite section could thin. We feel like at the Nearburg proposed location, the seismic and subsurface are again telling us that we'd be structurally high or flat to the Fairchild location and that the dolomite section would thicken back to the east. As you can see, there's really not a tremendous amount of well control out here. But the seismic information and the control that does exist tells us what we need to know in terms of where the safest locations are. 0. And what, in your opinion, is the safest location for all interest owners? In the southeast quarter of -- southwest quarter A. of 13, it's the 1980 from the west line location. MR. KELLAHIN: That concludes my examination of

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Mr. Elger.

We move the introduction of his Exhibits 14, 15

1 and 16. Exhibits 14, 15 and 16 will 2 EXAMINER CATANACH: be admitted as evidence. 3 4 Mr. Carroll? 5 CROSS-EXAMINATION BY MR. ERNEST CARROLL: 6 7 Q. Mr. Elger, the -- your Exhibit 16 shows the seismic lines. Was this the 3-D seismic or 2-D seismic? 8 9 Α. This is a printout display of a portion of our 10 3-D survey. All right. This particular 3-D seismic line, has 11 0. 12 it been migrated? 13 Α. I believe it has, yes. Let's look just a moment here on the orientation 14 0. 15 of the shot lines that are reflected on Exhibit 14 and 16 Exhibit 16. 17 Now, as I take it, there is a group of circles that run across the southern half of Section 13 and the two 18 19 adjacent sections. And every other circle, we see a number, starting on the left, 1070, then 1080, 1090, 1100. 20 21 That is the shot line, is it not? 22 Α. Yes. And so those numbers -- 1070, 1080, 1090 -- these 23 Q. are the same numbers that run across the top of your 24 Exhibit 16, are they not? 25

A. Yes, uh-huh.

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- Q. All right. So if we look at Exhibit 14, the 1080 shot mark is east of the proposed location by Yates; is that correct?
 - A. It's very close, yes.
- Q. Now, the 1090 line is west of the Nearburg proposed location; is that correct?
- A. It's very close to -- when it projects down to the line, it's almost on it.
- Q. All right. But the distance between 1090 and the Nearburg well is less than the distance between the 1080 and the Yates well; is that correct?
 - A. Yes.
- Q. All right. Let's look at Exhibit 16. When you look at 1080 and the line drawn for the Bert location, it's almost on the 1080 line, is it not?
 - A. That's correct.
- 18 Q. And then --
- 19 | A. It --
 - Q. Excuse me?
- 21 A. It should probably have been spotted or drafted
 22 just slightly to the west of 1080 --
- 23 Q. All right.
- A. -- which would have been even more centered into the syncline.

Well, let's look, then -- Since you've told us 1 Q. that this line here is drafted improperly, let's look over 2 at 1090. 3 Now, we see the Nearburg line, a distance here 4 maybe an eighth to a quarter of an inch to the left of the 5 1090 line. But on Exhibit 14, it shows that the line 6 should be actually to the right of the 1090, doesn't it? 7 Well, I can't see this -- this didn't -- You 8 know, this display doesn't show the tick -- the actual tick 9 mark for the 1090 shot point. You know, it didn't come 10 through very well, so I had the draftsman print it darker 11 so it would display better. And whether he didn't get it 12 centered exactly right or -- It's probably a little bit of 13 a drafting --14 Well, we can assume that the tick line should 15 Q. probably be somewhere in the center of the 1090 --16 17 Α. Very close, yes. -- number, shouldn't it? 18 Q. 19 A. Yes. And so this -- The margin of error on the drawing 20 Q. 21 of the line for the Nearburg location is at least larger 22 than the error on the one showing the Bert location; isn't 23 that true?

Now, you've told us that the indicator here --

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Α.

Q.

Yes.

the reflector, excuse me, that's a better word -- the reflector here is not the dolomite but the limestone; is that not true?

- A. That's correct. It's the top of the bank, whatever the carbonate is. Whether it's dolomite or limestone, it still is --
- Q. All right. You will agree with me that the limestone is not the reservoir, does not -- is not a reservoir rock?
 - A. That's correct.
 - O. It has to be the dolomite?
- A. Right.

- Q. And you know from your drilling and experience in this area that the limestone in this area is anywhere in the 50-plus feet thickness, is what you've encountered?
 - A. That's correct.
- Q. All right. So really, you told us that the location -- as you read the seismic, the location of the Fairchild 15, as opposed to the Bert, would get the driller of those wells an advantage of approximately 30 foot; is that correct?
 - A. That's approximate, yes.
- Q. Well, if the limestone can vary 30 to 50 feet, that margin -- that error created by not really knowing where the top of the dolomite is -- actually could destroy

your advantage that you're talking about. That area of limestone could be greater than this advantage that you're claiming that you can encounter?

A. That's why you utilize the subsurface control in conjunction with the seismic, and that's the way this

picture has been developed.

See? That the dolomite section is a known -it's known in this area from well control that it thins to

- Q. And the only -- The closest subsurface information you've got is your well in the northwest quarter of Section 24; is that correct?
- A. Well, there's obviously more well control out here that was utilized in this interpretation than what's displayed on this map. But, you know, for purposes of this hearing, we're just displaying the subject area.
- Q. Well, is there any well control between the well in 24 and the two proposed locations?
 - A. No.

the west.

- Q. And in fact, the well control you're talking about is up in the northern parts of the section to the east of Section 13, and up in that northern area; is that not true?
 - A. Yes.
 - Q. And you've got some very significant deviations

or drawing of the formation between that data and Section 2 4, do you not?

A. Yes. And again, that's based on the projection of the top of the reservoir, in conjunction with the top of the carbonate bank and the fact that in this local area they tend to mirror each other.

I'm not saying that's true all over Dagger Draw, but in this local area the well control strongly suggests that those two --

Q. Which wells --

- A. -- surfaces mirror each other.
- Q. Which wells tell you that?
- A. The well in 23, the well in 24, the well in Section 18, and there's another well in the west half of Section 23. All of those wells.
- Q. Okay. When you say "mirror", how do you know -You only have one data point. How do you know that it
 mirrors? Are you saying that the thickness in the well in
 23 is -- the thickness of the limestone in 23 is the same
 in 24?
 - A. Nearly.
 - Q. Nearly?
- A. It's nearly as -- You know, I could add it up real quick. It's a little over 60 feet thick in the Parino well, and it's -- well, it's nearly 60 feet thick to the

1 top of the dolomite in the Fairchild well. So it's very 2 close. Now, over there in the -- Okay, now, you were 3 Q. saying it's very similar between the well in Section 23 and 4 5 the well in Section 24; is that correct? 6 Α. Yes. In your cross-section, though, you show no 7 Q. dolomite at all --8 9 Α. That's right. 10 Q. -- in the --11 In the Upper Canyon. Α. -- well in 23? 12 Q. That's right, in the Upper Canyon. That's right. 13 A. So that's a major distinction there, isn't it? 14 Q. Major distinction? Major -- It means the upper 15 Α. 16 dolomite may have thickened a little bit to the Fairchild well --17 18 Q. Well --19 -- the relationship between the Parino well and 20 the Fairchild. -- what we're saying is that you notice that 21 Q. there is a definite thickening of this section, limestone-22 dolomite, as you move from the 23 well to the Section 24 23

There's a little bit of a thickening, yes.

well?

Α.

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But how do you know that this thickening just 1 Q. occurs in the dolomite area and that it's going to be --2 What tells you that that is going to stay consistent? 3 Well, again, I was able to differentiate the 4 various units within the Canyon -- the Upper, Middle and 5 Lower -- based on some gamma-ray ticks. And the pay 6 7 section in the Fairchild well falls right at the base of the Upper Canyon. 8 The well in Section 24, was this based on -- Was 9 Q. this well picked on the basis of seismic? 10 Yes, it was. 11 Α. And this well was not picked or projected as a 12 Q. Canyon well, was it? 13 Α. No. 14 It was -- Based on your seismic, you picked a 15 Q. Morrow test, did you not? 16 17 Α. That's correct. In fact, has Nearburg ever been able to pick a 18 Q. 19 Canyon well or have any experience of being successful in 20 picking a Canyon well with the use of its seismic? 21 A. A Canyon well? Yes, a Canyon/Cisco test in this Dagger Draw 22 Q. 23 area? Have we ever utilized -- I'm not sure I 24 understand your question. 25

Have you successfully found a Cisco/Canyon well 1 Q. on the basis of your seismic testing? 2 3 A. Yes. Where? 4 Q. Section 27. A. 5 27, where? 6 Q. 7 The South Boyd Number 4 -- well, section -- not Α. on this -- I mean, the seismic extends beyond the bounds of 8 9 this map, and in Section 27 we did utilize a seismic to identify and drill a Cisco/Canyon test that is productive. 10 That particular well was a direct offset of an 11 0. already-producing Canyon/Cisco well, was it not? 12 Tackitt well? 13 Α. Yes. 14 And the fact that it was a direct offset figured 15 very heavily in the picking and drilling of that well by 16 17 Nearburg? That in conjunction with the seismic. 18 Α. 19 Q. Did you do a comparison of the actual log of 20 where the limestone was found in the dolomite and compare 21 that to what your predictions were from your seismic? Α. Yes. 22 And what did you find? 23 Q. It was a very good comparison. 24 A.

What's "very good" mean?

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Q.

We were very pleased. We were very pleased. 1 A. Well, what --2 Q. We drilled a successful, commercial well. 3 A. Okay, what was the difference in deviation? 4 I don't know. I don't think we've gone back --5 Α. 6 we were --7 Well, what we're talking about here is a 30-foot Q. advantage? 8 Right, and we're --9 Α. Were you within 30 foot of picking the interval 10 Q. of the dolomite through the use of that seismic? 11 12 A. For the Fairchild well? No, for the well over in 27. 13 Q. I believe we were, yes. 14 Α. 15 And that's not the only instance where we've utilized it. That's the only operated well we've utilized 16 17 it. MR. ERNEST CARROLL: That's all I have, Mr. 18 19 Catanach. **EXAMINATION** 20 BY EXAMINER CATANACH: 21 Mr. Elger, do you know if Yates has any access to 22 Q. seismic data in Section 13? 23 24 A. I do not. They don't have access to your seismic 25 Q.

1	information; is that correct?
2	A. No, that's correct.
3	EXAMINER CATANACH: I have nothing further.
4	The witness may be excused.
5	MR. KELLAHIN: That completes our direct
6	presentation, Mr. Examiner.
7	I'm sorry, there is the certificate of mailing
8	that I need to submit to you, Mr. Examiner.
9	Exhibit 17 is the certificate of mailing and my
10	certificate of compliance with the notice provisions of the
11	Division for this case.
12	EXAMINER CATANACH: Exhibit 17 will be admitted
13	as evidence.
14	MR. KELLAHIN: That completes our presentation.
15	MR. ERNEST CARROLL: May I proceed?
16	EXAMINER CATANACH: Please.
17	MECCA MAURITSEN,
18	the witness herein, after having been first duly sworn upon
19	her oath, was examined and testified as follows:
20	DIRECT EXAMINATION
21	BY MR. ERNEST CARROLL:
22	Q. Would you please state your name and residence
23	for the record?
24	A. It's Mecca Mauritsen, and I live in Artesia, New
25	Mexico.

Ms. Mauritsen, by whom are you employed? Q. 1 Yates Petroleum Corporation. 2 A. And in what capacity? 3 Q. As a landman. 4 Α. Ms. Mauritsen, are you familiar with the two 5 Q. pending Applications before the Examiner, the two competing 6 7 Applications for compulsory pooling by Nearburg and Yates? Yes, sir. 8 And have you had an occasion to testify before 9 this Commission or the Division and have your credentials 10 11 in the area of petroleum land management accepted? 12 Α. Yes. MR. ERNEST CARROLL: I would tender Ms. Mauritsen 13 as an expert in the field of petroleum land management. 14 EXAMINER CATANACH: She is so qualified. 15 (By Mr. Ernest Carroll) You have prepared 16 0. certain exhibits today, have you not? 17 A. Yes, sir. 18 Let's turn to your first exhibit, Exhibit 1, and 19 20 would you identify for the record what that is and then describe its significance to the case? 21 22 It is a lease map of the area we're talking 23 about. 24 The yellow-shaded acreage is just areas that 25 Yates has an interest in, some kind of -- either mineral or

1 leasehold interests. I've also got the spacing unit marked and 2 outlined in red, of the southwest quarter of Section 13, of 3 4 the spacing unit we're talking about today. Our proposed Bert APB Number 1 is the red dot 5 located 660 from the south and west. 6 And the blue dot is Nearburg's proposed Fairchild 7 8 13 Number 2, which is 660 from the south and 1980 from the

- All right. What is the significance of the solid 0. yellow and then the outlined areas in yellow?
- Well, the solid yellow on the southwest quarter of 13 is just to make the spacing unit stand out.

And 14, that's acreage that's owned a hundred percent by Yates. The outline just shows that it's a partial interest that we own.

- All right. Anything further with that exhibit? Q.
- A. No.

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west.

- Would you turn to Exhibit Number 2 and again identify it for the record and then explain its significance?
- This is a -- just a map of the North Dagger Draw Α. Pool.

The black line is the zero dolomite line. All the wells that have been drilled in the North Dagger Draw-

Upper Penn Pool are designated inside of that. 1 2 The black dots and anything that's a black circle are Yates-operated wells. The black dots are the ones that 3 4 have been drilled and completed; the circles are just 5 proposed locations. The purple dots are Nearburg-operated wells and 6 7 proposed locations. The blue dots are Conoco. 8 The yellow represent any of the other operators 9 out there. 10 In the North Dagger Draw-Upper Penn Pool, Yates 11 operates between 105 and 110 wells, Nearburg operates 12 13 between 12 and 14, and of course there's some drilling at this time. 14 Now, this particular map only depicts the pool --15 Q. the wells within the North Dagger Draw Pool; is that 16 17 correct? Well, there are other wells you'll see located on 18 Α. 19 the map. 20 There are a few gas wells, there are some oil production out in this area, but they're indicated in the 21 22 gas symbols. Anything outside the zero dolomite line is other 23 production. 24 All right. Now, the purple circles, either the 25 Q.

gas symbols, solid lines or open circles, those are 1 Nearburg-operated --2 That's correct. 3 Α. -- wells or locations; is that correct? 4 Q. That's correct, right. 5 Α. Now, with respect to the wells that have the gas 6 Q. 7 symbols, those are Morrow gas wells, are they not? 8 purple ones? 9 A. Most are Morrow. There might be a couple Strawn, but the majority of them are Morrow, right. 10 All right. In this particular area, there is 11 0. only one producing within more than a mile around this area 12 -- well, yeah, approximately a mile. There is -- The only 13 Nearburg-operated well is in Section 24 -- is that correct? 14 15 -- for the -- in this pool? In this pool, that's correct. Α. 16 Now, there was an Exhibit 4 that was introduced 17 Q. by Nearburg. That map somewhat differs from this with 18 19 respect to the Nearburg wells; is that correct? That's correct. 20 Α. 21 Q. And why is that? Well, it showed all the wells Nearburg has 22 drilled or operates currently, not just the Dagger Draw 23

This mainly shows the Dagger Draw field.

wells, but all wells. There are several more wells.

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Okay. Did that Nearburg map also include 1 Q. dryholes, that sort of thing --2 3 A. Yes --4 0. -- your information? 5 -- I believe it did, right. Α. 6 All right, let's turn to Exhibit 3. Or is there Q. 7 anything further that you would like to discuss with this exhibit? 8 No, I think that's all. 9 Α. Okay. Exhibit 3, what is -- Would you identify 10 0. 11 for the record what Exhibit 3 is? Exhibit 3 is our proposal to drill the Bert APB 12 13 Number 1 that we did send to Nearburg on March 2nd, 1995. 14 They received it March 3rd. It's a cover letter, plus an 15 AFE and our proposed joint operating agreement. All right. This -- Okay. Mr. Shelton described 16 Q. 17 in his testimony the proposal that was sent out by Yates. Basically was that testimony accurate? 18 19 A. Yes, it was. All right. The -- there was some -- Mr. Shelton 20 0. described the slight differences in the operating rates and 21 what have you. 22 23 Right. Α. Would you please tell the Examiner what overhead 24 Q.

rates that Yates thinks are appropriate for a well in this

Cisco -- a Cisco/Canyon well in this quarter section? 1 Okay, we're proposing a \$5400 drilling well rate 2 and a \$540 producing well rate. And I believe Mr. Shelton 3 4 said they would agree to those rates also. 5 All right. Now, with respect to a nonconsent Q. 6 penalty, which -- what do you feel is appropriate, or Yates 7 feel is appropriate in this? Both OA's proposed a 400-percent penalty. We 8 realize that those -- that you cannot impose that, so we 9 10 would request that a 200-percent penalty be imposed. Do you feel that that is consistent with the 11 Q. 12 experience of other operators in the area --13 A. Yes. -- that that would be adequate? 14 Q. 15 Α. Yes, sir. 16 Q. All right. And it certainly is less than what 17 both Nearburg and Yates proposed in the initial offerings 18 to try to get -- work out a compromise? 19 Α. That's correct. All right, let's turn to your Exhibit 4. What is 20 Q. that? 21 22 Would you again identify it and discuss its significance? 23 This is our approved APD, or Application for 24 Α. 25 Permit to Drill, our Bert APB Number 1 at a location of 660

from the south and 660 from the west, Section 13 of 19 1 South, 25 East. 2 And it has been approved by the Oil Conservation 3 Division. 4 So Yates has already received and got permission 5 0. to drill a well at this location? 6 7 Α. That's correct. Let's turn to your Exhibit Number 5, and what is 8 Q. 9 that? That is just our certificate of mailing and 10 Α. compliance with Rule 1207, that we did send notice of this 11 12 hearing. All right, and notice was given to just Nearburg 13 Q. Production? 14 That's correct. They're the only other party 15 Α. involved. 16 Now, Mr. Shelton described the ownership of -- in 17 Q. this quarter section, he described what Nearburg had as 50 18 19 percent, he described the contested Holmquist lease, the 20 amount, and then he described what the remaining ownership 21 was in Yates Petroleum --That's correct. 22 Α. 23 -- and he presented exhibits showing those 0. 24 numbers --25 Α. That's correct.

1	Q exactly?
2	Do you agree with those numbers as represented?
3	A. Yes, we do.
4	Q. The only difference is, Yates does differ with
5	respect to the ownership of the Holmquist least?
6	A. That's correct.
7	Q. That's a contested issue?
8	A. Right.
9	Q. Okay. Let's turn next to your Exhibit Number 6.
10	A. This is just a proposal I believe Mr. Shelton
11	also put in as an exhibit that we received from Nearburg
12	on March 8th. It's their cover letter, AFE and JOA for
13	their Fairchild 13 Number 2.
14	Q. I noticed on both your Exhibit 3 and this Exhibit
15	6 you have a red flag. What is the purpose of that red
16	flag?
17	A. That just marks where the AFE is at, because
18	those are to be discussed later by our engineering witness.
19	Q. All right, that was just to make it ease of
20	locating the two AFEs; is that correct?
21	A. That's correct.
22	Q. Is there anything further that you would wish to
23	tell the Examiner in relationship to these exhibits?
24	A. No, sir.
25	MR. ERNEST CARROLL: I would move, Mr. Examiner,

the admission of Yates Exhibits 1 through 6 at this time. 1 EXAMINER CATANACH: Exhibits 1 through 6 will be 2 admitted as evidence. 3 MR. ERNEST CARROLL: And I would pass the 4 witness. 5 EXAMINER CATANACH: Mr. Kellahin? 6 CROSS-EXAMINATION 7 BY MR. KELLAHIN: 8 9 Q. Ms. Mauritsen, if you'll look at Exhibit 3 with 10 me --Yes, sir. 11 Α. -- your proposal to Nearburg is March 2nd? 12 Q. Well, it was mailed on March 2nd. They did 13 Α. receive it March 3rd, right. 14 But it's prepared by you, and it is sent on March 15 Q. 2nd? 16 That's correct. 17 Α. At the time that was prepared, did you submit an 18 Q. 19 estimated well cost to Nearburg? 20 Α. Yes, we did. 21 And who prepares and signs off on this AFE? Q. Mr. Al Springer prepares the majority of our AFEs 22 Α. 23 and signs off on them. What is Mr. Springer's function with Yates? 24 Q. He's in our engineering department. I'm not 25 Α.

positive of his exact title. He is in the engineering 1 department. 2 If you're going to one of the Yates personnel for 3 Q. questions or AFEs, Mr. Springer is the man you go see? 4 Yes, he's the one that prepares them. 5 Α. Okay. That was done on the 2nd of March --6 Q. The AFE was --7 Α. -- letter -- the AFE? 8 Q. -- was prepared March 1st. 9 Α. You see up on the top it says March 1st? 10 Q. 11 A. Yes. 12 Okay, look on Exhibit 4 for me. Q. Okay. 13 Α. The Application for a Permit to Drill, filed with 14 Q. the regulatory agency --15 Α. Right. 16 -- shows that it's dated on March 1st? 17 Q. That's correct. 18 Α. And it is correspondingly approved on March 1st? 19 Q. That's correct. 20 A. This well has been approved at Yates' request by 21 Q. the Oil Commission prior to requesting Nearburg to 22 participate in this well? 23 That's correct. 24 Α.

Is that not true?

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Q.

- 107 Yes, that's true. 1 Α. Is that Yates' common practice, to obtain 2 Q. Applications for Permits to Drill before you propose the 3 well to the other interest owners in the spacing unit? 4 It's not always common, but we do do it 5 Α. 6 occasionally, yes. 7 And did it here? Q. 8 A. Yes, sir. 9 Do you do it consistently when you propose wells Q. to Nearburg? 10 I don't believe so, no. 11 Α. Why was it done in this case? 12 Q. I really can't answer that. I did not file the 13 APD. I was requested to prepare the documents to propose 14 the well, but I do not have anything to do with when the 15 APD is taken over to be approved. 16 On Exhibit 1 --17 0. Yes. 18 Α. 19 Q. -- the color coding --20 Yes. Α. -- within the southwest quarter of Section 13 --21 Q. Right. 22 Α.

-- you've shaded that in as all yellow acreage?

A. Well, I think I said I just did that so that the spacing unit stands out. It's not representing us having a

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Q.

hundred percent; I just wanted it to stand out on the plat 1 itself. 2 Okay. 3 Q. It does not represent that. 4 Α. You described the ownership in Section 14 to the 5 ٥. 6 west? Correct. That's the only part in this nine 7 Α. sections that I worked on where we do have a hundred-8 9 percent ownership. All right. Do you know the ownership in the Q. 10 southwest quarter of 14, which is the adjoining section? 11 It's shaded entirely in yellow. What does that 12 mean? 13 A hundred percent Yates. 14 Α. Yates Petroleum Company? 15 Q. Well, Yates, et al. It's not --16 Α. Yates and all the entities? 17 Q. That's correct. 18 A. 19 Q. And when I get over in the southeast quarter --Right. 20 Α. -- why is that not shaded entirely in yellow? 21 Q. Because we do not own a hundred percent of that 22 Α. 23 acreage. Who else owns the rest? 24 Q. There is a mineral owner, and it used to be one 25

of the Fants. I don't remember if it's C.J. or D.B. Fant 1 that still owns that, as far as I know, and we do not have 2 that lease. 3 How big an interest is it? 0. I believe it's a half interest, but I'm just --5 A. 6 From my memory, I believe it's a half interest. Yates only controls 50 percent of the southeast 7 Q. quarter of 14; is that what I'm hearing? 8 Well, I think we actually have a little less than 9 Α. 10 50 percent. We don't have -- We have 140 acres out of the 11 12 whole 320 section, east half of 14. When we look at your development map, which is 13 Q. Exhibit Number 2, Yates has the proposed Bert location in 14 15 the southwest of 13? 16 I see that marked on here. 17 Α. That's correct. 18 Q. How far west do we have to go before we get to an 19 oil well in North Dagger Draw that's operated by Yates? Oh, I'd say approximately 2 1/2 miles. 20 Α. And where would that be? 21 Q. The closest one would probably be in the 22 southeast quarter of Section 21, our Patriot AIZ Number 5. 23 24 MR. KELLAHIN: Thank you, Mr. Examiner, I have

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nothing else.

110 EXAMINATION 1 BY EXAMINER CATANACH: 2 Ms. Mauritsen, do you routinely deal with 3 Q. Nearburg Producing Company on these spacing-unit issues? 4 Yes, I have in the last six months or so, yes. 5 Α. Are you aware of the instances referenced by Mr. 6 Q. 7 Shelton this morning where Yates and Nearburg were able to agree voluntarily on operatorship? 8 I'm aware of them. I was not the landman 9 Α. 10 handling the wells, but I'm aware of them. 11 Are you aware of some of the criteria that were Q. 12 used by Yates and Nearburg to determine who should operate 13 those spacing units? The two that Bob pointed out as far as the 14 Α. 15 ownership, and at the time I guess he said it was their operations viewpoint. 16 But that's all I know of, because I was not 17 involved the in actual negotiations on those. 18 Would you characterize those as being accurate as 19 Q. far as Yates is concerned? 20 21 Α. As far as I know, yes. EXAMINER CATANACH: Okay. That's all I have of 22

MR. ERNEST CARROLL: I have nothing further from

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the witness.

this witness.

BRENT MAY, 1 the witness herein, after having been first duly sworn upon 2 his oath, was examined and testified as follows: 3 4 DIRECT EXAMINATION 5 BY MR. ERNEST CARROLL: Would you please state your name and place of 6 Q. 7 residence for the record? Brent May. I live in Artesia, New Mexico. 8 Α. 9 Mr. May, if you would, please, try to speak up. Q. The roar from this intake is really tough, and I'm having a 10 11 hard time hearing. I'm sure maybe the Examiner too. 12 Α. Okay. 13 By whom are you employed? Q. Yates Petroleum. 14 Α. 15 In what capacity? Q. As a petroleum geologist. 16 Α. Mr. May, are you familiar with the two competing 17 Q. Applications now being heard by this Examiner? 18 19 A. Yes, I am. 20 And have you performed geological work with Q. 21 respect to these Applications? 22 Α. Yes, I have. And have you testified before the Division on 23 previous occasions and had your credentials as a petroleum 24 25 geologist accepted?

A. Yes, I have. 1 MR. ERNEST CARROLL: Mr. Catanach, I'd tender Mr. 2 May as an expert in the field of petroleum geology. 3 4 EXAMINER CATANACH: Mr. May is so qualified. 5 Q. (By Mr. Ernest Carroll) Mr. May, with respect to 6 the Application that Yates has filed and in opposition of 7 the Nearburg Application, have you prepared certain 8 exhibits? Yes, I have. 9 A. And would you please turn to your first Exhibit, 10 Number 7, and if you would identify that and explain its 11 significance to the case. 12 This is a partial log of the Nearburg Fairchild 13 Α. 24 Number 1, located in Section 24 of 19 South, 25 East. 14 It's the same log that Mr. Elger had on his cross-section. 15 This is a neutron density log, just over the 16 Canyon or Upper Penn section. 17 I might state that -- Mr. Elger stated this too. 18 19 This is the key well in the area, since we are about two to two and a half miles east of the main North Dagger Draw 20 Pool, and this is the only Canyon or Upper Penn producer in 21 this immediate area. 22 I'd just like to point out, I've marked the top 23 24 of the Canyon limestone and the top of the Canyon dolomite,

the base of the dolomite.

As was stated before, this was drilled originally to the Morrow. Original TD was around 9599.

I've marked one DST that Nearburg performed in the upper part of the Canyon dolomite, and I've also marked the perforations that they have currently perforated. And from what I understand, at least they have tested around 800 barrels of oil per day, a little over 2000 of water, and around a half a million gas.

And also, I might state that the blue colored in -- and that's colored in on the PE log -- that's just showing dolomite present within this well.

- Q. Mr. May, is the geologic data available from the drilling of this Fairchild 24 Number 1 the principal subsurface data available to a geologist in trying to map the productive interval in the Cisco/Canyon area of the southwest guarter of Section 13?
- A. This is the key well, since it's the only producer for a couple of miles around.
- Q. All right. Is there anything else further you would like to point out with respect to Exhibit 7?
 - A. No, I believe that's all.
- Q. Would you turn to Exhibit 8, then, and identify it?
- A. This is a structure map. It shows the top of the Canyon dolomite. Contour interval is 50 feet, and it shows

both the Yates and Nearburg proposed locations.

Note the Fairchild 24 Number 1, the only producer, shown with a red dot down in Section 24. There's also a few Morrow producers around, which Mr. Elger has also pointed out.

On my map I'm showing a structural high trending east-west and plunging to the east. Both the proposed locations are on the southern flank of this high. It appears both the locations should be higher than the producing well in 24, but it also appears like the Yates location could be 35 to 40 feet higher structurally than the Nearburg location.

- Q. Well now, Mr. May, let's just deviate just a moment here. Your map is drawn on the top of the Canyon dolomite; is that correct?
 - A. That is correct.
- Q. The Canyon dolomite that you're depicting here is the actual pay zone or pay interval; is that correct?
 - A. That is correct.
- Q. Now, as you understand Mr. Elger's testimony, the top of the interval that he was mapping -- Was it actually the Canyon dolomite or the Canyon limestone?
- A. He used the Canyon dolomite as his mapping. But with the seismic line he integrated, all he could see was the top of the Canyon lime.

Q. All right. Now, would you please discuss for us -- You just testified that you feel that the proposed Yates location would be more favorable than the proposed Nearburg location or be structurally higher; is that correct?

A. That's correct.

- Q. Mr. Elger testified differently. Would you please discuss those differences and why you feel that Mr. Elger is incorrect?
- A. Well, as I alluded to earlier, Mr. Elger mapped on the Canyon dolomite using his subsurface data. But when he added in his seismic data, that is based on top of the Canyon limestone. That's a different horizon. Now, I'm sure he interpreted where he thought the Canyon dolomite would come in based off his seismic top.

My experience out here -- Even though he has pointed out some of the surrounding wells he thought the limestone thickness was similar, which is true, but my thickness -- I have seen great variation in short distances in the thickness of the lime.

So the shot points he has going across the two locations, that could vary his structure map a little bit if that lime thickness changes.

Q. All right. Now, with respect to the thickness of the lime is it your information that you could even read

that on the 3-D seismic?

- A. From what I understand, no, that is strictly an interpretation on whoever's doing the seismic interpretation.
 - Q. Why is that, to your information?
- A. As far as I know, the way I understand it, the seismic reads the interface between the Penn shales right above the Canyon. It's the difference between the shales and the carbonate, and that's what shows the big peak or the identifiable peak on the seismic, and that is just between the interface between the shale and the top of the Canyon. And the top of the Canyon out here has been the Canyon limestone. So his seismic, that's all he's seeing.
- Q. Mr. May, is the limestone in this area -- has it been found to be thick enough to even be read with the use of seismic?
- A. From what I understand, the resolution and the thickness of the lime out here, you might have a very hard time seeing that thick -- that 50-some-odd feet of limestone.
- Q. Now, you have heard Mr. Elger testify. Do you consider that testimony of Mr. Elger credible enough to change your interpretation that you have rendered to this Division Examiner?
 - A. That is his interpretation. I have a different

interpretation. And I think there's room enough out here, with only having one known producer and the few well-control data you have out here, that there's room for different interpretations.

- Q. Is it your testimony, though, after having considered Mr. Elger's testimony, that you do not believe that you would adopt his interpretation?
- A. I don't think I could at this point, with the data that he shows. It's too much variance in there.
- Q. To your information, do operators in this area use the seismic to define the locations for the Cisco/Canyon?
- A. I am personally -- I know Nearburg shot a 3-D seismic in this area, and that's the only seismic I am personally aware of.

Now, whether or not Conoco or Nearburg is using 3-D seismic or 2-D seismic elsewhere in the field, I do not have personal knowledge of that.

But as far as I know out here, they did use their 3-D seismic.

As far as I know, they have not drilled a Canyon producer, based on a 3-D seismic, except for the one well that Mr. Elger alluded to, which was a direct offset.

Q. 3-D seismic has been used out here to define Morrow tests; is that not true?

- Like Mr. Elger said, they drilled the Fairchild 1 Α. 24 Number 1 originally as a Morrow prospect, and I believe 2 they drilled their Lakewood Farms 18 Number 1 in 18 of 19 3 South, 26 East, as a Morrow producer, and both were dry, I 4 5 believe, in the Morrow. Now, you have indicated that the proposed Yates 6 0. location would be structurally higher. Could you quantify 7 8
 - that?
 - Probably around 35 to 40 feet, maybe, somewhere in that area.

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- And again, what is the basis of your opinion that ο. it would be higher?
- That's off the subsurface data on top of the Α. dolomite, and that is my interpretation. There's -- I'll concede there's room for other interpretations out here.
- Is there anything else that you'd like to discuss here with respect to Exhibit Number 8?
- Oh, I would just like to point out -- not Α. necessarily towards my exhibit, but Mr. Elger's --Nearburg's Exhibit 14, he has a line drawn distinguishing between non-Canyon reservoir and Canyon reservoir, which he has shaded gray. And in between the two wells, between the Fairchild 24 Number 1 in Section 24 and the well in 23, I think he can pick that fairly decently, based on the data.

But up around the proposed locations, there's no

data points up there to base that on, and that's his 1 interpretation. 2 And you would differ with that? 3 Well, I would say at this point there's not 4 Α. enough data to really put that line in. 5 You would feel uncomfortable with drawing that Q. 6 7 line, then? Yes, the lack of data, I'm not sure where I could 8 draw that line at this point. There's just not enough data 9 10 up there. But that's his interpretation. 11 Anything else with respect to that? 12 Q. 13 No, sir. Α. Okay. If you'd turn to your Exhibit Number 9, 14 0. again, would you identify it for the record and discuss its 15 significance? 16 This is a net isopach of the Canyon dolomite. 17 The contour interval is 50 feet. Again, the two proposed 18 19 locations are shown. 20 This map shows a net dolomite thick trending basically east-west, with the two locations within the 21 thick. Both locations should have similar dolomite 22 thickness and should have more dolomite than the Fairchild 23

So this map is showing no difference between the

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24 Number 1.

two proposed locations.

- Q. You show no, then, advantage between the two proposed locations based on this map?
- A. No, sir, there is no advantage between the two locations here.
- Q. Is there anything else that you would like to discuss with respect to this exhibit?
 - A. No.
- Q. Mr. May, is there anything else that you would like to discuss with respect to the geologic exhibits that Mr. Elger testified to?
- A. I might just state that whichever well is drilled, and if a Canyon producer is made, I would bet money the other location will be drilled too. I believe that there's -- if there's a Canyon producer drilled up here, both wells will eventually get drilled.
 - Q. And under the field rules, that could occur?
 - A. Yes, sir, because you can drill four per 160.
- Q. All right. Both of these wells are orthodox for drilling additional wells within that 160; is that correct?
 - A. That's correct.
- Q. So actually two wells could be drilled, one each, north of the two proposed locations?
 - A. That's correct.
 - Q. Now, with respect, though -- your opinion, which

1	do you feel Based on the information now available to
2	the parties, which do you feel which location do you
3	feel has the structural advantage or would be more
4	favorable to be drilled first?
5	A. According to my interpretation and I still
6	feel I can stick with my interpretation the Yates
7	location would be the better of the two locations.
8	Q. Do you have anything further you'd like to
9	A. No, I believe that's all.
10	MR. ERNEST CARROLL: Mr. Examiner, I would move
11	admission of Yates Exhibits 7, 8 and 9 at this time.
12	EXAMINER CATANACH: Exhibits 7, 8 and 9 will be
13	admitted as evidence.
14	MR. ERNEST CARROLL: And then I pass the witness.
15	EXAMINER CATANACH: Mr. Kellahin?
16	CROSS-EXAMINATION
17	BY MR. KELLAHIN:
18	Q. Mr. May, I'm looking at your Exhibit Number 8.
19	South of the dispute in Section 24 is the Fairchild 24
20	Number 1 well, drilled by Nearburg?
21	A. South of Section 13?
22	Q. I'm sorry.
23	A. Yes, sir.
24	Q. South of 13 in Section 24 is the Nearburg 24-1
25	well?

122 Yes, sir, that's correct. 1 Α. It's producing oil out of this Canyon dolomite? 2 Q. That is correct. Α. 3 Why is there oil at that location? 4 Q. That's a good question, and I think Mr. Elger hit 5 Α. on one possibility, that you could have -- As he showed on 6 his cross-section, there was a piece of dolomite at the 7 8 very top. First you had the Canyon lime, then you went into a piece of dolomite, and then you went into more lime, 9 and you finally went into the Canyon dolomite body. And 10 that upper dolomite is where they have perforated and are 11 producing out of. 12 That looks like maybe a little finger of dolomite 13 on top of the dolomite section. 14 Do you have any alternative theory to how this is 15 trapped and located there? 16 I think Mr. Elger is -- I would probably agree 17 A. with that. 18 Now, there's another one that is being kicked 19 around and is not been proven. There's a possibility that 20 21 that production from the main body of the field could

eventually come down and meet this. But that's highly speculative.

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I think Mr. Elger at this point has the better interpretation, and I would agree with his cross-section.

1	Q. Did you have available to you any of the seismic
2	data that Mr. Elger had utilized in his interpretation?
3	A. No, I did not. All I had was subsurface only. I
4	did not have any seismic available to me.
5	Q. When we look at the Exhibit 8, is the strategy
6	here to play off the success of the Fairchild 24-1 well in
7	Section 24?
8	A. That is the key well, and I would have to agree
9	with that statement.
10	Q. When we look at minimizing Well, let's look at
11	the risk issue before we talk about minimizing it.
12	Within the southwest quarter of 13, the risk,
13	regardless of which location, is substantial for either
14	operator, is it not?
	A. I agree.
15	A. I agree.
15 16	Q. And regardless of who is the operator, the
16 17	Q. And regardless of who is the operator, the
16 17 18	Q. And regardless of who is the operator, the maximum 200-percent penalty is going to be appropriate,
16	Q. And regardless of who is the operator, the maximum 200-percent penalty is going to be appropriate, isn't it?
16 17 18 19	Q. And regardless of who is the operator, the maximum 200-percent penalty is going to be appropriate, isn't it? A. I agree.
16 17 18 19	Q. And regardless of who is the operator, the maximum 200-percent penalty is going to be appropriate, isn't it? A. I agree. Q. Apart from that issue, though, you can manage the
16 17 18 19 20	Q. And regardless of who is the operator, the maximum 200-percent penalty is going to be appropriate, isn't it? A. I agree. Q. Apart from that issue, though, you can manage the risk in several ways, and one way would be to locate the

interpretation it did fall structurally higher, the closer

one.

But then again, on Mr. Elger's interpretation, the well that's a little further away, according to his interpretation, would be higher.

- Q. The advantage under either interpretation is for -- the challenge for either one is to be as high as you can structurally?
- A. That helps. But that is not everything, because as we saw on Mr. Elger's cross-section, that thin piece of dolomite where the Fairchild 24 Number 1 is producing, that is the reservoir out here, and either one of these locations, there's a risk we could lose that dolomite at either location.
- Q. When you look in Section 14 to the west of 13, it appears by your interpretation in Exhibit 8 that we are gaining structure as we move into the adjoining section?
 - A. Yes, sir.
- Q. Why has not Yates proposed a well in the southeast of the southeast of 14?
- A. I don't know if I can answer that right now because I don't know the land questions involved and how much -- if we own that acreage. I don't know that off the top of my head, sir, and I --
- Q. Well, forget the land questions. Ms. Mauritsen has told us the land ownership in 14. I'm talking about

geologic strategy.

A. Okay, again, you could go back to your previous question. You could be getting further away from your reservoir. And there's risk involved there on -- the further -- As you pointed out, the further you get away, possibly you could be getting further away from that thin piece of dolomite that's producing.

And then again, on the other hand, you might get lucky enough to where it thickens up. But it adds your risk, the further away you get.

- Q. When we look at your Exhibit 9, which is the distribution of the dolomite on the isopach, what's "net" mean?
- A. It's the -- I'll describe it the same way I did in the last hearing, and what I did is, I looked at the dolomite and actually counted up the feet thickness of dolomite present. I did not use the gamma ray, I did not use the porosity. I only counted up the net feet of dolomite --
- Q. Okay.
 - A. -- total, in the whole Canyon section.
- Q. Okay. And when you count that total at the Fairchild 24 location, you get 289 feet?
 - A. Yes, sir.
 - Q. And if you move up into Section 18, up to the

northeast, and we look up in the northwest-northwest, 1 there's a value of 268? 2 I'm sorry, in which --3 Yes, sir, I'm looking in Section 18. 4 Q. Oh, okay. Yes, sir, I see it. 5 Α. 6 Q. In the northwest-northwest --7 Yes, sir. Α. -- There's a value of 268? 8 Q. Yes, sir. 9 Α. Are you counting that off the log that was on Mr. 10 Q. Elger's cross-section, which is that Nearburg Lakewood Farm 11 18-1 well? 12 That should be the same, yes. 13 All right, let's look at his cross-section. You 14 have it there. 15 What are you counting when you get 268 feet, if 16 we're looking at his cross-section? 17 You can see he's got the limestone colored at the 18 19 top, and then he goes into what he's correlating in, a 20 little thin section that possibly correlates to the producing zone in the Fairchild 24 Number 1. That's 21 dolomite. 22 And then you go down into the Middle Canyon, what 23 he has labeled as the Middle Canyon, there's dolomite 24

present there.

You go down into what he has marked the Lower Canyon, and down to about eight thousand and approximately fifty, there's dolomite there. And then you finally go back into limestone.

- Q. All right. When you're looking at the log in that section, would you agree with him that the opportunity for oil production out of the dolomite is confined to that portion that he has shaded --
 - A. Possibly.

- Q. -- in the pink?
- A. Possibly. I would like to point out that everyone was surprised by the Fairchild 24 Number 1 becoming a producer, and I think Nearburg could even agree to that.

So at this point I don't rule out anything. And we could always stumble across more productive interval elsewhere, besides that thin dolomite finger, as I recall it, that's present in the Fairchild 24 Number 1.

- Q. Looking west on Exhibit 9 again, you've got Section 13 where the dispute exists?
 - A. Yes.
- Q. In Section 14, farther to the west, there is a well symbol, and it's got a value of 306 feet?
 - A. Yes, sir.
- Q. That is Yates's disposal well, is it not, where

you're disposing of water into the Canyon, are you not?

- A. That is correct, if I'm understanding it right.
- Q. When we look at your Exhibit Number 7, the well in 14 would be disposing in a zone that is correlative to what portion of the log shown on the Fairchild 24 well?
- A. I'm not exactly sure of where exactly those perforations are in the well in 14. So -- There's a possibility, if I remember right -- and I could be wrong, but if I remember right, I don't think there's that finger of dolomite in that well. But -- I believe the perforations are in the upper part of the Canyon dolomite, but -- I could be wrong on that, but I think that's what I remember.
- Q. That disposal well that's putting water in the Canyon member, how many feet on your structure map is that upstructure to the Fairchild 24 well?
- A. That -- let's see, approximately -- to the Fairchild 24? That was approximately 123 feet, I believe.
 - Q. Yes, sir, that's what I calculate.

When we look at your dolomite section, you have connected Sections 14, 13, 24 and 23 into the same dolomite reservoir, haven't you?

A. This net isopach dolomite, I'm not trying to map out individual units within the dolomite. It is the net of all dolomite. So yes, I'm not mapping out individual

dolomite units.

- Q. Do you know what kind of volumes are being disposed of into the disposal well?
- A. No, sir, I do not. And I might point out, that was converted into a disposal well several years ago, before the development in North Dagger Draw, and that's why that disposal well was put there.

I think if it was today, if we drilled that well today, we probably would not convert it into a disposal well.

- Q. Is it still being utilized for disposal purposes?
- 12 A. I'm not sure, I'm not sure.

MR. KELLAHIN: I have no further questions, Mr. 14 Examiner.

EXAMINATION

BY EXAMINER CATANACH:

- Q. Mr. May, am I correct in understanding your testimony that the seismic information utilized by Nearburg is not really valuable in this case because you still have to make certain assumptions as to thickness of the dolomite?
- A. I don't know if I should say that the word "valuable" should be used, but what I'm trying to get at is that all they can see on their seismic is the top of the limestone. And I have seen, working North Dagger Draw, the

thickness of the limestone can vary.

And thus, it's hard to predict the top of the dolomite, based off the top of the limestone.

- Q. Is the limestone thickness -- in some areas is it consistent?
- A. I've seen it vary from zero to over a hundred feet in thickness. I've seen it in 40-acre offsets -- In, I believe, Section 10 of 19 South, 25 East, I think I've seen it vary from, if I remember right, around 40 feet thick to over 100 feet thick in 40-acre offsets. So it can vary in thickness.
 - Q. Can it be consistent?
- A. I would say with the lack of data around Section 13 -- I mean basically in the nine sections around 13 you have around -- maybe one to two wells, one and a half to two wells, per section. I would say with that lack of control it might be hard to predict the consistency of it in this area.

Now, once you get back over to North Dagger Draw and you basically have 40 acres -- every 40 acres drilled up, you can get a better feel for it.

- Q. Mr. May, is it your opinion that both of these locations are drillable and both will be productive in this reservoir?
- A. I think there's a chance, yes, that both

locations could be productive.

I think both locations appear to be risky too.

And I have my interpretation that says the Yates well should be higher, and Mr. Elger has his interpretation.

- Q. These wells can be risky based upon the structural position?
- A. Well, I think the big risk here is that we're stepping out quite a ways from the known producer, and this is the -- and the Fairchild 24 is the only Canyon producer in this area -- you have to say back two, two and a half miles, back to the west to get into North Dagger Draw before there's any Canyon production.

And as Mr. Elger said, this is way downdip of where we originally thought you could find productive acreage in the Canyon. That also adds to the risk.

Also, we only have the one data point, the Fairchild 24, on that dolomite finger. Where else -- You know, it's very hard to predict where else that finger goes.

Granted, Mr. Elger also can see it in the well in 23, but that's basically only two in this immediate area. That's not a whole lot of data to go on.

So there can be a lot of room for interpretation.

EXAMINER CATANACH: That's all I have of the

1 witness. ROBERT FANT, 2 the witness herein, after having been first duly sworn upon 3 his oath, was examined and testified as follows: 4 5 DIRECT EXAMINATION 6 BY MR. ERNEST CARROLL: 7 Would you state your name and residence for the Q. record? 8 9 A. My name is Robert Fant, and I live in Artesia, New Mexico. 10 And by whom are you employed? 11 0. I'm employed by Yates Petroleum Corporation. 12 A. 13 Q. What capacity? As a petroleum engineer. 14 Α. Have you had occasion to testify before this 15 Q. Division and have your credentials accepted as a petroleum 16 17 engineer? Yes, sir, I have. 18 Α. 19 And Mr. Fant, are you personally familiar with the Applications now before this -- the two competing 20 21 Applications now before this Examiner? Yes, sir, I am familiar with them. 22 MR. ERNEST CARROLL: Mr. Examiner, I tender Mr. 23 Fant as an expert in the field of petroleum engineering. 24

EXAMINER CATANACH: Mr. Fant is so qualified.

1 Q. (By Mr. Ernest Carroll) Mr. Fant, you have prepared certain exhibits, have you not? 2 3 A. Yes, sir, I have. Before we get into those exhibits, you have also 4 5 examined the two AFEs that were presented, one by Nearburg 6 and one by Yates; is that correct? 7 Α. Yes, sir, I have. And that's where you would like to begin your 8 0. testimony, is it not? 9 Yes, sir, I would like to start with these. 10 Α. The two exhibits that you're going to be 11 looking at, the AFEs, for the Examiner's ease, would be 12 Exhibit Number 3, behind the red tab, and Exhibit, I 13 believe, 5, behind the red tab; is that correct? 14 15 Yeah, the red --No, it's Exhibit 6, excuse me, 3 and 6. 16 Q. 17 Yeah, 6. 3 would be the Yates AFE, 6 would be the Nearburg 18 Q. 19 AFE; is that correct? 20 Α. Yes, sir. All right. Would you please give us the benefit 21 Q. of what your opinion is with respect to comparing these two 22 23 -- the differences in these two AFEs? I don't want to take too long on this; Mr. 24

McDonald has covered some of this.

But basically there are discrepancies between the two AFEs. Exhibit Number 3 contains the Yates AFE, and Exhibit Number 6 contains Nearburg's AFE. And just as he mentioned, there are some discrepancies, and he mentioned some of the more prominent ones.

And the intangible drilling cost, the most prominent difference is actually the footage rate.

When this AFE was presented, we realized that there would be -- there might be some increased drilling activity, and we were concerned that drilling rates might increase, and we wanted to prepare our partners for that, that might happen.

In reality, drilling rates have not increased substantially out here, and so...

Again, as we alluded to earlier, these are cost estimates. I mean, they are hopefully based upon experience, but they are simply estimates made by these people. This does not define, necessarily, how much money will be specifically spent on these wells. Conditions arise and things change.

When Mr. -- Mr. Springer, Al Springer, our drilling superintendent, writes the AFEs. When he wrote this one out, he was concerned that drilling rates might go up, and even with the increased activity we really haven't seen that to any tremendous effect.

- 135 With respect to the drilling company that 1 Q. 2 Nearburg was talking about having a contract, Peterson, you in fact at the present are utilizing the rig that would 3 4 have been under that contract? 5 Well, we had been until just a day or two ago. We actually drilled a well with them. 6 They released that -- We released that rig 7 subsequent to the TD and running of casing in that well. 8 The significance is that the drilling contractors 9 Q. out here are available to both parties, the same drilling 10 contractors? 11 Yes. I mean, that's absolutely true. 12 Contractors are -- In fact, we used the specific company 13 that they spoke about using. We just used one of their 14 15
 - rigs. And we, I'm sure, get a similar type of drilling costs.

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Now, that was approximately \$30,000 of the difference between the two wells. And there was a -- Part of that difference in the drilling footage rates, is the fact that we have estimated taking the well to 8500 feet.

That's a practice that Yates Petroleum has found to be beneficial in the long-term operations of these It provides to have enough rathole beneath the Canyon to where if there were any problems or junk left in the hole, if you were to run into the problems, stuff

coming into the wellbore and it falls to the bottom, it's of no concern, you don't have to worry about that.

- Q. So the practice of drilling a deeper rathole is a decision consciously made by Yates to avoid having trouble with stuff that normally accumulates in these holes?
- A. Yes, it's an attempt on our part to prevent future problems in the wells and to keep the operating costs down. We don't have to go in and clean them out or anything of that nature.
- Q. Now, this is a much more significant problem, because these wells are subject to being pumped by submersible equipment, and that raises the risk for that kind of occurrence happening?
- A. Yeah. If you've got high volumes of fluid coming into these wells, which 2500 barrels of fluid a day is high volumes -- I mean there's not that many wells throughout the State of New Mexico that produce those types of fluid volumes. We lift them with a submersible pump.

That's a fairly large submersible pump, especially for this area. Pumps of that size can run on the order of \$80,000 to \$100,000. And bringing something in there, not giving it room to fall down, and sucking it into the pump and destroying a pump is a very, very expensive consideration.

And that's part of our reasons for taking it -- I

just wanted to cover why we like to take them a little deeper.

Most of the others -- And again, as Mr. McDonald pointed out in his comparison of these, we categorize our intangible drilling costs. The two different companies categorize them differently, and it's very tough to determine exactly where the differences are.

There's some significant differences on water costs. Again, that's going to be a function of actually when the well is drilled, what that actually costs.

It could be that supervision is a -- You know, I noticed on theirs that just the term "supervision" showed a large increase in theirs over ours. But then again, it just said "supervision". I don't know whether that's their specific well-site supervision of their personnel or supervision by contractors. It's not spelled out in their particular AFE.

But with respect to the intangible costs, the primary one is the drilling footage, and it probably will be lower.

Again, these are estimates, and when it comes down to the drilling of a well, we are going to strive to obtain the lowest cost possible from the drilling contractors, and we have a history of doing that, and I intend to present evidence to prove that.

That's basically all I have on the intangibles.

Q. Okay, go on to the tangible things.

A. The tangibles, again, there's two primary differences in the tangible costs, and they're much easier to delineate where the cost differentials are.

In general, the actual pipe costs, the costs per foot for the pipe, Nearburg's are equivalent or higher per foot of pipe for their...

The -- One of the large, glaring differences,

Nearburg has \$80,000 for artificial lift equipment. I have

spoken with our production personnel and with our drilling

people to -- and with the ESP, Electrical Submersible Pump,

Corporation. These are the people who we primarily use to

obtain our pumps.

You know, we're looking at \$60,000 to \$80,000 for the pump. We have in there, possibly, the contingency for a variable-speed drive.

But it's -- All of that is going to be driven by what the well can produce. As Mr. McDonald said, you know, we can estimate these things, but the cost there is going to be driven by what the well actually produces. When we get down and complete the well, that's what's going to drive whether or not you need a bigger pump or a smaller pump or the drives.

There is -- That's \$30,000 difference.

The other big difference is the -- You know, we have \$60,000 for separation equipment, flow lines, miscellaneous, and that's a big differential between theirs.

Separation equipment, you know, again, that's going to be determined -- the size separator you have to buy. We need a three-phase separator in this instance, because we are going to produce gas, oil and water.

Again, though, the size of that equipment is determined by what the well can produce. So we can make all these estimates. We can say, well, we can get one for \$3000. But still, we've got to get the size that will handle the production, and that will be decided when it comes in.

The other differential is evidently the tank battery issue of whether or not we are going to surface commingle on another lease.

Our particular AFE has provisions for building a tank battery for this 160-acre proration unit, and it appears that -- from the testimony, that they are not going to do that, and...

So basically, AFEs -- I'm really striving to make the point that AFEs are just estimates. And the specific well conditions, when you get in there to drilling it, that's what really controls the cost.

And again, I'm going to present some data that shows where those actually go.

You can estimate all you want, but when it gets down to it, there are histories of how much wells cost, and I think that has a much greater bearing on this particular case than an AFE.

If we had received their AFE first -- I don't know what our AFE -- what exactly the AFE costs would be. I know they received our AFE first, before theirs was -- went out.

And so I'm concerned that, you know, you could get in -- If we just consider AFEs, we could get into a situation of one-upsmanship on AFE-writing, and it still doesn't have any bearing.

You get out there and you drill the well, and you must engage in certain practices in drilling the well that are safe and that are specified by the rules, and we must do certain things. And those are what are going to drive the costs of the wells.

- Q. Now, you have prepared a study, then, about actual drilling costs, and that's in your Exhibit Number 10; is that correct?
- A. That is correct. Exhibit Number 10 is simply a compilation of the actual drilling costs, booked costs, for 14 wells operated by Yates Petroleum and four wells

operated by Nearburg.

Now, I want to first go through my selection criteria for the wells. I wanted a common data set between the wells, so I selected -- I wanted data that Nearburg had the data too, so I selected wells that we had drilled that they had interest in. So they had the drilling cost data.

I selected wells that they drilled that we had interest in, so that I knew were completed and all the costs have been booked. And I basically looked at the cumulative costs on these things.

And there are 14 wells. Ours happen to be alphabetically sorted. There's no time frame exactly on these, but they are alphabetically sorted.

And if you look, the average for Yates Petroleum Corporation drilling a Dagger Draw well is \$673,000. This is physical cost, this is factual.

There are 14 wells.

If you look closely, there are three wells, the Hooper AMP Number 1, the State K Number 3, and the Voight AJD Com Number 1. Those three wells are above \$700,000.

The remainder of the wells are under \$600,000 -
I mean under \$700,000 -- with an average of \$673,000.

So over 75 percent of the time that we drill a well, it comes in -- and I think the exact number is around 77 percent -- under \$700,000.

Our drilling staff, moving into an outlying area, was concerned about having to drill a tank battery.

They in fact -- I specifically spoke with the drilling supervisor. He did not specifically look, when he wrote this AFE, how far our operations, in terms of saltwater disposal, were away. It's right around a mile. So that's part of the high cost that we estimated, that won't be -- won't actually occur, because he was not taking into consideration that the Cotton saltwater disposal well is in the proximity.

But again, we estimated \$741,000.

When you move to the lower four wells, the ones operated by Nearburg Petroleum, I think the numbers just speak for themselves pretty bluntly.

The average for Nearburg Petroleum is almost \$720,000, \$719,000, about \$46,000 more than we spend per well. That's about a 6- to 7-percent increase for Nearburg to drill the well versus us.

I'm just -- I wanted to present this as the historical facts about what has been spent out here. These are Dagger Draw wells. These are Dagger Draw completed oil wells. That is a -- In my opinion, that's a stark difference.

And they came to us with an AFE saying that they can drill a well around -- for approximately \$92,000 less

than what they do on average. And I -- I just had -- I have trouble with that.

And I go back to the statement that AFEs are estimates. And I don't want the companies -- I don't want it to become a practice of getting into one-upsmanship on AFE-writing when we come up here. I want people to put down what they truly believe it will cost.

And I think these numbers reflect historical -- the historical averages.

- Q. Now, you've also on this exhibit compared what the AFEs were for these wells and have presented an average there, have you not?
- A. Well, now, this is -- The AFEs here are the AFEs as we see right here. The AFE numbers, drilling-cost estimate, the \$741,200 is what we presented to them in Exhibit Number 3.
 - Q. Okay, and then the other number --
- A. The \$627,000 is their estimate in their -- in Exhibit Number 6, their proposal back to us.
 - Q. All right. So then the historical data shows that the average -- Yates is -- or has an average of drilling under than what --
 - A. What we have proposed, in this instance.
 - Q. -- what we've proposed, almost \$75,000?
- 25 | A. Yes.

1 Q. And then -- But the expense level for Nearburg is 2 that they have understated almost \$100,000 what they have been historically drilling the wells for? 3 4 Yes, sir. 5 0. All right. With respect to drilling practices, 6 have you noted a difference in the practices that have been engaged in by Nearburg, as opposed to Yates? 7 Yeah, there are some significant differences. 8 9 Nearburg --You've prepared an exhibit to illustrate those 10 Q. differences, have you not? 11 Yes, I have. 12 Α. And that's Exhibit 11? 13 Q. That is Exhibit 11. Α. 14 Okay, would you describe that, then? 15 Q. 16 Α. Exhibit 11 shows a porosity log from the -- what is now considered to be the Tackitt AOT Number 2. 17 originally drilled as the State K Number 2. It was drilled 18 19 by Nearburg. 20 They went in, and this -- I have three intervals marked on this well. There's a box with some writing in it 21 and arrows extending in each direction. There are two on 22

And if you'll proceed to number "1", the first

the right-hand side and one on the left-hand side, and each

one of these boxes has a little number in it.

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thing that was done in this particular well, again,

Nearburg drilled the well and was completing it. And they
added the perforation, they perforated in the interval
shown on the -- in the box number 1 with the arrows
extending, 7737 to 7785, that's the perforation interval.

They acidized it, and it flowed 432 barrels of oil per day,
1783 barrels of water per day, 632 MCF a day.

And again, sir, that's flowing. With an artificial lift, that particular interval should have made -- you know, possibly could have made near proration-unit allowable.

But again -- They did not stop there.

They set a bridge plug on top, on the -- just above these perforations and proceeded to perforate the interval that I've designated with the "2", and that's the interval 7606 to 7720. They acidized that with a large volume.

These intervals, that I'm quoting on perforations, they did not perforate the entire interval. In fact, the perforation intervals that they specifically perforated are marked in the depth track with the little holes.

In this particular interval, they flowed 43 barrels of oil per day, 85 barrels of water per day and over 4 million cubic feet of gas per day.

So basically, in the lower portion you've got an oil well, and in the upper portion you've basically got a gas well.

And this should be apparent to them from the DST. If you look over on the far right side of the log, there is an interval marked right near the top as DST number 1, and you can -- It's standard mud-logging notation for DSTs, but it shows that the interval runs down to almost 7750 -- or 7760 -- from above 7600. That's almost 200 feet of Canyon interval that they DST'd.

Looking at that particular DST, that particular well produced -- On that DST, it was flowing about 7 million cubic feet of gas per day. Now, that's way too much gas to be in solution in the oil, and therefore the plain consideration that we had a gas cap in this particular localized area of the reservoir.

Now, under general circumstances it is much preferable to produce the oil column -- or the portion of the reservoir that's not high gas content first, to maintain the energy from the gas cap, and use that to drive the oil out, and then produce the gas, and you get more oil and gas out of that.

But with their -- with this particular operations technique, they went in and knocked out the bridge plug.

25 And we move over to interval number 3, 7606 to 7785

overall, and the well was flowing 121 barrels a day, 1100 barrels of water a day and 5 million cubic feet of gas.

So we've gone from leaving in the bottom 400 barrels of oil and some water -- and 1700 barrels of water and 632 MCF. Basically -- In the bottom you have an oil well, and in the top you have a gas well. And when you produce the whole thing, basically the gas is dominating the flow.

Now, as the particular JOA or operating agreement in this section or this proration unit holds, Yates was designated the operator, and the operating agreement specifies that once the well is completed, it's turned over to Yates Petroleum.

And that brings me to Exhibit Number 12, which is a production plot of this particular well.

This well was basically completed right at the beginning of September of last year.

I've got three dark vertical black lines on this that show three significant occurrences.

The first vertical black line was when Nearburg decided to perforate the gas cap.

The second one is when the well was -- turned over operatorship to Yates Petroleum.

And then there's one in November when we ran a submersible pump into the well.

And it's kind of busy, in the -- The graph is kind of busy in the beginning of it. But again, oil is designated as green, water is blue, gas is red. I chose blue-green for a water-oil ratio and purple for a gas-oil ratio. I thought that was appropriate.

And the important things to note is, when the well is flowing, when -- Before the sub pump is run, after the well had been perforated in the gas cap, oil production is real erratic, but it hovers and averages around 70 to 80 barrels a day. I mean, it is up and down quite a bit.

But we're looking at flowing, and the way that

Nearburg completed this well and designated a completed

well, a well capable of about 70 barrels of oil a day, and

when you look at the gas -- 7 declining to maybe 6 million

cubic feet a day, a tremendously high-rate gas well, and

ever-increasing water production.

It took us a while at Yates Petroleum to figure out what was wrong with this well. And we felt that -- You know, originally, they had a very good -- a much higher oil cut, a much lower GOR. And we were concerned that we were losing reservoir energy here in this well. And so finally, we figured it out, what was going on.

We put it through the necessary process to get a submersible pump out there, and in mid- to early November, we ran a sub pump in the well, and you can see that the oil

production dramatically increases. The oil production peaks at over 400 barrels of oil per day, around 450 barrels of oil per day.

The gas rate really didn't change much.

Water rate that we had before running the pump and after running the pump really didn't change much.

So now what we're doing is, we're getting a heck of a lot more oil out of this thing, out of this particular reservoir without -- while the gas is still coming out. I mean, we're recovering oil before the gas cap is wasted.

We would have preferred -- and we feel that it would have been a much better operation -- if the gas cap had not been perforated. It would have prevented waste in this particular instance. And that's -- you know, that relates to some production experiences in the area and some practices that have concerned Yates Petroleum in this particular area, or in Dagger Draw.

I'd like to go back briefly to one other point, if I may. We spoke about drilling costs. Mr. McDonald -- I'm not sure whether he covered it or not, but I'd like to cover the constituents of power -- of operating costs.

In Dagger Draw, with these high-volume wells, they're primarily controlled by three components.

The first component is overhead. That's specified by the operating agreement. I think we both

agree that it should be \$540 per month. I think that's a moot point.

The saltwater disposal is another big point of that, the charges to get into systems. Nearburg charges their partners 25 cents a barrel for saltwater disposal. We charge our partners 25 cents a barrel for saltwater disposal, same number. The well is going to produce.

The third point being power, and that's specifically what is driven by how much the pump needs and how much the well -- how much we need to lift, what the well delivers. So operating costs between the two companies should essentially be the same on that instance.

But again, with the completion techniques in this particular instance, there was significant energy -- reservoir energy waste, and --

- Q. Mr. Fant, did you address with respect to the drilling practices the mudding up and the intervals of DST?
- A. Yeah, the -- When they are drilling wells, they mud up when they're into the Canyon. This concerns us just from an operational standpoint.

Dagger Draw is well known for high H_2S content in the gas. Drilling with the light muds, you run risks of not cleaning the holes, sticking pipe, creating operational problems that could prevent the smooth operation of the well. You could lose returns. You don't have any mud cake

on the wall to seal off any of this stuff. You could get H_2S coming.

If your rig crew is not prepared to handle it, you could have problems with it, if they're not prepared to understand how lost returns occur. You can have serious problems with it. And that practice exacerbates that problem.

With respect to the DSTs, as I mentioned earlier, in the Tackitt Number 2 on Exhibit 11, they DST'd an interval of almost 200 feet. They've spoken with the concern for delineating contacts.

Shorter intervals in this particular instance might have helped them, even though it was apparent from the first DST that they did have a gas cap. It might have told them that -- where that gas cap exactly was, and they might have been able to increase the interval perforating and producing oil without producing that gas. Again, that could have prevented waste.

That's basically what I wanted to cover, then.

- Q. Mr. Fant, do you have an opinion that -- This

 Commission is concerned with issues of waste and

 correlative rights with respect to the granting or denying

 of these two competing Applications.
- A. I believe strongly that designation of Yates as the operator will prevent waste. I think the historical

evidence has shown that Yates drills wells in Dagger Draw 1 for less money than Nearburg. And in protection of 2 correlative rights, we both own interests in this section, 3 4 and that -- This is an orthodox location, so that's -- it fulfills those needs. 5 Is there anything further that you would like to 6 Q. 7 address? No, I think that --8 Α. MR. ERNEST CARROLL: Mr. Examiner, I would move 9 10 admission of Yates Exhibits 10, 11 and 12 at this time. EXAMINER CATANACH: Exhibits 10, 11 and 12 will 11 be admitted as evidence. 12 13 MR. ERNEST CARROLL: I pass the witness. 14 CROSS-EXAMINATION BY MR. KELLAHIN: 15 16 Mr. Fant, are you suggesting to the Examiner that 17 he should decide this case based upon how big a rathole 18 either operator leaves in this well? 19 Α. No. You've told us that the disposal of produced 20 Q. water from this proposed well is going to go into the 21 22 Cotton disposal well? 23 No, sir. Α. Where are you going to put it? 24 Q.

That's our -- That is the nearest point in which

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Α.

we can enter our SWD system. And from that point it's
within the confines of the water disposal system, and it
might go to a myriad of different -- Once it's in that
system, I can't specifically say where a specific molecule
of water goes. However, the costs for doing that are
irrelevant. I mean, the costs for disposal are not a major
issue there.

Q. Let me give you a chance to give you a question, and then you can respond to the question.

The Cotton well is still in the disposal system, isn't it?

A. It is at this point, yes, sir.

- Q. Yates is still utilizing it for disposal, are you not?
 - A. Yes, sir, as granted by the OCD.
 - Q. And Mr. May has told us that that disposal of produced water goes into the Canyon member of the reservoir, does it not?
 - A. Yes, in that particular well it does.
 - Q. Are you aware that the Nearburg disposal well disposes of its water and its system in the Devonian formation?
 - A. I am not aware of where their particular wells dispose of water, but I know that the Devonian is a common disposal interval, as we use in many of our wells.

Are you aware of whether Yates has studied the 1 Q. 2 continuing feasibility and the practicality of continuing 3 to use the Cotton well as a disposal well, as part of this system? 5 Α. They are studying it -- I don't want to say as we 6 speak, because actually I think they've quit down in Artesia at this moment. But there is a continuing study of 7 the disposal system going on right now. 8 9 So whether this water enters and goes towards that well, that's where our operation goes to, and if we 10 can tie into there, we can send the water to another 11 portion of our system and put the water in another well. 12 So whether or not the Cotton continues is a moot 13 point. 14 With regards to the North Dagger Draw wells, how 15 Q. 16 many of those wells have you actually been involved in? 17 Α. I'm not sure what you're asking. 18 Q. How long have you been employed by Yates? 19 Α. I've been employed by Yates Petroleum since January of 1992. 20 During that period of time, how many of these 21 Q. 22 Dagger Draw wells has Yates drilled? 23 I'm not prepared to answer the statement of how

Can you tell us, in any of those Dagger Draw

many wells we've drilled over that interval.

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Q.

wells operated by Yates, whether or not you have perforated 1 the gas portion of the pool? 2 Oh, certainly we have, but we -- when we -- when 3 4 there's clear evidence, we avoid it. 5 0. But you've got examples in the reservoir of doing the same circumstance that you describe for us that 6 7 Nearburg did in the Tackitt AOT Number 2? Yeah, and if I might expound on those, one of 8 9 those --10 Q. My question for you, sir, was whether or not you have examples of that occurrence for the --11 Oh, I do have an example. Yeah, I do have an 12 Α. 13 example. Now, the actual well costs, are you involved in 0. 14 15 the preparation and tabulation of the AFEs and comparing 16 them to the actual costs of the wells? 17 Α. I'm not exactly sure -- Are you referring to 18 Exhibit Number 10? 19 Q. Yes, sir. Okay. I asked our account- -- Our accounting 20 Α. department puts forth a tabulation of how much money we 21 22 spend on a well, okay? Accounting is a logical organization. 23

spent on those wells, they provide those numbers.

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I asked them to tell me how much money had been

I also

asked them to provide us with the numbers for the four 1 Nearburg wells. 2 Is the schematic of the Yates saltwater disposal 3 4 system a matter of public information? 5 I am not sure. Α. Can you tell us, if we discontinue the use of the 6 Cotton well as a disposal well in the Yates system, where 7 is the next closest disposal well in that system that would 8 take produced water from the Fairchild 13 well? I can't tell you, and it's really irrelevant. 10 Α. I didn't ask you that, sir. I just asked you the 11 0. question where it was. 12 13 Α. I can't tell you. MR. KELLAHIN: I didn't ask you for an editorial 14 15 comment. No further questions, Mr. Examiner. 16 17 **EXAMINATION** 18 BY EXAMINER CATANACH: Mr. Fant, do you know what drilling rate per foot 19 Q. you can get on this well? 20 21 A.

A. I would have to estimate that we would probably -- To provide a little bit of a cushion, I would probably say \$15.25 to \$15.50. I don't want to specifically say we can go out there and get \$14.50 a foot.

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Q. On your Exhibit Number 10, are these all of the

wells that are jointly owned by Yates and Nearburg in this area?

A. There are a couple of more wells. As you see, the Fairchild 24 Number 1 is not on here. We -- Because of the lag in the accounting system, we don't have that data. That's not available, that well. And in fact, that well is not completed.

And there's one other well, the Ross Ranch 22

Number 2, in which we have an interest. And again, that

well is not completed, and therefore we're not -- the

timing is such that we can't -- I can't be sure that those

costs would represent a fully drilled well.

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

MR. ERNEST CARROLL: Just one question, Mr. Examiner.

REDIRECT EXAMINATION

BY MR. ERNEST CARROLL:

- Q. Mr. Fant, you indicated that you had a specific example in mind where you had perforated the gas cap. What example was that?
- A. That, in fact, is a direct offset to the Tackitt.

 Yes, sir, we did perforate the gas cap. We perforated the same gas cap here, because the gas cap in this well was producing, and we had to protect the correlative rights of

the other proration unit directly. And that well is the 1 State K Number 3, and it's located directly west of the 2 Tackitt Number 2. 3 4 And to be a -- you know, to fulfill our fiduciary responsibility as an operator, we had to do that. 5 Otherwise, the gas would be drained off. We did not -- It 6 7 was not something we necessarily wanted to do, but our hand had been forced by the completion techniques applied in the 8 Tackitt Number 2. 9 10 MR. ERNEST CARROLL: That's all I have. MR. KELLAHIN: Follow up question, Mr. Examiner. 11 EXAMINER CATANACH: Yes, sir. 12 **RECROSS-EXAMINATION** 13 BY MR. KELLAHIN: 14 In Fairchild 24, is there a gas cap in that well? 15 Q. 16 I have no indication thus far. I have very 17 limited information on that. Q. Did you see the information that Mr. May and Mr. 18 Elger presented with regards to the reservoir for the 19 Fairchild 24? 20 I do not have -- I have not studied that 21 particular information in detail. 22 Did you look at the log of the well for the 23 Fairchild 24 to see where it was perforated? 24 25 Α. It's perforated in the upper section.

1	Q. Within a 40-foot interval, in the dolomite?
2	A. Uh-huh.
3	Q. Did you see any indications of gas cap when that
4	well was perforated?
5	A. I have not seen the whole thing. Specifically on
6	that particular well, the production does not indicate a
7	gas cap.
8	MR. KELLAHIN: No further questions.
9	EXAMINER CATANACH: The witness may be excused.
10	Does that conclude your presentation, Mr. Carroll?
11	MR. ERNEST CARROLL: Yes, it does.
12	EXAMINER CATANACH: Would both counselors agree
13	that closing statements are probably unnecessary?
14	MR. ERNEST CARROLL: I would agree to that.
15	MR. KELLAHIN: I do concur, Mr. Examiner.
16	EXAMINER CATANACH: Okay. I would like to see
17	some rough draft orders in this case from both parties
18	within two weeks.
19	MR. KELLAHIN: All right, sir, be happy to do
20	that.
21	EXAMINER CATANACH: With that, we'll take Case
22	11,233 and 11,234 under advisement.
23	(Thereupon, these proceedings were concluded at
24	5:10 p.m.)
25	* * *

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 April 26th, 1995.

STEVEN T. BRENNER

CCR No. 7

My commission expires: October 14, 1998

I do hereby certify that the forescine is a complete record of the produced

the Examiner hearing of Car

heard by me on /pulle

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