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 GILLESPIE-CROW, INC., FOR POOL EXPANSION AND CONTRACTION, POOL CREATION, AND SPECIAL POOL RULES, LEA COUNTY, NEW MEXICO

CASE NO. 11,599

ORIGINAL

REPORTER'S TRANSCRIPT OF PROCEEDINGS

EXAMINER HEARING

BEFORE: MICHAEL E. STOGNER, Hearing Examiner

October 3rd, 1996

Santa Fe, New Mexico

This matter came on for hearing before the New Mexico Oil Conservation Division, MICHAEL E. STOGNER, Hearing Examiner, on Thursday, October 3rd, 1996, at the New Mexico Energy, Minerals and Natural Resources Department, Porter Hall, 2040 South Pacheco, Santa Fe, New Mexico, Steven T. Brenner, Certified Court Reporter No. 7 for the State of New Mexico.

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(Continued...)

A P P E A R A N C E S (Continued)

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* * *

WHEREUPON, the following proceedings were had at 1:22 p.m.:

EXAMINER STOGNER: This hearing will come to order.

I'll call Case Number 11,599.

MR. CARROLL: Application of Gillespie-Crow, Inc., for pool expansion and contraction, pool creation, and special pool rules, Lea County, New Mexico.

EXAMINER STOGNER: I'll call for appearances.

MR. BRUCE: Mr. Examiner, Jim Bruce from the Hinkle law firm in Santa Fe, representing the Applicant.

I have -- I'll swear three witnesses; I'll probably only have two.

EXAMINER STOGNER: Any other appearances?

MR. CARR: May it please the Examiner, my name is William F. Carr with the Santa Fe law firm Campbell, Carr, Berge and Sheridan.

I represent Yates Petroleum Corporation, Hanley Petroleum Company and David Petroleum Corporation.

EXAMINER STOGNER: Do you have any witnesses, sir?

MR. CARR: I have two witnesses.

EXAMINER STOGNER: Two witnesses.

Other appearances?

MR. HALL: Mr. Examiner, Scott Hall from the

Miller, Stratvert, Torgerson and Schlenker law firm, Santa Fe, on behalf of Enserch Exploration, Inc.

We have no witnesses.

MR. CARROLL: Is Mr. Kellahin representing a party in this case too?

MR. CARR: Yes, he is, but I don't know who.

MR. BRUCE: I believe it's Chesapeake Operating.

MR. CARR: I think that's right.

EXAMINER STOGNER: Okay, at this time I'm going to ask all witnesses to please stand to be sworn.

(Thereupon, the witnesses were sworn.)

EXAMINER STOGNER: Mr. Bruce, Mr. Carr, Mr. Hall, is there any need for opening statements at this time?

MR. BRUCE: I don't think so, not for me.

EXAMINER STOGNER: Okay.

Mr. Kellahin, I just called the case and swore the witnesses. Do you wish to make a statement or --

MR. KELLAHIN: I'm sorry, I was looking for Mr. Carr and he's already here.

EXAMINER STOGNER: Are you entering an appearance for anybody?

MR. KELLAHIN: Yes, sir, for Chesapeake Oil Company.

MR. CARROLL: Any witnesses?

MR. KELLAHIN: No, sir.

EXAMINER STOGNER: Okay, what was my answer on the opening statements, I'm sorry?

MR. CARR: I don't have one, Mr. Stogner. There are several other parties I need to enter an appearance for.

EXAMINER STOGNER: Okay.

MR. CARR: Yates Drilling Company, Abo Petroleum Corporation, Myco Industries, Rio Pecos Corporation, Pathfinder Exploration Company, Cannon Exploration Company, Hollyhock Corporation, Tara-Jon, Lario Oil and Gas Company, Vierson and Cochran. And that's all.

EXAMINER STOGNER: Mr. Hall, do you wish to amend your appearance?

(Off the record)

EXAMINER STOGNER: If you don't have any opening remarks, Mr. Bruce, you may start with your witness.

MR. BRUCE: Okay, start with Mr. Widner.

KEVIN WIDNER,

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 full name for the record?

A. Kevin Widner.

Q. And where do you reside?

A. I reside in Midland, Texas.

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

A. The production manager for Gillespie-Crow, Incorporated, and for Charles Gillespie, Jr.

Q. Have you previously testified before the Division?

A. Yes, I have.

Q. As a petroleum engineer?

A. Yes, uh-huh.

Q. And are you familiar with the engineering matters pertaining to this Application?

A. Yes, I am.

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

EXAMINER STOGNER: Are there any objections?

MR. CARR: No objection.

EXAMINER STOGNER: There being none, he is accepted.

Q. (By Mr. Bruce) Mr. Widner, let's fold out Exhibit 1, which is a net-pay isopach. You're not going to testify on the geology, are you?

A. No, sir, I am not.

Q. Okay, let's get to the other matters that are shown on this map. Would you please identify the exhibit

and describe it briefly for the Examiner?

A. Yes, Exhibit 1 is a net porosity isopach of the Strawn formation in the area of the West Lovington-Strawn unit, which is operated by Gillespie-Crow, Incorporated.

Outlined on the map are the boundaries of the unit, as well as the current boundaries of the West Lovington-Strawn Pool. Our geologist will discuss the geology of this map a little bit later.

At this time, please note that the map shows two separate Strawn reservoirs within the boundaries of the West Lovington-Strawn Pool.

Q. And those are the West Lovington-Strawn and then what you have termed the South Big Dog-Strawn; is that correct?

A. Correct, uh-huh.

Q. Now, there's another pool on there, to the northwest, the Big Dog-Strawn. That doesn't have anything to do with our Application today, does it?

A. No, it does not.

Q. Okay. Now, looking at this map, the two reservoirs, the West Lovington-Strawn and the South Big Dog-Strawn, in your opinion, are they separate pools?

A. Yes, they are, and I'll discuss the reasons for my opinion in a little bit.

Q. Okay. Let's get first into what you request.

What does Gillespie-Crow request in this case?

A. We request that the West Lovington-Strawn Pool be divided into two separate pools, the West Lovington-Strawn Pool, which will cover the eastern reservoir, identified on Exhibit 1, and the South Big Dog-Strawn Pool, which will cover the western reservoir, identified on Exhibit 1.

The current special pool rules will remain in effect for both pools, except that the depth bracket allowable in the West Lovington-Strawn Pool will be reduced from 445 barrels of oil per day per well to 250 barrels of oil per day per well.

Q. Now, that 250 barrels of oil per day wouldn't be permanent, would it?

A. No, sir.

Q. If you did not seek to unitize any acreage in the West Lovington-Strawn Pool within a year of a well's completion, that 250 barrels a day would revert to 445 barrels a day, would it not?

A. Correct.

Q. Or in the alternative, if someone drills a well and shows that it's in a different reservoir, that allowable would revert to 445 barrels a day?

A. That's true.

Q. What is the reason for seeking the decreased allowable?

A. The working interest owners in the West Lovington-Strawn unit are bearing the cost of a pressure-maintenance project and have restricted production from the unit wells. Therefore, if wells outside the unit are allowed to produce at top allowable, the are benefitting from the pressure-maintenance project without having to pay for it.

Q. Okay. Would you please give a brief history of the West Lovington-Strawn Pool and the West Lovington-Strawn unit for the Examiner?

A. Yeah, the West Lovington-Strawn Pool was discovered in June of 1992 by the Hamilton Federal Number 1, which is now the WLSU Number 1, located in the southwest quarter, southeast quarter of Section 33, Township 15 South, 35 East. Eleven wells were drilled in the pool within the next three years.

As early as April, 1993, we began to consider a pressure-maintenance project due to the rapid pressure depletion of the reservoir.

In June of 1995 a hearing was held before the Division, resulting in orders approving statutory unitization and a gas-injection pressure-maintenance project. The unit became effective October 1st, 1995.

Q. What is the -- Let's go into the pool What is its drive mechanism?

A. It's a solution gas drive.

Q. And what is the current depth bracket allowable for wells in the pool?

A. 445 barrels of oil per day.

Q. Were wells on this map that are shown to be within the West Lovington-Strawn unit ever produced at top allowable?

A. Yes, early in the life of the pool. However, due to the pressure decline we voluntarily curtailed the production to approximately 100 barrels of oil per day per well in May of 1994. That's about a year and a half before the pressure-maintenance project began.

Q. And why was the production curtailed?

A. At the time we restricted production, we knew we were going to initiate a secondary recovery project, but knew that it would take time to put that project into place. We also knew that the reservoir was approaching critical gas saturation, and the depletion of the reservoir's bottomhole pressure had to be slowed down.

Had we continued to produce the wells at top allowable, critical gas saturation would have been reached by the time the pool was unitized in October of 1995. Had that occurred, free gas within the reservoir would have become mobile and the producing GOR would have increased rapidly, depleting the reservoir of its main energy drive.

Q. And how would that have affected production?

A. The oil production would have declined very rapidly and a vast majority of the oil in place would have been left unrecovered.

Q. Was the pressure-maintenance project proposed as a method of preventing loss of reserves?

A. Yes, it was.

Q. When did you begin injecting gas into the unitized formation?

A. In October of 1995, and since that time we've been injecting about 5 million cubic feet a day, for a total to date of about 1.4 BCF.

Q. Which well are you injecting into?

A. We're injecting into the top of the Strawn porosity in the WLSU Number 7, which was formerly the Speight Fee Number 1. This well has the highest porosity in the unit's reservoir.

The perforations in each of the producing wells are at the bottom of the Strawn porosity.

Q. Okay, let's move on to your Exhibit 2. Would you identify that and discuss the effect the gas in question has had on pressures in the Strawn formation?

A. Exhibit 2 is a plot of bottomhole pressure versus cumulative oil production from the unit.

As you can see, the original bottomhole pressure

was 4392. By April of 1994, the bottomhole pressure had declined to 3450. At that time, production was curtailed to approximately 100 barrels of oil per day per well.

By October of 1995, when the injection began, the pressure had further declined to 3261.

Since injection has begun, and as a result of the injection, the bottomhole pressure in the reservoir has increased to 3279, even though over 640,000 barrels of oil have been removed from the reservoir.

Q. Since that project was --

A. Correct, since that injection project was started.

Q. And how do the actual bottomhole-pressure figures compare with the calculated and extrapolated bottomhole-pressure figures?

A. The calculated points on this graph were generated in August of 1994, and they have never been altered.

The calculated points, compared to the actual measured points, indicate how accurate our predictions have been. This confirms our prediction that the reservoir would have depleted very rapidly, had we not instituted a pressure-maintenance project.

Q. Did the injection program successfully prevent further gas from breaking out of solution and prevent

critical gas saturation from being reached?

A. Yes, it prevented waste and will enable the recovery of additional reserves.

Q. Now, let's move on to your Exhibit 3. What has been the effect of gas injection on production -- This is from the unit, I believe?

A. Correct, uh-huh.

Exhibit 3 is a production graph for the oil and gas production from the lands within the unit. This exhibit shows that we started injecting gas in October of 1995. At that time, the production from the wells was increased approximately 20 barrels of oil per day per well.

After injecting gas for three months, we were able to determine that the gas was remaining in the top of the reservoir and that there was no early breakthrough of gas in the producing wells.

As a result, at that time, the production was gradually increased up to about 200 barrels of oil per day per well, which is twice as high as before the initiation of the project.

Q. And I notice on this chart that the GOR has been flat or declining during that period?

A. That's true.

Q. Now, you mentioned this 200-barrel-of-oil-per-day-per-well rate. Is this greater than the rate you could

have produced the wells without the pressure-maintenance project?

A. Yes, without the project we would have had to continue to restrict production to 100 barrels a day a well, to minimize depletion of the reservoir energy and loss of reserves.

Q. As a result, the project was approved in time to prevent harm to the reservoir?

A. Yes, it was.

Q. How many wells are there in the unit?

A. Again, looking at Exhibit 1, there are eleven wells in the unit, ten producing wells and one injection well. All of these wells were drilled prior to unitization.

Q. Okay. How about in the West Lovington-Strawn Pool as it's currently defined? How many wells are there?

A. Again on Exhibit 1, there are 17 wells completed in the Strawn formation, in the pool or within a mile of the pool.

Q. Are there any wells outside of the West Lovington-Strawn unit which are in communication with what you've shown to be the unit's reservoir?

A. Yes, there are. The State "S" Number 1 in the west half of the southeast quarter of Section 34, which is operated by Gillespie-Crow, and the Chandler Well Number 1

in the south half of the southeast quarter of Section 28, which is operated by Hanley Petroleum.

Q. Were these two wells drilled after the unitization hearing?

A. Yes, they were.

Q. What information do you have which supports your statement that these wells are in pressure communication with the West Lovington-Strawn reservoir?

A. The original bottomhole pressure of the reservoir in the unit in June of 1992 was 4392.

A DST, a drill stem test, on the State "S" Number 1 in September of 1995 showed that its bottomhole pressure was 3286, which is much lower than virgin pressures in that area for Strawn reservoir.

A bottomhole pressure of the wells in the West Lovington-Strawn unit in September of 1995 also showed that the reservoir's pressure was 3294, only eight pounds different than in the State "S" Number 1 at that same time period.

After producing about 15,000 barrels of oil, a bottomhole pressure survey on the State "S" Number 1 in October of 1995 showed the pressure had decreased to 3261. We also started injecting gas into the reservoir in October of 1995.

In July of 1996, nine months later, the

bottomhole pressure in the State "S" Number 1 had increased over 30 pounds to 3295, even though the well had produced an additional 42,000 barrels of oil.

Also, during the most recent bottomhole pressure survey for the West Lovington-Strawn unit wells in July of 1996, the average pressure of the wells was 3279, which is slightly less than in the State "S" Number 1.

Also, when we did that survey, the State "S" Number 1 was left shut in with a bottomhole pressure recorder left in the bottom of the well. While it was shut in, the wells in the West Lovington-Strawn unit were put back on production.

When the wells were put back on production, the pressure buildup curve for the State "S" Number 1 immediately flattened, which indicates excellent communication with the reservoir in which the unit wells are completed.

Q. Okay. Now, some of the data you've just discussed is shown on your Exhibit 4; is that correct?

A. Yes, it is.

Q. And I think the key point here is that the State "S" Number 1 bottomhole pressure has increased, even though it's produced over 50,000 barrels of oil?

A. Yes, it has.

Q. What kind of information do you have on the

Hanley well?

A. The Hanley well was a tight hole for six months, so we have very little data on that well, until the logs were released in -- earlier, in July of 1996. Our geologist will discuss the logs later.

We have offered to swap historical bottomhole pressure data with Hanley, but at this time Hanley is still not willing to do a pressure information swap with us.

Q. Will the Hanley well, the Chandler Number 1, be affected by this Application?

A. No, it will not, because the well produces less than 250 barrels of oil per day.

Q. How much gas needs to be injected into the reservoir to replace produced oil and maintain pressure?

A. For each barrel of oil that's removed from the reservoir, 2 MCF of gas must be injected to replace that barrel of oil. If a well is producing 445 barrels of oil a day, it takes approximately 900 MCF a day to replace production from that well.

Q. And what is the cost of this injected gas currently?

A. It costs the unit working interest owners approximately $2.15 per MCF to inject into the ground. Thus, it costs the unit working interest owners almost $2000 a day to replace production from a top-allowable

well.

Q. So in that case, if there's a well outside the unit producing at top allowable and it takes a year to unitize that tract, it will cost the unit working interest owners what? Approximately $720,000?

A. Yes, uh-huh.

Q. What are the current producing rates of the ten unit producing wells?

A. About 150 barrels of oil per day per well.

Q. Okay. So this is a decrease from 200?

A. Yes, it is.

Q. And why have producing rates been decreased in unit wells from 200 to 150 barrels a day?

A. Production from the Chandler Number 1 well and the State "S" Number 1 well has required production from the unit wells to be reduced to prevent a decrease in reservoir pressure. This adversely affects the correlative rights of interest owners in the unit.

Q. Why not just increase gas injection rates? Why can't you do that?

A. It sounds easy, but it's really very difficult. The costs involved, the compressor -- capacity of the compressors that are involved, the environmental permits to install larger compressors, because these compressors are moving a lot of gas at high pressures, the capacity of our

injection wells -- It takes several months, if not many months, to accomplish this. It's not that simple.

Q. Now, what about -- I know you're asking to decrease the allowable from 445 barrels a day, which is pretty healthy, down to 250 barrels of oil per day. How does that affect economics?

A. Typically, to drill and complete a Strawn well in this -- if it's a flowing top-allowable well in this reservoir, costs about $600,000 to complete a well. A well producing at 250 barrels of oil a day should pay that well out in six to eight months.

Q. So it's still economical in your opinion?

A. Correct.

Q. Looking again at Exhibit 1, how do you know the western reservoir, again called the South Big Dog-Strawn Pool here, is a separate reservoir from the West Lovington-Strawn Pool?

A. The Amerind Mobil State Well Number 1 in Lot 3 of Section 2, when it was drilled, encountered virgin pressures of 4357, which were higher than the pressures in the wells in the West Lovington Strawn unit at that time.

Gillespie drilled the second well in the reservoir, the Baer Number 2, in the southeast quarter of the southeast quarter of Section 32 and completed a well which had a pressure of 3272. At that time, the pressure

in the wells in the unit was 3294.

Also, the pressures in the western reservoir, in the Big Dog, Southeast [*sic*] Big Dog-Strawn, continued to decline. In January of 1996, the pressure in Amerind's Mobil State well and Gillespie's Baer Number 2 well was 2583, which was substantially lower than the pressures in the unit, which in March of 1996 was 3310.

Because the pressures within the unit are steady or increasing, the western reservoir has to be a separate reservoir.

Q. Is the western reservoir affected by this Application?

A. No, it is not, except that the reservoir will be given a new pool name.

Q. Okay. Now, let's look at your Exhibit 5. Would you identify that and describe the acreage which is affected by the allowable reduction request?

A. Exhibit 5 is a portion of the net porosity isopach map, submitted as Exhibit 1, in which we have shaded acreage which may contain a portion of the unit's reservoir. This is the acreage affected by the request to reduce the allowable.

Q. Okay, and is Exhibit 6 simply a legal description of the acreage identified in yellow on Exhibit 5?

A. Yes, it is.

Q. Okay. Have -- Besides the wells -- completions shown on here, are there any other wells or APDs regarding acreage in this yellow block?

A. Yes, Charles Gillespie is currently drilling a well located in lot 12 of Section 1, just immediately south of the unit. This well will be affected by the production limitation.

Q. Does Gillespie-Crow, Inc., as operator of the West Lovington-Strawn unit, intend to unitize additional acreage in the West Lovington-Strawn Pool?

A. Yes, we do. We plan to add to the unit the south half, southeast quarter of Section 28, and the west half, southeast quarter, of Section 34, which are the well units for the Chandler Well Number 1 and the State "S" Well Number 1.

Q. What is the time frame for unitizing these tracts?

A. We have -- Backing up a little bit, we sent a letter in May of 1996, proposing unitization of the State "S" Number 1 tract. We had a working interest owners' meeting in June of 1996. When the data from the Hanley well became available, we invited Hanley to the next working interest owners' meeting, which was held in September of 1996.

Last week we sent out a proposal for

participation factors in bringing those two tracts into the units. However, Yates, Hanley and others have shown no interest in unitization. When -- We do plan at this time to continue moving forward with unitization.

Q. Now, when you originally formed the unit, how long did it take to form, roughly?

A. About a year and a half.

Q. And at that time you had unanimous consent from the working interest owners, I believe?

A. Yes.

Q. Does it benefit working interest owners outside of the West Lovington-Strawn unit but within the pool to delay unitization of their tract?

A. Yes, by stalling unitization they benefit from the pressure-maintenance project without having to pay for its cost. If additional wells are drilled outside the unit and are allowed to produce at top allowable, unit wells will have to keep reducing their production to prevent the reservoir pressure from declining.

Q. Is this Application -- was it filed only to benefit the working interest owners in the West Lovington-Strawn unit?

A. No, it was not. In fact, Charles Gillespie; Gillespie-Crow, Incorporated; and Enserch, who are the primary interest owners in the unit, also own a large

interest in the offsetting acreage and will be affected by the reduced allowable.

Q. Who was notified of this hearing?

A. We notified all operators within the current boundaries of the West Lovington-Strawn Pool, all operators, lessees or unleased mineral owners within a mile of the West Lovington-Strawn Pool, all working interest owners in the West Lovington-Strawn unit, and all interest owners, working, royalty and overriding royalty, in the State "S" Number 1.

Q. And is my affidavit of notice submitted as Exhibit 8?

A. Yes, it is.

MR. BRUCE: I might not have numbered that exhibit, but it should be Number 8, my affidavit, Mr. Examiner.

We're skipping over Exhibit 7 for the moment.

EXAMINER STOGNER: So you wish to admit Exhibits 1 through 6?

MR. BRUCE: At this --

Q. (By Mr. Bruce) Mr. Widner, let me see, now. Were Exhibits 2 through 6 prepared by you or under your direction or compiled from company records?

A. Yes, they were.

Q. Okay, and in your opinion is the granting of this

Application in the interest of conservation, the prevention of waste and the protection of correlative rights?

A. Yes, it is.

MR. BRUCE: Mr. Examiner, at this time I'd move the admission of Exhibits 2 through 6 and Number 8.

EXAMINER STOGNER: Any objections?

MR. CARR: No objection.

EXAMINER STOGNER: Exhibits 2 through 6 and Exhibit 8 is admitted into evidence at this time.

Mr. Carr, your witness.

CROSS-EXAMINATION

BY MR. CARR:

Q. Mr. Widner, you testified you're the production manager for Gillespie-Crow?

A. Yes, uh-huh.

Q. How long have you been employed in that position?

A. For about three and a half years.

Q. Were you involved in the initial effort to form the West Lovington-Strawn unit --

A. Yes, I was.

Q. -- during 1994 and 1995?

A. Yes, uh-huh.

Q. And during the effort to put together this unit, were you involved in decisions that were made concerning how production within the unit would be allocated back to

other interest owners in that unit?

A. No, I was not.

Q. During your involvement with the development of this unit, were you aware of Yates Petroleum Corporation being involved at any level in the development of the original unit?

A. No, I was not.

Q. Was Hanley involved in the development of the original?

A. No.

Q. Was David Petroleum?

A. No, they were not.

Q. Now, in this particular case, you're seeking to restrict production in the area shaded in yellow on your Exhibit 5 that's outside the unit; isn't that right?

A. Correct.

Q. And if I understand your testimony, the Hanley well, on the northern edge of the unit, will not be affected by this Application?

A. It's not affected because it's not capable of producing 250 barrels a day at this time.

Q. The State "S" Number 1, will it be affected by this Application?

A. Yes, it will.

Q. Is that the real purpose of this Application, is

to obtain OCD authority to curtail that production?

A. From that particular well?

Q. Yes, sir.

A. No, sir.

Q. Have you been, in fact, curtailing production from that particular well?

A. Yes, we have.

Q. Have you been curtailing it substantially below 250 barrels of oil per day?

A. At one point in time.

Q. Are you doing that now?

A. No, sir.

Q. Now, in deciding to curtail production from that well, that was a decision you made as operator of that well; isn't that correct?

A. Yes, it was.

Q. And it was substantially below the established depth bracket allowable for the pool at that time?

A. Yes, it was.

Q. And now you're seeking authorization that would let you curtail that well to 250 barrels a day; is that right?

A. Yes.

Q. Is that the level at which you would intend to produce this well if, in fact, your Application is granted?

A. Yes, it is.

Q. Now, does this -- is the -- a purpose of this Application also to restrict production from other wells that might be drilled in this yellow area outside the unit but within -- I guess the yellow area is the pool boundary; is that right? The proposed pool boundary?

A. No, sir, the pool boundary is the area in green, if I'm not --

Q. No --

A. Or maybe I didn't understand your question.

Q. Is the proposed pool boundary the yellow-shaded area?

MR. BRUCE: Proposed.

THE WITNESS: Proposed, yes.

Q. (By Mr. Carr) And you may have recently come into some of these exhibits. If you need to talk to Mr. Bruce --

A. No, I'm fine.

Q. All right. And my question was, the intent of the Application is to limit the production from wells that might be drilled in that yellow area, and they're not in the unit so that they could not produce in excess of 250 barrels of oil a day?

A. If it is communicated with the reservoir, which is within the unit.

Q. Are you here today prepared to testify that any of that yellow acreage is, in fact, in communication with the reservoir within the unit?

A. No, I can't do that.

Q. And so you want to restrict that and reduce the allowable, but are you going to present anything here today that shows that, in fact, if anyone drilled out in that area, they would, based on your understanding today, be in communication?

A. No, I can't -- I can't claim that.

Q. Now, if I understood your testimony about the basis for the -- and maybe I'm linking something incorrectly here, so stop me. You're requesting a limit of 250 barrels a day?

A. Yes.

Q. At the present time you have to inject 2 MCF per barrel of oil; is that what your testimony was?

A. Correct, uh-huh.

Q. And so your -- Is your proposal, your 250-barrel-a-day proposal, based on what is currently happening in that reservoir?

A. No, sir, it is not.

Q. So there's no relationship between the 2-MCF-per-day barrel that you want to -- barrel -- per barrel --

A. No, sir.

Q. -- that you want to inject and the 250?

A. No.

Q. How was the 250-barrel-per-day number derived?

A. I can't answer that. I did not derive that particular number.

I do know that several numbers were discussed, and I don't know how that final conclusion was -- that number was come about.

Q. To maintain the effectiveness of your project, if I understood your testimony, was that you have to and now are limiting wells within the unit, based on the volumes of gas that you're able to inject in the Number 7 well; is that correct?

A. Correct, uh-huh.

Q. You have capacity, however, or the ability to increase your gas injection, do you not?

A. Correct, uh-huh.

Q. And that's in the Ernestine well; isn't that right?

A. That's correct.

Q. Are you planning to convert that well to injection in the near future?

A. Not at this time.

Q. It has become a high-GOR well, though, has it not?

A. It has not become relative -- relative to what? It's just higher than -- The GOR is higher in that well than it is in the other producing wells.

Q. Is it increasing?

A. Yes.

Q. Is that the next likely candidate for an injection well in the unit area?

A. Probably not. We'll probably just shut that well in.

Q. Can you inject more gas in the Number 7 than you currently are injecting?

A. It's possible.

Q. If additional wells were drilled in this yellow area around the unit, would that cause you to need to lower withdrawals from the pool?

A. Yes, it would.

Q. And would that perhaps require additional lowering of the depth bracket allowable in the buffer zone if, in fact, there are additional wells drilled in that area?

A. If there were too many wells drilled within that area and we were not able to inject enough gas to make up the production for that.

Q. So what you're proposing is something we need to do to deal with the reservoir as it stands today?

A. Correct.
Q. That may change?
A. It could.
Q. And it probably will change; isn't that right?
A. It might.
Q. Now, as you understand this reservoir, do you believe the current wells in the pool will drain all the reserves in the pool?
A. The vast majority, yes.
Q. And when you talk about draining the reserves in the pool, the existing wells, does -- that includes the production that is under the tract on which the State "S" Number 1 is located; that's correct, isn't it?
A. I don't quite understand your question. You mean with the wells --
Q. The wells that are there today, you're going to drain whatever is under the State "S"?
A. The wells in the unit, or including the State "S"?
Q. Well, are there -- If you put the State "S" in the unit --
A. Yes.
Q. -- as you're proposing --
A. Correct.
Q. -- if you put the Hanley well, in the north, in

the unit, will those wells drain the reservoir?

A. As we know the reservoir today, we feel it will.

Q. And if there are reserves that are owned, say, by David Petroleum off the northeast corner of the unit, under the present plan, current unit as you propose to expand it, there's no way for them to enjoy any of the benefits of that production; isn't that right?

A. Benefits of production from under their lands?

Q. Yes.

A. Yes, they can drill a well --

Q. And if they --

A. -- up there if they want.

Q. Okay. And if they drill an additional well under your proposal, they would be having to evaluate what they could produce, their economics, based on an allowable limit of 250 a day; isn't that right?

A. Correct, uh-huh.

Q. As opposed to 455 --

A. Correct.

Q. -- whatever it is?

A. Correct.

Q. And if they drilled a good well --

A. Uh-huh.

Q. -- isn't it fair for them to expect that you would attempt to expand the unit to bring that acreage into

the unit?

A. Yes, it would.

Q. And then if they drilled that good well and you brought it into the unit, what they would get in terms of compensation for that well would be based on their share of unit production; isn't that right?

A. It would be based upon their hydrocarbon pore volume underneath their tract.

Q. And that is the basis for allocation and production in this unit; isn't that right?

A. I don't believe so. I'm not --

Q. It would be whatever the unit provides. That would be their share; isn't that correct?

A. Their share of the unit's total unit production?

Q. Right.

A. Correct.

Q. And that's based on the geological interpretation of the reservoir, is it not?

A. That is correct.

Q. And if the geological interpretation is incorrect, it could give them less or more than they're entitled to; isn't that right?

A. That's correct, uh-huh.

Q. And if you were proposing a well and your allowable was cut in half, and if you got a good well you

might have it put in a unit, and what you would share would be dependent upon what the unit formula allocated, wouldn't you think that would have a negative impact on your decision to develop your land?

A. It possibly might.

Q. Now if we look at the Hanley well north of the proposed unit --

A. Uh-huh.

Q. -- you're proposing to bring that well in, are you not?

A. Correct.

Q. And you have, based on what you know about it, allocated based on this unit method, allocating unit production, a certain volume to the Hanley well; isn't that right?

A. Correct.

Q. They right now have produced more out of that well than they would get if they were included in the unit; isn't that correct?

A. I'm not exactly sure what that number is, to be honest with you.

Q. Okay. Do you have a witness who would know that today?

A. I don't -- I don't think so. I don't think we have those numbers with us.

Q. Okay, that's fine.

Now, if I look at the area shaded in yellow on Exhibit Number 5, that's the new pool boundary, correct?

A. Proposed.

Q. Proposed pool boundary?

A. Yes, correct, uh-huh.

Q. Can you tell me -- and this is the area in which the lower depth bracket allowable would apply, just in the yellow area?

A. Correct --

Q. Okay.

A. -- uh-huh.

Q. How did you develop the proposed new boundary for this pool?

A. I'm going to let our geologist discuss that.

Q. And you can do that on anything.

There were not engineering considerations on that? That's basically a geological pick; is that right?

A. Yes.

Q. Okay. You were involved with the drilling of the State "S" Number 1, were you not?

A. Correct, uh-huh.

Q. Now, that well is immediately offsetting the unit boundary on the east; is that correct?

A. Yes, it is.

Q. When did this unit become effective?
A. In October of 1995, if I'm correct.
Q. And when did you drill the State "S"?
A. In August of 1995.
Q. When you drilled the State "S", you weren't really planning to propose a unit, get it approved and immediately offset it and find yourself in the same reservoir; isn't that right?
A. Correct.
Q. You were thinking you were drilling into a separate porosity pod?
A. At that time, yes.
Q. And when you drilled the well, you discovered that, in fact, the reservoir extends further off to the east than you had originally --
A. That's true.
Q. -- anticipated?
Was that decision based on your seismic information?
A. To drill that well?
Q. Yes, sir.
A. It was certainly used as a tool.
Q. And when you drilled the well, you actually thought it was 100-percent Gillespie-Crow, did you not?
A. That's true.

Q. And it was only after that, that you discovered that Yates and Lario and Vierson and Cochran and the Wilson family and all of those other people were in the well?

A. That's true.

Q. Now, you discovered it was in communication with the reservoir that you had unitized --

A. Uh-huh.

Q. -- is that not correct?

A. Yes.

Q. And immediately you knew you had a very good well; isn't that fair to say?

A. Yes, uh-huh.

Q. And at that time, with a very good well, about the same time you formed the unit, a year ago, you knew you had a situation where you had a well outside the unit, and the production from that could have an impact on your unit operations; isn't that right?

A. That's true.

Q. And you have not formally proposed an expansion of the unit to this Division, even today; isn't that fair to say?

A. That is correct.

Q. And you testified that you felt that the other interest owners, Yates, Mewbourne, were not interested in expansion of the unit; was that your testimony?

A. We have had opposition to bringing that well into the unit.

Q. Isn't it true that Yates Petroleum wrote you in July of this year and encouraged you to go forward immediately with unitization?

A. I don't know the answer to that.

Q. All right. Now, after this Snyder well was -- I'm sorry, the State "S" Number 2 well was completed, you knew then that the reservoir that you had unitized needed to be changed, did you not?

A. The State "S" Number 1?

Q. Yes, sir.

A. Yes.

Q. And you knew that your geological interpretation had changed; isn't that fair to say?

A. Yes.

Q. Now, when the Hanley well was drilled north of the unit and you -- with the limited data that you have on that well, still again, didn't that suggest that maybe the geological picture was changing?

A. Correct.

Q. We also have a well that Gillespie drilled, the Snyder "EC" Com Number 4, off the southeastern portion of this unit?

A. Yes, uh-huh.

Q. That well is also in communication, is it not, with this reservoir?

A. Yes, it is --

Q. Are you proposing to --

A. -- pressure communication.

Q. -- expand the unit to include that?

A. No, that well has little value to the unit. It's a pumping 40-barrel-a-day well. It's neither drawing reserves from the reservoir nor is it receiving any help from the pressure-maintenance --

Q. So you're not going --

A. -- project.

Q. Excuse me.

A. That's okay.

Q. You're not going to include that well, because it's a poor well; isn't that right?

A. Correct.

Q. So if I was Yates and I wanted to drill a well offsetting the State Number 1, isn't it fair for me to assume -- on the -- immediately east of there, outside what would be the expanded unit, wouldn't it be fair for me to think that if I drilled a good well it would be taken into the unit; if I drilled a poor well you'd leave it out?

A. Yes.

Q. And so isn't that a disincentive to drilling? If

I drill a good well, I'm going to lose it?

A. To Yates?

Q. To the unit.

A. It's -- When the well is brought in the unit, it is paid out --

Q. It would be paid out --

A. -- according to -- according to the unit document. They are paid out for their costs incurred in drilling the well.

Q. Any time you bring a well in, would it have to be paid out before it was --

A. I think, and I may be wrong, but I think it has to be voted in by the working interest owners in the unit.

Q. Now, when we look at your geological interpretation that is shown on Exhibit 5, am I taking you into an area I should defer to a later witness?

A. Yes.

Q. In the original application that was filed in this case, it was stated that Gillespie was in the process of expanding the unit. How soon do you anticipate being able to make a formal proposal to the OCD for expansion of the West Lovington-Strawn unit?

A. There is a letter out right now to all working interest owners and all the interest owners in the State "S" proposing a new -- or the tract-participation formulas

for the expansion of the unit. It's my understanding when those ballots are received, we plan on then going before the -- or filing to go before the OCD for expansion of the unit.

Q. Are you aware that there was a ballot earlier this year for expansion of the unit?

A. Yes.

Q. What were the results of that ballot?

A. To be honest with you, I don't think there really were any results. I know that there was not a -- I don't know that answer, to be honest with you.

Q. All right. You're not aware that the result of that was ever announced to anyone?

A. No.

Q. In proposing to expand the unit, you're only proposing to expand, if I understood your testimony, to include the two tracts, the Hanley tract to the north -- on which the Chandler well is located, the spacing unit --

A. Correct, uh-huh.

Q. -- and the spacing unit on which the State "S" is located --

A. That's correct.

Q. -- is that right?

Are these the only tracts outside the current unit boundary that, based on your understanding of the pool

today, may contribute reserves to the unit?

A. At this time.

Q. And it is your --

A. There's no other wellbore control in the other tracts, the shaded area that we have.

Q. And so -- When you bring a tract into this unit, are you only going to bring in tracts upon which there is an existing wellbore?

A. That's correct.

Q. And are you required to do that by the terms of the unit agreement?

A. I don't know the answer to that. I don't think so.

Q. But you would not --

A. No, we're not.

Q. Even if your geology changes, it's going to be your position that you will only expand the unit on the basis of wells once they've been drilled?

A. That's correct.

Q. Did you testify in the original unit hearings?

A. Yes.

Q. And at that point in time, you brought a -- I'm sorry, Gillespie brought an application under the Statutory Unitization Act; is that correct?

A. Yes.

Q. At that time was the testimony of Gillespie that the reservoir had been defined by development?

A. What they -- he felt like at that time.

Q. And included within the reservoir at that time were there tracts on which there were not existing wellbores?

A. Yes, there was.

Q. And that was based on a geological determination --

A. Correct.

Q. -- isn't that correct?

A. Correct.

Q. But now if we're going to expand the unit, you first have to have a well?

A. Correct.

Q. So if I am Yates and I have a drilling location on the east side of the unit, before that would even be considered I have to go out and drill a well; is that --

A. Correct.

Q. -- what we understand?

A. Yes, sir.

Q. And if there are reserves there, unless I go drill a well, they're never going to be included in the unit or shared by the unit -- or -- won't share for that tract in unit --

A. That's true.

Q. -- in the unit production?

And so that means with half the allowable and a chance of having my well taken away if I get a good well, I have to go drill that, no matter what the geology says, before my tract can be included in the West Lovington-Strawn unit; is that right?

A. That's correct, uh-huh.

Q. And if I have reserves under there and I don't drill that well, they will probably be produced by existing wells within the unit area?

A. Possibly.

Q. At the time of that unit hearing, was it Gillespie's testimony that the unit could be operated without an adverse impact on offsetting operators?

A. I don't know the answer to that.

Q. You did obtain an order approving the unit based on your application under the Statutory Unitization Act?

A. Yes.

Q. Would it be your testimony today that you can continue to operate as you're proposing in this case without there being an adverse impact on offsetting operators?

A. Yes.

Q. And you wouldn't consider a reduced allowable and

no assurance that you can operate a well you drill an adverse impact?

A. Say that again?

Q. Okay, I understand your question. You wouldn't consider a reduced allowable and no guarantee that if I drill a well I can even operate it being an adverse impact on me as an offsetting operator?

A. Well, if an operator has that lease and they certainly want to drill that well, then they will operate that well until it's belonging to the unit.

Q. Under --

A. I guess maybe I misunderstood your question.

Q. If I drill a well, though, I know I'm going to have to reduce the allowable until it goes into the unit; is that --

A. That's correct.

Q. -- right --

A. Uh-huh.

Q. -- if the rules are adopted?

A. That's correct.

Q. And I know that if I drill a good well it will go into the unit?

A. That's correct.

Q. And I won't get to operate it?

A. That's correct.

Q. And I know that if it goes into the unit, I get the unit share, not what today I might be able to produce like in the State "S" if I just opened it up and produced it; isn't that right?

A. That's true.

Q. In your opinion, those aren't adverse effects on me as an offset operator?

A. I guess it would be.

Q. Okay. Now, you testified, I thought, that the delay in unitizing was working to the benefit of other operators at the expense of the interest owners within the unit --

A. That's true.

Q. -- is that what you said?

Do you think that it is working to the benefit of the non-Gillespie owners in the State "S" at this time to delay unitization?

A. It certainly benefits them in the fact that they are receiving pressure maintenance from our pressure-maintenance well, and they are receiving the benefit of our pressure-maintenance project while having not to have any expenditures for that.

Q. Mr. Wagner, isn't it true that you have, since payout, substantially curtailed production in the State "S"?

A. We curtailed production on the State "S" when we did not know who the working interest owners were in the well.

Q. And by curtailing that, that means other interest owners in the well get less than they would if you produced it at the allowable --

A. That's true.

Q. -- authorized for it?

And isn't it true that at the same time you decreased and limited production from the State "S", that you increased the production from the WLSU 18 and the WLSU 19 inside the unit to prevent those people from getting their share of the reserves?

A. That's not -- I don't know what we did with the production from those two wells at the time. I don't have that in front of me. But that was not our purpose.

Q. If that happened, that wasn't your purpose?

A. No, sir.

Q. And if we are getting substantially less than 250 barrels a day to today --

A. Uh-huh.

Q. -- we're not gaining a benefit by the delay in unitizing the reservoir, are we?

A. If you're not getting --

Q. If we're being produced at substantially below a

250-barrel-per-day allowable right now --

A. Correct, which you're not right now.

Q. But if we're produced at the levels you've been producing it, you still are testifying that we're deriving benefits from unitization by staying out of the unit?

A. At the levels that they were producing, but at top allowable levels, which is the question in hand here, then they certainly would be benefitting, because they're producing at top allowable in the wells, when in the unit they're not, and the wells are receiving help from the pressure-maintenance project.

Q. So you're telling me that it is in the best interest of Gillespie to unitize quickly; is that right?

A. That is true.

Q. Well, then, if that's the case, why did Yates call the working interest owner meeting in June instead of Gillespie?

A. I'm not -- I was not involved with that. I don't have that answer.

Q. Wouldn't you think if you were interested in unitizing, you would have called a working interest owner meeting?

A. (Nods)

Q. If additional wells are drilled after the first expansion, if the unit is expanded --

A. Correct.
Q. -- and they're good wells --
A. Yes.
Q. -- it's fair for us to expect that there would be subsequent applications to expand the statutory unit; isn't that right?
A. Yes.
Q. And you would go under that Act where you would then need to vote the interest owners within the expanded unit area to put the unit into effect; isn't that correct?
A. Yes.
Q. And if you step out in small pieces, you certainly have the 75-percent vote necessary to ratify a unit agreement if it's approved by this Division; isn't that right?
A. Uh-huh.
Q. Have you estimated whether or not you would have sufficient royalty ownership ratification if you tried to unitize the entire area shaded in yellow on Exhibit 5?
A. Do we have approval from the royalty owners at this time --
Q. Do you --
A. -- 75 percent? I do not know.
Q. Okay. You don't know if you have 75 percent of the royalty in the pool that would ratify, do you?

A. No, sir.

Q. Okay. Now, in coming forward with the unit, you did some engineering studies to evaluate it in terms of pressure-maintenance potential, did you not?

A. Correct, uh-huh.

Q. And you had an extensive 3-D seismic study of the area; isn't that correct?

A. Correct.

Q. And you have been studying this reservoir for a number of years; isn't that fair to say?

A. That's true.

Q. And yet now if we want to -- if we should drill a well, Yates, outside the unit, we would be restricted to the lower allowable until we proved that we were outside of the unit; isn't that right? Or outside the pool?

A. That's true.

Q. And today you're not here telling this Commission, this Examiner, that the yellow area is in communication with the reservoir?

A. No, we are not.

Q. And what would happen is, if we drill a well, then we're going to just go ahead and drop the allowable. But if it's inappropriate, you don't have to prove that it's in communication; we have to prove that it's not? That's the proposal you have here today?

A. Is that -- I'm not 100-percent sure. Is that correct?

MR. BRUCE: (Nods)

THE WITNESS: That's correct.

Q. (By Mr. Carr) And your geologist is going to justify the boundaries of the new pool; that was your testimony?

A. Our geologist?

Q. Yeah. Well, a geologist.

A. A geologist will present maps for the OCD, and they seem to be the one who's been deciding the boundaries.

Q. If Yates had been the operator of the State "S" Number 1 well and had been producing it at over 400 barrels a day, don't you believe there would be incentive for Gillespie to get out here and get the unit expanded?

A. Yes.

Q. Now, if this Application is granted and the operators in the yellow area but not in the unit have a restricted allowable down to 250 a day, there's no incentive on the part of Gillespie to push the unit at that point, is there?

A. Sure, there is.

Q. Why is that?

Q. That well is still benefitting from the pressure-maintenance project, and they're not paying for any of the

gas that we're injecting into the ground.

Q. There would be no reason for you to want to go forward and expand the unit, though, based on geology, would there? You would have to have a wellbore first?

A. Correct.

Q. Were you involved in a June 20 working interest owner meeting at all?

A. Yes.

Q. At that time did not Yates come forward and propose to you certain ways to resolve the problem with the State "S" Number 1?

A. I'm not aware of that.

Q. You're not aware of any proposal. Were you at the meeting?

A. Yes.

Q. And that is when there was a first ballot; isn't that correct?

A. Correct.

Q. And you don't know what the results of that might have been?

A. No, sir.

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

THE WITNESS: Thank you.

EXAMINER STOGNER: Thank you, Mr. Carr.

Mr. Hall, your witness.

MR. HALL: No questions.

EXAMINER STOGNER: Mr. Kellahin?

MR. KELLAHIN: Thank you, Mr. Examiner.

EXAMINATION

BY MR. KELLAHIN:

Q. Mr. Wagner, on one of your maps here for reference, let's look at the Hanley Chandler well.

A. Okay.

Q. Does that well produce water?

A. Yes, it does.

Q. Do all these wells produce water?

A. We have one other well within the unit that produces water.

Q. So there is one unit well, produces water?

A. Yes.

Q. And all the rest of the unit wells are water-free?

A. Yes.

Q. Does the Gillespie State "S" 1 produce water?

A. No, it does not.

Q. Is there a water-drive component to the reservoir?

A. No, sir.

Q. What's the oil cut on the Hanley well? What -- Can you give us any kind of magnitude of the water-oil

ratio on that?

A. I'm going to be -- and I'm not 100-percent sure, but from what I understand, the well is producing approximately 125 barrels of oil a day and 300 barrels of water a day.

Q. Why don't you peg the production limitation to total barrels of reservoir fluid withdrawn in order to balance the equities arrived from the pressure projection?

A. I was not involved in that decision. We felt also that if we did that, the Hanley well would probably load up and not flow anymore.

Q. The Hanley well is obviously a very inefficient producer --

A. Correct.

Q. -- in relation to the others?

A. Correct.

Q. And it is afforded the opportunity to use reservoir energy you're supplying with pressure maintenance in order to produce a limited volume of oil in relation to the water?

A. Well, a limited volume, it's still producing 125 barrels of oil a day, which is -- by far means not a stripper well.

Q. Okay. But you've made the conscious choice to peg the limitation to an oil limit, as opposed to a total-

fluid-withdrawn limitation?

A. That's correct.

Q. Okay, and why have you chosen to do that?

A. I was not involved in that decision, so I can't answer you that.

Q. When you look at the configuration of the wells, between the injection well and the Gillespie State "S" 1 --

A. Yes.

Q. -- arguably there are three and perhaps as many as six take points within the unit --

A. Correct.

Q. -- that could capture the benefit of the pressure from the injection well and protect the unit from the outside well benefitting from that pressure?

A. That's not necessarily true, because the State "S" well pressure has increased over 30 pounds.

Q. Well, I'm curious. How does that happen when we have those take points between the injection well and the State "S" 1?

A. This reservoir is like a tank, and the injection well is pressurizing the whole tank. and that State "S" well, the bottomhole pressure at this time is very, very similar to the wells within the unit, no matter where they are within the unit.

Q. So it's not practical to suggest that we could

control withdrawals in the unit in order to protect unit oil from being pushed off the unit and being produced by the non-unit well?

A. That's correct.

MR. KELLAHIN: Thank you.

EXAMINER STOGNER: Thank you, Mr. Kellahin.

Any redirect?

Mr. Bruce?

MR. BRUCE: A couple of questions.

REDIRECT EXAMINATION

BY MR. BRUCE:

Q. Regarding the State "S" Number 1 well, Mr. Widner, that well was produced at top allowable for a period early on its life, right?

A. That's true.

Q. And then production was cut back because there was some substantial title problems regarding working interest ownership in that one?

A. That's correct.

Q. And those problems lasted for about the first half of this year?

A. Yes sir, uh-huh.

Q. Okay. Now, regarding David Petroleum, one question just so the Examiner is straight on this. They're not in -- David Petroleum is not in the West Lovington-

Strawn unit at this point?

A. Not at this point.

Q. Now, at one point they owned interest within the unit boundaries before unitization?

A. That's correct, and in WLSU Number 11, they had a working interest in that well --

Q. And they sold their interest?

A. They sold their interest to Gillespie and Enserch.

Q. Okay.

A. Or at that time I believe it was Dalen.

Q. Now, if somebody wanted to drill a well, in your opinion, at 250 barrels a day, that would still be economic, wouldn't it?

A. Very much so.

Q. Especially if it's in pressure communication and receiving pressure support from the project?

A. Yes, uh-huh.

Q. Now, the current interpretation of the pool -- and this is both Gillespie-Crow and I believe Enserch, the major partner in the unit -- the current interpretation of the pool indicates that there's really no significant reserves outside the unit boundary at this time, as the expansion is proposed; isn't that correct?

A. Correct, uh-huh.

Q. And the unit participation formula was based primarily on hydrocarbon pore volume?

A. That's correct.

Q. Less production, I believe?

A. Correct, yes, uh-huh.

Q. Okay. Did your hydrocarbon pore volume numbers closely match the material balance numbers calculated for this pool, or do you recall that?

A. I don't recall, to be honest with you.

Q. All right. But what we're dealing with is a reservoir -- what? How deep?

A. 11,800 feet, 11,500 feet.

Q. And you've mapped that, or the geologist can discuss that?

A. Based on well control, yes.

Q. Now, what you're proposing is this 250-barrel-of-oil-per-day allowable, which would stand as the allowable and -- unless the well was brought into the unit; is that correct?

A. That is true.

Q. And if you don't bring it in, the allowable goes up?

A. That's correct.

Q. And even at 250 barrels a day, the payout is still a matter of months?

A. Yes, somewhere in the neighborhood of six to eight months.

Q. Okay. And once again, at one point you were producing -- you had increased the producing rate of the unit wells to 200 barrels of oil per day per well?

A. That's true.

Q. And then the State "S" --

A. Average, the average of it.

Q. Average?

A. Yes.

Q. And then the --

A. Certain wells, we produced them at higher rates due to their location relative to the injection well.

Q. Okay, and then the State "S" and the Hanley well came along and you had to reduce the producing rate to 150 barrels a day?

A. That's true.

Q. And you're still bearing the same costs of pressure maintenance?

A. That's true.

Q. Now, if another well outside the unit was drilled and it was top allowable, you'd have to drop it down -- you'd have to drop your production down another 50 barrels a day, wouldn't you?

A. Per well.

Q. Per well?

A. Yes.

Q. So instead of producing 200 barrels per day per well, you're all of a sudden producing 100 barrels per day per well?

A. That's correct.

Q. And maintaining the same costs of pressure maintenance?

A. That's true.

Q. Is this an economically sensitive project?

A. Not for the working interest owners in the unit?

Q. It is for them?

A. Rephrase the question.

Q. Is this an economically sensitive project for them?

A. Oh, very much so. Yes, it is.

Q. In your opinion, based on well control, is it reasonable not to -- is it reasonable to bring in tracts only when they've been proven productive?

A. Yes, it is.

MR. BRUCE: Okay. Thank you, Mr. Examiner.

EXAMINER STOGNER: Thank you, Mr. Bruce.

EXAMINATION

BY EXAMINER STOGNER:

Q. In referring to Exhibit Number 2, this shows the

reservoir pressure, now, and you show the measured -- the measured curve.

A. Correct.

Q. Is that the average all currently producing wells within the unit area?

A. Yes, it is, uh-huh.

Q. Okay, when you went and looked at the six wells to the east within the unit, did they show that same 30 pounds of pressure increase as the State "S" Number 1?

A. On average, all wells within the unit showed an increase in reservoir pressure, some more, some less than 30 pounds.

Q. But I'm talking about these six wells. What did you show for just these six wells?

A. I would have to pull that individual well information up. I don't have the exact by well. But the average reservoir -- the pressure of the unit did increase. And when these wells -- the bottomhole pressure tests are run on these wells, they are all very similar in bottomhole pressure, they're all -- On an individual basis, I don't know exactly what -- I don't have that information in front of me.

Q. Are there any proposed -- any other proposed wells within this unit?

A. Not at this time.

Q. How come?

A. We're already having a problem injecting enough gas to keep up with the production that's already there. To add another straw to it at this time is not feasible.

Q. Now, is the amount of gas the problem, or --

A. No, sir. The problem is the capacity of the compressor and the capacity of our injection wells, the problem of coning gas. There's various problems involved in just shoving 20 million a day down the top of the reservoir.

Q. Now, when you say injection wells, where's the other one?

A. There's only one. I'm sorry, injection well.

Q. Oh, okay. So far I've heard about how the benefit -- how the State "S" is benefitting, but I haven't heard much about reservoir damage occurring because of that well and its capacity or capability of producing at allowable. Is there the possibility of reservoir damage in this area?

A. If that well and other wells that could possibly -- in the shaded area or outside the unit, be part of the reservoir, by their top allowable or their increased production, we would have a hard time keeping up with reservoir pressure depletion, and when that happens, when the reservoir pressure goes and our critical gas saturation

is reached, the production is essentially over.

I mean, just like our graph on our Exhibit Number -- I forget what it is, Exhibit Number 2, I guess it is. That situation will arise if we cannot maintain reservoir pressure, and from the production of wells outside the unit at top allowable that will happen.

Q. I'm taking this back to the elementary portion so bear with me.

As I understand it, we have somewhat of a dome-type or a contained reservoir, so the whole idea of this project is to keep the injection or keep a gas cap or keep essentially the attic filled with gas, at the same rate or near the same rate where it allows the producing wells -- Are the producing wells on pump?

A. No, sir, they're all flowing.

Q. They're all flowing?

A. Yes.

Q. So as you put the gas in the top of the reservoir --

A. Correct.

Q. -- and allow it to push out --

A. It's not necessarily pushing; it's maintaining a pressure within the reservoir which keeps further gas from breaking out of solution when in the reservoir.

And by doing that, we're keeping the gas

saturation within the reservoir at a minimum at the producing edges, so that the critical gas saturation is not reached. So when that gas -- If that gas should become mobile, then our energy drive is reduced very rapidly.

Q. The gas injection, how much higher in the reservoir is that than your average producing interval?

A. We're -- I'm going to have to let our geologist answer that question.

Q. Okay.

A. I know we're producing -- We're injecting into the top of the Speight, and I do not know -- I do not know that answer.

Q. Okay. At the same time I'm hearing this case, I'm trying to --

A. I understand. Visualize?

Q. -- visualize and bring myself up to date on what's been going on to this point.

Also when I refer back to Exhibit Number 5, there are portions of your proposed expansion that are outside of the zero line, and why do you wish to include those areas at this time?

A. That is a zero line that is based on well control. Certainly that's not -- I mean, that's an interpretation. Certainly a well could be drilled in the yellow acreage, which would be part of the reservoir. But

at that time, that is the interpretation right now.

Q. Okay. Is it your intent to set up some sort of buffer, perhaps?

A. What do you mean by "buffer"?

A. A buffer, just in case a well is drilled within the white area, say to the north, or anywhere for that matter, that it would leave enough extension to --

A. -- include that well in the unit?

Q. No, I'm not thinking of the unit as much as I am about the science and the reservoir portion of the drainage.

A. I may have to let our geologist answer. I'm not sure I'm following your question on --

Q. Okay.

A. He's going to address the outline of the yellow acreage in his testimony --

Q. All right --

A. -- which will --

Q. -- I'll --

A. -- further define why the yellow acreage has come up.

EXAMINER STOGNER: Any other questions of this witness?

You may be excused.

THE WITNESS: Thank you.

EXAMINER STOGNER: Mr. Bruce?

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

RALPH NELSON,

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

DIRECT EXAMINATION

BY MR. BRUCE:

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

A. I'm Ralph Nelson. I live in Colleyville, Texas.

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

A. Enserch Exploration as a geologist.

Q. Is Enserch a working interest owner in the West Lovington-Strawn unit?

A. Yes, they are.

Q. Have you previously testified before Division as an expert geologist?

A. Yes, I have.

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

A. Yes, they were.

Q. And are you in charge of the West Lovington-Strawn unit and that area for Enserch?

A. Yes, I am.

Q. And are you familiar with the geological matters

pertaining to this pool?

A. I am.

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

EXAMINER STOGNER: Mr. Nelson is so qualified.

Q. (By Mr. Bruce) Mr. Nelson, you did testify as an expert witness at the unitization hearing?

A. Yes.

Q. Okay. Let's go to Exhibit 1. Would you identify that for the Examiner?

A. Exhibit 1 is a net porosity isopach of the Strawn formation in the area of the West Lovington-Strawn unit, that unit operated by Gillespie-Crow.

Outlined on the map are the boundaries of the unit, as well as the current boundaries of the West Lovington-Strawn pool.

Q. Would you discuss the Strawn geology in this area?

A. The Strawn reservoir is a Pennsylvanian-age algal mound. The algal mound at the West Lovington-Strawn unit has a net pay thickness of 229 feet.

Q. Now, shown on this map are three reservoirs. We're not interested today in the Big Dog-Strawn Pool, are we?

A. No.

Q. Okay. The other two pools, what we refer to as the western and eastern reservoir, how do you know that the South Big Dog-Strawn, the western reservoir, is a separate reservoir from the West Lovington-Strawn Pool where the unit wells are completed?

A. Well, Mr. Widner discussed the engineering aspects of it, but from a geological point of view, the Amerind West State Number 1 in lot 1 of Section 2 was a dryhole defining the southwest edge of the eastern pool.

Subsequently, Amerind drilled a producing well in lot 3 of Section 2, Charles Gillespie drilled a second well in the western reservoir, located in the southwest of the southeast of Section 32, and it has the similar log characteristics as the Amerind well and it has the same pressures.

It is apparent the western reservoir is a separate pool from the eastern reservoir.

Q. Okay. Now, let's discuss how the acreage extent in the West Lovington-Strawn Pool was identified. What is Exhibit 7?

A. Exhibit 7 is the hydrocarbon pore-feet map submitted by Platt-Sparks in the original unitization hearing.

Q. Platt-Sparks was the -- were the experts for Snyder Ranches at that hearing?

A. That's correct.

Q. And there was a fight at that unitization hearing between Gillespie-Crow and Enserch on one hand, and Snyder Ranches on the other hand?

A. That's correct.

A. Okay. Was this Exhibit 7 the map used by the Division in determining tract participations for the West Lovington-Strawn unit?

A. That's my understanding.

Q. Okay. And if you'll recall, was this Exhibit 7 based on well control?

A. It is based on well control.

Q. Okay.

A. Yes.

Q. Did this map, Exhibit 7, also define the boundaries of the unit's reservoir that was known at that time?

A. It did, from their interpretation.

Q. Okay, and what has happened since the unitization hearing?

A. Well, two additional producing wells were drilled, which extended the boundaries of the unit's reservoir. The two wells are the Chandler well in Section 28 and the State "S" well in Section 34.

Q. Now, because this map was the one that was

accepted by the Division as the geology defining the pool, did you accept the Snyder Ranches or Platt and Sparks map as the starting point for defining the boundaries of the -- what we're calling today the West Lovington-Strawn Pool, the unit's reservoir?

A. Yes, we used this map as the starting point to revise the other maps.

Q. Okay. Was any seismic data used in the preparation of Exhibit 1?

A. No.

Q. Okay. Were you surprised that additional acreage offsetting the unit proved to be productive like it is in the State "S" Number 1?

A. Yes, we thought we had included all the reservoir in the unit. If you look at Exhibit 7, even the Snyder Ranches thought we had essentially developed the reservoir.

Q. And once again, this reservoir is what? 11,500 feet underground, and you just can't tell until you drill; isn't that correct?

A. That's correct.

Q. Now, geologically, what indicates that the Hanley Petroleum Chandler Number 1 well is in the same reservoir as the unit wells?

A. Geologically -- Well, first of all, the well was held tight. We didn't have the well information for about

six months.

And once we received the well logs, we noticed the Chandler well had a similar oil-water contact as in the West Lovington-Strawn unit Wells Number 3, 10 and 11, and in my opinion this is a good indicator that the Chandler well is in communication in the reservoir.

Q. Okay. Let's get to one question the Examiner asked the last witness.

What is, roughly, the difference between the -- the footage difference between the level where injection is occurring and the level where the producing perforations of the well are?

A. As I understand, the Unit Well Number 7 was reperforating the very top of the formation, and all of the other wells were reperforated at the base of the porosity. The nearest well, that Ernestine Number 1, that height difference would be about 65 feet.

Q. Okay. Let's get to another question that came up, Exhibit 5, which is merely Exhibit 1 with the yellow overlay on it, and discuss how we came up with this yellow area.

A. Well, we just set up laydown 80-acre proration unit, and these all represent 80-acre proration units that for the most part, I believe, except for maybe one exception, someone can drill 330 feet off the lease line.

Q. Okay, which is what Hanley did with its Chandler Number 1?

A. That's correct.

Q. Okay. And so the way you've mapped it, there may be some productive acreage outside the current unit boundaries?

A. Yes.

Q. Even outside the unit boundaries as the expansion is proposed?

A. That's correct.

Q. Okay. But no one will know until you drill?

A. That's correct.

Q. And why are you confident that the acreage affected by the allowable reduction request will be limited in extent?

A. Well, we have -- The Amerind State well has already been an offset to the unit, the Bridge Culp Number 2 is also a dryhole, and the results of the Chandler well suggests that the reservoir quality deteriorates rapidly because of the oil-water contact.

Q. Okay. Mr. Nelson, Exhibit 1 was prepared by William Crow of Gillespie-Crow, Inc.; is that correct?

A. That's correct.

Q. Have you reviewed Exhibit 1 and the data that went into it, and do you agree with the interpretation

shown on the map?

A. I have reviewed it, and I do agree with the interpretation.

Q. And was Exhibit 7 previously admitted into evidence in Division Cases 11,194 and 11,195?

A. Yes.

Q. Mr. Nelson, in your opinion is the granting of this Application in the interests of conservation, the prevention of waste and the protection of correlative rights?

A. Yes.

MR. BRUCE: Mr. Examiner, I would move the admission of Gillespie Exhibits 1 and 7.

EXAMINER STOGNER: Any objection?

MR. CARR: No objection.

EXAMINER STOGNER: Exhibits 1 and 7 will be admitted into evidence.

Thank you, Mr. Bruce.

Mr. Carr, your witness.

CROSS-EXAMINATION

BY MR. CARR:

Q. Mr. Nelson, if we could first go to Exhibit Number 5, if I understand the exhibit, the area shaded in yellow is what is being proposed here today as the new West Lovington-Strawn Pool --

A. Yes.

Q. -- is that correct?

A. That's what I understand, yes.

Q. And if I understood your testimony, the way the new pool boundary was in fact developed was, you simply put sort of a buffer zone around what you knew to be the geology, just 80-acre spacing units around what you thought the pool actually contained; isn't that right?

A. The intent was to set up a 40-acre ring around it, but because they're 80-acre proration units, it ends up being 80 acres in part, yes.

Q. There was no geological study, was there, that caused you to decide to put a 40-acre loop around this reservoir? It was just to provide protection; isn't that what it is?

A. Yes.

Q. And in that 40-acre ring around the unit, if Hanley wants to drill another well, they'll be confronted with a lower allowable limit for a year; isn't that right? Unless it's brought into the unit?

A. Yes, that's what --

Q. That's what's being proposed --

A. -- I understand, yes.

Q. -- here today?

A. Yes.

Q. And so in essence you're saying, if the Commission agrees with you, that the operators of the tracts outside the unit, in the yellow area but outside the unit, are not going to be able to produce at what they have been able to produce at in the past under a statewide allowable for one unit; isn't that right?

A. That's correct.

Q. And other than just looping this with a 40-acre ring, there's no real science behind that, is there?

A. No.

Q. Now, wouldn't it seem logical that if I was telling you that you were -- or asking that you only be allowed to produce a portion of what you currently can produce out of a well, that I would need to show something to support that, other than just saying I was going to throw a 40-acre ring around what I knew?

A. Can you repeat that, please?

Q. Is there some science for that 40-acre ring?

A. No -- Other than to provide protection to the unit, no.

Q. And there's nothing in that area that you can point to that would say that a 40-acre tract, being the northeast of the northeast of 34, is in communication at all with this reservoir; isn't that right?

A. That's correct.

Q. But if I drill a well over there, if I'm the operator and I drill a well, I'm not going to be able to produce it until I prove that I'm not in communication; isn't that right?

A. That's correct.

Q. And so with nothing more than just saying we want some production, you're saying that if we're going to maintain our current allowable rate, we have to bear the burden of proving we're not in communication?

A. Yes.

Q. If we look at Exhibit Number 1 -- This is Mr. Crow's work, but you told Mr. Bruce you're comfortable with this exhibit; is that right, Mr. Nelson?

A. That's correct.

Q. If I look at the northwest quarter of Section 33, that is within the unit, is it not?

A. That's correct.

Q. There are no wells on that acreage?

A. That's correct.

Q. Based on your review of this reservoir as a geologist, do you believe the geology supports inclusion of that tract in the unit?

A. Based on the thickness in the West Lovington-Strawn Number 3 well?

Q. Yes, sir.

A. Which is one of the thickest, maybe the third-thickest well in the reservoir, yes, we believe that there was additional reservoir up there, yes.

Q. And it's because you can see quality reservoir rock; isn't that what it is, in that northwest quarter of Section 33?

A. Can I see quality --

Q. I mean --

A. -- reservoir rock there?

Q. -- doesn't this look to you like a -- from a geological point of view, like a portion of the reservoir that would contribute reserves?

A. That's correct.

Q. And it doesn't have to have a well on it; it could be drained by the West Lovington-Strawn unit Well Number 3 just due south of it; isn't that correct?

A. In part, yes, I believe so.

Q. And there are also wells off to the east that would --

A. Correct.

Q. -- drain that acreage?

And to produce the reserves under that, as a -- from a geological point of view, can you say whether or not an additional well would have to be drilled in that quarter section?

A. I'm not sure. I do know that wells Number 3, 10 and 11 have a water contact in them and that those wells should drain that oil in that northwest quarter.

Q. Okay. If we go over to the northwest quarter of 34, that 160-acre tract, that's also included in the unit. When you look at the geology, does that look like acreage that for the most part would contribute reserves to the unit?

A. Yes.

Q. Would you need a well on that tract to recover reserves from under that property?

A. Possibly.

Q. Do you believe without a well reserves will still be produced from that acreage by the unit?

A. Yes, again because of the permeability in the reservoir and the fact that we have several wells that have the oil-water contact in them and one more, the Number 8 well, that is right above the oil-water contact.

Q. Now, let's look at a 40-acre tract, the southwest quarter of the northeast quarter of 34, offsetting the unit on the east side. Do you see that acreage?

A. Southwest of the northeast --

Q. -- quarter of the northeast, yes, sir.

A. Yes.

Q. It's a 40-acre tract. Now, that is outside the

unit, is it not?

A. Yes, sir, it is.

Q. It's within the zero contour, is it not, as --

A. That's correct.

Q. -- drawn on this map?

And it is also offset to the south by the State "S" Number 1, which is a good well; isn't that right?

A. That's correct.

Q. Looking at the geology, wouldn't you anticipate there would be reserves under the southwest of the northeast of 34?

A. Possibly.

Q. And it's not necessary to drill a well there to recover some of those reserves, based on the geology; wouldn't you say that's fair?

A. That's a fair statement.

Q. And yet it is outside the unit, is it not?

A. That's correct.

Q. And it cannot be brought into the unit unless someone drills a well on it; isn't that correct?

A. Yes.

Q. And that well might not be necessary even to produce those reserves; isn't that right?

A. I'm not sure I can answer that. I don't know that.

Q. It's not -- There's no proposal, though, forthcoming to include acreage of that caliber in this proposed expansion of this unit; isn't that right?

A. Right, and the reason is, it's -- this participation was based on hydrocarbon pore-feet, and there's really no way to give that acreage value yet. We don't know what that value might be.

Q. And how do you know the value of the northwest quarter of that section if you can't assign a value to the southwest quarter of the northeast quarter?

A. Well, on the hydrocarbon pore-feet map, a reasonable contour estimate based on the HPV in the West Lovington-Strawn unit Number 3 well, plus that contour interval in the West Lovington unit Number 11 well, would suggest a contour up and into that area.

Q. Now, I'm talking about the northwest quarter of Section 34.

A. Oh, 34.

Q. Yes, sir.

A. I'm sorry.

Q. And if I understood your testimony, you were able to assign hydrocarbon pore volume to the acreage within the unit in the northwest quarter of that section?

A. That's correct.

Q. And you're telling me that even though you can do

that on that side of the unit boundary, you can't assign hydrocarbon pore space to the southwest quarter of the northeast quarter of 34, just across the unit boundary?

A. Again, the OCD recognized the well control, the original unitization, as a basis for determining tract participation.

Q. And that's what you have indicated as Exhibit Number -- introduced as Exhibit Number 7. That's what the OCD recognized; isn't that correct?

A. That's correct.

Q. And since then the State "S" Number 1 has been drilled; isn't that right?

A. Yes.

Q. And as a geologist, you know that the interpretation here on Exhibit 7 is now wrong because of the State "S"; isn't that true?

A. Yes.

Q. All right. And since that interpretation is now wrong, aren't we looking at Mr. Crow's interpretation that he prepared on September the 30th of this year, honoring the data available now, not as it was available last October?

A. That's correct.

Q. And with the data available now, can't you assign hydrocarbon pore volume to that acreage, the southwest and

northeast of 34?

A. I possibly could.

Q. And if you were trying to bring all the productive reservoir into a unit, shouldn't you include all the acreage that could be drained by the wells in the unit?

A. Perhaps. And what value would I assign to it?

Q. That would be something I would defer to you as a geologist.

My question as a lawyer is, if you can do it, you should do it, and not just leave people out to be drained; isn't that fair?

A. Perhaps it is. We continue to have surprises if people drill wells offsetting this unit.

Q. We've had those already?

A. Correct.

Q. But we only must operate with the best data we have available on the date we have to make the call as to what people own in this pool; isn't that right?

A. That's correct.

Q. And that changes? And that changes as they --

A. That can change --

Q. -- go along?

A. -- after that decision point, yes.

Q. Now, in developing the horizontal limits of this unit, there was a substantial amount of 3-D seismic

information analyzed; isn't that correct? Initially?

A. Repeat that, please.

Q. When you initially proposed the unit with Gillespie-Crow --

A. Uh-huh.

Q. -- there was a substantial amount of geological work involved; isn't that fair to say?

A. Geological work, yes, sir.

Q. Yes, and that involved analysis of 3-D seismic; isn't that right?

A. Yes.

Q. And the unit as you proposed it to this Commission was not accepted in the form that you presented it to them; isn't that right?

A. That's correct.

Q. They included actually more in terms of the vertical interval; isn't that fair? By moving the water contact off to the north?

A. Based on the Platt-Sparks maps, yes.

Q. They didn't change the horizontal boundary, did they? The unit -- the horizontal extent of the unit is what you asked for?

A. That's correct.

Q. They approved that?

A. Yes.

Q. And that was based on what was offered at that time as the Gillespie-Crow Exhibit Number 3 in that earlier case? And that's a copy.

A. Okay.

Q. Isn't that right?

A. Can you -- Are you asking me is this the map that --

Q. This is the map you submitted; isn't that right?

A. As far as I know, yes, it is.

Q. And this is one of the pieces of evidence upon which you came to this Division and asked them to approve this unit boundary?

A. Yes.

Q. And when we are now trying to determine whether or not there should be additional acreage included in the unit, this is an appropriate thing to look at as well; isn't that true?

A. This map?

Q. Yes.

A. This is --

Q. This is an appropriate place to --

A. -- an incorrect map.

Q. I'm sorry.

A. But it's an incorrect map now.

Q. But this would be a place to start, would it not?

A. Yes.

Q. And data used to construct this map, just because there have been some surprises around the edge, isn't totally invaluable now in trying to determine what's in the reservoir, is it?

A. But this is not the map that was accepted by the OCD.

Q. No, but I'm talking about if we were to map it again today, the seismic data that you have on the area included in Exhibit 3 from the original hearing still is valid seismic information, is it not?

A. Subject to interpretation, and that interpretation has been shown to be wrong.

Q. But the raw data is still there, is it not?

A. Yes.

Q. And it could be reinterpreted, could it not, in light of what you know today?

A. Yes.

Q. And so that would be important information to look at if you were trying to evaluate what are the appropriate limits of this reservoir today?

A. Repeat that again, please.

Q. If you wanted to do the best job you could do in terms of defining what the reservoir limits of this reservoir happen to be now, in October of 1996, wouldn't

the seismic work, the raw seismic data on this reservoir, be of some value, preparing what you know from well data now?

A. It may be of some value. I would lean more toward the subsurface control now as being more ground truth.

Q. And if we were trying to determine -- being Yates, Hanley, David Petroleum -- what were the appropriate boundaries for this unit, the seismic information on this reservoir might also be of some value, integrated with the well control we have today?

A. Perhaps.

Q. Would Gillespie make that available to these other companies to analyze in terms of anticipating a hearing to expand this unit to see if we can't do it right once?

A. I can't answer that. I don't work for Mr. Gillespie.

Q. Now, as a geologist for Enserch, are you involved beyond just the geological part of the effort?

If you're -- Example: If a well is drilled and there's a discovered title problem, would you be involved in the decision of whether or not to curtail the well or just escrow the plans? Would that be anything that would be considered by you?

A. No.

Q. You're familiar with the unit agreement and how production is allocated within the unit?

A. Basically.

Q. It's based on hydrocarbon pore volume, is it not?

A. That's my understanding, yes.

Q. And isn't that based on the geological interpretation of the reservoir?

A. Yes.

Q. And if the reservoir is expanded to pick up the State "S", the production allocated back to that tract is again based on the geological interpretation as it relates to the State "S" tract; isn't that right?

A. Based on that as well as the offsetting well control, yes.

Q. Okay. And all of that would be integrated into the -- in an effort to determine the hydrocarbon pore space?

A. That's correct.

Q. And that geological effort, when you came here a year ago, was found to be wrong by the OCD, was it not?

A. That's correct.

MR. CARR: And that's all I have. Thank you.

EXAMINER STOGNER: Thank you, Mr. Carr.

Mr. Hall?

MR. HALL: No questions.

EXAMINER STOGNER: Mr. Kellahin?

MR. KELLAHIN: Thank you, Mr. Examiner.

EXAMINATION

BY MR. KELLAHIN:

Q. Mr. Nelson, I want to ask you a point of procedure in how we're handling the rules now and what -- I think I understand you're saying when we talk about the buffer around the unit -- I'll show you this to you, but let me read it out loud.

It says, West Lovington-Strawn Pool Rule 1, it says, Each well completed or recompleted in the West Lovington-Strawn Pool or in the Strawn formation within one mile thereof, and not nearer to or within the limits of another Strawn oil pool, shall be spaced, drilled, operated and produced in accordance with these rules.

So right now we've got a one-mile buffer, so that as wells are drilled in the Strawn, they are presumed to be in the same reservoir? That's the rule now, is it not, sir?

A. Do you want me to read the rules?

Q. No, sir, I just want to show it to you as the basis of my question.

A. Okay.

Q. What are you proposing now for the reconfigured

West Strawn Lovington Pool [*sic*] in relation to the one-mile rule? Is it now a half mile or whatever --

A. It shrinks in --

Q. -- this yellow buffer is?

A. -- that yellow area.

Q. So it shrinks?

A. Yes.

Q. So it shrinks, and so wells from the Strawn that are currently or potentially in the one mile, that rule changes?

A. Yes.

Q. And we can change it because we at least have enough geologic information to recognize a certain size and shape within a certain area of flexibility?

A. That's correct.

Q. And it's your geologic opinion, then, that a buffer, which in most instances is the 80-acre buffer, I guess --

A. Uh-huh.

Q. -- is an appropriate way to ensure that as Strawn wells are drilled around the edge, that everybody's playing by the same rules?

A. That's correct.

MR. KELLAHIN: Okay, thank you.

EXAMINER STOGNER: Thank you, Mr. Kellahin.

Mr. Bruce, redirect?

MR. BRUCE: Just a couple.

REDIRECT EXAMINATION

BY MR. BRUCE:

Q. Mr. Carr was asking about the proposal to reduce the allowable would be in effect unless a tract is unitized, number one --

A. (Nods)

Q. -- or if the operator of the well can show that -- by pressure data or any other data -- that the well is not in the West Lovington-Strawn Pool; is that correct?

A. That's correct.

Q. Is it difficult to show by pressure data that it would be separate from the pool?

A. No.

Q. I mean, you could do it --

A. A drill stem test would do it?

Q. -- by DST? A DST or a shut-in, pressure buildup?

A. At the most, you may be curtailed a month.

Q. Okay. So it's easy enough to do?

A. I think it is, yes.

Q. Okay. One final question.

Looking at Exhibit 5, Mr. Carr was asking, Well, why not add the southwest quarter-northeast quarter of Section 34 to the unit at this time? Do not Enserch and

Charles Gillespie and Gillespie-Crow, Inc., own substantial interest in that quarter-quarter section?

A. Yes, we do.

Q. I mean, it would benefit you to bring that in; it would give you more interest in the unit?

A. Sure.

MR. BRUCE: Okay. Thank you, Mr. Examiner.

MR. CARR: Mr. Examiner.

RECROSS-EXAMINATION

BY MR. CARR.

Q. Wouldn't you want to make that call on the south with that 40-acre tract in 34 based on the geology and whether it's being drained, as opposed to who owns it? Wouldn't that be the technically correct way to do it?

A. Yes, it would.

MR. CARR: Thank you.

EXAMINATION

BY EXAMINER STOGNER:

Q. There again, referring to Exhibit 5, because that's the one I have out in front of me, I just want to clarify some items here.

When I look at the Big Dog-Strawn, the South Big Dog-Strawn and the West Lovington-Strawn, these are all separate -- what? Algal mounds, if you will?

A. Yes.

Q. And is the deposition different, or did they occur at different times or do they occur at the same time for these three intervals?

A. They're time-equivalent.

Q. I'm sorry, what?

A. They're time-equivalent.

Q. So they all were formed within the same -- at the same time?

A. Yes.

Q. Originally, when this unit was put together, how much did seismic or 3-D play in the drawing of the boundary?

A. Originally, as I understand, it was relied upon to help establish the boundary, yes.

Q. Have you reviewed that information since then, knowing now what you know about the Hanley and the State "S" Number 1 well?

A. I have not personally.

Q. You have not.

What can you tell me about that Snyder EC Com Well Number 1 -- or is that the Well Number 4? -- down in the -- in Section 6, up in the northern portion, that is right on the zero line?

A. It's my understanding that was a well drilled by Gillespie, anticipating finding a separate algal mound.

They found a thin Strawn interval with only four net feet of pay.

Q. Do you know what the status of that well is right now?

A. As I understand it, it pumps about 40 barrels a day.

EXAMINER STOGNER: What is your next witness's qualifications, Mr. Bruce?

MR. BRUCE: I do not plan on presenting any more witnesses.

EXAMINER STOGNER: Okay. Well, I'm going to ask the first witness, then. He said they would produce about 40 barrels of oil per day on pump?

MR. WIDNER: Correct.

EXAMINER STOGNER: So that well is on pump?

MR. WIDNER: Yes, it is.

EXAMINER STOGNER: Are there any other wells in the pool or within this algal mound, whether inside the unit or not, that is also on pump?

MR. WIDNER: The Baer Number 1 and the Big Dog-Strawn.

EXAMINER STOGNER: Okay, the Baer Number 1 --

MR. WIDNER: That is on pump.

EXAMINER STOGNER: And where is the Baer Number 1?

MR. WIDNER: Well, I'm sorry, maybe I misunderstood your question. The only other pumping well within this whole map is the Baer Number 1 in the Big Dog-Strawn reservoir --

EXAMINER STOGNER: Okay, I'm just --

MR. WIDNER: -- outside the unit.

EXAMINER STOGNER: -- looking at this West Lovington- --

MR. WIDNER: No, are no other --

EXAMINER STOGNER: -- -Strawn algal mound.

MR. WIDNER: There are no other pumping wells in that.

EXAMINER STOGNER: Okay. Did you notice any difference in that Snyder EC Com Number 1 well?

MR. WIDNER: Different from what? What the unit was?

EXAMINER STOGNER: Yeah.

MR. WIDNER: What the wells in the unit were? No. It is pressure --

EXAMINER STOGNER: You're not saying the pressure increase or the pressure differences in that well --

MR. WIDNER: It is -- It has the same bottomhole pressure as the unit. It is pressure-communicated, but it's not -- It doesn't have enough permeability to be able to flow or produce at high volumes. It is absolutely no

permeability.

EXAMINER STOGNER: Do you know if the fluids are similar?

MR. WIDNER: Yes, they are.

EXAMINER STOGNER: Okay. Mr. Bruce, I'm still a little concerned about where the 250 barrels a day comes from, why that was not based on some established --

MR. BRUCE: It was -- if I can answer that, it was -- In discussions with my client, it was based upon a couple of things. Number one, an allowable high enough so that wells would be economic to drill, and, number two, the unit wells, as has been testified, were at that time producing roughly 200 barrels of oil per day per well, on average, and so it was bumped up so that a well outside the unit could be producing a little more than unit wells.

And one other thing pointed out to me, Mr. Examiner, was as was testified, the wells were at 100 barrels of oil per day, then they've been slowly boosted up within the unit. You know, when the unit was instituted there were 100 barrels of oil per day, and then they were boosted up in grades or in steps up to 200 barrels of oil per day.

And there was the thought that if pressure could be maintained, that perhaps some additional production could be obtained out of each of the unit wells, if

pressure could be maintained.

EXAMINER STOGNER: Well, Mr. Bruce, to be honest with you, that's good information, but I wish I would have seen it in a scientific manner, presented technically, to support your information. That's going to bear in mind at this point, why that was not presented in that type of an information, because it does seem very relative, and I do wish it was presented.

But with that, do you have anything further, Mr. Bruce?

MR. BRUCE: Mr. Examiner, if I could just recall Mr. Widner to explain -- just -- if he could just sit from here and explain it --

EXAMINER STOGNER: Okay.

MR. BRUCE: -- briefly.

KEVIN WIDNER (Recalled),

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

EXAMINATION

BY MR. BRUCE:

MR. WIDNER: In regard to your concern over the allowable number that was achieved or decided upon, you know, we still at this time are still learning about this reservoir. We don't know exactly how much oil we can produce, we don't know exactly how much oil [*sic*] we can

inject into the ground.

So to put a scientific number on that is very difficult to do. Certainly 100 barrels a day is too low. We feel 150 barrels a day is too high. At one point we had the wells within the unit averaging 200 barrels a day.

And I don't feel that shooting for a number close to what the average production number within the unit is, is a good number. It's difficult to put a scientific number on it.

EXAMINER STOGNER: Well, with that, are there any questions?

MR. CARR: No, no questions.

EXAMINER STOGNER: Thank you.

Mr. Bruce, anything further?

MR. BRUCE: Not at this time, Mr. Examiner.

EXAMINER STOGNER: Okay, let's take a ten-minute recess.

(Thereupon, a recess was taken at 3:09 p.m.)

(The following proceedings had at 3:25 p.m.)

EXAMINER STOGNER: Hearing will come to order.

Mr. Carr?

MR. CARR: May it please the Examiner, at this time I would call Mecca Mauritsen.

EXAMINER STOGNER: I'm sorry, who?

MR. CARR: Mecca Mauritsen.

MECCA MAURITSEN,

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

DIRECT EXAMINATION

BY MR. CARR:

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

A. Mecca Mauritsen.

Q. Where do you reside?

A. Artesia, New Mexico.

Q. By whom are you employed?

A. Yates Petroleum Corporation.

Q. And what is your current position with Yates Petroleum Corporation?

A. I'm a landman.

Q. Ms. Mauritsen, have you previously testified before this Division?

A. Yes.

Q. At the time of that testimony, were your credentials as a petroleum landman accepted and made a matter of record?

A. Yes, they were.

Q. Have you familiarized yourself with the Application filed in this matter on behalf of Gillespie-Crow?

A. Yes, I have.

Q. And are you familiar with the status of the lands in the area which is involved with this Application?

A. Yes.

MR. CARR: Are the witness's qualifications acceptable?

EXAMINER STOGNER: Are there any objections?

Ms. Mauritsen is so qualified.

Q. (By Mr. Carr) Could you refer to what has been marked for identification as Yates Petroleum Corporation Exhibit Number 1 and simply identify this and review it for Mr. Stogner?

A. This is a lease map of the area in question. The West Lovington-Strawn unit is in the blue outline that's been colored blue. The green, two 80 acres, the two tracts that have been proposed to be pulled into the unit where the State "S" Number 1 has been drilled and the Chandler well that's been drilled by Hanley. The yellow acreage is just acreage that Yates, et al., has an interest in. And then the red outline is just the new proposed boundary for the new pool.

Q. And this is being offered as a general orientation map for Dr. Boneau's testimony?

A. That's correct.

Q. Have you been involved with the Yates effort to secure higher producing rates from the State "S" Number 1

well?

A. Yes, I have.

Q. And as a representative of Yates, did you -- and a land representative, did you have an opportunity to discuss the status of that well with William Crow soon after it was discovered by Gillespie-Crow that Yates and others owned an interest in that property?

A. Yes.

Q. And what was the nature of that conversation?

A. A title question had come up as far as one of the 40s under the State "S". There was an old exploration agreement that was in place between Rio Pecos Corporation and other parties, and they were making a claim to partial interest in one of the 40s.

And Mr. Crow called, since we were an original party to that agreement, called and asked for some help as far as title opinions and different agreements. And I did some research and I sent some title opinions to him and whatever information we had.

Q. Did you discuss how that well would be produced at that time?

A. What we had decided was that there probably was a claim to a partial interest and that any funds attributed to that interest would be suspended until the title problems were corrected.

Q. And is the suspension of funds when there's a title problem with a well a customary practice within the land department of Yates Petroleum?

A. Yes, it is.

Q. Was Exhibit Number 1 prepared by you?

A. Yes.

MR. CARR: At this time, Mr. Stogner, we would move the admission into evidence of Yates Petroleum Corporation Exhibit Number 1.

EXAMINER STOGNER: Exhibit Number 1, if there's no objection, will be admitted into evidence.

MR. CARR: And that concludes my direct examination of Ms. Mauritsen.

EXAMINER STOGNER: Thank you, Mr. Carr.

Mr. Bruce, your witness.

MR. BRUCE: I don't have any questions.

EXAMINER STOGNER: Mr. Kellahin?

MR. KELLAHIN: No, thank you.

EXAMINER STOGNER: Mr. Hall?

MR. HALL: No, sir.

EXAMINATION

BY EXAMINER STOGNER:

Q. Ms. Mauritsen, just for clarification, I need you to answer this question for me.

A. Yes.

Q. When I look over in -- What is that? Section 2?
A. Yes.
Q. There appears to be a darkened circle with the number "2" near it. Does that have any significance?
A. That's just a well location that's been put on by our map person, and when the map was enlarged it just kind of stands out.
Q. Now, does that well correspond to that Gallagher State Number 2 that shows up on --
A. That's correct, I think that's the Number 2 well that's been proposed.
Q. Now is -- That's a proposed well?
A. Right.
Q. And that's operated or will be operated or that at least belongs to Amerind?
A. I believe so.
Q. Okay. Just wanted some clarification, because that is included, I believe, in what they're calling the South Big Dog-Strawn?
A. Correct.
EXAMINER STOGNER: Mr. Carr, for clarification --
MR. CARR: Yes, sir.
EXAMINER STOGNER: -- is there any objection to the breakup of your client by the South Big Dog-Strawn Pool or --

MR. CARR: Our testimony does not address breaking the Big Dog-Strawn Pool, the west and the South Big Dog-Strawn, which are off the end. We do not address that in our testimony.

EXAMINER STOGNER: The main objection here is, then, the allowable?

MR. CARR: Is setting the allowable, that's correct.

EXAMINER STOGNER: Okay. So as far as breaking off or forming this Big Dog-Strawn for that pool, there's no objection or --

MR. CARR: No objection.

EXAMINER STOGNER: I have reminiscence about a pool name in here some time ago.

Okay, I have no questions of this witness. You may be excused.

MR. CARR: At this time we call Dr. Boneau.

DAVID F. BONEAU,

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

DIRECT EXAMINATION

BY MR. CARR:

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

A. My name is David Francis Boneau.

Q. Where do you reside?

A. Artesia, New Mexico.

Q. By whom are you employed?

A. I'm employed by Yates Petroleum Corporation.

Q. And what is your position with Yates Petroleum Corporation?

A. My position with Yates Petroleum Corporation is called Manager of Nonoperated Properties.

Q. And you are a petroleum engineer?

A. I'm a petroleum engineer and, yeah, that's a job within the engineering department of Yates Petroleum.

Q. Dr. Boneau, you've previously testified before this Division, have you not?

A. Yes, sir.

Q. At the time of that testimony, your credentials as a petroleum engineer were accepted and made a matter of record?

A. That's correct.

Q. Are you familiar with the Application filed in this case on behalf of Gillespie-Crow?

A. Yes, I am.

Q. Have you reviewed the impact of this Application on Yates' interests in the West Lovington-Strawn Pool area?

A. I have done that.

Q. Are you prepared to make recommendations to the Examiner concerning this Application?

A. Yes, sir.

MR. CARR: Mr. Stogner, are Dr. Boneau's qualifications acceptable?

EXAMINER STOGNER: Any objection?

They are acceptable.

Q. (By Mr. Carr) Dr. Boneau, would you refer to what has been marked for identification as Yates Petroleum Corporation Exhibit Number 2 and review that for the Examiner, please?

A. Yes, Exhibit Number 2 is a typed sheet that summarizes what we intend to talk about today. It's an outline, a summary. It contains the bones of our case.

Q. Would you review first of all what Yates will be recommending as the appropriate course of action for the Division?

A. We're asking the Division to deny this Gillespie Application, and I think it's coming out that the real thing that ought to be done is to set a hearing for the expansion of this unit and sort of get away from these diversions.

Q. Summarize the reasoning for this request.

A. Well, there are two kinds of reasons from -- on a kind of general-principle basis it's, I think, becoming clear this afternoon that this Application is intended by Gillespie to discourage future development and remove the

incentive for anyone else drilling outside the unit. That's going to be the first, and I think fairly short, part of our testimony. A lot of that has already been talked about.

In the second part of our testimony, item 2B down there, is, I think the sequence of events will make clear that I'm halfway reasonable in saying, you know, this just seems to me to be Gillespie's attempt to get the NMOCD to put a stamp of approval on their past behavior, which has been, you know, less than sensational in two areas. They've produced our well -- the well that we have an interest in, and it's not our well; we have a small interest in it -- far below any acceptable minimum.

And the second point, really, is that Yates has tried to settle this and get some dialogue going, and we think it's Gillespie that's been slowing down the process.

So those are the things the Examiner is going to hear from Yates Petroleum.

Q. All right. Your first reason for requesting denial of the Application is that Yates submits this is an attempt by Gillespie to limit or discourage future development in the pool. Could you explain what you mean by that?

A. Well, actually I think that's pretty much already been heard, but the point simply is, and we brought a map

that's just the same as -- our Exhibit 3 is a map just like their map, or very similar to their map.

The point is that this Application -- If someone drills a well such as Yates or Hanley or David or someone, outside the present boundaries of the unit, and this Application is approved, half of the first year's production from that well is taken away by this Application.

And if it's a good well, it's going to go into the unit, and Gillespie is going to want -- from what we've heard, Gillespie is going to want to take it in at half its value. And so the person drilling the well has half his production taken away, and his costs, et cetera, are all the same, and the risk is still huge, and it just defeats any incentive to drill those kinds of wells.

Q. And what does this do to the control that Gillespie-Crow will maintain over the reservoir?

A. Well, it helps ensure that no additional wells are drilled to compete with the Gillespie-Crow wells.

And this is not a -- you know, a theoretical, I think, consideration. The Examiner has seen in Section 34 and up by the Hanley well and some places, where some other wells are going to be drilled, or at least would be drilled if this Application is turned down.

Q. The third point under sub-part A of the reasoning

is that the burden of proof should be on Gillespie. What do you mean by that?

A. Well, personally, I think it's unfair for Gillespie to set up this area just sort of out of the blue and then if someone drills there, that someone has got to prove that Gillespie's guess is wrong. It ought to be up to Gillespie to prove it.

Q. Is there anything that you want to review on Yates Exhibit Number 3?

A. Nothing additional, no, sir.

Q. Let's move to Exhibit Number 4, the chronology. And using this chronology, I would like you to review how this whole situation has evolved, focusing on the relationship between Yates and Gillespie.

A. Okay, I'd be happy to do that.

I think by now the Examiner realizes that Yates has no interest in the present Strawn unit, and Yates was not really involved in it until Gillespie-Crow found out that they had -- didn't own what they thought they owned in this State "S" 1 well.

So the -- A good point to pick up the chronology, I think, is October 1, 1995, when the West Lovington-Strawn unit became effective.

It's been testified, and it's true, that at that time the State "S" well was being drilled. Actually, it

started in August. It was -- That State "S" Number 1 well, which is the well that Yates ends up with an interest in, was completed -- the chronology says October 26th. There are other papers that say October 20, but in late October of 1995. It was a good well from the start, initial potential of 505 barrels of oil per day.

Gillespie drilled this State "S" Number 1 well thinking that they owned 100 percent of it. And as I got the story within our company, our geologist was talking to their geologist about various locations in this area while this well was being drilled, and they started talking about the State "S" 1. And our geologist said, I think we may own an interest over there. And the word got around, and Gillespie started checking and found out that for once our geologist was right.

Okay, but it turned out that when Gillespie-Crow checked the records, it found out that Yates, Lario, Vierson and Cochran and the Wilson family owned part of that State "S" 1.

And our contention is that even though this group owns about a third of the well, Gillespie-Crow has operated it as if it were a unit well from the start, and to the detriment of us and the other minority owners. and I think they have the feeling that, you know, we kind of stumbled into it without knowing what we're doing, and somehow that

makes us second-class owners, and that just is not the case.

Okay, so back to the chronology. The real -- A real important part is on January 8th, 1996, there at the top of the page, Yates and other people received a letter from Gillespie-Crow acknowledging that Yates and other people owned part of the well.

And I think it would be good to bring in at that point Exhibit 5, which is a quotation from that letter of January 8th, 1996.

Q. Would you read that quotation?

A. That quotation -- Well, okay. That quotation says -- and I can read it, and you guys can read it too -- it is Gillespie-Crow, Incorporated's, intention as operator of the West Lovington-Strawn unit and the subject well -- that is, the State "S" 1 -- to bring said well into the unit immediately upon payout. At that time the well will be choked back to approximately 175 barrels of oil per day, which is in line with production from other unit wells.

And what that says to me, and I think it says it to all of you, is that -- it's two things: That Gillespie-Crow will proceed expeditiously to expand the unit. And, number two, that it will produce the State "S" 1 well at 175 barrels of oil a day or more, depending upon how you want to interpret the language. And pretty much the heart

of our case today is that Gillespie-Crow has not done either of those things really very well.

Okay. So --

Q. What did Yates then do internally, after receiving this letter from Gillespie-Crow?

A. Well, we received this kind of strange letter, and I realized it was unusual and we should do something. And so my little group, which is Carolyn Yates and I and a few other people, immediately looked into this. We did some calculations and we wrote an internal memo suggesting how valuable that well might be in the overall context. And so we were ready to discuss the situation with Gillespie-Crow there in February.

But nothing happened and nothing happened, and finally there was a meeting, only in June, and the meeting existed only because Yates called it. So there was a meeting in June, on June 20th, and that's been testified to.

Q. Dr. Boneau, prior to that meeting was there not a ballot received from Gillespie-Crow to expand that West Lovington-Strawn unit?

A. Yes, that was in the letter of May 10th, 1996, and that's the ballot that you heard the testimony that there was no result, or we didn't know what the result is or -- et cetera.

Q. And then it's after that there was a working interest owner meeting called, and Yates actually called that; is that right?

A. That's correct, yes, sir.

Q. And what happened at that meeting?

A. Well, after that meeting, we at Yates went home and -- Well, actually at the meeting I learned for the first time that there was a good amount of data that said that our well was in communication with their unit.

And we went home and wrote -- and did calculations and drew $S_o(\phi)h$ maps and wrote a letter July 2nd, like 12 days later, quite quickly after that, setting out our position and indicating that we would settle for a compromise position that was set out in that unit.

And in my opinion, the -- you know, which the other people aren't going to believe, but in my opinion, our offer was a very generous one. We thought we went really a long distance towards trying to settle that.

Q. And what response did you receive to your proposal?

A. Well, the response we received was the Application of Gillespie-Crow to reduce the allowable in the West Lovington-Strawn unit, which has led to the second half of the chronology, which is mostly case-related stuff that I don't think we need to go into --

Q. All right.

A. -- in infinite detail.

Q. Following that date is basically just the chronology of this case and how it's evolved; is that not right?

A. That's pretty much the rest of the story, yes, sir.

Q. Let's go to what has been marked Yates Petroleum Corporation Exhibit Number 6. Will you identify and review that for the Examiner?

A. Okay, it's supposed to be clear that we've now talked about our efforts to solve it and kind of Gillespie's slowness about solving it, and now I'd like to move into Exhibit 6 where we talk about how our well was produced.

So Exhibit 6 is a summary of production from the State "S" Number 1 well. And I keep calling it our well; it's the well that Yates owns 11 percent of and the minority owners own about a third of.

And the Examiner should notice that the numbers on this exhibit are in barrels of oil per producing day. We just thought that was the most honest thing to do.

So the fourth column from the left, says oil, barrels of oil per day, is the one we should focus on. So in October, November and December, the State "S" Number 1

was produced at over 400 barrels a day.

Then came the letter and approximate payout, et cetera, and you can see in that column that January is kind of the transition month where we went to 182 barrels a day. But then in February it was 93 barrels of oil a day, 114 in March, 124 in April, 103 in May, and then some numbers that were more up in the range of the 175 that they were talking about. But for four months our well was restricted to about 100 barrels a day, which is less than 175 in my math.

Q. And at this period of time, this well still was not in the unit; isn't that right?

A. It's still not in the unit as of this time, yes, sir.

Q. Let's go to Exhibit Number 7, Dr. Boneau. Would you review that, please?

A. Exhibit Number 7 is some more about oil production data, and the point -- There's a couple points there.

The first is to compare how the State "S" 1 was produced, compared to the average well in the unit. So we have months. And then the second column from the left is barrels of oil per day for the 10 wells in the West Lovington-Strawn unit on average, and here we've gone to wells per calendar day since that's all that's available, really, on the unit.

But the unit wells during February, March, April, May were produced at 160, 159, 163, 183, 196, numbers around the 175 that we have been quoted.

Our well, like we said, was produced approximately 100 barrels a day during February, March, April and May. So our well, the well that we have an interest in, was restricted far below the level that -- even of the unit wells.

The rest of the story is shown in the two columns to the right, and those are production numbers for the unit wells that are the closest offsets, the Snyder Number 1, the Snyder Number 2, and they now have names, West Lovington-Strawn unit 18 and 19. And you can see what happens in February, March, April and May. Those wells are opened up and are produced at higher rates, while all our offset well is restricted.

Q. And all --

A. For example, the Snyder Number 2 was produced at 379 barrels a day in May of 1995, while ours was restricted to 103. So Gillespie-Crow restricted the wells in which Yates has an interest, which had an allowable of 445 barrels of oil per day, restricted it and opened up production from the offset wells in the unit to get more oil from the unit and perhaps pull away from our well.

Q. Are all of these wells operated by Gillespie-

Crow?

A. All of these wells are operated by Gillespie-Crow, yes, sir.

Q. Did Yates request that the State "S" Number 1 well be produced at allowable limit?

A. Yeah, we requested that -- Well, we thought it was requested way back in February, but it was requested in our letter of June 2nd, of July 2nd. It has been requested in a couple phone calls that are in the chronology after that.

It's consistently been our position that the State "S" Number 1 should have been produced at 445 barrels of oil per day until it was brought in the unit, so that Gillespie-Crow would an incentive to get on with the show and get us into the unit, and you can see what has happened.

Q. What is Yates Exhibit Number 8?

A. Yates Exhibit Number 8 is just an attempt to make it clear that the State "S" Number 1 was not producing at these low rates, because that's all it would make. Exhibit Number 8 are a variety of quotes from Gillespie-Crow people confirming that the State "S" Number 1 is a top-allowable well and could produce 445 barrels of oil per day.

Q. Let's go now to Exhibit Number 9, the graph. What does this show?

A. Exhibit Number 9 shows what I'm about to say, and it's our contention that the State "S" Number 1 would have produced 53,000 more barrels of oil up through September if it had been produced in what you would call a normal manner, it would have produced 53,000 barrels more than it actually produced under the way that Gillespie-Crow operated it, and Exhibit 9 is a plot of the actual production and compared to a decline-curve production that's based on the early production, the data.

It's actually a fairly steep decline, and so we weren't trying to jack up the numbers, but it's 53,000 barrels' difference between the actual, the solid line, and the dashed line, which is -- even a conservative decline curve for the State "S" Number 1.

But we feel that the State "S" Number 1 has been denied 53,000 barrels of oil up to the present time, up through September.

Q. Dr. Boneau, the exhibits you've just presented support your contention that Gillespie-Crow has been dealing with you in a less than straightforward way in terms of producing the State "S" Number 1 well; is that correct?

A. Yes, sir, we -- Pretty much repeating, we feel like Gillespie-Crow has produced the State "S" Number 1 unfairly, and we feel that Gillespie-Crow has needlessly

delayed the inclusion of the State "S" Number 1 into the unit, and we feel as a sort of corollary from that, that this issue today is basically a side issue, but it's just an attempt to drag the NMOCD in as giving a sense of legitimacy to the things they've done, which I don't think really enjoy that legitimacy.

Q. And is your recommendation that not only this Application be denied but that the hearing be set to expand the unit? Is that right?

A. Yes, sir.

Q. And is it your recommendation that at that point in time all operators come forward with the appropriate technical, geological and engineering data to support a proper determination of what should be included in this unit?

A. Yes, sir, Yates is ready to settle this, anxious to settle this, and I think the other minority owners that we've talked to are -- likewise feel that way, and let's get rid of these sideshows and let's get on to the main --

Q. Do you believe that by going forward with a full presentation of all technical data and trying to put the unit together right would protect the correlative rights of all owners in the unit?

A. That's what I feel, yes, sir.

Q. Would it result in the effective operation and

management of this unit and reservoir?

A. Yes, sir.

Q. Were Exhibits 2 through 9 prepared by you or compiled at your direction?

A. They were, yes.

MR. CARR: At this time, Mr. Stogner, I would move the admission into evidence of Yates Exhibits 2 through 9.

EXAMINER STOGNER: Any objection?

Exhibits 2 through 9 will be admitted into evidence at this time.

MR. CARR: And that concludes my direct examination of Dr. Boneau.

EXAMINER STOGNER: Thank you, Mr. Carr.

Mr. Bruce, your witness.

CROSS-EXAMINATION

BY MR. BRUCE:

Q. Mr. Boneau, has Yates made a written unitization proposal to the working interest owners in the State "S" Number 1? What I mean is, setting forth the interests --

A. I'm not sure what you mean.

Q. Well --

A. I think that we have. The letter -- Our letter of July 2nd does that, in my opinion, if I'm understanding your question.

Q. I don't have a copy of the letter, so -- What did you propose as a tract? Did you propose a tract participation?

A. Yes. Yes, we drilled a really plain vanilla $S_o(\phi)h$ map based on -- actually based on a map presented by Tom Davis of Vierson and Cochran, at that June 20th meeting. And it doesn't have wiggles in it, it's just nice little curves, and we said we'll accept this, and let's get this thing settled.

Q. And these are kind of off the subject, but you mentioned something about your wells, you referred to it, would be taken in at half its value. What do you mean by that?

A. Okay, I mean that -- and this is really off the subject of this hearing, but let's -- you know, let's do this.

The State "S" Number 1 has an 80-acre spacing unit. Let's talk about that. The January 8th letter said that Gillespie-Crow would take that 80-acre spacing unit into the unit, giving it 3 percent of the unit, giving that 80 acres three percent of the unit.

Our internal calculations show that it was worth, you know, six, eight, ten percent of the unit, numbers like that. Okay.

We -- The proposal that we made July 2nd was that

80-acre spacing unit occupied by the State "S" receive about 4.9 percent of the unit. My half is 3 that they offered, divided by 4.9 or 4.6 or something like that.

Q. Okay, you're just talking about different negotiations among the parties over tract participations?

A. Well, no. You say that way, but we've gone through the numbers and trying to be reasonable and moving towards it, it's worth five or six percent.

And actually, Gillespie-Crow has increased their offer, maybe, some. But I'm basically not disagreeing with you. You know, I don't expect you to agree with that, but that's the way I see it.

Q. You have -- There's two different geological interpretations, and that's what the differences are based on?

A. We could talk about that as long as you want --

Q. Sure.

A. -- if you want to or not.

Q. And we won't.

Based on the data you've seen, is the State "S" Number 1 in pressure communication with the West Lovington-Strawn unit reservoir?

A. The data that I've seen tends to indicate that the State "S" Number 1 is in pressure communication with the -- well, it's definitely in pressure communication with

the unit.

Q. Okay.

A. It suggests that it's -- The data suggests that the State "S" Number 1 could be receiving some benefit from the unit, but it's that point -- a little unclear. But it's definitely in pressure communication.

Q. If it is receiving pressure communication, isn't it unfair that Yates would be benefitting from the pressure-maintenance project without paying for it?

A. Well, lots of answers to that. We're happy to join the unit and pay for our share, okay? And it's not unfair -- I mean, you might have a claim that it's unfair if somebody was operating the well that was trying to get oil out of it and it was producing 445 barrels a day and had been during this period.

But that's very far from what has really happened. We have not benefitted unfairly via the way that Gillespie-Crow has operated the well.

Q. Do you have any data on the Hanley well?

A. No, sir.

Q. You don't have any pressure data on the Hanley well?

A. No, sir.

Q. Dr. Boneau, does it take a long time to prove that a well is in pressure communication with a reservoir?

A. There are a lot of cases where it does not take a long time. There can be cases where it would take a long time, depending on --

Q. Do you think in this reservoir it would take a long time?

A. In the portion of the reservoir that has been examined to date, it does not take a long time.

Q. What is Yates Petroleum Corporation's working interest in this well?

A. In the State "S" Number 1?

Q. Yes, sir.

A. It's my understanding it's around 11 percent.

Q. Is it your understanding that the interests of Enserch and Gillespie are much larger than that?

A. It's my information that Gillespie, Enserch own about two-thirds of the well, and these what I'm calling minority partners own about one-third of the well.

Q. If Yates had been operating the State "S" Number 1, would they have flown it at 445 barrels a day?

A. I think so, yes, sir.

Q. Okay. Would that be unfair to offsetting unit wells that are producing at an average of 200 barrels a day or 150 barrels a day?

A. At some point in time, I would agree with you that it's unfair. I think from the other point of view, it

would give Gillespie-Crow an incentive to move forward with this unitization, with this expansion, and just the opposite has happened. Our well has been restricted and unitization hasn't gone forward.

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

THE WITNESS: If it was unfair, it would have been unfair when it was produced at that rate, those high rates. If it was produced at those high rates then and -- you know, I don't think that was unfair. Gillespie-Crow didn't think it was unfair, because they did it.

EXAMINER STOGNER: Thank you, Dr. Boneau.

Mr. Kellahin, your witness.

EXAMINATION

BY MR. KELLAHIN:

Q. Dr. Boneau, the depth bracket oil allowable for wells that produce in this pool at this depth is what, 445 a day?

A. Yes, sir, 445.

Q. It comes off the depth bracket oil allowable?

A. It comes off the chart in Rule 503 or --

Q. 505.

A. -- 505.

Q. Yes, sir. Do you remember how those rules got set for those rates at that depth?

A. I'm old, but I'm not that old.

(Laughter)

Q. (By Mr. Kellahin) Do you remember whether there was any science involved in setting those depth rates? You don't remember?

A. I was not here. I do not remember, and I've actually tried to find and really haven't been able to easily find out whether there's any science.

Q. Okay.

A. Maybe you can tell me. I'd be happy to know it.

Q. The differential between the 445 and what, the 250? 195 barrels? And your net interest is 11 percent, you said?

A. Uh-huh.

Q. 21.45 barrels a day for your net interest, if this is approved? Do you see it?

A. Your math is right, yes.

Q. Yeah. We're quibbling over 21 barrels a day?

A. We're doing more than quibbling, I think.

Q. Well, let's look at some reservoir pressures. Reservoir engineers make an importance of reservoir pressures, do they not, Dr. Boneau?

A. Engineers love pressures.

Q. They're great, aren't they?

A. They are great.

Q. They're pretty definitive about a lot things,

aren't they?

You said there was an inference about the State "S" 1 being connected to the unit?

A. There's a series of two or three pressure measurements, all of which indicate that the State "S" 1 is connected to the unit. And that was the Gillespie-Crow testimony today.

Q. Did you see the Gillespie-Crow Exhibit Number 4, Dr. Boneau?

A. This is the Gillespie-Crow Exhibit Number 4, yes, sir.

Q. Have you as a reservoir engineer examined to determine whether or not you were satisfied with the testing methods by which those pressure data were taken?

A. I would say that I've done that. I went out there to be in attendance at the last set of pressure measurements.

The earlier ones were taken really before we were involved. I've made an effort to do what you're saying, yes, sir.

Q. Aren't you amazed as a reservoir engineer that this well can produce 57,000 barrels and 10 months later have a higher pressure than its original bottomhole pressure? Isn't that astonishing?

A. It would be astonishing if Gillespie-Crow wasn't

injecting that gas in their unit, yes.

Q. This thing is connected as if it had a pipeline to the unit, isn't it?

A. Well, it's well connected to the unit. I'm not sure what you're --

Q. So even when we look at your Exhibit 7 where you show the operator is producing this well at less than 250 a day and certainly less than the 445, pick a month, April of 1996, there's 95 barrels a day. Even at 95 barrels a day, this well is getting pressure support from the unit, is it not?

A. I'm not sure what inference you're after. In April of 1996 it was producing 95 barrels a day, and it's pressure-connected, and if you shut the well in, the pressure goes back to the same pressure as in the unit.

Q. Have you attempted to quantify this well's share of recoverable oil in the pool, in the absence of pressure support from the unit?

A. Yeah, various ways. And Exhibit 9 is one such account.

Q. That Exhibit 9 looks like a postponed production and not a reduction in ultimate recovery. Did I misread the display?

A. The dashed line in Exhibit 9 is an estimate of how the well would behave if it were not -- well, if gas

was not reinjected in the West Lovington-Strawn unit.

Q. I guess my question -- Let me phrase it better. At 250 a day, as opposed to 445 a day, is there a differential in the ultimate oil recovered from this well?

A. Yes.

Q. Why?

A. Why? Because during the time that the well is restricted, additional oil is being produced out of other wells. It's no longer going to be available to this well.

Q. All right. There is simply no question that that well is in pressure communication with the unit wells, right?

A. I think there is no question.

Q. Okay. Have you as a reservoir engineer attempted to apply the disciplines of your science to come up with some method by which the State "S" 1 well can be produced at a certain rate, where the offsetting unit wells can also be produced at a certain rate, so that we can establish some equilibrium of equity between the two properties, some type of no-flow boundary so that we can maintain equity while you people quibble about a unit?

A. I have not done that. I have considered doing that and have decided that the expense in time and money does not justify the interest that we own in the whole area.

Q. At 445, there is a competitive advantage for the well outside the unit; is that not true?

A. I think the reasonable -- I think it's reasonable to agree with you on that, yes.

Q. All right. Do we know whether or not the reservoir is going to be damaged if that well is produced at that rate, with regards to premature gas breakthrough or other -- some other kind of reservoir problem?

A. I think we know, and I think the answer is that no, the reservoir is not going to be damaged, just because of that fact.

Q. Do we know whether or not by reducing the allowable for all the wells in the pool, inside and out, to 250 a day, does that not better establish equity between the unit and the non-unit wells until you people can agree on what to do?

A. I don't think I agree with that. I would agree with that if we were drilling development wells, but you're ignoring the risk that the driller of a new well takes in drilling that well.

If you could assure me that I'll get a 250-barrel-a-day well, I could agree with you. I think I could agree with you. I could come close to agreeing with you. But there's a huge --

Q. I'm looking at the existing well. We haven't

gotten to the topic of future wells. The existing State "S" 1 well, if we reduce its producing rate to 250 a day maximum, and that's equivalent to the withdrawal rates of the average for the wells in the unit, tell me how that is not fair.

A. Well, I surely agree that that would have been way more fair than what was actually done.

Q. And that's what's being asked for today, is it not, that the maximum producing allowable for these wells be 250 a day?

That's what the agency is being asked to do, to establish a threshold to attempt to preserve equity and correlative rights on a temporary basis till you people can figure out how to share this production on a unitwide basis?

A. I don't agree with that. We can talk more about why.

Q. How is it not fair, if the wells in the unit and outside the unit are playing at the same reduced rate?

A. Well, again, I'll try to re- -- try to state it better this time, I guess.

If you're talking about the day that the State "S" 1 was completed and it was clear that it was a gas well, I can agree with you.

If you're talking about somebody's about to move

a rig out there some similar place to drill a well, I cannot agree with you.

Q. Okay, does Yates have immediate plans within this temporary period to add wells to this pool?

A. There's a location on Yates' acreage that I, for one, would like to see drilled.

Q. Has it been staked?

A. No.

Q. Not been permitted in any way?

A. Not been permitted.

Q. Has it been budgeted for 1996?

A. Yates doesn't have a budget; that's an irrelevant question.

Q. We just go see John and get the money?

A. Uh-huh.

MR. KELLAHIN: Thank you, Doctor.

EXAMINER STOGNER: Thank you, Mr. Kellahin.

Mr. Hall?

MR. HALL: No questions.

EXAMINER STOGNER: Mr. Carr, redirect?

REDIRECT EXAMINATION

BY MR. CARR:

Q. Dr. Boneau, just to perhaps avoid some of the confusion I think Mr. Kellahin created, there's no --

MR. KELLAHIN: I object to the editorial comment

by opposing counsel, Mr. Examiner.

EXAMINER STOGNER: So noted.

Q. (By Mr. Carr) There's no dispute here that there is communication between the State "S" and the unit, is there, Dr. Boneau?

A. No, no dispute.

Q. And there's no dispute between any of us that producing the State "S" outside the unit at 445 barrels a day gives an advantage to a well outside the unit; isn't that right?

A. I don't see a dispute there.

Q. And that it would be unfair to sit outside the unit and produce at 445 barrels a day.

Mr. Bruce is concerned about unfair and benefits. There is an unfair benefit if you sit outside somebody's unit and get a benefit without being in the unit; isn't that right?

A. That's my idea of unfair, yes, sir.

Q. So we're not challenging any of that.

When did you learn that you were -- that there was a well outside the unit in which you had an interest?

A. About the time of the January 8th letter.

Q. And if you were deriving a benefit, you -- and the others that I represent have a third of that; isn't that right?

A. Yes.

Q. And if there's an unfair benefit, Mr. Gillespie and Mr. Crow, Mr. Enserch, they've got two-thirds of that benefit, do they not?

A. Yes.

Q. And since this thing came to your attention in January, have you not been trying to get somebody to put this into a unit?

A. Yes, very much so.

Q. Are we here quibbling over the approximately, oh, $2000 to $3000 a month that you're not receiving because the State "S" Number 1 is being restricted? Is that really the issue here?

A. Well, I guess that's part of the issue.

But I'm -- You know, I'm not sure what answer you want, but the answer you're going to get is, I'm here because I just would like to see this done right, and everything about it has been done wrong, and it really bugs me.

That's why I'm really here.

Q. When you -- In the context of your efforts to get this unit formed, do you believe that when you're making proposals or trying to move this along, the parties with whom you've been dealing in this effort are dealing with you as a prudent, responsible operator trying to get this

situation addressed?

A. That's it, yes.

Q. Do you believe they are?

A. They are prudent? No, I think they've done a lousy job of trying to get this settled.

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

EXAMINER STOGNER: Are there any other questions of Dr. Boneau?

You may be excused.

Mr. Carr, do you have anything further?

MR. CARR: No, sir, I do not.

EXAMINER STOGNER: Dare I ask about closing statements?

MR. CARR: Do you need to ask, Mr. Examiner?

MR. BRUCE: I might want to put Mr. Widner on for a few questions.

EXAMINER STOGNER: Do you need a few minutes, Mr. Bruce?

MR. WIDNER: Please.

EXAMINER STOGNER: Let's take about a five-minute recess.

(Thereupon, a recess was taken at 4:18 p.m.)

(The following proceedings had at 4:22 p.m.)

EXAMINER STOGNER: Mr. Bruce?

MR. BRUCE: Recall Mr. Widner to the stand to

address two issues.

KEVIN WIDNER (Recalled),

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

DIRECT EXAMINATION

BY MR. BRUCE:

Q. Mr. Widner, you heard Dr. Boneau testify, did you not?

A. Yes.

Q. And I believe he said that if the well had continued to produce at a higher rate, it would have produced something like an additional 53,000 barrels to date?

A. Correct.

Q. Now, if Gillespie-Crow had not instituted a pressure-maintenance program and had produced its wells that are now within the unit at top allowable, would there be any significant oil for the State "S" well to have produced?

A. No, not at that time. I refer again to Exhibit 2, and again I'd like to point out the accuracy of the calculated numbers of Exhibit 2.

Even at a reduced rate, the State "S" was completed in August of 1994. The unit at that time were producing at a reduced rate. The cumulative production in

August of 1994 -- or 1995, excuse me, for the unit was about 1.475 million barrels of oil, right at the 3300-pound bottomhole pressure mark. That was in August of 1995.

We started injecting gas in October of 1995. Had we not injected any gas, we really feel, and according to this chart, that the cumulative production from the reservoir would have been about 1.8 million barrels. If there were 11 producing wells in that reservoir at that time, that leaves about 34,000 barrels a well.

Q. Remaining reserves?

A. Remaining to recover. Not to recover, recoverable reserves. Excuse me.

Q. Is 34,000 barrels of oil economic for a well at this depth?

A. No, it is not.

Q. And then one final thing. The Examiner had asked about any scientific basis for our 250-barrel request. Can you address that again?

A. Yes, I don't have this in the exhibit, but the Chandler Number 1 well, to replace the production from the Chandler Number 1 costs the unit owners about 550 MCF a day, injected into the ground. We are currently injecting about 5500 MCF a day. That leaves us, if you subtract the 550 from the 5500, that leaves us with about 5 million a day going in the ground, which on a reservoir basis is 4400

reservoir barrels.

If there are 11 wells producing out of the reservoir, that leaves 400 reservoir barrels per well to remove that would keep the pressure equal. 400 reservoir barrels per well is equal to 200 stock tank barrels per well at the surface. Having the allowable at 250 barrels a day at least gives us -- I mean to answer your question, to maintain reservoir pressure now, 200 barrels a day would be an allowable, but 250 barrels a day gives us some leeway down the road where we can increase production within the unit.

MR. BRUCE: Thank you, Mr. Widner.

EXAMINER STOGNER: Mr. Carr?

CROSS-EXAMINATION

BY MR. CARR:

Q. Mr. Widner, you've just explained to us or given a scientific basis or at least an argument for the 250 barrels per day?

A. Yes, sir.

Q. Is it your testimony to Mr. Stogner that that is was what was utilized by Gillespie-Crow to pick that number?

A. No. He asked for reasoning for that number, and I --

Q. And that's just reasoning that you came up with

here today --

A. Yes.

Q. -- to support the number?

A. Yes, it is.

Q. It's not necessarily what was used to pick the number?

A. Not at that time.

Q. Now, you testified that of the 5300 barrels to date, you wouldn't have gotten that without pressure maintenance; isn't that right?

A. Correct.

Q. Doesn't this show that it's important, to the extent possible, to avoid situations in the future where you have a well outside your unit in pressure communication with them; isn't that what we're dealing with here today, to avoid that kind of a situation?

A. I don't understand your question.

Q. You don't want another well drilled outside the unit that is in pressure communication that's a very good well like the State "S" Number 1 well, do you? That creates a problem when that happens?

A. Well, it's a nice problem to have. I mean --

Q. But it is a problem.

A. -- we don't want that well flowing 445 barrels a day.

Q. And isn't it important, if you were developing this reservoir, to try not to have that happen over and over again?

A. Well, I mean, we cannot prevent that from happening over and over again.

Q. Isn't it smarter to develop your unit based on geology, so you can reduce the number of times that happens, instead of just letting it happen with a tract and a new well on it, and expand the unit again and again and again?

A. No, sir, we decided to bring acreage in as wellbore control dictates.

Q. I'm sorry, I didn't hear that.

A. We have decided to bring acreage in as wellbore control dictates.

Q. And that was a decision made, when you say "we", by whom? By Yates?

A. No, sir.

Q. By the OCD?

A. No, sir, not --

Q. And so by making that decision instead of developing the unit based on geology, you create situations in the future where you may have wells outside the pool or more of them in communication with the reservoir than if you would look at the geology to date and honor it and

expand the unit in a proper way; isn't that right?

A. I'm not sure which way is proper, but your -- Whatever you said is correct.

Q. Now, let me ask you: Mr. Nelson said the seismic information on the unit area might be important. Would Gillespie-Crow make that available to the rest of us so we could try to come in and do this right once?

A. That's something I can't answer.

MR. CARR: Okay. Thank you, that's all I have.

EXAMINER STOGNER: Mr. Carr.

Mr. Hall?

MR. HALL: Mr. Examiner, let me state for the record, Enserch Exploration supports Gillespie-Crow's Application.

EXAMINER STOGNER: Thank you for that.

Mr. Kellahin, do you have any questions?

MR. KELLAHIN: No questions, sir.

EXAMINER STOGNER: Mr. Bruce, do you have any redirect?

MR. BRUCE: No, sir.

EXAMINER STOGNER: Okay. You may be excused.

Well, with Mr. Hall's comments, would you like to make any, Mr. Kellahin or Mr. Carr, or --

MR. KELLAHIN: No, sir, I'm a neutral party.

MR. CARR: I would.

EXAMINER STOGNER: Mr. Carr, please do.

MR. CARR: I hate to follow Kellahin saying that he's neutral. If that's neutral I'm definitely not neutral.

We're here today because when this unit was originally formed, the boundary was too small. It was drawn in a very tight fashion, and we submit to you it was drawn in a way that would benefit the interest owners within the unit, by taking out any possibility of any additional outside acreage being able to contribute, and as soon as the unit was proposed, the operative unit drilled a well that proved, in fact, that their technical case was wrong.

And now we're sitting in a situation where to expand the unit, they have decided to only take in tracts where there are wells -- it doesn't make any difference whether the technical evidence on the pool shows there are reserves; you first have to have a well, drill it, or you're not in the unit.

And to drill it, I think we've shown you that with what they're proposing here today with the lower depth bracket allowable, is a situation where if you're going to go out and develop your acreage and you're in that buffer zone, your economics are poor because your allowable is lower. You can drill it; if it's a bad well, it's yours.

You take the risk, you drill it, take the risk and it's a good well if it goes into the unit. And then you're only going to share based on what they have determined that their unit formula will be.

We're here today because we think what's before you is just fundamentally flawed. They misread their seismic, they didn't do their title work, and before they even got the unit started they proved their own presentation to this Division wrong.

We're here today because instead of correcting the problems with a proper unit expansion under the Statutory Unitization Act, we submit that they are taking a basically predatory posture with other owners in the pool.

They're in complete control of the pool, Mr. Stogner. They operate the unit, they operate every well in the unit outside -- and -- in the pool outside the unit except the Hanley well. And yet they come in here and complain about, Gosh, it's unfair that you have an interest in a well we drilled, we operate. Isn't there something patently unfair about it?

If it is, Mr. Stogner, it's time to straighten it out. It's time to get on with a proper unitization application.

Now, when we say the practice in the past has been basically predatory, they come in and want to curtail

the amount that can be produced any from well we would drill in the future on our acreage. They have delayed expanding the unit, although they knew a year ago they had this problem. And they have failed, or refused, to propose a proper expansion under the Statutory Unitization Act, based on science, not on wells that have been drilled, but by what the geology and the engineering data tell us.

We're here, we submit, because they want to continue to control the reservoir, and the order they're seeking will do that. There's no science behind it.

They ought to propose a boundary based on what they know to be the pool, and then let the buffer effect of normal pool rules control. But instead, they've reached out an extra 40, an extra 80, and they've set the boundary there. And it may be easy in most circumstances to come in and show if we drill a well that it's not in communication.

The process is backwards. People who want to limit your right to drill under statewide rules ought to have to come in here and ought to have to show something. They ought to justify the boundary, and they ought to justify the 250. And they ought to tell you why the 250-barrel-a-day limit was selected in the first place, not what they can think up in an hour and a half to give you because you would like some science behind it.

The science behind it ought to not be developed

to justify a number they pulled out of the air. The number ought to be based on science in the first instance.

We're here because we believe what they approve -- or what they propose, is arbitrary and because instead of squarely addressing the problem, they're taking a piecemeal approach to the situation we find in the West Lovington-Strawn Pool.

If there was ever a case where you ought to tell an operator to go back and do it right, this is the case. If there was ever a case where you ought to not endorse this kind of practice by an operator against others in the pool, this is the case. If there was ever a time when you needed to act to protect correlative rights, the opportunity to produce your reserves, and that means drilling wells, then this is the case. If there was ever a case where you needed to insist that the statutes and rules be followed and not new band-aid approaches be developed, this is the case.

If there was ever a case where you needed to require an applicant come in with real technical evidence, this is the case.

You need to in this case require that they present their seismic data, and you need to then come in and look at the evidence when it comes before you in the context of unit expansion. And in the meantime, you must

deny the Application that's before you today. If you do anything else, I submit you will not be carrying out the duty to protect correlative rights imposed on you by statute.

I think it's time to tell Gillespie-Crow, Go home, familiarize yourself with our rules, our statutes, the way we do practice up here, and then return with a proper application to expand the statutory unit, to include the portion of the reservoir reasonably proven productive and allocate those reserves, then, back to the owners in that area on a fair, reasonable and just basis as is required by law.

EXAMINER STOGNER: Mr. Bruce?

MR. BRUCE: Simply put, Mr. Examiner, the Division must limit production from wells outside the unit, or the correlative rights of the interest owners in the West Lovington-Strawn unit will be adversely affected.

Second, if excessive withdrawals occur from the reservoir, the pressure will decline in the reservoir, premature gas breakthrough will occur, oil production will decline rapidly, causing waste and damaging the reservoir.

I think Mr. Kellahin used the phrase best. The State "S" Number 1 well is a pipeline to the unit, and unless production is restricted, it's going to harm the reservoir, it has the potential of harming the reservoir,

not to mention the correlative rights of the unit interest owners.

The unit was producing 200 barrels per day per well, until that well was put back up at 440 -- the State "S" well was put back up at 445 barrels a day. The unit owners had to crank their wells down to 150 barrels a day. What happens if there's another well? Do they have to crank it back down another 50 barrels a day to 100 barrels a day, and keep doing that just to keep people outside the unit happy? I don't think so.

Yates is here pretending unitization is easy. Nothing could be further from the truth. The parties have been negotiating for months without any agreement. Hanley wouldn't give up its data until a couple of months ago, and only then was it clear or did it seem that their well was in the same reservoir. So they had to start negotiations with a new party.

Mr. Examiner, you are here -- you were the Examiner for the Avalon-Delaware unit. Tom, Bill, we were all involved in that, where we had a dispute over a certain interest that one party was claiming should only be worth one percent, and the other party was claiming should be worth eight percent. There's always room for disagreement in these numbers.

Unitization takes quite a while, even if all the

parties agree. In the last go-around for the West Lovington-Strawn unit, it took a year and a half, even though 100 percent of the working interest owners in the unit agreed.

In the meantime, during unitization, we have to protect the reservoir. I've tried to, in a very simplistic non-engineering way, compare the withdrawal rates.

Right now, the State "S" Well Number 1 is producing 445 barrels of oil per day. That is over five barrels of oil per day per acre in that proration unit.

The West Lovington Unit is producing 1500 barrels of oil per day, and that covers about 1500 acres. They're producing about one barrel of oil per day per acre. There's a five-to-one withdrawal advantage there for the State "S" Well Number 1. Even if it's cut back to 250 barrels of oil a day, t will still have almost a three-to-one advantage.

That's the key phrase to look at here. Certain people want an advantage over the unit.

Now, questions have come up about the allowable, saying it's allowable. Well, to me, I've never understood where the depth bracket allowables and the statewide rules come from. I think those are pretty darn arbitrary. Maybe not now, but probably in most.

Is Gillespie-Crow's allowable somewhat arbitrary?

To a certain extent yes, but not really. It was based on the production practices in the unit. They had gotten their production up to about 200 barrels a day, closely controlling the injections and pressures in the unit. They wanted to continue producing at that rate or perhaps increase that. But on the other hand, they had to have some restriction of the advantage that the State "S" Well Number 1 and potentially other wells may have, minimized. And as both parties seem to agree, 250 barrels a day is a reasonable, economic allowable rate.

Same thing goes with the area we're asking for the pool rules. Once again, the statewide rules say if you have a designated pool, the pool rules apply to any well drilled and completed in that same formation within a mile of the pool. Is that scientifically based? I don't think so.

Here we're seeking to limit any effect by, in effect, asking for a slightly more -- basically a 40-acre ring around the unit. In a couple areas that expands to 80 acres.

Furthermore, Gillespie-Crow is trying to limit the effect of this allowable reduction. Number one, because the distance of the reduced allowable is limited. Number two, the allowable will revert to the 445-barrel-per-day depth bracket allowable if there is no unitization

application filed with the Division within a year. Or, third, the operator can show by pressure data that a well completed in the Strawn in this area is not in pressure communication with the reservoir.

Now, if I understand Mr. Boneau, he wanted to -- the burden to be on Gillespie-Crow to prove that a well is in the reservoir, rather than having the well operator prove that it's not in the reservoir.

The problem with Mr. Boneau's proposal is that we can't get the well data, we can't get the pressure data unless the operator voluntarily shows it to us. It's been nine months, and we still don't have pressure data from the Hanley well.

And that's why we believe it should be on the operator of a well to come in to the Division and show with pressure data whether or not a well is in communication with the reservoir.

We believe that this Application is reasonable and should be approved to prevent damage to the reservoir and prevent waste and protect the correlative rights of all interest owners in this pool.

Once again -- I'll say it like I did at the last hearing a month and a half ago -- Mr. Carr pretends that we're doing something illegal here, but what we're asking for is exactly what was done in the Santa Fe Exploration

case when the Division reduced the allowable in the pool in Chaves County.

That allowable was reduced. I think the depth bracket allowable may well have been 445 or 500 barrels a day, and that allowable was reduced to 200 barrels a day to prevent reservoir damage pending unitization.

That's what we're asking here for today. We think it's reasonable, it will prevent damage to the reservoir, it will protect everyone's correlative rights, interest owners outside the unit can still drill economic wells.

We ask that you approve the Application.

EXAMINER STOGNER: Thank you, Mr. Bruce.

You can guess what I'm going to ask for now: rough drafts from the opponent and proponents.

MR. CARR: I can have mine in, in the morning at 9:00.

(Laughter)

MR. BRUCE: And give me a week to look at this.

(Laughter)

EXAMINER STOGNER: How about Tuesday afternoon, since the Monday after next is some sort of a holiday for us?

MR. CARROLL: Yeah, Columbus Day.

EXAMINER STOGNER: Yeah, we celebrate --

MR. BRUCE: Next Tuesday?

EXAMINER STOGNER: Yeah, the next Tuesday. Not Tuesday of this week, but the Tuesday of next week.

MR. BRUCE: Okay.

EXAMINER STOGNER: Mr. Carr, if you want to get yours in prior to that, that would be fine.

MR. CARR: Thank you, I can.

EXAMINER STOGNER: Okay. If there is nothing further in Case Number 11,599 at this time, this matter will be taken under advisement.

And the hearing is adjourned.

(Thereupon, these proceedings were concluded at 4:43 p.m.)

* * *

I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case No. 11599, heard by me on March 3, 1996.

, 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 October 13th, 1996.

STEVEN T. BRENNER
CCR No. 7

My commission expires: October 14, 1998