STATE OF NEW MEXICO

ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION

IN THE MATTER OF THE HEARING CALLED BY THE OIL CONSERVATION DIVISION FOR THE PURPOSE OF CONSIDERING:	)	
APPLICATION OF BEACH EXPLORATION, INC., FOR STATUTORY UNITIZATION, EDDY COUNTY, NEW MEXICO	)	CASE NOS. 12,684
APPLICATION OF BEACH EXPLORATION, INC., FOR APPROVAL OF A WATERFLOOD PROJECT AND TO QUALIFY THE PROJECT FOR THE RECOVERED OIL TAX RATE PURSUANT TO THE ENHANCED OIL RECOVERY ACT, EDDY COUNTY, NEW MEXICO	)	and 12,685
	)	(Consolidated)

REPORTER'S TRANSCRIPT OF PROCEEDINGS

EXAMINER HEARING

BEFORE: DAVID R. CATANACH, Hearing Examiner

July 13th, 2001

Santa Fe, New Mexico

This matter came on for hearing before the New Mexico Oil Conservation Division, DAVID R. CATANACH, Hearing Examiner, on Thursday, July 13th, 2001, at the New Mexico Energy, Minerals and Natural Resources Department, 1220 South Saint Francis Drive, Room 102, Santa Fe, New Mexico, Steven T. Brenner, Certified Court Reporter No. 7 for the State of New Mexico.

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July 13th, 2001
Examiner Hearing
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A P P E A R A N C E S

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BILL TAYLOR
HARVEY TAYLOR
Interest Owners
Carlsbad, New Mexico

* * *

WHEREUPON, the following proceedings were had at 10:12 a.m.:

EXAMINER CATANACH: Call the hearing back to order, and at this time I will call Case 12,684, which is the Application of Beach Exploration, Inc., for statutory unitization, Eddy County, New Mexico.

I will call for appearances in this case.

MR. BRUCE: Mr. Examiner, James Bruce of Santa Fe, representing the Applicant. I have three witnesses.

EXAMINER CATANACH: Call for additional appearances?

MR. TAYLOR: Mr. Catanach, I'm Bill Taylor and this is my son Harvey Taylor. We just have some questions to ask of the witnesses and also questions concerning exhibits.

EXAMINER CATANACH: Okay, Mr. Taylor, I assume that you are an interest owner in this proposed unit?

MR. TAYLOR: Yes, sir, I think they will acknowledge that.

EXAMINER CATANACH: Okay. Any additional appearances?

Okay, will the three witnesses please stand to be sworn in?

(Thereupon, the witnesses were sworn.)

MR. BRUCE: Mr. Examiner, before we begin I'd ask

that this case also be consolidated with the next case, 12,685.

EXAMINER CATANACH: At this time I'll call Case 12,685, the Application of Beach Exploration, Inc., for approval of a waterflood project and to qualify the project for the recovered oil tax rate pursuant to the Enhanced Oil Recovery Act, Eddy County, New Mexico.

I assume, Mr. Taylor, you're also entering an appearance in this case?

MR. TAYLOR: Yes, sir.

EXAMINER CATANACH: Okay. Are there any additional appearances in either of these cases? Okay --

MR. TAYLOR: My son is here, sir --

EXAMINER CATANACH: Okay, Mr. --

MR. TAYLOR: -- he's also --

EXAMINER CATANACH: As so noted.

Okay, Mr. Bruce?

ROBERT HINSON,

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

DIRECT EXAMINATION

BY MR. BRUCE:

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

A. My name is Robert Hinson, H-i-n-s-o-n, Midland,

Texas.

Q. Who do you work for and in what capacity?

A. I work for Beach Exploration as their vice president of land.

Q. Have you previously testified before the Division?

A. No.

Q. Would you please summarize your educational and employment background for the Examiner?

A. I graduated from Texas Tech in 1977 with a BBA in marketing. I've worked as a landman in Midland since 1977 to the present, starting with Freeport Oil Company, ARCO, Hustelan Minerals, Felmont and most recently, for the last 12 years, Beach Exploration.

Q. Does your area of responsibility at Beach include southeast New Mexico?

A. Yes.

Q. And are you familiar with the land matters involved in these two cases?

A. Yes.

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

EXAMINER CATANACH: Mr. Hinson is so qualified.

Q. (By Mr. Bruce) Mr. Hinson, would you summarize what Beach seeks in these two cases?

A. Okay, in Case 12,684 Beach seeks to statutorily unitize all interests in a portion of the Queen formation underlying 1156.6 acres of federal and state land. In Case 12,685 Beach seeks approval of a waterflood project for the unit and certification of the project for the Recovered Oil Tax Rate.

Q. What is the proposed unitized and injection interval?

A. The unitized interval is the Penrose section of the Queen formation between the depths of 1708 feet and 1738 feet, as shown by the Schlumberger compensated neutron lithodensity log dated 4-6-86 in the Exxon Federal Well Number 14, located 1650 feet from the south line, 1650 feet from the east line of Section 18, Township 16 South, Range 29 East, NMPM. The unitized formation includes all subsurface points throughout the area correlative to these depths.

Q. Would you identify Exhibit 1 for the Examiner and describe its contents?

A. Exhibit 1 is a land plat which outlines the proposed unit area and identifies the separate tracts which comprise the unit area. Attached to the plat is a legal description of the entire unit area. There are 12 tracts in the unit. Beach operates all these tracts at the present time. Most recently, we acquired an assignment

effective June 1st, 2001, on Tract 11, the M&W Federal well.

Q. Okay, now that Tract 11, which is in the southwest corner of the unit, that is the tract in which Mr. Bill Taylor and Mr. Harvey Taylor own interest; is that correct?

A. Yes.

Q. Okay. Would you please move on to your Exhibit 2 and identify it for the Examiner?

A. Exhibit 2 is the proposed unit agreement. The unit agreement is a standard form mandated by the State Land Office and similar to agreements approved previously by the Division.

The unit agreement describes the unit area and the unitized formation. The unitized substances include all oil and gas produced from the unitized formation, the designated unit operator is Beach Exploration.

Q. What is Exhibit 3?

A. Exhibit 3 is the proposed unit operating agreement which sets forth the authorities and duties of the unit operator, as well as the apportionment of expenses between the working interest owners.

Q. Okay. Does this agreement provide for a penalty against nonconsenting working interest owners?

A. Yes, Section 11.7 provides for a 200-percent

nonconsent penalty. Previously when this was submitted to working interest owners and the Commission it had a 500-percent nonconsent penalty, which was inadvertently included because of a previous form that we had taken this from.

Q. And it has since been amended to the statutory maximum of 200 percent; is that correct?

A. In the agreements presented today as this Exhibit 3, yes.

Q. Okay, from a landman's standpoint is a 200-percent penalty fair and reasonable?

A. Yes.

Q. Why is that?

A. Operating agreements in this area typically provide for nonconsent penalties of 200 percent.

Q. Do some of them provide for penalties in excess of 200 percent?

A. Yes.

Q. Now let's discuss the ownership of the tracts in the unit area. Please describe the tracts and their ownership and how you determine the working and royalty interests in each tract.

A. The unit tracts are formed according to common leasehold ownership. If we go back to Exhibit 2, which is the unit agreement, and look at Exhibit B to the unit

agreement, you'll find a tract-by-tract listing of the interest owners. The names and interests were obtained from current Division orders or title opinions.

Q. Since this unit agreement was submitted to the Division, has Exhibit B changed somewhat?

A. Yes, it's changed constantly as we've acquired additional interests.

Q. And is Exhibit 4 simply a revised Exhibit B, up to date?

A. Up to date, current, that's our current ownership.

Q. Okay. How many interest owners are there in the proposed unit area?

A. There are 32 working interest owners and 65 royalty or overriding royalty interest owners.

Q. Okay. Now, let's refer to your Exhibit 5. What does that reflect?

A. Exhibit 5 lists all working interest owners in the unit. The working interest owners that have not yet ratified are noted in Exhibit 5, and they're detailed in red on that exhibit.

Q. Does Exhibit 5 also contain all overriding royalty owners?

A. Yes.

Q. And how are they -- The ones who have not

ratified, how are they designated?

A. I believe we listed one. They're in blue, that's right.

Q. Okay, so on Exhibit 5, which is stamped on the back, the overriding royalty owners who have not ratified are in blue?

A. Yes.

Q. And the working interest owners who have not ratified are in red?

A. That's correct.

Q. And so the persons shown on that status on Exhibit 5 are the people that you seek to force into the unit?

A. Yes.

Q. What is the total percentage of working interest owners who have voluntarily ratified the unit to date?

A. Ninety-four percent of the working interest owners have ratified the unit and the unit operating agreement to date.

Q. Now, all of the royalty here is either federal or state, correct?

A. Yes.

Q. Okay, including the federal and state royalty plus the overriding royalty owners, what is that ratification status percentage?

A. Okay, are you talking about -- The royalty owners, including who you just mentioned, we have -- 96.5 percent of the royalty owners have ratified the unit to date.

Q. Okay, and that would include the overriding royalty owners?

A. Yes.

Q. Okay. So at this point you are in excess of the 75 percent of working interest and 75 percent of royalty interest that's required under the statute for statutory unitization?

A. Yes.

Q. Okay. What are Exhibits 6A and 6B?

A. That would be copies of the ratifications we've received to date.

Q. Okay, 6A is the working interests, I believe, and -- Is that correct, Mr. Hinson? 6A are the working interests and --

A. Yes.

Q. -- 6B are the overriding royalty interests?

A. Yes.

Q. Okay. Has the Commissioner of Public Land preliminarily approved unitization?

A. Yes, Exhibit 7 is a copy of the Commissioner's letter of preliminary approval.

Q. What is the status of the Bureau of Land Management's approval for unitization?

A. The status of BLM as we submitted this to them November 8th, 2000, I believe, you know, we had some questions to answer for the state concerning freshwater concerns and changed a couple of times how the unitized interval was described. It's my belief they were waiting on settling some of these, and then they, of course, received a carbon copy of the state's preliminary approval, but we have not yet received in writing the BLM approval.

Q. But you have been in contact and you do anticipate their preliminary approval --

A. Yes.

Q. -- shortly?

A. Yes.

MR. BRUCE: Mr. Examiner, I'd request permission to submit the BLM's letter of preliminary approval after the hearing.

EXAMINER CATANACH: Do you have that, Mr. Bruce?

MR. BRUCE: I don't have it at this point.

EXAMINER CATANACH: Okay, you don't know when it's going to be approved?

MR. BRUCE: No. I anticipate in a few days. What Mr. Hinson was referring to -- and the engineer can get into it -- most of the water for this waterflood is

going to be fresh water, and as you know, the Commissioner of Public Lands does not favor freshwater injection, so we had to go through several steps to satisfy the Commissioner on that issue, which is why their approval came about just a couple weeks ago, after about seven months, and the BLM was waiting on the state to see if the state was satisfied.

EXAMINER CATANACH: Okay.

Q. (By Mr. Bruce) Now, Mr. Hinson, let's discuss your efforts to obtain voluntary unitization among the parties. Would you just briefly identify what Exhibit 8 contains?

A. Exhibit 8 contains copies of correspondence regarding -- to soliciting their approval of the unit.

Q. Okay. Now, rather than going through the correspondence page by page, let's start with Beach's contacts over the years with the interest owners. When did Beach first consider unitization of this pool?

A. This has been considered for quite some time. Initially, probably as far back as 1993, we began purchasing interest in the unit area that we did not already own. Beach had drilled a number of the wells themselves, and then we started in 1993 purchasing other wells and working interest.

Q. Now, when was the formal unitization proposal made to the working interest owners and overriding royalty

owners?

A. That would have been by a letter dated March 29th, 2001.

Q. And that was to the working interest owners?

A. Yes.

Q. And then March 30th was the letter to the overriding royalty owners, correct?

A. I believe so, yes.

Q. Okay. And as to the two royalty owners, they were first submitted the unitization plan in what? November of 2000?

A. I'm sorry, as to who?

Q. The two royalty owners, the state and the federal government.

A. Oh, yes, I believe it would have been November, 2000.

Q. But they were submitted requests for preliminary approval --

A. Yes.

Q. -- about seven or eight months ago?

A. Yes.

Q. Okay. Now, you sent these documents out and there was some subsequent correspondence. At this point, other than the two Mr. Taylors, have you received any calls or letters from interest owners in the unit expressing

interest or objection, one way or the other?

A. No.

Q. Okay. Other than the typographical error you mentioned in the unit operating agreement, did any working interest owner propose any changes to the unit operating agreement?

A. No.

Q. Now, going back to what is referred to in correspondence or on the land plat as the M&W Federal tract, which is Tract 11, what have been your contacts with the working interest owners or with the operator of that particular tract?

A. That particular tract goes also back to 1993. I show in June of 1993 we had made an offer to Hale Petroleum who, at that time, was the operator of the well. And then subsequent to that, in May of 1997, we made another offer to Hale Petroleum trying to purchase that well.

Since that time, I believe my first contact with H&S, who is the current operator of that well until we purchased his interest, we contacted H&S March 30th of 2000 and made an offer to Herb Spencer, who was the primary person at H&S. Since that time we've had numerous phone calls and letters with Mr. Spencer. We've talked to him in April of 2000, September of 2000, we sent him a follow-up letter in June of 2000. September of 2000 was another

follow-up letter to him. All these follow-up letters were again reinstating, you know, would you like to either participate in our unit or sell.

October, 2000, we sent a letter to H&S that, you know, still included a purchase offer. We also listed in that letter what it would cost -- what we were anticipating our unit installation cost to be, in case he wanted to consider participating in the unit. I had phone conversations with Mr. Spencer December of 2000. We sent a letter January 4th, 2001, to all working interest owners in the M&W Federal well. Prior to that we had been dealing strictly with the operator.

Q. Did Mr. Spencer purport to represent all of his working interest partners in that tract?

A. Yes. We did go ahead and send a letter to everybody because we knew we were anticipating a unit hearing and wanted to get the offer out in front of all the working interest owners, even though he was representing them.

Let's see. I have a letter of January 9th, 2000, to Herb Spencer at H&S again, with another letter to all of his working interest owners. March 29th, 2000, is when, as I mentioned a minute ago, we sent out a letter to all unit working interest owners, not just the M&W Federal tract that we're discussing right now. That mailing included an

AFE cost breakdown, a copy of the actual unit agreement and the unit operating agreement.

April, 2001, we received a letter from H&S. He was waiting on replies from his working interest owners that we had solicited to purchase this interest. We followed that up with a letter to Mr. Spencer in April, 2001.

May, 2001, I had a phone conversation with Mr. Spencer where he'd indicated an agreement to go ahead and sell interest in the M&W Federal well. I followed that up with a letter to him confirming what we believed the trade to be, and at that time he'd indicated which of his working interest owners were agreeable to sell, which at that time I believe was about 75 percent of the interest. Since that time, H&S provided us with a letter with all of his -- the 75-percent interest acceptance.

June 28, 2001, we sent a letter to Mr. Spencer with an operating rights assignment to go ahead and conclude the deal, and then July 6th, 2001, we sent him a check to complete the trade. So it's gone on for a long period of time.

Q. Okay. And with different operators, several years at this point?

A. Right, initially with Hale and then following that with H&S.

Q. At this point, what percentage of the working interest in Tract 11 has Beach purchased?

A. I believe it's about 81 percent.

Q. Now, let's skip ahead for a minute, go to Exhibit 10, Mr. Hinson, rather than Exhibit 9. Are there any interest owners in the unit who you just have not been able to locate?

A. Yes, there is.

Q. And is Exhibit 10 an affidavit of notice giving notice to these unlocatable interest owners of the unitization hearing?

A. Yes.

Q. Now, it lists certain interest owners. I won't have you read them into the record, but these are the unlocatable interest owners at this point; is that correct?

A. Yes, I believe from the newspaper listing, since we put that out we've identified at least one on that list, maybe more --

Q. But what efforts did you make to locate the people listed in Exhibit 10?

A. That also goes back as far as 1993 when we first started trying to purchase interest in our proposed unit area, so we corresponded with working interest owners back to that date by letter and phone calls.

Several of the wells we purchased came to us with

already missing people on the pay sheets, and since that time -- and that's what represents most of these missing people -- since that time we followed that up with Internet searches, this advertisement and the legal notice in the Carlsbad paper. We sent out certified mailings, we tried return-receipt-type situation to the working interest and royalty owners on June 20th, 2001.

We've also sent letters and made phone calls to some of the previous operators that we've purchased these interests from, trying to chase down missing people as well as letters and phone calls to friends and relatives, and as a last resort we've tried all the oil purchasers and some of their pay sheets, trying to find current addresses for these people.

Q. Okay. In your opinion, has Beach made a good faith effort to locate these persons listed on Exhibit 10?

A. Yes.

Q. And also in your opinion, has Beach made a good faith effort to secure voluntary unitization?

A. Yes.

Q. Has written notice of the unitization hearing been given to all parties who did not voluntarily join in the unit?

A. Yes, copies of the notice letter and certified return receipts are attached to an affidavit regarding

notice, which is submitted as Exhibit 9.

Q. Okay. Now, regarding the waterflood project, does Exhibit 11 list all of the operators or lessees within the area of review as required by the Form C-108?

A. Yes, to my knowledge.

Q. And was notice of the waterflood Application given to all of these operators or lessees?

A. Yes.

Q. And was Exhibit 12 the affidavit of notice regarding that particular letter?

A. Yes.

Q. Mr. Hinson, in your opinion will the granting of these Applications be in the interest of conservation, the prevention of waste and the protection of correlative rights?

A. Yes.

Q. And were Exhibits 1 through 12 prepared by you or under your direction or compiled from company business records?

A. Yes.

MR. BRUCE: Mr. Examiner, I'd move the admission of beach Exhibits 1 through 12.

EXAMINER CATANACH: Exhibits 1 through 12 will be admitted as evidence.

MR. BILL TAYLOR: I would like to question some

of them, sir, that's what I said a while ago.

EXAMINER CATANACH: Certainly, Mr. Taylor.

MR. BILL TAYLOR: All right, I --

EXAMINER CATANACH: You may proceed.

MR. BILL TAYLOR: -- you're going to admit them, but you haven't accepted them, all right, sir. Do you want me to proceed, or do you want to --

EXAMINER CATANACH: Well, do you have an objection to any of these?

MR. BILL TAYLOR: Yes, I do.

EXAMINER CATANACH: Then we will refrain from admitting these as evidence until --

MR. BILL TAYLOR: I would appreciate it. You may want to afterwards, and that will be your business.

EXAMINER CATANACH: Okay, go ahead, Mr. Taylor.

MR. BILL TAYLOR: All right, sir.

EXAMINATION

BY MR. BILL TAYLOR:

Q. Mr. Hinson, I'm at a little bit of a loss because a lot of these here have been renumbered and such prior to what have been provided to me before with the Application and with the overnight mailing that you sent to me after I came to Santa Fe.

As I told Mr. Bruce, we certainly are not opposed to you waterflooding the project. I don't really

understand why you're wanting the M&W, but that's fine. The M&W was the only well that you had to -- that you were not operating, is that correct, at the time that you started this latest proceeding? You had the other wells?

A. Yes.

Q. All right. So the M&W is the one you began to work with. Your contact to Mr. Herb Spencer offered to pay him how much for that well?

A. We offered to pay him $13,000 for that well.

Q. $13,000. And Mr. Spencer has not gone in and stimulated that since he took over Mr. Hale, and so the well hasn't produced very much, but what is the well producing at the present time with Mr. Spencer's taking care of it, and how much would it make in one year's time at the current rate, which is nothing? It's less than a third of what it will do, and you have an Exhibit, C-108, that will help bear this out. How much is that well making?

MR. BEACH: 45 barrels a month.

EXAMINER CATANACH: Hold on a second, I'm not sure that this witness is the proper witness. You may cross-examine him on land issues and certain stuff like that, but when you get into producing rates and things like that, it might be more appropriate to ask the engineer or geologist.

MR. BILL TAYLOR: All right. Well, now, since I do not know which one is which, and I have -- Is Mr. Rose here?

MR. BRUCE: Mr. Rose is here.

MR. BILL TAYLOR: Mr. Rose, hello, sir. I have had conversation with Mr. Rose and Mr. Hinson. I had three, quite frankly, with Mr. Hinson. But would both of them be available, and whichever one of them would be the most expertise, could we do it that way?

EXAMINER CATANACH: Certainly, each of these gentlemen is going to testify, and I think that you would be able to ask them after they testify.

MR. BILL TAYLOR: After, and then whichever one of them can best do it?

EXAMINER CATANACH: Yes, sir.

MR. BILL TAYLOR: Let's do it that way for the sake of simplicity and time.

EXAMINER CATANACH: Okay, but do you have further questions for Mr. Hinson?

MR. BILL TAYLOR: There probably are some of them there, but they're intermingled. It takes in some of the exhibits --

Q. (By Mr. Bill Taylor) Mr. Hinson, the AFE that you provided to the working interest owners prior to the one that I see here today listed a 500-percent nonconsent

penalty or factor on it, did it not?

A. The AFE didn't have any mention of a nonconsent penalty.

Q. Well, you're right, you're right. The operating agreement. It didn't have an AFE with my first one, you sent me one the other day. But the operating agreement did have a 500-percent nonconsent factor, and that's the one that was presented to the Oil Commission before this one today?

A. Right.

Q. All right.

A. We've already testified that we corrected that today.

Q. That's correct. But at the time that you were asking some of us to participate, we were looking at an AFE of 500 percent nonconsent and then some other factors.

A. The AFE didn't have anything to do with nonconsent.

Q. You're right, I apologize.

A. I'm sorry, we're not trying to --

Q. Yes, you're absolutely right. We're still on the operating agreement --

A. Right.

Q. -- then. My apologies to you, sir. Put up with me, and we'll try to --

A. That's fine.

Q. -- get there.

Your unit operating agreement starts off with the percentage in the well that each of us have, and it ends up with -- the operating agreements you have presented here today end up with -- of the tract, myself having a .00486889 percent; is that correct? And my son Harvey having a .00074906 of the West High Lonesome Penrose Unit?

A. Just a second. Working interest.

Q. Yes, sir. See, I'm as lost with these new numbers as probably what you are.

A. These particular numbers are not new. This is the same numbers we've had --

Q. All right, but --

A. -- all --

Q. -- then perhaps you're much more familiar with them, you've been looking at them --

A. Well --

Q. -- since 197- --.

A. -- there's so many numbers, you have to read them --

Q. Yes, I agree.

A. -- individually, but I didn't hear what you -- or --

Q. My question is, why don't you just tell us

what --

A. We show Bill Taylor as a .00592322-percent working interest owner in the unit, Harvey Taylor .00091126 working interest in the unit.

Q. Well, I'm going to have to find those, sir.

A. It would be Exhibit D to the unit agreement. You've got two different exhibits, one shows net revenue interest, one shows working interest. So you've got to be sure you're looking at the one that says Exhibit D, Tract Working Interest, and then it totals it in front of your name on the left side.

Q. All right. Then this one that has the red and the blue on it is the net revenue interest?

A. Yes.

Q. The one that has red and blue numbers?

A. Yes.

Q. All right, sir.

A. Up at the top where it says Exhibit D, Tract working interest, it would be right behind -- Let's see.

Q. Well, I have separated them where I do not have a -- the portion of --

A. That's, all right, it's basically --

Q. What I'm -- what I'm --

EXAMINER CATANACH: Can we please try and not --

MR. BILL TAYLOR: Yeah.

EXAMINER CATANACH: -- talk at the same time? The court reporter is having a real hard time --

MR. BILL TAYLOR: Okay.

EXAMINER CATANACH: -- with this.

MR. BILL TAYLOR: I apologize.

Q. (By Mr. Bill Taylor) One of the major things is that you're showing that the M&W has a .04556324 percent of your High Lonesome Unit.

A. Yes, sir.

Q. All right, sir. You have proposed a unit operating agreement, and that has the 200-percent factor on page 7.

It also has another article or two in it, that I wonder if they might not be against statutory -- On page 6 of Exhibit 3, at 11.4 it says "Commingling of Funds. Any funds received by Unit Operator under this agreement need not be segregated or maintained by it as a separate fund, but may be commingled with its own funds."

You -- I think that the regular orders require any funds not disbursed for any reason will be -- escrowed in Eddy County in this case -- to be paid to the true owner thereof upon and proof of ownership. Would this here allow that to take place?

A. No, but I don't know what's statutorily mandated, but I have no idea whether this is a proper paragraph as

stated or not.

Q. Uh-huh. All right. And you have changed the 500 percent to a 200 percent on page 7 in this --

A. Yes.

Q. -- operating agreement?

A. Then -- You also have in this under the accounting procedures -- I believe this is the one, let's see if it's not. It may be the other one. You have two unit agreements, and it must be the other one. But one of them in addition to requesting -- This is not the one requesting monthly cost of overhead and the drilling, is it?

A. Yes, that would be in this agreement.

Q. That is in this one.

A. That's in the COPAS procedure that's attached to the unit operating agreement as Exhibit E.

Q. All right. Now, I've got Exhibit 3, and we're looking for Exhibit E of 3?

A. Right, and go to page 4 of that exhibit.

Q. I finally found it. In this one, you are asking for a drilling well rate of $3500 a month, and you're asking for a producing well rate of $375 a month for fixed overhead, and that -- Is that correct?

A. Yes.

Q. All right, sir. This has changed a little, and I

appreciate that. But there is a drilling well rate of $3500 and a producing well rate of $375, and then the COPAS, the last page of that, which you still designate as COPAS, which is not quite accurate but you have it designated that way anyway, there is the additional cost that you're wanting for a foreman, field foreman, of $300 a day and a geologist of $350 a day, and that is in lieu of some of the other things that's in here.

Should this not have been negotiated with us? Do you think that the operating agreement itself should be negotiated, and whatever your drilling rate is and your overhead rates, are those not the proper things to ask for the well information and is this not -- should not been properly negotiated?

A. Yeah, I believe it was properly negotiated. I mean, we didn't even know you existed personally, individually --

Q. Yes.

A. -- as a working interest owner until very recently when H&S told you who you were. These rates were negotiated with our major working interest owners, which these start with, like KNG America is a 50-percent working interest owner in the unit, people like that. And these are rates that are already established, basically with our Red Lake Unit which adjoins this one to the southwest --

Q. Right.

A. -- other than I believe we went up -- That unit agreement was prepared probably 12 years ago, and I think it had $350 producing well rates. We've gone up in 12 years, $25 basically.

Q. Thank you for that information.

I have an objection to an operating agreement coming in in this area, and I want to file a formal objection to it, that that -- it is asking the Commission, I believe, to provide -- or intercede, especially after payout has occurred, as I heard today. And it would be real interesting to see what happens with the other -- the new operating agreements that might come before us. There's some benefits to it, but it needs to be arm's length negotiations.

Mr. Herb Spencer did do most of the negotiating on this, and I did come into it late. You and I didn't get the chance to talk until after you had already instigated the force pooling. I knew you were thinking about it.

Have you -- You said that you sent Mr. Herb Spencer a check on July the 1st for our interest.

A. Well, it wasn't for your interest, it was for the people who had agreed --

Q. I'm sorry, for the -- for the -- yes, those who had sold.

A. July 6th.

Q. July -- All right. Because he had not received it as of the day before yesterday.

MR. BILL TAYLOR: I have some questions concerning the difference between this. You're basing your cost your, your production and all of it on a 1993 study that you filed with the Commission as C-108, and you said this goes back to 1993. And so it seems like you're basing most of this on this, but Mr. Stock may be the one I need to address it to --

MR. BRUCE: Mr. --

MR. BILL TAYLOR: -- but there is differences.

MR. BRUCE: Mr. Examiner, Mr. Rose can answer questions about any reservoir study, our engineer.

MR. BILL TAYLOR: Well, this has to do with the figures that's associated with it. Will that be Mr. -- I'm sorry, Mr. Rose, I'm sorry, forgive me.

EXAMINER CATANACH: What figures, Mr. Taylor?

MR. BILL TAYLOR: Well, as an illustration, Mr. Hinson, we have pointed out that this MW in these exhibits indicates a .04556324 percent of the total unit. The study upon which Mr. Rose has based his -- uses that as a basis, and it goes to 5.6 percent that M&W has as a percentage of it. Can you -- Well, and so would that be properly addressed to Mr. Rose or to Mr. Hinson? Mr. Rose?

EXAMINER CATANACH: I believe it -- Yeah.

MR. BILL TAYLOR: Mr. Rose? All right. May I, since I thought I might be able to talk to both these fellows at the same time on this, may I later ask him a question or two if I should need to, Mr. Hinson, might I do that if it's --

EXAMINER CATANACH: Certainly, if you have additional questions of Mr. Hinson --

MR. BILL TAYLOR: I might.

EXAMINER CATANACH: -- afterwards, we can always bring him back.

MR. BILL TAYLOR: I would appreciate it, if it's all right with you, sir.

THE WITNESS: That's fine.

MR. BILL TAYLOR: Let's let them go ahead with their presentation, then, while I try to get organized.

EXAMINER CATANACH: Thank you.

EXAMINATION

BY EXAMINER CATANACH:

Q. Mr. Hinson, what is the status of your negotiations with the remaining working interest owners? Are you continually continuing to try and --

A. Yes, we have very few remaining working interest owners, other than Mr. Taylor, that we have either not reached an agreement with or -- The primary ones we don't

have right now are mostly the unlocatable people.

We do -- some of the ones that are still listed as -- have not ratified the agreement yet are even long-time Beach partners that we expect their ratifications to come in, such as Brock Exploration, for example, and people like that.

So right now we really don't have any ongoing negotiations as far as price or anything. It's really a matter of still collecting some paperwork.

Q. Okay, some of the interest owners that were not locatable, those are working interest owners?

A. Some of them are, yes. I've got --

Q. And some are overrides?

A. I can tell you specifically which ones or how many, if you'd like that for your...

Q. Quite a few of them.

A. I show 14, I believe, unlocatable. And of that number seven are working interest owners, and the remainder are overriding royalty owners.

Q. Okay. Now, do you hold out any hope for finding any of those interest owners?

A. I mean, even since we published that notification in the paper, like I said, I think we had identified one of those people. So it's an ongoing process, yes.

Q. Which one did you identify?

A. Was it Gail Marr? It's listed under the exhibit Gail and --

MR. BRUCE: Gail and Steve Marrs.

THE WITNESS: Gail and Steve Marrs, okay.

FROM THE FLOOR: Cara Lynn Gant.

THE WITNESS: Who?

FROM THE FLOOR: Cara Lynn Gant.

THE WITNESS: Cara Lynn Gant also, one we've found since then.

Q. (By Examiner Catanach) Okay. The unitized formation again is the Penrose portion of the Queen formation, and I see that as the productive interval in this area?

A. Yes.

Q. In this pool?

A. Yes.

Q. Okay. And you cited a log that was run on an Exxon well. Is that in here somewhere, in the unit --

A. That's something our geologist will be able to testify to. I believe it is.

Q. Okay.

A. Yes.

Q. Mr. Hinson, did you actually conduct meeting with working interest owners in this unit?

A. Most of our contacts with working interest owners

were either -- most of the working interest owners were already in wells we operated, and those conversations were either by phone or by letter. The other people -- Really, I mean, it came down to pretty much this M&W Federal well was the only one that was outstanding that we hadn't already acquired, you know, by far the majority of interest in.

And we talked, as I've detailed there, over a long period of time with Mr. Spencer individually, who said he was representing the working interest owners. And so really no meeting was required. I mean, at the time Mr. Spencer had indicated that our offer was insufficient as to money, and they had indicated to us that they wanted $24,000.

We indicated to them that we couldn't pay them more than what we paid on par with everybody else in the unit, it wouldn't be fair.

They indicated that they had a potential buyer that would buy it for that, and we told them to go ahead and sell it to them if they'd like. You know, we didn't try and stand in their way or anything like that.

So as far as being a meeting, it was really just a matter of price. There was no questions from Mr. Spencer, and at the time we didn't know Mr. Taylor, of proposed unit operation agreements, so on and so forth. So

there really didn't appear to be a need for a meeting at that point.

Q. And you subsequently have obtained Mr. Spencer's interest in this --

A. His interest, as well as a large number of the other individuals, like I said, totaling approximately 81 percent in that well.

Q. So he sold his interest to you, he's not participating?

A. No, he sold his interest to us.

Q. Okay. Has any of the other interest owners, working interest owners in the unit expressed any concern about any part of the unit agreement or unit operating agreement?

A. No.

Q. Has anybody expressed any concern about the way that production is going to be allocated?

A. No.

Q. With regards to the question Mr. Taylor had about the overhead rates, is it my understanding the way that this operates is -- The $375, is that a correct figure for a producing --

A. For a producing well, yes.

Q. Okay. That doesn't include the additional cost that you cited for --

A. I'm sorry, did you say $350?

Q. I'm sorry, I don't -- What were the costs?

A. I'm sorry, it's $375 per producing well and injectors, I believe. Yes.

Q. For the --

A. Per active well.

Q. Okay. And what is the additional cost that you've outlined on the last page for the field foreman and the geologist?

A. That's a cost that's just been standard and not just -- I mean for us standard, not just in this operating agreement, but individual well agreements, in wells we operate, and it just covers the expenses that our accounting department believed were not adequately covered by the standard COPAS procedure.

Q. So the $375 --

A. Now I'm talking about the back page now, that you were asking me about.

Q. Okay, explain that to me.

A. If I understand which one you're -- The page 8 to the COPAS procedure that lists charges for a field foreman of --

Q. Yes.

A. -- $300 a day --

Q. Yes.

A. -- engineer, geologists at $350 a day.

Q. Right.

A. The way I understand it -- and not being an accountant, but the way I understand that, what you're really doing is clarifying the charges that you're already able to charge for under the COPAS procedure, clarifying what that amount would be. You're already able to charge for your field foreman and engineer and geologist, you know, field expenses, under the COPAS. This is just detailing what that charge would be.

Q. So is this in addition to the $375 per day, or --

A. Yes, because the $375 is just your overhead rate, which would be under any operating agreement in COPAS. This is where you send individuals out into the field that are the technical people that are doing work in the field.

Q. Okay, this is just on an as-needed basis, then?

A. Right, right, correct.

EXAMINER CATANACH: Okay, I understand.

I believe that's all I have, Mr. Bruce.

MR. BILL TAYLOR: Mr. Catanach --

EXAMINER CATANACH: Oh, I'm sorry, did you --

EXAMINATION

BY MR. EZEANYIM:

Q. I wonder, why did you change the 500 to 200 percent?

A. Excuse me, why was it different?

Q. Yeah, why did you change it?

A. That number came from -- That was the same that was in our Red Lake Unit agreement.

Q. Which one, 500 or 200?

A. Five hundred.

Q. And then why did you change it to 200 now?

A. At the advice of our attorney that that was the rate that would be approved by the Commission.

Q. Is that the normal rate you --

A. In our operating history, wells in Texas as well as wells in New Mexico, depending on how depth, how deep the well is and other factors, cost, we commonly use anywhere from 300 to 500 percent as a nonconsent penalty.

Q. And so you start with your penalty at 200?

A. Yes.

Q. Instead of 500?

A. Excuse me?

Q. Instead of 500 you use 200?

A. Instead of the 500, yes.

MR. EZEANYIM: Okay.

EXAMINER CATANACH: This witness may be -- I'm sorry.

MR. BILL TAYLOR: May I ask one more question -- a couple more questions?

EXAMINER CATANACH: Sure.

FURTHER EXAMINATION

BY MR. BILL TAYLOR:

Q. One of them concerning the statement concerning the 500 percent. I discussed this with you over the phone.

A. Yes.

Q. And then whenever I filed my request to postpone this hearing so we could look at some things and I could also obtain an attorney, you sent me a letter back that let me know that I misunderstood you when I thought that you had inadvertently taken the Red Lake operating agreement and had sent it and had forgotten to change the 500 percent. And your letter states to me that I was misquoting you there, that really you had -- when you all submitted that, you did it with the full knowledge of it, is the way I took your next letter then.

And so whenever you all submitted that, you were aware that there was 500 percent on that; is that correct? That's the way your letter indicated to me.

A. I kind of lost you in your question, but --

Q. All right, basically, whenever you submitted the original operating agreement --

A. Right.

Q. -- with 500 percent on it, you knew it had 500 percent on it?

A. Right.

Q. All right, sir. And so then after our discussion and your discussion with your attorney, you decided that you better take it back down to what the Commission, the statutory allow?

A. Right, but you say it was inadvertently put it in there, that was from the point that we did not know that that was not the proper percentage for a unit in New Mexico. That was just in line with -- That's not a percentage that I'm not unused to seeing in any of our operating agreements.

Q. I think, Mr. Hinson, your letter makes reference to the fact that you said you'd do what the Commission does, and in our --

A. Right.

Q. -- conversation you told me that you thought it was 200 percent?

A. Right, I said during the course of our discussion I mentioned to you that the 500-percent nonconsent penalty shown on our unit operating agreement was inadvertently left in from a previous form --

Q. Uh-huh.

A. -- and that we would be governed by whatever nonconsent is approved by the OCD.

MR. BILL TAYLOR: All right, sir, thank you.

EXAMINER CATANACH: This witness may be excused.

CHARLES BEACH,

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

DIRECT EXAMINATION

BY MR. BRUCE:

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

A. Charles Beach.

Q. Where do you reside?

A. Midland, Texas.

Q. What's your job and who do you work for?

A. I'm a geologist at Beach Exploration.

Q. Have you previously testified before the Division?

A. Yes, I have.

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

A. Yes, they were.

Q. And are you familiar with the geology involved in these cases?

A. Yes, I am.

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

EXAMINER CATANACH: Mr. Beach is so qualified.

Q. (By Mr. Bruce) Mr. Beach, would you identify

Exhibit 13 and describe it for the Examiner?

A. Exhibit 13 is a type log of the Penrose sand for the Queen formation from the Beach Exploration Exxon Federal Number 4 well, located in Township 16 South, Range 29 East, Section 18, 1650 feet from the south line and 1650 feet from the east line. It shows the top of the Penrose sand, which is a lower member of the Queen formation, at 1708 and the base of the Penrose sand at 1738 feet. This is the interval to be waterflooded in the proposed unit. There are impermeable beds above and below it, and this zone is easily correlatable throughout the proposed unit area.

Q. Would you move on to your Exhibit 4 [*sic*], identify that and describe the geology of the zone that you seek to unitize and flood.

A. Exhibit 14 is an area structure on the top of the Penrose sand in the Queen formation, showing all Penrose penetrations. This map shows structural strike and dip on the top of the Penrose sand. Strike on top of the Penrose sand is northeast to southwest, and dip is northwest to southeast, with southeast being the downdip direction.

The map is contoured on a 10-foot contour interval, and the scale is one inch is equal to 2000 feet. It also shows that in this area the Penrose sand is regionally dipping to the southeast with no structural

closure mapped, indicating that the trap for the Penrose is a stratigraphic trap. Updip the sand becomes salt-filled in the pore spaces, creating a loss of permeability, and downdip the sand becomes nonreservoir quality, grading into a tight, silty sand with greater amounts of anhydrite and carbonate cements within the sand creating the stratigraphic trap.

Q. Are there any faults in this area which would connect a freshwater zone with an injection zone?

A. No, there are not.

Q. What is Exhibit 15?

A. Exhibit 15 is a net thickness isopach of the Penrose sand. The porosity cutoff used to make this map was 12 percent. Density neutron logs are indicated by circles, and neutron logs are indicated by squares. The contour interval is five foot, and the scale is one inch is equal to 2000 feet.

The best part of the reservoir, or sweet spot, is located in Sections 17 and 18, which is borne out by the isopach map and by production history.

Q. Could you move on to your Exhibits 16 and 17 together, identify them and describe the continuity of the reservoir?

A. Exhibits 16 and 17 are north-south and east-west cross-sections of wells in the proposed area. The cross-

sections are both stratigraphic cross-sections, hung on the top of the Penrose sand.

The east-west cross-section extends to other Penrose sand fields along trend and adjacent to our proposed unit area and shows the continuous nature and deposition of the Penrose sand in this area.

And the north-south cross-section simply goes through the field showing the correlatable sand throughout the proposed unit.

Q. What factors were used to determine the unit outline?

A. Primarily sand quality determined by isopach mapping and by production history of the wells.

Q. Okay, and will the engineer discuss the production history of the wells?

A. Yes. Yes, he will.

Q. From a geologic standpoint, has this reservoir been reasonably defined by development?

A. Yes, it has.

Q. And is the Penrose reservoir continuous across the unit area?

A. Yes.

Q. Geologically, is this a good candidate for waterflooding?

A. Yes.

Q. Were Exhibits 13 through 17 prepared by you or under your direction, or have you reviewed the data that went into the preparation of these exhibits, and do you agree with it?

A. Yes.

Q. In your opinion, is the granting of these Applications in the interest of conservation and the prevention of waste?

A. Yes.

MR. BRUCE: Mr. Examiner, I tender the admission of Exhibits 13 through 17.

EXAMINER CATANACH: Any objection, Mr. Taylor?

MR. BILL TAYLOR: No, sir.

EXAMINER CATANACH: Exhibits 13 through 17 will be admitted as evidence.

Mr. Taylor, do you have any questions of this witness?

MR. BILL TAYLOR: No, I would just like for him to repeat that that reservoir has been defined and it is a good waterflood prospect.

THE WITNESS: Yes, it is, it's well defined.

MR. BILL TAYLOR: Thank you.

EXAMINATION

BY EXAMINER CATANACH:

Q. Mr. Beach, is this the -- the proposed unit, does

that encompass the whole pool in this area?

A. No, the pool extends for several miles, as witnessed by the east-west cross-section. Most of the previous or the flood -- the adjacent Penrose sand has already been waterflooded. This is a portion of the pool that has not been waterflooded to date.

Q. Okay, so the pool extends to the east?

A. It extends to the east and actually extends back to the south.

Q. To the south. And a portion of this pool has already been waterflooded to the east and the south?

A. Yes, sir.

Q. Do you know who operates those floods or flood?

A. I don't know. I know Jack has that information and can testify to that.

Q. Okay.

A. I will say that we -- Beach Exploration actually operates the flood directly south, but I don't know some of the other ones, the operators.

Q. Now, you say directly south. Do you know where that is?

A. It would be starting Section 24, if you look at one of the maps, and going south from there.

MR. BRUCE: It's actually southwest.

THE WITNESS: Southwest, yeah, it's -- You're

right, it's actually southwest.

MR. BRUCE: If you look at Exhibit 16, the locator map on the right-hand side.

EXAMINER CATANACH: Okay.

MR. BRUCE: That outline to the southwest is a portion of that unit.

THE WITNESS: Right.

Q. (By Examiner Catanach) Okay, you've got some wells that I assume from the map, it looks like they're in the south half of Section 19, specifically the southwest quarter of 19.

A. Uh-huh.

Q. Are those Queen-producing wells?

A. Yes.

Q. And those are not going to be included in the unit?

A. No.

Q. And they're not included in your other waterflood project?

A. No.

Q. Is there a reason for that?

A. Well, it kind of goes back to the production history and the discontinuous nature. Actually, up in Sections 17 and 18 of the proposed unit area, the sand is a continuous sand, the production history has been good, and

it's kind of the sweet spot of the field.

As you get south in Section 19, with the exception, really, of the M&W well, those wells in that area have been very much poorer performers, and really economics did not dictate that the wells that you're discussing would go into the unit. And I know that Jack has some information regarding that also, our engineer.

Q. Okay, so you're saying the sand quality deteriorates as you move south into that area?

A. It does, it becomes much more -- The permeability becomes much more erratic. As a matter of fact, the Red Lake Unit that we have, that I discussed, we have -- The flood that we did down there was marginally successful, and we think it's because of erratic permeability within the sands. And we think that this area, based on the primary production and the net sand map that I made, would be similar to what we experienced down there.

Q. Did you have a net sand thickness cutoff that you used?

A. I used 12 percent. I will say that --

Q. Well, that's porosity cutoff.

A. Oh, yeah, yeah.

Q. Did you --

A. Gross, of the gross sand?

Q. Well, of the net sand. It was 12 percent. I

mean, did you -- was there a cutoff that you used?

A. Oh, a porosity percentage, is that what you --

Q. Well, I mean how much net sand thickness did these wells have that was above 12 percent; do you know?

A. Yeah, I mean, the ones that are not -- The ones that are on the map or the ones that don't have figures?

Like the one, for instance, in the southwest of 19, there's one that's got a zero. It had zero feet above that. And there's one that has four, there's one that has six --

Q. Okay, but you didn't use a cutoff of net sand that you used to where you say you couldn't include the well with four feet of net sand?

A. Oh, no, not necessarily. Really some of the issues are maximum porosity. If you get, for instance, 20-percent porosity, and if you've got -- sometimes if you only have six feet of that, you can make extremely good wells, whereas if you get ten feet of 14-percent porosity, for instance, those wells sometimes don't perform as well.

Q. Okay. As far as you can tell, the area that you've outlined for the unit, that's going to be continuous enough to where you think that you can inject water into that whole portion and you'll get some response --

A. Yes, sir.

Q. -- from those producing wells?

EXAMINER CATANACH: Okay, I have nothing further, Mr. Bruce.

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

MR. BILL TAYLOR: If I could ask one more question.

EXAMINER CATANACH: Okay.

EXAMINATION

BY MR. BILL TAYLOR:

Q. Mr. Beach, that Cal-Mon State that Mr. Catanach has raised about wanting to be included in this, I believe that your pumper owns the working interest in that well, is the operator --

A. He does, he does.

Q. All right, so he will get the benefits of any waterflood that should get outside of our area?

A. If he gets some push, he could get benefits from it.

Q. Both directions --

A. Yeah, he could get benefits from our --

Q. -- from this one?

A. -- from our Red Lake Unit, from the southwest also.

EXAMINER CATANACH: Okay, this witness may be excused.

JACK M. ROSE,

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

DIRECT EXAMINATION

BY MR. BRUCE:

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

A. Jack rose, Midland, Texas.

Q. Who do you work for?

A. I work for Beach Exploration as an engineer.

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

A. I have.

Q. And are you familiar with the engineering matters involved in these Applications?

A. I am.

MR. BRUCE: Mr. Examiner, I tender Mr. Rose as an expert petroleum engineer.

EXAMINER CATANACH: Mr. Rose is so qualified.

Q. (By Mr. Bruce) Mr. Rose, what materials did you examine in your study of the reservoir?

A. Well, as Mr. Hinson had stated earlier, this project has been going on since 1993, that was the original idea. A study by T. Scott Hickman and Associates was ordered back in 1993, and primarily most of our engineering

emphasis is based on that study in 1993.

I've also reviewed logs and production histories and wellbore histories in the area and reviewed Hickman's assumptions and the offset floods.

Q. Okay. Now, and you updated the data used in that 1993 study?

A. Yes, I did. We didn't originally. When we went into it I reviewed the study, and I didn't have any problems with it. On a more formal basis I have gone back and gone through the volumetric calculations, and I think that's Exhibit 19.

Q. Okay, well, why don't you move to -- actually Exhibit 18 --

A. Yes, 18.

Q. -- and describe the calculations you made regarding the secondary recovery for the proposed water flood project?

A. Basically the study of 1993 by Hickman went through these calculations, and of course we've had -- from 1993 till now we've had some additional cum generated. So what this basically is intended to do is bring those calculations up to date to -- All my calculations are effective April -- or May 1, 2000.

We have an original oil in place number of 6.2 million barrels, based on -- We have a slight difference on

the unit outline from the 1993 study, including the Rosewood State.

We have a primary recovery factor which is 8.9 percent, and it was 8.8 in 1993.

Pore volume is essentially the same at 10,800 barrels.

We recalculated the current oil saturation at about 55 percent.

And our fill-up time with the free gas volume, about 20.6 months, is very similar to the study in 1993.

And we see a theoretical recovery under waterflood of 700,000 barrels, just to kind of give us a feel for, are we being reasonable with our...

And basically these haven't changed very much, even though we updated the cums, because this is in an advanced state of depletion as far as the field goes.

Q. Okay, this portion of the pool is pretty much on its last legs insofar as primary recovery goes?

A. That's correct.

Q. Okay. Why don't you move on to your Exhibit 19 and maybe discuss the Penrose or Queen waterfloods in this area?

A. Exhibit 19 is an area map to kind of help you locate what you were talking to Mr. Beach about earlier. It outlines our proposed flood area as a striped outline.

The other floods and their operators, we have three floods to the east, the Aceco High Lonesome Queen Sand waterflood in Section 16, Vintage's High Lonesome Penrose Sand unit in Section 15 and Armstrong's High Lonesome Brewer Bosworth to the east.

And then we have our Red Lake Unit to the southwest in Sections 24, 25 and 36, and then we have the Kincaid and Watson East Red Lake Unit to the southwest also there. And that kind of orients you.

Most of these floods were done in the early 1950s and have been fairly successful floods.

Q. Now, before we move off of this exhibit, just for future reference, you have some -- I think some pipelines and some other data on this well. What does that pertain to?

A. This map was originally prepared to answer some questions with the Commissioner of Public Land about water sources. These pipelines that are represented in dark black are freshwater Carlsbad Double Eagle water supply system. These other units that are in this area have used that fresh water from Carlsbad. We used it in our Red Lake, the Kincaid and Watson, on the East Red Lake down to the southwest, used fresh water, the Armstrong High Lonesome Brewer up to the east in Section 14 and 13 also used fresh water, as did, I think, the High Lonesome Queen

in Section 16.

Q. So water supply for injection is a problem in this area?

A. Yes, there's very little water source, and we can cover that in more detail later when we go on the C-108.

Q. Okay. Let's move on to your Exhibit 20. Could you identify that exhibit and describe briefly the history of this portion of the pool?

A. To give you a little background on the High Lonesome-Queen Pool, which basically includes the eastern portion of those floods that we were talking about, there have been a hundred wells drilled, and there are currently 42 active. And in that field, 4.6 million barrels has been recovered, about 1.5 BCF of gas and about 11.2 million barrels of water.

The plat that we're looking at in Exhibit 20 is a plat of the proposed unit area in gray with the dashed outline. It includes all of the penetrations within that area, including dry holes, and the status of the wells.

We have three wells currently shut in, the Exxon Federal Number 2, the Brainard Federal Number 1 in Section 19 and the Ryan Federal.

Basically what we have in this unit area is 26 wells that have been productive, three dry holes, and currently we have 23 active wells.

Q. Okay, could you move on to your Exhibit 21 and describe the production from the wells in this portion of the pool?

A. This is a plot of the production history from 1974. The initial well drilled in this area was drilled in 1939, and there are four wells that were drilled in the -- Let me take that back. There are three wells that were drilled in the 1939 to 1940 time frame, two wells drilled in the 1950, and then the rest of them were drilled in the 1982 to 1987 time frame. So most of the wells are fairly current.

This has a current cum for all of that period and covers the cum of the unit area that we looked at on the last exhibit. We see a cum of 533,000 barrels of oil to date, and that date is 5-1 of 2000, cum gas of 374 MMCF and 30,000 barrels of water.

This also shows our projections of remaining primary. When we went through the flood we extrapolated, basically, these current declines to one barrel of oil per day as an economic limit. The problem with oil price changing and everything, we used one barrel a day as a cutoff for primary reserves, which is really below economic limit, in my opinion, right now. But our calculations indicate that we have a remaining primary of 8500 barrels of oil.

This plot also shows our projected performance for secondary, that incremental secondary recovery, and we're projecting that that would recover an additional 558,000 barrels, approximately.

Q. Okay. Was the waterflood project proposed as a method of extending the life of the reservoir?

A. Yes, it was.

Q. What is the drive mechanism of this pool?

A. Our assumption is that this pool is under a solution gas drive. That's primarily based on declining fluid production, increasing GOR and negligible water production.

Q. Why don't you refer to your Exhibit 22 and describe the proposed injection pattern in the unit?

A. Exhibit 22 is again a similar plat to what you looked at before, but it has the injection pattern that we're proposing superimposed on the unit outline.

We have our philosophy, and it basically comes out of our Red Lake experience to the southwest. We feel like we had some permeability problems in the flood to the southwest, even though the pay was continuous, and we've got our peripheral flood combined with fivespot -- a 40-acre fivespot pattern here.

The peripheral flood in the north part in Section 18 and Section 17 is basically the sweet part of the

reservoir, and our intention there is to inject into the Phase I injectors, which are the darker ones, and when oil or when water breaks through to the white injectors, which would be Phase II injectors, those would be converted to injection.

And our better wells, if you remember from Mr. Beach's testimony, the sweet spot and the better recoveries are in the center of that peripheral flood, and our intention is to get water coming in from the outside.

In the other areas we don't have -- we feel like we've got more chance in the southwest of being similar to the Red Lake Unit. We have the M&W well down there, which is a pretty good well, it's not -- The best wells out here are about 50,000 barrels, and that's about a 25,000-barrel well. It's a significant producer, and we want to include it, and that's one of the reasons.

But we went with the fivespot pattern down there because we don't have the -- a similar situation that we have up in the northern part of the unit.

Q. How many production and injection wells will there be in the well [*sic*]?

A. When we initially start with Phase I injection, there will be 13 injection wells and 14 producing wells. As these injection wells in white, Phase II injectors, water out and we convert those, we'll eventually have nine

producers and 18 injectors.

Q. And again, how many additional barrels of oil do you anticipate recovering as a result of the waterflood project?

A. We anticipate 558,000 barrels of oil.

Q. How does your estimate of reserves and project life concur with other Queen waterfloods in this area?

A. It compares favorably to conservative, I would say.

Q. Okay. Could you describe how you calculated the reserves to be recovered by the waterflood project?

A. Under Exhibit 23, if you want to --

Q. Oh, sure.

A. -- the offset floods. This is out of the Scott Hickman study, and this is the floods that we showed on the area map. These are some of the offsetting floods and some statistics on those.

Basically, our calculation for economics is that we're going to have a one-to-one secondary-to-primary ratio on this flood. We have approximately -- if you take our cum of 533 plus the 8500 remaining, you're talking about 541,000 remaining primary, and we're projecting 557,000. There's a little kicker in there, because we have one undeveloped location and that accounts for the difference, but essentially we're on a one-to-one secondary to primary

assumption.

If you look at these floods, the three to the east of us are the top three floods, and if you look at a numerical average of the secondary-to-primary ratio that these wells experienced, you're talking about a 1.07 secondary-to-primary ratio on a weighted average. Based on reserves it's a .94-to-1, and they vary from as low as .61 up to 1.39-to-1.

Our Red Lake Unit, which isn't represented on this page because it wasn't in completion when this was formed, we only have about a .5-to-1 secondary-to-primary ratio on that flood.

And considerable effort was put into trying to figure out whether we had some artificial plugging going on. And our assumption after looking at all that material was that we had some permeability variations in that, that didn't allow the water to break through. Plus, they superimposed a fivespot pattern on that permeability, and we ended up injecting into some of our better wells. And we got breakthrough on a few wells, but it wasn't as significant. And that's part of our concern in the southwest portion of our new flood.

Probably the most comparable to our flood are the Aceco High Lonesome. It's a -- If you look at the primary recovery on these floods on a per-acre basis, this is not a

number on this exhibit, but the Aceco flood and the Kincaid and Watson flood both have recovery factors on primary of about 400-some-off barrels per acre. And our field, on a primary basis, if you look at ours, is about 460 barrels per acre.

The bigger flood, the Armstrong to the east, is about 1100 barrels per acre. So that's obviously a better quality pay to the east.

So the two that are most comparable to ours are probably the Aceco and the Kincaid, based on primary recovery per acre.

Q. Okay. What is the estimated life of your project?

A. As of 5-1-2000, it's 13 years.

Q. What is Exhibit 24?

A. Exhibit 24 is the AFE, or basically a cost estimate of what we feel like it would take to put this unit into operation initially. It's a total of $865,000. It does not include an additional approximate $64,000 that it will take to convert these Phase II injectors. In our economics, which we'll cover later, we do account for that additional $64,000, but this is the initial installation. It includes drilling and equipping one producing well, converting injectors and reconditioning the producers, installing waterflood facilities and a water supply line.

Q. In your opinion, will the project be economic?

A. Yes, we have economics -- The incremental economics are Exhibit Number 25, and as a quick summary, the economics on that which include that $64,000 in Phase II, we're basically going to generate $10.2 million in future revenue. That will have a total cost, installation and operating cost, of approximately $6.2 million, for a total of $4 million profit. The rate of return is anticipated to be 55.8 percent. And this was all based on a $22 flat oil price.

Q. Okay. In your opinion, is the portion of the pool being unitized suitable for waterflooding?

A. Yes.

Q. Is the project area so depleted that it's prudent to apply an enhanced recovery program at this time?

A. Yes.

Q. Is a waterflood project technically and economically feasible at this time?

A. Yes.

Q. And will the value of the oil and gas recovered by unit operations exceed the unit cost, plus a reasonable profit?

A. Yes.

Q. Will the waterflood operations result in the recovery of substantially more hydrocarbons from the pool

than will otherwise be recovered?

A. Yes.

Q. In your opinion, will unitization and secondary recovery benefit the working interest and royalty owners in the unit?

A. Yes.

Q. Is unitized management and operation of this reservoir reasonably necessary to effectively carry out waterflood operations?

A. Yes.

Q. Because of the estimated additional production, do the wells in the proposed unit qualify for the recovered oil tax rate?

A. Yes.

Q. Now, let's discuss your proposed tract allocation formula, which is set forth initially in Exhibit C of the unit agreement, but let's move on to your Exhibit 26, which I think describes it in more detail.

In your opinion, does this formula allocate produced and saved hydrocarbons to each tract on a fair, reasonable and equitable basis?

A. Yes, it does. Our tract participation -- This is a clarification exhibit that we sent to the Commissioner of Public Lands showing each tract, what the cumulative production was on 5-1 of 2000, what we feel like the

remaining primary, which was represented by the curve I showed you previously.

We have one undeveloped location on the Federal 19 tract, which we gave 13,880 barrels to. And the ultimate primary is 555,000, and that includes that additional PUD, and the economics of that proved undeveloped location was included in the secondary economics.

Q. Looking at your Exhibit 26, other than for a couple of wells, the pool is basically depleted as far as primary production goes; is that correct?

A. That's correct. There were only five wells, I think, producing over a barrel a day.

Q. Okay, and that's why you have based the tract allocation formula solely on cumulative production?

A. Yes, there's very little error in primary forecast, since it's there.

Q. Now, let's discuss your injection operations. Will you identify Exhibit 27 for the Examiner?

A. Exhibit 27 is a copy of the C-108 that was an Application for injection that was filed with the OCD.

Q. I'll let you run through this pretty much, Mr. Rose, but will you describe how the injection wells will be completed?

A. The injection wells, if you look at that first

legal-size page, that's Item III under the C-108, there are three pages of injectors listed there with a kind of a pseudo-schematic on the left side, and then individual surface-casing and production-casing layouts.

As a summary, these three pages represent all 18 wells that we plan to inject into eventually, which includes Phase I and Phase II injectors.

Generally, 8-5/8 casing was run and cemented from 300 to 400 -- or set at 300 to 400 feet and cemented to surface on these wells.

Production casing was generally either 4-1/2 or 5-1/2-inch casing, set through the pay interval and cemented to surface or tied back to the surface casing.

There are some exceptions to this. Most of the wells in this area, 22 wells, were done in the 1982-to-1987 time frame, and they are basically completed like we've described. There are two wells -- there are three wells on the Iles lease that are open-hole sections that were drilled in 1939 and 1940, and then the Big-Mac is also one of the injectors that was drilled in 1956, although that was subsequently cased. And so we do have three open-hole wells, and those are described in that Exhibit 3.

Q. Okay. Now, how many wells are there in the area of review?

A. There are -- In the area of review, which is a

half-mile radius around all injectors, there are 42, and let's -- what that is. Behind that injection well review there is an area map which shows a two-mile radius with the half-mile radius of review, and then behind that there is a detailed area-of-review map, showing all penetrations within the area of review.

Q. Are any of these 42 wells plugged and abandoned?

A. Yes, we have 11 wells in that are that have been plugged, and the wellbores are attached. We have 18 of our injectors in there, that are in that area of review, of course, eight producers, and then there are five offset producers. And the information in the C-108 includes, under Item VI, unit producing wells, the offset producing wells. And then finally there is a list of 11 P-and-A'd wells with schematics attached, wellbore schematics.

Q. Let's go through those a little bit. In general, are the wells in the area of review properly completed or properly plugged and abandoned?

A. Generally they are. We have those three older wells that were nitro'd, treated with nitroglycerine, in 1939. Although the casing intervals are well within the -- most of these -- All of these wells were basically drilled to the Penrose. There are one or two that went deeper. But the intervals in the open hole are basically conducive to our flood.

As far as the P-and-A wells, there are two -- there was some additional work done in 1993 to see what we needed to go back and plug on plugged wells. Of that list of 11 plugged wells, there are two that the OCD had concerns about in the early 1990s. That was the Number 3 well and the Number 4 well or the George Atkins Iles Number 5, and the B.H. Nolan/George Atkins Iles Number 1. They're both in Section 17, in Section O and -- or Unit O and P.

Q. Could you move on to those wellbore sketches, perhaps, for the Examiner and identify those wells, just describe them briefly?

A. The third wellbore sketch back is the George Atkins Iles Number 5. This was a well that was drilled to 1866, and we have some fairly thin plugs in that well. I assume that's what we're trying to go back in and -- The main concerns in this area, the State Engineer has been contacted about water. There are some scattered freshwater sands, down to about 100 feet, Triassic sands. There are no aquifers in this area. And water protection is somewhat of a concern, but there is very little water in this area.

The other concern you might have is coming out of the zone on our injection well, and are we going to affect other producing horizons. Basically these wells, there are no other producing horizons really within our flood area, and that -- either below us or above us. But the Iles

Number 5 is one that the Commission had previously stated we needed to plug.

And then the next wellbore sketch, the George Atkins Iles Number 1, was also --

Q. So additional work would be required on those wells before injection could begin?

A. Yes, that's correct. And we have presented wellbore sketches on the other wells for the Commission's review too and for their consideration and --

Q. Okay.

A. -- would be glad to comply with whatever the Commission deems necessary on those plugged wells. All the wells in the area have been plugged, it's a matter of whether they've been plugged to our satisfaction.

Q. Would you please summarize your proposed injection operations?

A. We anticipate an injection rate of approximately 200 barrels a day. That's the maximum we're really looking for. There is a pressure concern out here as far as injection pressure. I know the Commission has a .2 p.s.i. per foot, and we're talking about, you know, anywhere from 1650 to 1800 feet on these perforations.

The study from T. Scott Hickman and Associates shows the injection pressures and average injection rates on these other floods that were successful, and they go

from a low of -- and this is in the C-108, they go from a low of -- Let me look at that just to make sure I'm talking --

Q. The Scott Hickman study is attached to the C-108?

A. Yes, that's correct. The other floods have experienced -- the best injection they experienced was 280 barrels a day at 700 p.s.i. The .2 p.s.i. per foot would limit us to about 390 or 400 pounds.

The maximum injection pressure on these other floods that were successful was 150 barrels a day at 1100 p.s.i. We feel like, based on what we've said previously about the pay quality to the east being better than ours, that we may experience some tighter reservoir in this area, and so we would like to request 1100 pounds, as far as injection maximum.

Q. Is there a proposed stimulation program for the injection wells?

A. There's no -- These wells were originally treated with a small frac job, generally about 20,000 gallons and about two pounds per gallon of sand. Other than acid jobs to clean up carbonate scale, there's no anticipated treatment. And these wells will be -- we'll run 2-3/8 tubing in the wells, use AD-1 tension packers within 100 feet of the perfs. This will be plastic-lined, we're planning on using seal-type plastic-lined tubing at this

point in time to complete the injectors.

Q. Moving to the very last pages of the C-108, are there any sources of fresh water in this area?

A. Like I stated previously, we've been in contact with the State Engineer and done searches on fresh water. There is one freshwater windmill within a mile of our injectors to the southwest. I think that's the second to the last page on the C-108; it has that Windmill Number 2 outlined. And we've included a water analysis on that.

That well was -- This water analysis was done in 1990 when we did the Red Lake Unit. We have current analysis not included with that; we have current analysis on that well also that we received after the C-108, and it shows similar water quality. That's the only freshwater well we know in the area.

Q. Now, you've briefly addressed this before, but again what will be the source of the injection water?

A. We did a four-township search in looking for -- because the Commissioner of Public Land had some concerns about using fresh water. We did locate -- There are no disposal wells in the two townships we're involved with.

To the south there are. Mack Energy operates two disposal wells. One of them, which is five miles from us, does about 6500 barrels a day out of the Yeso and Paddock. We had that analyzed as an option, and that water is

extremely cruddy water. We've analyzed it. It has a tremendous amount of solids in it, oil carryover, extreme carbonate scale problems and bacteria.

The fresh water coming from Carlsbad water system is three miles to the east of us. It's uphill from us, and we can gravity-flow it to our flood. These other floods have been successful in using this fresh water, and I don't particularly care to use the fresh water, but I think the Big George -- our opinion is that Big George water disposal system water would pose considerable risk to the success of the flood, even if you tried to keep up with it, additional expenses with filters and -- and we really feel like that's our real risk to the success of the unit. So we're requesting the use of Carlsbad Double Eagle fresh water to the east of us.

Q. Just one final question, Mr. Rose, if you could turn back to your injection pattern map --

A. Uh-huh.

Q. -- it's Exhibit 2, and maybe -- There was questions of Mr. Beach about these couple of wells in between the Beach Red Lake Unit and the proposed unit, and if you look down there at the southwest corner of your proposed unit there are a couple of Cal-Mon State wells, I think the Number 1 and 2.

A. Yes, that's correct.

Q. In your opinion, would it be economic to add those wells into this waterflood?

A. We don't think it would be. It wouldn't be advisable in our opinion. The M&W well is a -- as I've stated before -- I think Exhibit 26, which was the allocation of primary recovery, has a map attached to it that has ultimate primary per well and kind of gives you a spatial representation of what kind of primary recovery we've had out of these wells.

The better wells in the sweet spot are 50,000- and 40,000-barrel wells. The M&W has about 25,000, which is a pretty decent well in this area. The wells around it are 13, 4, 10 and 4. The two Cal-Mon wells are about 11,000-barrel-type wells.

Part of our concern is, we -- If you look at the curves on these two wells, they do show some kick, not a normal primary decline, in the 1990s, and we feel like there may be some that we have already swept some oil from the Red Lake Unit to those wells. So we feel like there may have been already some secondary recovery taking place in those wells. If we included those wells, we would probably have to convert both of them to injectors only, and it just wasn't deemed advisable to include them, based on that.

Q. If you converted them to injectors, they'd really

only be supporting one well, wouldn't they?

A. That's correct, the M&W well.

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

A. Yes.

Q. And were Exhibits 18 through 27 prepared by you or under your supervision?

A. They were.

MR. BRUCE: Mr. Examiner, I'd move the admission of Exhibits 18 through 27.

EXAMINER CATANACH: Any objection, Mr. Taylor?

MR. BILL TAYLOR: (Shakes head)

EXAMINER CATANACH: Exhibits 18 through 27 will be admitted as evidence.

Mr. Taylor, do you have any questions of this witness?

MR. BILL TAYLOR: Yes, sir. I wish I was on the other side of the table, over there with him. I appreciate. You look like you've done your work, and that's good.

EXAMINATION

BY MR. TAYLOR:

Q. You took the 1993 study by the Hickmans and you updated it. That's what this was telling us, and we have

your figures as to how your update is. That's where we come up, and you said 558,000. I think it's 555,000 but maybe I'm wrong, I don't remember.

A. Well, we have -- if I can clarify that, we have -- 541 is the primary without this additional drilling location.

A. Yes, sir.

Q. We've put 13,000 barrels on that undrilled location. If you add that to the 41 you get 555,000 primary for the whole area, and that gives you about -- I'd have to go back and look, but it gives you something less than 555,000 for this incremental secondary.

So actually our secondary-to-primary ratio is a little under 1, based on that additional PUD location. That's a little confusing there.

Q. Well, you propose to drill the one well right in the middle of everything, up to the northeast of the M&W --

A. Yes.

Q. -- in order to take advantage of the five-point system you've got going.

A. Yes.

Q. And you anticipate it doing how much, you said?

A. 13,880. And what that is based on is, it's an average of the eight wells surrounding that location.

Q. All right. So --

A. Most of which is the M&W.

Q. Well, there's really not much risk in drilling that well, then, is there?

A. There is an area there, there is risk in drilling that well. The -- going back to Exhibit -- trying to find it, the primary recovery, Exhibit Number 26, and it has a plat with ultimate primary per well on it. If you look at that location, the M&W Federal well to the southwest is a 25,000-barrel well. To the northwest our Exxon Federal Number 6 is a 24,000. And to the northeast you've got a 24,700-barrel well.

But the other wells around that location are, you know, 13,000, 6000, 10,000 and 4000. There is a risk that that may be a tight portion of the reservoir, and we may end up with a 4000- to 10,000-barrel well. And of course that's taking into account our average --

Q. But here, on this here, you have indicated it's going to be 13,880 --

A. That's correct.

Q. -- as your best estimate.

A. That's correct.

Q. And that's sitting down with no pressure on it? I mean, to say, that was at home.

A. Yeah, assuming we haven't drained it, and it's a good location and --

Q. Yes, and you intend -- All right. So there really isn't much risk there with that one involved in the first part.

You have taken five waterfloods, one of them that you operate --

A. Uh-huh

Q. -- or Beach operates, to come up with an analysis of what to expect from this one?

A. That's correct.

Q. And you expect that 555,000, 558,000 barrels, reasonably expected.

You are familiar that risk factors, as I understand them -- and the Commission can correct me -- is for drilling and not being able to see what's there and taking a risk. The 200-percent factor is for a wildcat, and this here you have all of these logs, Hickman had all these logs, you've got the porosity, you've got five different wells -- I mean five different floods --

A. Uh-huh.

Q. -- to fall back on. This is just a pretty well cinch that we're going to get a pretty good percentage of our money back, aren't we?

A. I wouldn't classify it as a cinch, because we went into the Red Lake with the same assumption, and we only got a .5 secondary-to-primary ratio. But yes, it's a

good candidate and we want to do it. Whether we will succeed is still a question in our minds, but it's a good candidate and we think it needs to be done.

Q. You've mulled it over for several years, haven't you?

A. Uh-huh, yes.

Q. And so if you didn't think it was a good candidate you wouldn't be going with it?

A. But there is risk.

Q. And you're expecting 555,000 barrels. That's your estimate of what it will produce.

A. That's correct.

Q. That's not much of a risk. Do you really think it warrants a 200-percent risk factor, because --

A. Yes, I do.

Q. You don't think that's penalizing us or rewarding you for doing it? I don't mind you seeing a reward. If you have to invest the money, I think you ought to get interest on it. But there's not much risk here. We've got five other flood units that show you how to do it, you can compare their logs with your own logs, and you ought to know what's going to happen. And you're telling us that you expect this 555,000, 558,000 barrels of oil. That's not a 200-percent risk factor, is it, sir?

A. I feel like there's nothing in gut sense in the

oil industry. I've drilled enough wells to know that anything can happen to you. There's always risk involved.

If somebody feels this way and that there's not any risk involved in this, then I would ask them to participate with us and spend their money. If we go out and spend almost a million dollars on this thing and it doesn't work, we're taking that risk that it will not work, and if somebody's not willing to take that risk, that's their option, and they don't have to put out that money.

But that's what the 200 percent is designed to do, is if you feel that this is a good project and we're going to get -- We're hoping that it succeeds.

Q. I am too, I really do.

A. And this would be my -- you know, best projection is yes, let's do it. But if you're not willing to take that chance, then yes, the 200 percent I think is reasonable, if not low.

Q. The oil being there is not the risk for some of us.

A. That's correct.

Q. And that only leaves one thing that's the risk whenever that we don't want to participate. So...

A. The risk is also, can you get the oil out? There's no doubt that the oil is there. The oil was there in the Red Lake Unit, but we didn't get as much out as we

thought we would for geologic reasons.

Q. All right, sir, so I don't feel that the risk is there. You're asking for 200 percent. I think that if you're able to get your interest back on any money, that that would be more than adequate, especially since you haven't given very much for the wells that you have purchased.

A. The --

Q. Just one year's pay is not much.

A. If you look at the M&W economics in our offer to you --

Q. Yes.

A. -- the M&W is doing 45 barrels a month, which -- I don't know what your operating expenses are, but on a pumping well, generally, if you've got a pumping well with electricity, I would assume you're going to be $1200 a month operating expense. I put $750 a month on your well, and it doesn't fly at 45 barrels a month, so the value in your well right now is zero, according to economics.

And there is value, since we are going to put it in a flood. The value -- And basically the $13,000, you can either look at it as, we'll pay you for your salvage and your equipment, plus money, because I don't think you have $13,000 worth of --

Q. One year's production even at the 45 barrels a

day, but go ahead. I mean 45 barrels a month.

A. Yeah, that's quite a bit of value, but you have some cost to get that out, and that's what I'm saying --

Q. Uh-huh.

A. -- you can't --

Q. Well --

A. If you'll let me finish, on the --

Q. Sure.

A. -- the other way to look at this offer is, how much is the flood worth? We're not in the business of trading money and taking a risk without getting a reward. The $13,000 represents, on our economics that we've presented here, approximately a 30-percent rate of return for our interest. In my experience, I've been in exploration programs and development programs, and generally if you shoot for a 30 percent you might end up with a 10 to 15 percent. And that's generally our -- my approach to purchasing properties.

And that's pretty much what we've done with everybody else over the years. I think it's a reasonable offer. It doesn't represent the flood value, and if you want to realize the flood value my charge to you is, participate with us and enjoy the benefits of that participation.

Q. I am mulling it over, I really am. But there are

so many negative aspects. The oil being there is one of them -- not being one of them, I beg your pardon.

But that well, if it did have the bore cleaned, would produce considerably more, we've already seen that in the past, but it just hasn't been done with the present operator. He was considering it until you all started talking to him.

You were talking about the cost of the well. What are we going to do -- and maybe Mr. Hinson is the one I need to ask this one about. I have an agreement as to how much that well is going to cost me to pump it and the overhead on it. I have that, that goes back. I have some billings here that show what it is. I pay my share of a hundred and seventy -- let me just be sure, I believe it's $175 a month for overhead, administrative, overhead and pumping that thing. Now, $75 for administrative, overhead, $150 for pumping. And I'll pay my share of that.

Now, that's the agreement I have. Are we going to just null and void a private negotiated agreement on that well, or how are we going to handle that?

A. I don't understand your question.

MR. BRUCE: Mr. Examiner, that's a legal question, but certainly the Statutory Unitization Act requires that the Division approve the unit operating agreement, and the unit operating agreement will supersede

Mr. Taylor's agreement with H&S or whoever, to the extent necessary to allow Beach to operate that well as it sees fit.

EXAMINER CATANACH: I would have to agree with you, Mr. Bruce, on that.

MR. BILL TAYLOR: Well, I appreciate both of you speaking up, because it has been a question. And whenever I talked to two attorneys they couldn't tell me the answer. But I do appreciate that part of it.

I suppose, Mr. Rose, that that's probably enough for us today. We need to let this get on this afternoon. I do have a couple things I want to ask of the Commission, and then I'll get out of your way.

EXAMINER CATANACH: Thank you, Mr. Taylor.

Mr. Rose, just a couple, two or three questions.

EXAMINATION

BY EXAMINER CATANACH:

Q. You've identified one location that you're going to drill within the unit. There are some tracts that do not have a well. You have no plans to drill any additional producing wells?

A. Not at this time. In the northwest corner there's a 40-acre tract, or maybe not totally 40, but north of the Rosewood State. The Rosewood State was a gassy well, and we feel like that updip, if you remember the

structure, there's some gas, and that's probably gas-cap gas. The Rosewood only had 881 barrels of oil, but it produced some gas, and we want to fill that up with water. So we don't feel like there's much reservoir up there.

Same reason to the south of that well.

Q. Uh-huh.

A. Over to the southeast, if you look in Section 20 there's a 40-acre tract, the northwest of the northeast quarter of 20, and also the southwest of the southeast of Section 17. Those two 40-acre tracts are undrilled. It appears to us with the well performance, it gets better to the east of that area and it gets better to the west, but that little avenue in there seems to be tight and poorer quality, and that's why we didn't take the unit to the east, because we thought it could have communication from it.

Q. Okay. Again, just to go over your costs, you've estimated $865,000.

A. That's correct.

Q. And did that include -- You mentioned something about another forty-some-thousand dollars.

A. $64,000 for subsequent --

Q. $64,000.

A. -- we're talking about Phase II injectors. There are an additional five injectors that -- or producers that

will be converted to injection when they water out, and that's approximately $64,000 added on to that $865,000, which would give you a $929,000 total.

Q. Okay.

A. And the reason I didn't include it on the initial is, our approach to this peripheral flood in the north is to put the water in the ground and start seeing what's happening, see where it's breaking through. There may be a point in time when we decide to put an injector in the middle of the sweet spot, but this is our initial approach to it, and we'll have to see how it develops and how the rock reacts when we inject water.

Q. Okay. You mentioned the fact that three of the wells were treated with nitro. Were those the three open-hole injection wells?

A. Yes, that's correct.

Q. Do you have any concerns about the annulus in those wells being able to conduct water from the injection zone upward?

A. I don't think so. They were cased above the zone and then drilled out open-hole, and they do have cement behind that casing. Generally the cement -- or the casing is -- I think the biggest interval on one of them is like 150 feet. The actual Queen sand, which is approximately 200 feet above the Penrose, might be a concern, but it

doesn't produce in the area. It tends to be wet.

There's one well that's got 150 foot of interval in there, but it doesn't come up to the Queen. The fact that these have been treated and producing and were originally nitro, we feel like it's going to stay in.

There's nothing above. In between those, we're looking at anhydrite and salts, and there's nothing below us immediately or above us immediately that really would take any water. If water did get behind the casing on that particular well and went into the Queen, we're basically talking about putting it into another water zone, not a productive oil zone. So I don't feel like that's a concern, other than losing injection efficiency.

Q. Okay. You've identified two wells that you plan to re-enter and re-plug; is that my understanding?

A. Yes, and our understanding from our previous correspondence back in the 1990s was, the OCD would require us to re-enter those two wells and re-plug them. I don't know the details of what would be required as far as plugs, but yes.

Q. Do you think that's a good idea?

A. Yes. You know, we don't want to spend any more money than we have to, we want to protect any fresh waters in the area. I guess our -- in my discussions with the State Engineer's Office, there doesn't appear to be a whole

lot of fresh water in this area. We don't want to damage any that is there. That would be my main concern, is the shallow portion of these wells.

I would hope that we wouldn't go to replugging 2000 feet, because I don't think we have much danger of affecting other zones down there. If we've got some weak plugs in the 1950s and 1940s that were put in there, maybe ten sacks going into the top of the wellbore and putting some more cement in the top to protect some potential fresh water lenticular sands up there, that's kind of what I see.

Q. You've asked for an injection pressure of 1100 p.s.i., which is above the .2 standard that we use. Do you have any evidence that you want to present today with regards to the fact that that 1100 p.s.i. will not fracture the Penrose formation?

A. I don't have any evidence today. We have gone to hearings before on the Red Lake Unit. I think -- How many hearings did we --

MR. BEACH: Just the one, I believe, to increase the pressure.

THE WITNESS: One or two to increase the pressure in Red Lake, and we were able to do that. They did step-rate tests on the Red Lake Unit and were able to increase the injection pressures. I don't think it helped us there, because it was a permeability problem between the wells,

even though the pay was continuous.

We do know that some of this was tight, and we anticipate -- I guess my approach to this is, if we start out with 400 pounds, we may be back here within a week of starting the flood, you know. We're going to have fill-up, and that's going to take about 20 months, and hopefully the water will go in pretty clean.

But those are our concerns as far as, you know, taking care of your time and ours also.

Q. (By Examiner Catanach) I understand. Generally the orders that we issue have a provision where you can run step-rate tests and then administratively ask for an increase in pressure, and it wouldn't require you to come back, necessarily, to Santa Fe. But unless you have some data that shows that the Queen won't fracture at 1100 p.s.i., I'm not sure that I can grant that request at this point.

A. Is there any middle ground that we can go to like 750?

Q. I'm not going to negotiate this.

A. Okay, and that's fine. You know, we'll do what it --

Q. If you have some data that you would like to submit, even after the hearing, I mean I would be willing to look at it.

A. Okay. Well, we may go back and look at some of that.

EXAMINER CATANACH: That's really all I have in terms of questions.

MR. BILL TAYLOR: Mr. Catanach, I would like to just say that I'd appreciate if the Commission would just allow that operating agreement. It does go over into private ownership and such, and it prevents arm's-length bargaining.

I would appreciate it if you would consider a zero risk factor on this. If you want to allow them interest on their money, fine, but they also have some wells. They're going to make money on quite a bit of it.

And I would appreciate detailed and proper accounting that has been taking place prior to the Oil Commission. The AFE and such that we received was very, very broad, just hit it the most broadest I've ever seen. And if you all would consider those, I would appreciate it.

EXAMINER CATANACH: Is there anything we can provide Mr. Taylor in that area, Mr. Bruce?

MR. BRUCE: As far as the AFE stuff?

EXAMINER CATANACH: Yes.

MR. BRUCE: Yeah, we have more details. We will copy it and slip it into the mail to you within the next day or so.

EXAMINER CATANACH: Okay.

MR. BRUCE: There are detailed backup sheets to that.

EXAMINER CATANACH: Okay, that will help some.

MR. BILL TAYLOR: And that in future -- Right now it's not such a large problem to me, because -- even though it's not detailed. The well has what, $150,000 to drill it and such? And ordinarily we do get more detail so we can scrutinize a little bit more, and this was furnished me since I talked to you, and I appreciate it. I think that they've got some good men working for them.

Thank you all.

EXAMINER CATANACH: Thank you, Mr. Taylor.

Okay, anything further, Mr. Bruce?

MR. BRUCE: No, other than give us a week to determine if we'd like to present more data on the injection pressures, and then of course the BLM approvals.

EXAMINER CATANACH: Give you a week. I'll tell you what, we'll close the record now, but if you want to submit that, that's fine, additional data regarding pressures, that's fine. If you would do that within a week to two weeks, that would be appreciated.

And the BLM approval you're going to submit also?

MR. BRUCE: Correct.

EXAMINER CATANACH: Okay, there being nothing

further in these cases, Case 12,684 and 12,685 will be taken under advisement.

(Off the record at 12:10 p.m.)

(The following proceedings had at 4:36 p.m.:)

EXAMINER CATANACH: And this hearing is adjourned until 8:15 --

MR. BRUCE: Mr. Examiner --

EXAMINER CATANACH: I'm sorry, we're not adjourned yet.

MR. BRUCE: If I could, Mr. Examiner --

EXAMINER CATANACH: Mr. Bruce.

MR. BRUCE: Cases 12,684 and 12,685 were taken under advisement this morning, or early this afternoon, and I had forgotten to move the admission of Exhibits 1 through 12 submitted by Beach Exploration, Inc.

I will ask at this time Exhibits 1 through 12 be admitted into evidence.

EXAMINER CATANACH: Okay, Mr. Bruce, as I recall, there was some objection to those by Mr. Taylor, who was --

MR. BRUCE: Mr. Taylor objected to them. I'm not sure what the objection was, but he fully questioned my witnesses regarding those exhibits. I think in particular it had to do with the unit operating agreement. He made his proposal for a no-penalty under the unit operating agreement. As far as I can tell, that was the primary

objection.

EXAMINER CATANACH: Okay. Okay, Exhibits 1 through 12 in Case 12,684 and 12,685 will be admitted as evidence.

And we stand adjourned until 8:15 tomorrow morning.

(Thereupon, these proceedings were concluded at 4:38 p.m.)

* * *

I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case No. 12684-12685 heard by me on July 13, 2001.

David K. Catanach, Examiner
Oil Conservation Division

CERTIFICATE OF REPORTER

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

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

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

WITNESS MY HAND AND SEAL July 21st, 2001.

STEVEN T. BRENNER
CCR No. 7

My commission expires: October 14, 2002