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:	)	CASE NO. 12,663
APPLICATION OF DAVID H. ARRINGTON OIL AND GAS, INC., FOR AN UNORTHODOX WELL LOCATION AND SIMULTANEOUS DEDICATION, LEA COUNTY, NEW MEXICO	)	

ORIGINAL

REPORTER'S TRANSCRIPT OF PROCEEDINGS

EXAMINER HEARING

BEFORE: DAVID R. CATANACH, Hearing Examiner

June 14th, 2001

Santa Fe, New Mexico

This matter came on for hearing before the New Mexico Oil Conservation Division, DAVID R. CATANACH, Hearing Examiner, on Thursday, June 14th, 2001, at the New Mexico Energy, Minerals and Natural Resources Department, 1220 South Saint Francis Drive, Room 102, Santa Fe, New Mexico, Steven T. Brenner, Certified Court Reporter No. 7 for the State of New Mexico.

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I N D E X

June 14th, 2001
Examiner Hearing
CASE NO. 12,663

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A P P E A R A N C E S

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By: J. SCOTT HALL

ALSO PRESENT:

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* * *

WHEREUPON, the following proceedings were had at 1:10 p.m.:

EXAMINER CATANACH: Call the hearing back to order at this time and call Case 12,663, which is the Application of David H. Arrington Oil and Gas, Inc., for an unorthodox well location and simultaneous dedication, Lea County, New Mexico.

Call for appearances in this case.

MR. FELDEWERT: May it please the Examiner, Michael Feldewert. I'm with the law firm of Holland and Hart and Campbell and Carr here in Santa Fe, for the Applicant, David H. Arrington Oil and Gas, Inc., and I have one witness today.

MR. HALL: Mr. Examiner, my name is Scott Hall. I'm with the Miller Stratvert Torgerson law firm, Santa Fe, appearing on behalf of Permian Resources, Incorporated, and I have two witnesses this afternoon.

EXAMINER CATANACH: Any additional appearances?

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

(Thereupon, the witnesses were sworn.)

BILL BAKER, JR.,

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

DIRECT EXAMINATION

BY MR. FELDEWERT:

Q. Mr. Baker, would you please state your full name and address for the record?

A. Bill Baker, Jr., and I live in Midland, Texas.

Q. And by whom are you employed, and in what capacity?

A. David H. Arrington Oil and Gas, Inc., as exploration manager.

Q. Have you previously testified before this Division and had your credentials as an expert in petroleum geology accepted and made a matter of record?

A. Yes, sir, they have been.

Q. And are you familiar with the Application that's been filed in this case?

A. Yes, sir, I am.

MR. FELDEWERT: Mr. Examiner, are the witness's qualifications acceptable?

EXAMINER CATANACH: Any objection?

MR. HALL: No objection.

EXAMINER CATANACH: Mr. Baker is so qualified.

Q. (By Mr. Feldewert) Mr. Baker, why don't you

identify and review Arrington Exhibit Number 1 and briefly state what Arrington seeks with this Application?

A. Okay, Arrington Exhibit Number 1 is a land plat showing the potential wellbore and the lands enclosed in Section 14 of Township 16-35. The well in question, the Mayfly "14" State Number 7, is located in the very northeast of the northeast quarter of Section 14, so located by a little red dot right there.

Arrington is requesting to recomplete the Arrington Mayfly "14" State Com Number 7 into the Strawn formation, which is part of the North Shoe Bar-Strawn Pool, at an unorthodox location 330 feet from the north and the east lines of Unit A of Section 14.

And we also seek a simultaneous dedication of this well to the previously approved 160-acre oil spacing and proration unit, consisting of the northeast quarter of Section 14.

Q. And is that oil spacing and proration unit highlighted in yellow?

A. Yes, sir, that is.

Q. Okay. Why don't you briefly review for the Examiner the history of Arrington's existing Mayfly "14" State Com Well Number 7?

A. Okay. The Mayfly "14" State Com Number 7 was originally proposed and drilled as a Morrow test, taken

down to the top of the Mississippian formation. The well tested noncommercial in the Mississippian Chester formation. The Morrow formation that we went after was not present in the wellbore.

We subsequently recompleted in a little Cisco carbonate zone that's at a depth of approximately 10,900 feet, and it basically depleted on test. And the well has been currently shut in pending this hearing for recompletion to the Strawn.

Q. So you tested noncommercial in the Mississippian?

A. Yes, sir, we did.

Q. How long did you produce out of the Cisco formation?

A. Less than a week.

Q. Trying to salvage the well, then, by uphole completion in the Strawn?

A. Yes, sir, this is our last formation that appears to be productive in this wellbore, and we just hope to salvage something out of the well.

Q. Okay, why don't you identify for the Examiner Arrington Exhibit Number 2?

A. Arrington Exhibit Number 2 is the Division Order, Case Number 12,381, Order Number R-11,403, and this is the Division Order granting us the right to drill the original wellbore.

Q. Is this the Division Order that approved the unorthodox gas well location?

A. Yes, sir, it is.

Q. Okay. Now, this Division Order also references, in paragraph (4) on page 5, a production penalty of 50 percent on this well. Does Arrington propose that this same penalty also apply to your proposed recompletion in the Strawn?

A. Yes, sir, we do.

Q. Do you have an agreement with Yates that also talks about a 50-percent production penalty?

A. Yes, sir, we do.

Q. Does Yates oppose this Application?

A. No, sir, they do not.

Q. Okay. Why is this well unorthodox in the Strawn formation at its 330 location?

A. Well, basically, the special pool rules for the North Shoe Bar-Strawn field require a 660 offset to unit lines and 150 feet from the center of the quarter-quarter section. Our current wellbore is at a location of 330 feet from the north line by 330 feet from the east line, indicating it's unorthodox.

Q. But you're not unorthodox by 50 percent, are you?

A. No, sir, we're not.

Q. You referenced the special pool rules. Has that

been marked as Arrington Exhibit Number 3?

A. Yes, sir.

Q. And the 150-foot-of-the-centerline requirement is found where in those pool rules? I believe it's Rule 4; is that correct?

A. Yes, sir, I believe so. Yes, sir, Rule 4.

Q. Do the special pool rules for the North Shoe Bar-Strawn Pool, which have been marked here as Exhibit Number 3, provide for any exceptions to this well-location requirement set forth in Rule 4?

A. Yes, sir, I believe Rule 5 does provide for administrative approval of the unorthodox location if it's a recompletion of a well that's been previously drilled to another horizon.

Q. Is that the case that we have here?

A. Yes, sir, it is.

Q. Okay. Why didn't you seek administrative approval for this proposed uphole --

A. We anticipated that we would be objected in this Application by Permian Resources as they originally objected to our original well proposal for the Morrow that was reflected in that original Order R-11,403.

Q. The one that's been marked as Exhibit 2?

A. Yes, sir.

Q. Now, Arrington also seeks to dedicate this well

to an existing 160-acre oil spacing and proration unit; is that correct?

A. Yes, sir, we do.

Q. Why don't you briefly identify and review the status of that existing 160-acre oil proration unit for the Examiner?

A. The existing 160-acre proration unit is currently HBP'd by the Arrington Mayfly "14" Number 2. This well was originally drilled as a Strawn test. At the current time the well is producing at an average rate of between 390 to 400 barrels of oil per day.

Q. Is there an allowable for this pool in these special pool rules?

A. Yes, sir, and that allowable is 605 barrels of oil per day.

Q. Is the Mayfly -- the existing well there, the Mayfly Well Number 2, is that meeting the allowable?

A. No, sir, it's not.

Q. Why don't you identify for the Examiner Arrington Exhibit Number 4?

A. Examiner Arrington Exhibit Number 4 is the last month in a week or so daily production for the Mayfly "14" State Com Number 2, and as you can see during the month of May the well had an average daily production of 389 barrels of oil per day and 964 MCF a day.

On the second page, right there, the days that we had up through June the 7th, the well had an average daily production of 397 barrels of oil per day and 961 MCF per day.

Q. Do the special pool rules for the North Shoe Bar-Strawn Pool allow more than one well in a 160-acre spacing and proration unit?

A. Yes, sir, they do.

Q. Is that found in Rule 6?

A. Yes, sir, Rule 6 allows for more than one well to be produced in a proration unit.

Q. And is the purpose of that rule to allow the party to produce up to the depth bracket allowable --

A. Yes, sir, it is.

Q. -- spacing unit?

A. Yes, sir.

Q. What acreage is affected by this unorthodox location, and who owns that affected acreage?

A. The southeast quarter of Section 11 will be affected, and this is currently operated by Yates Petroleum, and they have an offsetting well located at a standard location called the Runnels Number 2 well.

Q. Is that an offsetting Strawn well?

A. Yes, sir, it is.

Q. Does Yates oppose this Application?

A. No, sir, they do not. We also have the southwest quarter of Section 12, which is Chesapeake Petroleum. At this particular time there is no productive well in that southeast quarter, and we were not opposed by Chesapeake either.

Q. And then we have -- Is it Permian who operates the --

A. Yes, sir.

Q. -- offsetting northwest quarter in Section 13?

A. The northwest quarter of Section 13 is operated by Permian Resources, Inc., and they have a Strawn well in there, the Hilburn Number 1, that's at a standard location, and their Hilburn Number 2 well, which I believe is a Wolfcamp producer.

Q. Is Arrington Exhibit Number 5 an affidavit with attached letters giving notice of this hearing to Yates and Permian?

A. Yes, sir, it is.

Q. Why wasn't Chesapeake notified of this hearing?

A. Well, Chesapeake is a partner in Section 14 with us via a farmout from ICA, and they have a 25-percent interest in there, and they concurred in the recompletion and had no problems with their offset quarter in Section 12?

Q. Okay, so they're a partner and they don't have

any opposition. Is that reflected in Arrington Exhibit Number 6?

A. Yes, sir, it is.

Q. That's the letter in which Chesapeake waives any objection to your proposed unorthodox location in the Strawn?

A. Yes, sir, it is.

Q. So is the only party opposing this Permian at this time?

A. Yes, sir.

Q. Have you developed a cross-section for this well?

A. Yes, sir, I have.

Q. Is that marked as Arrington Exhibit Number 7?

A. Yes, sir.

Q. Okay, why don't you review that for the Examiner, please?

A. Okay, cross-section A-A' is a structural cross-section that basically goes through four wells. We'll begin on the left-hand side of A'. This shows the Yates Petroleum Runnels "ASP" Number 2 well. This well was drilled in May of 1999 as an Atoka-Morrow test. They encountered a Strawn interval. The well has been dually completed.

I've marked the Strawn perforations, as well as the productive rates; they're down at the bottom. Came off

for initial potential of 312 barrels of oil per day and 484 MCF, has a total cumulative production of 310,000 barrels and about a B and is currently producing at a rate of 195 barrels of oil per day and 1.7 million cubic feet of gas per day.

As you move to the right you will see the David H. Arrington Oil and Gas, Inc., Mayfly "14" Number 2. We drilled this well in September of 1999. It was strictly a Strawn test. Basically, we had an IPF of 773 barrels of oil per day and 1.6 million. The well has an approximate accumulation of 286,000 barrels and about .4 of a B. It is currently producing at a rate of 433 barrels of oil per day and 1.2 million cubic feet of gas per day.

And this rate on here, 433, this is back when I did this original exhibit, and that was the current day rate that that was at, so that was the most accurate that I had at that time.

The well, proceeding on from there to the further right, is the David H. Arrington Oil and Gas Mayfly "14" State Com Number 7. This well was drilled as a Morrow test into the top of the Mississippian formation.

What I've shown here is that we did encounter a Strawn interval right here, and we did drill stem test it. I marked the drill stem test results right there on the right of the wellbore. As you can see from that, we had

the zone open two hours, 15 minutes, we had gas to surface in five minutes, had oil to surface in 38 minutes, we recovered 71.5 barrels of oil, had an initial shut-in pressure of 2907 pounds and a final shut-in pressure of 2886.

If you continue on across the cross-section you come to the Burns Corporation Witt Number 1 well. This is located in the southeast quarter of the southeast quarter of Section 11. This basically shows that they had Strawn intermound with no porosity developed at all. Basically, the algal mound had truncated and pinched out at that particular point.

Q. Who operates that well?

A. Yates Petroleum right now.

Q. And where is that located?

A. That is in the southeast quarter of the southeast quarter of Section 11.

Q. Do you know what the footage is on that well?

A. 330 from the south line, 330 from the east line.

Q. Okay. In your opinion, Mr. Baker, will the granting of this Application be in the best interest of conservation, the prevention of waste and protection of correlative rights?

A. Yes, sir, it will be.

Q. Is it your hope here to drill this additional

well in the Strawn, to allow you to make the allowable that the special pool rules for the North Shoe Bar-Strawn Pool allow?

A. Yes, sir.

Q. And you're seeking a well that's an additional well as allowed by the pool rules; is that correct?

A. Yes, sir.

Q. Were Arrington Exhibits 1 through 7 prepared and compiled under your supervision and direction?

A. Yes, sir, they were.

MR. FELDEWERT: Mr. Examiner, I would move the admission into evidence of Arrington Exhibits 1 through 7.

MR. HALL: No objection.

EXAMINER CATANACH: Exhibits 1 through 7 will be admitted as evidence.

MR. FELDEWERT: And Mr. Examiner, that concludes my direct examination of the witness.

EXAMINER CATANACH: Mr. Hall.

CROSS-EXAMINATION

BY MR. HALL:

Q. Mr. Baker, I assume that Arrington's offering no other witness to testify how the correlative rights of Permian will be protected by Arrington's Application; is that correct?

A. No, sir, nobody but me.

Q. When you first -- Arrington first considered its recompletion of the Number 7 well, did it first go through the steps typically associated with the protocol for nonstandard locations, exceptions from Rule 104? In other words, did you determine whether or not that there were any suitable Strawn locations at a standard location in the east half of Section 3 -- 13 rather?

A. You mean internally, did we assume --

Q. Yes.

A. -- do that? I think with the existing wellbore there, that we probably didn't look real hard at that, because we already had an existing well.

Q. So would you agree that there are viable Strawn locations to be drilled at standard locations in the east half of Section 13?

A. Very risky ones, if any.

Q. What did you do to evaluate those standard locations?

A. Well, I think basically you can see from the well control that the thing is thinning as you move to the east. And we showed that by moving to the north in the Burns well it went away real quick. And so based on that alone, in any direction to the east or the south, it can be -- speculate that this thing could go away real fast.

Q. Is there any reason why Arrington can't

horizontally drill to a standard location in the Strawn?

A. Economics would basically dictate that.

Q. And that's the basis of Arrington's Application, isn't it? It's an economic consideration?

A. That's a big part of it, yes, sir.

Q. Let me ask you about the Number 7 well when it was originally a Morrow test. You had 320 acres dedicated to the well, correct?

A. Yes, sir.

Q. Was that acreage under a communitization agreement?

A. I think it was not. They filed it as a com agreement because the Mayfly "14" State Com Number 1 was under a com agreement, and that our people filed it as a com well. I don't think it had to be, if I'm not mistaken.

Q. All right. Do you know how many leases comprise the east half of Section 13?

A. No, sir, I do not.

Q. Is it more than one?

A. Yes, sir.

Q. Would you happen to know what the ownership is in the Morrow, as opposed to the Strawn? Is it different?

A. No, sir, I don't know the exact breakdowns of that.

Q. Do you know who the other partners were in the

Morrow test for the Number 7?

A. Well, I know that Chesapeake is one of them, and then two or three other little parties that, you know, I don't know the exact names of who they are, that are just little bitty guys that have interest in this thing.

Q. What proportion of the cost for the Morrow tests were borne by David H. Arrington?

A. About probably 67 to 70 percent.

Q. Okay, and do you know what cost of the Strawn recompletion are being borne by David Arrington?

A. Same.

Q. Do you know what Arrington paid to acquire its interest in the Morrow?

A. Paid to acquire its interest?

Q. Yes.

A. You mean the cost of the well, to drill the well?

Q. No, the lease interest.

A. No, sir, not the exact numbers. No, sir, I do not.

Q. Do you have an estimate?

A. I want to believe it was around $600 an acre, is what we paid, and that was for all the rights.

Q. All horizons?

A. Yes, sir.

Q. You say that economics was the primary

consideration for this Application. Did you actually investigate the economics behind drilling horizontally to a standard location?

A. Well, first, I don't think we can drill horizontally; you might drill directionally to a legal one. But we really didn't consider that, as you have a wellbore sitting right here with your pay zone in it, and basically you've already agreed to a 50-percent penalty, which is we're 50 percent close to the line, so we really didn't consider going to a legal when we didn't have a reason to.

Q. All right, so the answer to my question is, you don't know what the cost difference would be?

A. No, sir.

Q. Mr. Baker, how will Permian's correlative rights in the pool be protected by Arrington's Application?

A. Well, I mean, I guess they're within their rights, if they feel like they're being depleted, to drill their own well over there to protect it.

Q. Well, let's refer to Exhibit 2, if you have that in front of you. Could you look at that exhibit at page 4 again? Do you see Finding (14) on page 4 there? That finding says, "The evidence presented further demonstrates that drilling the Mayfly '14' State Com Well No. 7 at the proposed unorthodox gas well location may adversely affect the correlative rights of the interest owners in the W/2

and the southeast section [*sic*] of Section 12 and the W/2 of Section 13."

Do you see that there?

A. Yes, I see that.

Q. Do you agree with that finding?

A. For the Morrow, and that was what that was based upon.

Q. Yes. Would you agree that the unorthodox location at the Strawn would also adversely affect the correlative rights of the interest owners in the west half of Section 13?

A. Possibly.

Q. Do you agree that the Strawn is continuous from the Number 7 wellbore eastward into Section 13?

A. At this particular time there's not enough geological evidence to say whether it is or is not. There has not been a well drilled up in that quarter to tell.

Q. Okay. Do you have any reason to suspect that it does not occur in the west half of Section 13?

A. I have no direct evidence to say it may or may not, no, sir.

Q. Isn't it true that at one time Arrington opposed the drilling of more than on well in these proration units for the North Shoe Bar-Strawn Pool?

A. Opposed it?

Q. Yes.

A. I don't know that we've ever opposed anyone directly in a case.

Q. Let me refer you to what's been marked as Permian Exhibit A. Do you recognize this letter?

A. Yes, sir, I do.

Q. This is a letter dated April 27th, 2001, signed by Mr. Arrington; is that correct?

A. Yes, sir.

Q. If you would look at that last paragraph on the first page, would you read that into the record, please?

A. "Further, it is our understanding that the Hilburn #1 Strawn producer is in the North Shoebar [*sic*] Strawn...which calls for 160 acre proration units, and the NW/4 is the spacing unit for the Hilburn #1. It is our understanding that another new drill Strawn well would not be allowed in this NW/4 without changing these field rules."

Q. How do you explain that change in position?

A. Basically, Mr. Arrington was not aware of simultaneous dedication, he didn't know you could simultaneously dedicate an additional to this at the time he wrote this letter, and he certainly did not consult me or our legal team.

Q. Why was Arrington opposed to drilling a second

well in the North Shoe Bar-Strawn at the time?

A. Well, I think in this particular letter here, he felt that you already had a Strawn producer in the quarter that was a commercial well, and there wasn't at this time reason to drill another one.

Q. Was it Arrington's understanding that a single well could efficiently and adequately drain Strawn reserves from those proration units in that pool?

A. I don't know about that, sir, no, sir.

Q. Hasn't Arrington taken the position in the past that the Number 2 well could adequately drain Strawn reserves in this northeast quarter?

A. I don't know that we've taken the position it could adequately drain them in an effective manner, no, sir, I'm not sure that we have.

Q. On your Exhibit 4, would you take that in front of you, please, sir?

A. Uh-huh.

Q. If you'll look at the choke-setting column, can you explain why that particular choke setting selected for the well?

A. No, sir, that is our production department and our engineering department.

Q. All right. Do you have any information with you reflective of how the GOR has been behaving for the well?

A. No, sir, I do not have anything with me, no.

Q. Is that a concern to Arrington?

A. I think the GOR is a concern to anyone, as far as production is concerned, yes, sir.

Q. Are you familiar with the nature of these volatile oil reservoirs, these Strawn pods?

A. Not to the point that I'm an expert, just from listening.

Q. Is there a concern on Arrington's part that having two wells within the same proration unit may adversely affect reservoir performance in a volatile oil reservoir like this?

A. Not if it's produced at the current allowable. I think if you increased it dramatically, trying to blow the reservoir down, I think we're all concerned about that, yes.

Q. And what plans does Arrington have for allocating the allowable for that northeast quarter between the two wellbores?

A. Specific, I don't know. My guess is, we would monitor production and try to keep it at 605 barrels of oil per day.

Q. Isn't it true that under the pool rules that was one of your exhibits, Arrington would be free to allocate the entirety of that allowable to the Number 7 wellbore at

its unorthodox location?

A. I believe the 50-percent rule would keep us from allocating the entire allowable to that wellbore.

Q. Mr. Baker, do you have any evidence you can present today that establishes that the pressure container for this Strawn reservoir does not continue into the west half of Section 14?

A. No, sir, I don't.

MR. HALL: Nothing further of the witness, Mr. Examiner.

EXAMINER CATANACH: Thank you, Mr. Hall.

EXAMINATION

BY EXAMINER CATANACH:

Q. Mr. Baker, the only offset production we currently have is up to the north in Section 11, and that's the Yates well?

A. Nearby, Mr. Catanach. I mean, Chesapeake and Yates have wells located in the north half of Section 12 and the north half of Section 11 as well.

Q. Okay. Just with regards to the southeast quarter of Section 11, there is only one well in that quarter section?

A. In the southeast quarter, yes, sir.

Q. And that's the Runnels "ASP" Number 2?

A. Yes, sir.

Q. Do you know what the status is of the Yates well in Unit P of that section?

A. That well is currently producing at about a million a day from an off-the-Morrow sand, which was the original target that we went after with our Mayfly "14" Number 7.

Q. Does that well have potential to produce from the Strawn formation?

A. No, sir, and that's exhibited by that last well on my cross-section. It says Burns Corporation. They were the original operator. Yates is now the operator of it. My mistake for not putting Yates as the current operator.

Q. Okay. And then Section 12, the southwest quarter, there is no production currently from the Strawn?

A. No, sir.

Q. And in the west half of Section 13 there currently is no Strawn production?

A. In the west half of Section 13, as I understand it, the Hilburn Number 1, which is in the southwest quarter of the northwest quarter, if I'm not mistaken, I think it was the original discovery well for the North Shoe Bar-Strawn Pool, and it's made approximately, I think, 450,000 barrels and about -- I think 1.5 BCF from the Strawn.

Q. Okay, is that a Permian well?

A. Yes, sir.

Q. Okay, southwest of the northwest?

A. Yes, sir.

Q. Okay. Have you tried to map this particular Strawn structure, Mr. Baker?

A. Yes, sir, we have.

Q. And do you know what the extent of this structure is?

A. Well, we have guesstimates on it, and we're guesstimating it's probably an 80- to 100-acre feature, and the best we can tell, it runs a kind of an east-west orientation. But we certainly don't know the eastern edge of it. We feel like we kind of know the western edge of it, we know the southern boundaries, and we know the northern boundaries of it.

Q. Is this the same structure that's being produced in the Hilburn well?

A. It's our belief that it's not, because our pressures when we drilled our well were virgin, and we have to believe with their well having made 450,000 barrels and we having this kind of pressure out here, there has to be some type of a perm barrier or something separating the reservoirs.

Q. But you don't have any geologic evidence to demonstrate that?

A. I'm afraid we cannot get down to any type of

resolution or isopach that you could see, you know, down to that small interval in between where our wellbore's at and where theirs is. I mean, there's a lot of open area in there that right now has not been proven one way or the other. So no, sir.

Q. Okay. Based upon your geology, do you feel there's a viable Strawn location in the north half of that quarter section?

A. Possibly. I think you have to believe that it's going to take an element of risk with it, simply because how you see ours thinning in the Mayfly 3 and how quickly it's moved to the north. But there's certainly, you know, the place for geologists to put in a location, yes, sir.

Q. Mr. Baker, do you have any drainage data on the existing Mayfly Number 2 well that you've -- have you done any drainage data on this?

A. We originally, when we first started producing the well, did some buildups and some volumetrics and stuff like that, and it was at that time that we kind of did some material -- or our engineer did some material balance, and guessed the reservoir to be about 82 acres in areal extent right here.

We have not shut the well in, in the last -- goodness, I guess nine months, to confirm that material balance, and that's been due to oil prices and stuff, we've

been hesitant to shutting in the well.

Q. So your answer is what?

A. No, sir, not since the original stuff.

Q. Have you done any estimates based on decline curve analysis or any other type of --

A. As to what the total reservoir would produce?

Q. What the drainage area of this particular well might be.

A. No, sir, not beyond the material balance that we did, and I think some of the original EURs that our reservoir engineers came up with, the well has already exceeded some of those original numbers that they came up with.

So that tells you you've got a thickness size -- you've got something in there that's not quite right. And we've done everything that we know, without shutting the well in and doing another material balance, to estimate that. But it's probably between 80 to 100 acres in size.

Q. So you don't know at this point whether the Number 2 well will adequately drain that structure on your unit?

A. Not 100 percent, no, sir. I think you have to feel like it's going to get a good chunk of it, but I think we also feel that by recompleting in the Number 7 well, we'll salvage that wellbore there, and then basically we

would just accelerate some of the reserves that the Number 2 would probably get.

Q. Is the Number 2 well, is that a conventional vertical well?

A. No, sir, it's not.

Q. Can you tell me what that is?

A. That is a horizontal well. It was drilled as a conventional pilot test hole, and when we encountered the Strawn, we turned it due east, slightly south and east, and drilled it approximately 1300 feet to the east. And you've got a bottomhole location there that I believe is 760 from the north by 660 from the east line.

Q. Approximately how long is the horizontal section in the Strawn in that well, Mr. Baker?

A. That would be 1320 feet.

Q. So you've got a horizontal section that extends into both of the 40-acre tracts --

A. Yes, sir.

Q. -- on that well?

A. Yes, sir, we do.

Q. The 50-percent penalty that you have arrived at, that was an agreement between Arrington and Yates; is that correct?

A. Yes, sir, it was.

Q. And can you tell me how that would be instituted,

how that penalty would be accomplished?

A. Well, sir, I mean, I think what we would have to do -- and I don't know the exact workings of this, but if we were to recomplete in the Mayfly "14" Number 7, basically what we would do is just simply make up the difference from what the Mayfly 2 is doing to what the allowable is.

Fifty percent in there, we still wouldn't be able to produce at that high of a rate. I mean, a 50-percent penalty in here would allow us to only make 300-some-odd barrels, and we would be able to produce a maximum, I think, of about 200.

Q. Okay, I'm not following you. The allowable for this proration unit is 650 barrels a day?

A. Yes, sir.

Q. The current well, the Number 2 well, is producing approximately 390 barrels a day?

A. Yes, sir.

Q. You're saying you would take that excess allowable, which is about 261 barrels?

A. Yes, sir.

Q. And --

A. And then cut it by 50 percent.

Q. And then apply the 50-percent --

A. Yes.

Q. -- penalty to that?

A. Yeah.

Q. So you'd have about a 130-barrel-a-day allowable?

A. Uh-huh.

Q. In the event your Number 2 well -- I'm sorry, the Number 7 well comes in at a rate below that, in fact, it would not be penalized at all --

A. Yes, sir.

Q. -- is that your position?

A. Yes, sir.

Q. Do you have any estimates on what that well might produce?

A. No, sir. I mean, if you look at the drill stem test, drill stem test was pretty good. But that drill stem test was also -- goodness, year ago. And we don't have a clue as to what that bottomhole pressure may be right now. I'd have to believe that it's capable of doing the allowable that we would be assessed.

But without, you know, some better bottomhole pressure information you just don't know. I know that you could tell the difference between the original wellbore and the second one was pretty substantial.

Q. Mr. Baker, do you know what the Well Number 2 -- Is that production being restricted at all, as far as you know?

A. No, sir. I think what we have there -- and this probably goes a little bit to Mr. Hall's question, and before I make an attempt to answer this, please understand I'm not an expert in the field of reservoir engineering or engineering, so -- I know that our engineers have talked about when we get up to a 28/64, that the well seems to load up and won't lift at all.

So the choke size -- there seems to be an area in there where it's kind of a balance between what the flowing tubing pressure and what the choke will allow. And when we open it up too much it seems to load up or die or something. It just doesn't lift it as well. And so that's kind of why the choke's been in that 22/64 to 24/64 range.

It's not being purposely restricted. If we could flow that, Mr. Catanach, at today's oil prices, I assure you we would be.

Q. Okay, back to the penalty, the previous penalty you guys had an agreement on was for gas, for the Morrow gas?

A. Yes, sir, it was for Morrow gas.

Q. And that was based on the well's ability to produce gas?

A. Yes, sir, and it was also based on an agreement that we had with Yates on the Mayfly 1, which is a previous deal, basically, because we were unorthodox there. And it

was the same type of deal where we were going to do a 50-percent penalty for gas, based on being 50 percent too close to the line.

Q. So in your opinion, the same type of -- applying the penalty in the same manner for the oil well would not be fair to you guys; is that --

A. Well --

Q. If you take the well's ability to produce and cut that by 50 percent --

A. You can make a case that it would be a little unfair to us, because really, we're not 50 percent off that line; we're approximately -- I think around 35 to 40 percent off that line, as far as the field rules go. So I mean, it is a little bit unfair.

But at the time we were meeting with Yates, and in the spirit of the agreements that we had previously made, we agreed to just stay at 50 percent to make it easy on both parties. And Yates and us have worked together good, and David didn't have a problem with it.

EXAMINER CATANACH: Okay, I have nothing further. Anything further, Mr. Hall?

MR. HALL: No, sir.

EXAMINER CATANACH: Mr. Feldewert?

MR. FELDEWERT: Mr. Examiner, I would like to clear up, I think, one thing for the record.

EXAMINATION

BY MR. FELDEWERT:

Q. Could you take a look at this Exhibit Number A that Permian Resources has represented as being David Arrington's steadfast opposition to a second Strawn well? Did you understand this proposal -- And Mr. Baker, I should ask you, are you familiar with what formation Permian was proposing to recomplete in with this letter?

A. Yes, sir, I think so.

Q. Was it the Strawn formation?

A. Yes, sir.

Q. Now, as I read through this letter I didn't come to the same conclusion that Mr. Arrington was steadfastly opposed to a second Strawn completion in this unit.

Did you understand him that his concern was whether a recompletion was allowed under the joint operating agreement because a well was producing in commercial quantities from the Wolfcamp?

A. Correct, yes, sir.

Q. And I think he says at the end of his -- In the third paragraph his last sentence is, "We do not concur with abandoning this zone"; is that right?

A. Right.

Q. Okay. Did he -- And apparently he was confused about the pool rules --

A. Yes, sir.

Q. -- and he makes a statement here, "It is our understanding that another new Strawn well would not be allowed in this NW/4 without changing these field rules." Well, we know that that's not correct, right?

A. Right, we do.

Q. But then he goes on in the next paragraph to say that if it's "allowed under the JOA...this letter shall serve as our election to participate in..." the project; is that right?

A. Yes, sir.

Q. So do you read this as Mr. Arrington being opposed to a second Strawn well in their quarter section for any reason?

A. No, sir.

MR. FELDEWERT: That's all I have.

MR. HALL: Mr. Examiner, we need to tender Exhibit A into evidence. I don't there's any question of authenticity.

EXAMINER CATANACH: Any objection?

MR. FELDEWERT: No.

EXAMINER CATANACH: Exhibit A will be admitted as evidence.

Anything further of this witness? This witness may be excused.

MR. HALL: At this time, Mr. Examiner, we would call Bob Marshall to the stand.

ROBERT MARSHALL,

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

DIRECT EXAMINATION

BY MR. HALL:

Q. For the record, sir, please state your name.

A. Robert Marshall.

Q. Mr. Marshall, where do you live?

A. Midland, Texas.

Q. And how are you employed?

A. I'm CEO and president of Permian Resources.

Q. All right. Have you previously testified before the Division or one of its Examiners and had your credentials accepted as a matter of record?

A. Yes, I have.

Q. And are you a petroleum geologist by training and background?

A. Yes, I am.

Q. Are you familiar with the lands that are the subject of this Application?

A. Yes.

MR. HALL: At this point, Mr. Examiner, we'd offer Mr. Marshall as a qualified expert geologist.

EXAMINER CATANACH: Any objection?

MR. FELDEWERT: No.

EXAMINER CATANACH: Mr. Marshall is so qualified.

Q. (By Mr. Hall) Mr. Marshall, you have sat in the hearing room and listened to the geologic presentation of Mr. Baker. Do you disagree with his presentation, his conclusions?

A. No, not all of it.

Q. What do you disagree with?

A. I believe that the zone is probably contiguous across our acreage.

Q. All right. Do you have some exhibits that can demonstrate that?

A. Exhibit 9 and Exhibit 1.

Q. Let's start with Exhibit 1, if you would identify that for the record.

A. This is a Strawn structure map across the Shoe Bar area. The yellow is highlighted with our acreage in it, the green dots are Strawn producers. What it's showing here is that there is some Strawn nosing or ridging across our acreage here, from the Mayfly Number 2 "14" Hilburn well and across our Hilburn -- not Hilburn, but the Mayfly 2 "14" through our Hilburn Number 1 and Hilburn Number 2. This is a Strawn nose going across there, structurally.

Q. All right. In your opinion, does the Strawn

pressure pod continue across in Section 14 to your acreage in Section 13 in the west half?

A. We think that there is evidence that indicates it might.

Q. Is there any evidence that would suggest to you that there's any disconformity or porosity barrier, any other barrier that would result in the prevention of drainage by the Number 7 well Arrington proposes?

A. Of our acreage, I don't see anything between us.

Q. All right. Do you believe as a geologic certainty there's a reasonable probability that the State Number 7 well will be in communication with Permian's reserves in the west half of Section 13?

A. I do.

Q. Would it appear to you that the Hilburn Number 1 well, in the northeast quarter of Section 13, is in a separate reservoir?

A. It appears that way, just based on the performance of the Mayfly Number 2.

Q. All right. And can you be more specific? What performance data are you referring to?

A. By the -- We don't have any production information, it's not of public record. The only public-record information we have is just the cumulative production.

Q. All right. Anything further with respect to Exhibit Number 1, Mr. Marshall?

A. No.

Q. All right, let's look at your Exhibit Number 2, and I would note for the record that this is also Exhibit Number 9 in Case Number 12,381. Would you explain to the Hearing Examiner what this exhibit is intended to imply?

A. Okay, this was taken from the public records, from a hearing approximately a year ago for the Mayfly "14" State Com 7, and Arrington presented some seismic sections to indicate the position of this Morrow fault and how it would affect his location.

And what we have noticed on this section is -- There are two seismic images across here, one on the left, one on the right. The one on the left is a north-south line, which goes across his acreage, Arrington's acreage, and intersects with the Mayfly 7-14 and the Mayfly 2-14.

And what we're showing here on the right-hand corner of this image to the left -- It says "Strawn" right there, and there's a little arrow. From that "Strawn" to the arrow, you go over to the left, you intersect with the approximate location with the Number 2 Mayfly -- it may be a little bit further to the left -- there appears to be some sort of thickening right there, indicating some sort of algal mound buildup or just some sort of buildup there.

And that's what the Mayfly 2 is producing out of.

Now, what's coincident with that is, there is an arbitrary section that was a slice section taken across our acreage, going across our northwest quarter, across our Hilburn acreage, and you can see there's a Strawn label there on the right-hand side, and there's another arrow which indicates the base of that marker, and there's an arrow which would indicate where our possible location or -- that we would have on our section would be.

Now, what the point of this is that we're trying to show that there's a continuity between the seismic image from the Mayfly lease and the Hilburn lease, as exhibited by this seismic.

Q. Now, given that the information reflected on Exhibit 2 came from Arrington, is it safe to assume that Arrington knew about the existence of the Strawn in the west half of Section 13 before it even drilled the Number 7 well?

A. Yes.

Q. Mr. Marshall, have you considered whether there are viable Strawn locations at standard locations in the east half of Section 12? I'm sorry, in --

A. In Section 13?

Q. -- Section 14.

A. Or 14, yes, there are.

Q. Would you tell the Hearing Examiner what it is that Permian seeks as a result of this hearing?

A. Permian would like the Commission to deny the Application to produce the Mayfly 7 "14" well, because we believe it's in clear violation of the OCD rules.

Q. And you're speaking of Rule 104, the well-location rules?

A. That's correct.

Q. Mr. Marshall, was Exhibit 1 prepared by you or at your direction?

A. By me.

MR. HALL: And at that, Mr. Examiner, we would move the admission of Exhibit 1, Exhibit 2. We'd also move the previous exhibit in Case Number 12,381, in evidence in that case, and I believe you can take administrative notice of that.

EXAMINER CATANACH: That is your Exhibit Number 2?

MR. HALL: Yes.

EXAMINER CATANACH: Okay, why would we need to take administrative notice of the previous...

MR. HALL: That it's an exhibit in that case, it was authenticated in that case --

EXAMINER CATANACH: I've got you, okay.

MR. HALL: -- without objection, it was admitted.

EXAMINER CATANACH: Exhibits Number 1 and 2 will be admitted in this case, and administrative notice will be taken that this exhibit was a previous exhibit in Case Number 12,381.

Mr. Feldewert?

CROSS-EXAMINATION

BY MR. FELDEWERT:

Q. Mr. Marshall, I do have one question. I'm looking at your Exhibit Number 2.

A. Yes.

Q. You show an arrow there --

A. Yes.

Q. -- in that depiction in the upper left-hand corner?

A. Yes.

Q. And then you followed from that arrow that blue depiction there to the left; is that correct?

A. I'm sorry, in the Hilburn lease you're talking about?

Q. I'm looking at --

A. Oh, wait, wait, we're on the seismic.

Q. Yeah, I'm --

A. Yes, okay.

Q. -- trying to understand your Exhibit Number 2, and I'm not a geologist, so you've got --

A. I understand.

Q. -- to bear with me.

I see your arrow there.

A. Yes.

Q. Okay, and then I believe you followed that arrow left; is that correct? Along that blue line?

A. Yes, that's the base of a marker below the Strawn.

Q. Okay, and where did you see the buildup on that?

A. Well, if you were to take a scale and to scale out all along this line, there is a thickening along this line on a north-south direction.

Q. Okay. But you realize that according to this depiction the Strawn formation is actually the blue line above that?

A. That's correct.

Q. Okay.

A. Yeah, we pick a line above and below --

Q. Okay.

A. -- to indicate some sort of interval thickening.

Q. All right. And beside the fact that you think there -- I think you said, might be some reserves, Strawn reserves, in your section, I take it you didn't have any other disagreement with Mr. Baker's conclusions here today?

A. In regard to what?

Q. In regard to his testimony. I think your attorney asked you whether you had any disagreement with his testimony, and you pointed out the fact you think there might be some --

A. I would say that there --

Q. -- reserves in Section 14.

A. I would say that there were reserves in Section 14.

Q. Okay, and that's the only disagreement you'd have with --

A. Excuse me?

Q. That's the only disagreement you would have with his testimony here today --

A. Yes --

Q. -- Mr. Baker's testimony?

A. -- that's correct.

Q. Okay. And as I understand it, am I correct that you all were proposing a second well in your north- --

A. We are pro- --

Q. -- -east quarter?

A. We are proposing a well in the northeast -- or northwest of the northwest quarter of our Hilburn lease --

Q. Okay, and --

A. -- in Section 13.

Q. -- you are proposing a well?

A. That's correct.

Q. Okay, and where is that well location?

A. It will be 510 off the west lease line and 660 off the north lease line.

Q. Now, would that be a standard location?

A. According to the field rules, it would be.

Q. Okay, all right. So you're already proposing to drill a second well in your --

A. That's correct.

Q. -- quarter section? All right.

And if you're at a standard location, I assume, then, you wouldn't be looking at any kind of a production penalty; is that right?

A. That's correct.

Q. Okay. If you were at a nonstandard location, would you be looking at a production penalty?

A. We would be.

Q. And why do they impose production penalties?

A. To conserve oil reserves for offset lease owners.

Q. Protect correlative rights?

A. That's correct.

Q. Okay. And you understand here that Mr. Arrington has agreed to accept a production penalty in order to protect your correlative rights; is that correct?

A. That's correct.

Q. In fact, he's agreed to accept a greater production penalty than his percentage of encroachment on your acreage; isn't that correct?

A. Is that correct?

Q. He's agreed to accept a --

A. Yeah.

Q. -- 50-percent production penalty rather than a roughly 32-percent?

A. That's correct. Oh, based on spacing, yeah.

Q. Correct. So he's actually done a little more than what would be required to protect your correlative rights; is that right? Wouldn't you agree?

MR. HALL: Well, I'm going to object. The question presumes that it will, in fact, protect correlative rights. But you if you know that you can answer.

THE WITNESS: Would I think that he's taken steps to ensure that we have correlative rights protected?

Q. (By Mr. Feldewert) Uh-huh.

A. As far as a penalty, yes.

Q. Okay. Now, was Permian's predecessor Mesa Petroleum Company?

A. No, Permian's predecessor was Merit.

Q. Merit, okay. You acquired an interest in the Hilburn Well Number 1; isn't that --

A. That's correct.
Q. That's what you operate now?
A. That's correct.
Q. Did you acquire that interest and that right of operation from Mesa Petroleum, or was Mesa Petroleum --
A. I believe Mesa bought it -- excuse me, Mesa sold it to Merit.
Q. And then you purchased it from --
A. We purchased it --
Q. -- Merit?
A. -- with a huge package of properties from Merit --
Q. Okay.
A. -- in 2000.
Q. Have you looked at the pool rules for the North Shoe Bar Strawn Pool?
A. I have, and I'm not real familiar with them, other than talking to the engineer about them.
Q. Are you --
A. I know the general rules, yes.
Q. Are you familiar with the fact that they were developed for your Hilburn Well Number 1?
A. That's right, that was the discovery well.
Q. Okay. So it would have been your predecessor who proposed a depth-bracket allowable of 605 barrels; isn't

that correct?

A. Yes.

Q. And it would have been your predecessor who proposed that --

A. I assume that it hasn't been amended. I don't know.

Q. According to my records it hasn't.

A. Okay.

Q. Okay. And I assume, then, it was also your predecessor who proposed the idea that the Division could grant exception to the well-location requirement, particularly for uphole completions?

A. I don't know that.

MR. FELDEWERT: Okay, that's all I have. Thank you.

EXAMINATION

BY EXAMINER CATANACH:

Q. Okay, Mr. Marshall, do you believe that as you move east into your acreage, that this Strawn structure is thinning?

A. Yeah, at a certain point it will.

Q. Okay, wouldn't it be justified, then, to move your location more to the west, toward an unorthodox location, to encounter a thicker portion of the reservoir?

A. Well, our interpretation is that this is a

different reservoir than is what the -- in the Hilburn Number 1, that we feel like it's a little bit larger because of the EURs that we've calculated on the Mayfly Number 2, and so we feel somewhat comfortable in the 510-660.

Q. And are you going to have an engineer testifying to some of the engineering matters?

A. Yes, we will.

Q. Okay. Now, as far as the production penalty that Arrington has proposed on their well, do you not believe it's going to protect your correlative rights?

A. I don't think so.

Q. Can you tell me why?

A. Well, because I think that the horizontal well plus the vertical well will substantially drain a larger area and come across and encroach our lease lines, and I don't think the 50 percent would protect us.

EXAMINER CATANACH: That's all I have of this witness.

Any other questions?

MR. HALL: Nothing further, Mr. Examiner.

EXAMINER CATANACH: This witness may be excused.

MR. FELDEWERT: Mr. Examiner, I do have one quick question, if I may.

EXAMINER CATANACH: Okay, Mr. Feldewert, go

ahead.

MR. FELDEWERT: I just took a look at this because something wasn't clicking in my head.

FURTHER EXAMINATION

BY MR. FELDEWERT:

Q. I've got a letter here, Mr. Marshall, that's dated June 11th, 2001, to David Arrington Oil and Gas. Are you familiar with this letter? If I may approach.

A. We've had several letters back and forth. Yes.

Q. Is this, Mr. Marshall, is this your most recent well proposal for your second well in your northwest quarter?

A. No.

Q. It's not?

A. No.

Q. Okay. Because I was noticing this proposed a 330 from the west line location.

A. Yes, we were tempted to negotiate and show some good faith in negotiations, and they did not agree to it, so we decided just to come to a legal location and drill our well.

Q. Now, you said good faith negotiations. You were proposing a well, but you didn't want to encounter a production penalty at your 330 location --

A. That's right.

Q. -- is that right?

A. That's correct.

MR. FELDEWERT: Okay, that's all I have. Thank you.

EXAMINER CATANACH: Okay.

MR. HALL: At this time, Mr. Examiner, we would call Mike Stewart to the stand.

MICHAEL L. STEWART,

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

DIRECT EXAMINATION

BY MR. HALL:

Q. For the record, please state your name.

A. Michael LeRoy Stewart.

Q. And Mr. Stewart, where do you live?

A. I live in Midland, Texas.

Q. How are you employed, Mr. Stewart?

A. I'm employed as a contractor/consulting engineer for Permian Resources.

Q. Have you previously testified before the Division and had your credentials accepted as a matter of record?

A. Yes, I have.

Q. And are you familiar with the Application in this case?

A. Yes, I am.

Q. And are you familiar with the lands that are the subject of this Application?

A. Yes, I am.

MR. HALL: At this point, Mr. Examiner, we'd offer Mr. Stewart as a qualified expert petroleum engineer.

EXAMINER CATANACH: Any objections, Mr. Feldewert?

MR. FELDEWERT: No.

EXAMINER CATANACH: Mr. Stewart is so qualified.

Q. (By Mr. Hall) Mr. Stewart, if you would, please, sir, would you refer to what's been marked as Exhibit 3?

A. Exhibit 3 is a land plat that's generated by Midland Map Company, and on that land plat I've superimposed the pool boundaries for the various Strawn pools and the one Wolfcamp pool that comprises our acreage.

In addition to that, there's a producing zone legend which illustrates what zone given wells are producing from or have produced from, and I did not -- made no detail of the shallower zones. I just marked the Wolfcamp through the Morrow intervals. And that information came off of public production records via Lasser Data.

And then the selected pool boundaries are the outline of the different Strawn pools adjacent and of the North Shoe Bar Strawn Pool that the subject well is located

in.

Q. Does Exhibit 3 show the existence of numerous discrete Strawn Pool reservoirs in close proximity to one another?

A. Yes, I believe that's what the exhibit does show, as does the various case records on other unorthodox pool and GOR hearings.

Q. And does it show that the Division has established specific pool rules for these numerous Strawn reservoirs?

A. It shows the outline for those pools. The individual pool rules can be referenced in our public record, but there are different pool rules for the various pools.

Q. Mr. Stewart, let me ask you about Arrington's Number 2 wellbore in the northeast quarter of Section 14. Is it your view that that well can adequately and efficiently drain Strawn reserves?

A. It is my opinion that that well, with the data that's available to us, can adequately drain those Strawn reserves, and it is also my opinion that the burden of proof that that well cannot drain that 160-acre proration unit should lie on the operator who is asking for an additional well penetration and an additional conduit to produce those reserves.

And I believe that David Arrington, through prior correspondence, has indicated that the Mayfly State Com "14" Number 2 will produce and adequately drain the 160-acre northeast quarter of Section 14 reserves.

Q. All right, now you were present when Mr. Baker testified that that was not the position of Arrington, that a single wellbore could not efficiently drain those reserves in the northeast quarter. Let me refer you to Exhibit Number 4, if you would please turn to that.

A. I'm looking at Exhibit Number 4. It's a November 10th, 1999, letter directed to the OCD, Mike Stogner. It's asking for a project allowable of 890 barrels per day to the Mayfly State Com Number 2 well.

If you will notice, in the letter it says that Arrington has been testing the well, and they tested it in October of 1999 at various rates and choke settings. They thought at that time that the well could justify a project allowable of 890 barrels a day. I think there was some question as to the GOR limits too, which were set up for the North Shoe Bar-Strawn Pool, which are currently 4000 to 1.

Q. All right. Now, is this Exhibit 4 a letter from Arrington's attorney, Thomas Kellahin, which also has attached to it the application of Arrington in Case Number 11,294 for special project oil allowables for a directional

wellbore for that well?

A. Yes, it's a letter from Mr. Kellahin to the Examiner asking for a special project allowable. And subsequently I believe they made application for the project allowable.

Q. All right. And the first letter, the top of Exhibit 4, is that in essence a request for a special test allowable for the well?

A. That's correct.

Q. If you'll look at page 2, there's a numbered paragraph 2 (b) there. What does that say?

A. Item number 2, "Geologic and petroleum engineering evidence demonstrates that: ...in all probability this horizontal wellbore will be the only well necessary in order to adequately deplete this reservoir."

Q. And if you would turn to the application portion of Exhibit 4 and refer to paragraph 4 on page 2 of that application, does that in essence say the same thing as the letter?

A. Yes, it does. It says The Mayfly Number 2 well "is capable of effectively and efficiently producing Strawn formation oil at rates...up to 890 barrels...per day..."

Q. And Mr. Stewart, is the producing rate for these Strawn reservoirs a concern with respect to waste of resources?

A. There's been a lot of testimony, specifically in the South Big Dog-Strawn field, concerning producing rates and associated GORs. It is of great concern. When you pull a reservoir too hard -- and what's been of public record before, that this is a volatile oil reservoir, which means that the bubble point of the fluid is very near the saturation pressure of the reservoir. And if you, in effect, pull the wells hard, that the gas will break out in the reservoir into a free gas phase.

And when that happens, you lose residual oil saturation in the reservoir and effectively lose reserves, because those oil reserves now become nonrecoverable, or they're residual, they stay on the bore throats.

So rates and associated gas-oil-ratio limits have been a concern in this area in these Strawn pools.

Q. Now, have you prepared some exhibits that will demonstrate that particular concern?

A. I have.

Q. Let's refer to Exhibit Number 5, if you would, please.

A. Exhibit Number 5 is a rate-time plot of the Mayfly State Com Number 2 well, illustrates oil on a monthly basis. The information was taken from the public Lasser Database and from the NMOCD ONGARD system that's plotted -- we only had data available through February of

2001, so the monthly oil production is plotted, as is the GOR or the gas-oil ratio for the Number 2, Mayfly State Com "14" Number 2 well.

Q. All right, yeah, the exhibit does not say "Number 2 well", but this is for that well, correct?

A. That's correct.

Q. All right.

A. It shows that the Number 2 well, through February of 2001, has cum'd almost 273,000 barrels of oil and 527 MCF of gas.

Q. Now, the fact that the GOR plot for the Number 2 well has remained relatively steady, what does that indicate to you?

A. In comparison to wells -- other Strawn wells, specifically other Strawn horizontal wells in the Big Dog field and in the Shoe Bar North-Strawn field -- and I have included those as Exhibit 8 -- you will notice that the GOR on all of those other -- and I believe all of these wells are horizontal wells with the exception of one -- the GOR, for the most part, on all of those wells increases very rapidly, at very early age in the wellbore's history.

Those wellbores' GORs start at around 1000 to 1, and then they have increased up into the neighborhood of 10,000 to 1, which I think is indicative of those wells draining small areas. What's happened is, as they've

pulled the oil out of those small algal mounds free gas has broken out in those reservoirs and it's caused the GOR to increase substantially.

In contrast, Arrington's well, you'll notice that the well has been producing for -- This plot is over a year and a half of production history. The GOR has remained fairly constant on that well.

And that would lead me to believe that this is a larger reservoir, and so the gas that's been liberated in this reservoir, areally-extentwise, has not taken up very much room, and subsequently the gas rate hasn't increased significantly in the Arrington well.

Q. All right. Does this information lead you to conclude that this particular reservoir extends into Section 13?

A. Yes, it does.

Q. All right, let's look at Exhibit 6, if you would explain that, please, sir.

A. Exhibit 6 is, again, a rate-time plot of the Mayfly State Com "14" Number 2. It's on a little bit different scale. And off of that we have projected decline curve recoveries from that well, and those decline curve rates are noted as the solid lines, the green and the red.

Again on the left side, the cum of the well has made 273,000 barrels of oil, the EUR that we're projecting

based upon the illustrated decline curve for the oil is 816,000 barrels of oil. Gas, it's made 527,000 MCF, and we're projecting it to recovery approximately 1.65 BCF of gas.

Q. Is it your opinion that the Number 2 wellbore is adequately and efficiently recovering reserves from the northeast quarter of Section 14?

A. It is my opinion. And when you contrast that -- and I'll reference Exhibit Number 7, which is Art Hilburn Number 1 well, which was the discovery well in the pool -- it was drilled in 1973 by Mesa -- that well has made 452,000, almost 453,000 barrels of oil to date and 1.1 BCF. The reserves that we're projecting, ultimate reserves associated with that well, are 465,000 barrels of oil, approximately 1.2 or 1.17 BCF of gas.

This is a vertical wellbore. The Hilburn State Com Number 2 -- or excuse me, the Hilburn Number 1 is a vertical wellbore. The Mayfly "14" State Com Number 2 is horizontal wellbore with an approximate horizontal section of 1300 feet. And I think, if I'm not mistaken, we've got an exhibit here that talks about it a little bit later. I believe the bottomhole location of that may be closer to 788 from the east line and 760 from the --

Q. You're referring to Exhibit --

A. -- north line. Yes, I'm referring to Exhibit

Number 9. That's just a view of the surface location as surveyed on the Mayfly State Com Number 2, its reported bottomhole location as came up, NMOCD Form 104 that was filed with it, and the reported surface location of the Mayfly State Com Number 7 well.

That horizontal wellbore -- and its -- the literature points out -- and I've got four or five SPE papers that point out the two primary reasons for drilling horizontally is, one, to accelerate the rate of production of the reserves from the reservoir, and secondly it's to increase the recoverable reserves of a given well from the reservoir.

The projection of ultimate reserves from horizonal wellbores is tedious at best. You need to have a lot of information. We're not privy to that information. It requires permeability data, it requires height data, PVT analysis of the oil.

As an operator -- or again as a nonoperator, we do not own an interest in that well, we don't have any of that data, so we can't make those calculations. Again, I will reference that I believe the burden of the proof in this case would be on the operator who has the availability to collect that data, which they have not done with the exception of original shut-in pressure, and go through the myriad of calculations that are approved by industry

standards to calculate a drainage radius for the State "14" Com Number 2.

Rule of thumb -- and I mean, it's a big -- it's a rule of thumb, other than to say horizontal wellbores typically produce more reserves than a vertical wellbore, given the same reservoir conditions -- is about two to one. You're going to produce twice as much reserves with a horizontal wellbore as you would a vertical wellbore.

And when we look back on the projected reserves from the Mayfly State Com Number 2, off decline curve, which is rudimentary at best, and the projected reserves off the Hilburn Number 1 -- which I don't think we'll miss those by much because a lot of it's already been put in the tank and sold, you've got very little remaining reserves present there -- if you take the ratio of the estimated EUR of the Mayfly State Com Number 2 to the ultimate reserves of the Hilburn Number 1, you get a ratio of approximately two to one. So that rule of thumb looks to apply in this case.

The other thing that's of interest is, if you look at the actual production history for the first 16 months of those wells, the Hilburn was completed in September of 1973, the Mayfly 2 was completed in September of 1999. The first 16 months of production, the Mayfly has made 247,770 barrels. The Hilburn made 111,997 barrels of

oil. That's a ratio of 2.2 to 1.

So again, our rule of thumb is applying. Not only does it look like the vertical well is going to produce about half as much as the horizontal well, it also looks like the horizontal well is producing oil at about twice the rate a vertical well is.

With that in mind, I don't understand the grounds for allowing an additional wellbore into that reservoir without adequate reservoir proof that it's required to drain that 160-acre proration unit.

Q. All right. So when -- Here you have a situation where Arrington deviated from a surface hole location to an effective horizontal well to its unorthodox bottomhole location for the Number 2 well, do you see any reason why Arrington couldn't do the same for its Number 7 well, deviate that hole over to a standard location for a Strawn well?

A. From an operational standpoint, none whatsoever.

Q. All right.

A. But we get back to what Bill talked about, the economics. And based upon Exhibit Number 9, you know, the bottomhole location of the Mayfly Number 2 is 598 feet from the proposed Strawn completion in the Mayfly State Com Number 7. While this field, the North Shoe Bar-Strawn, doesn't make provisions for distance between wells, there

are several fields that do make provisions for distance between wells, and it typically is 1120 feet.

So, you know, we're putting another wellbore into the reservoir. It's not only 330 feet from the lease line, an encroachment of 180 feet off of the standard field rules, but it's only 598 feet from the bottomhole location of an existing horizontal well.

And if you put in your mind, that horizontal well has the same effect of drilling vertical wells over that whole section. You know, I don't know how many 7-7/8 wellbores it would take to line up side by side to drill, you know, 1300 feet. A lot.

So that's why I do agree that while the wellbore is there, that it was drilled with the knowledge of the field rules, and it was most likely drilled with the knowledge that the Strawn extended to that location, it should not allowed [*sic*] to be produced out of the Strawn.

Q. All right.

A. And the other thing that I did want to visit about was, the exhibit that Bill prepared, Arrington Exhibit Number 7, the cross-section -- and I think Bob alluded to this -- we recognize the fact that that Strawn reservoir deteriorates or goes away to the north.

One thing that I don't think is a fair depiction in this cross-section is, you have to remember that this

log section from the Mayfly 14 Number 2 is at its -- where it encountered the Strawn section at its surface location, or near the surface location. And he's projecting it thinning to the Mayfly State Com Number 7 location.

And, you know, I don't know -- we're not disputing that fact, that it thins to the north. There's a wellbore to the north, the Yates Burns, that shows it not there at all. But there's nothing at all that shows that that's not a thin, elongated -- or a thick, elongated reservoir that runs east and west through there and that the Number 7 well may be on the flank of it --

Q. All right.

A. -- to the north extent.

Q. Mr. Stewart, we only briefly touched on Exhibit Number 8. We need to identify that for the record. Is this a composite of production plots -- Tell me what that's intended to reflect.

A. Exhibit 8 is, again, monthly oil rates and GOR rates on several wells, predominantly horizontal wellbores, in the adjoining fields, be it the Big Dog South-Strawn field, and then there's one well from the North Shoe Bar-Strawn field. Those show a GOR increase early in the production history of the wells --

Q. All right.

A. -- as opposed to the performance of Arrington's

well.

Q. And again, when you compare these plots against Exhibits 5 and 6, it indicates to you that the reservoir under Sections 14 and 13 is a fairly large reservoir for a Strawn reservoir?

A. Given the assumption that the reservoir fluids are similar, yes.

Q. All right. Mr. Stewart, what are Permian's plans for developing the northwest quarter of Section 13?

A. Permian's original plan was to re-enter the -- not re-enter but temporarily abandon the Wolfcamp formation in the Hilburn Number 2 well and drill horizontally to approximately 660-660 location from the north and west lines in Section 13 to encounter and produce the Strawn reserves.

Q. Is that shown on Exhibit 1, by the way?

A. No, the proposed surface location on Exhibit 1 is -- references a vertical wellbore.

Q. Okay.

A. But that would be the approximate location of the bottomhole location of a well that we would -- that we originally proposed re-entering -- not actually re-entering but temporarily abandon the Wolfcamp formation in the Hilburn Number 2, which produces approximately four to five barrels of oil a day, cutting a window, kicking off

horizontally, and drilling over to a 660-660 bottomhole location.

We permitted that with the NMOCD District 1 Office. It was approved. Subsequently sent it out to the partners, and it was -- the response from David Arrington, who is a 4.544-percent working interest owner in the Hilburn lease, was submitted into evidence as Exhibit A, I believe, or -- You'll have to help me with that, Scott. It's the letter dated -- from David. Yeah, that was David's response to our directional deepening to a Strawn bottomhole location.

David's concerns were that we had a zone -- or a well that was producing in paying quantities, and that under the JOA you can not abandon that zone without the consent of all owners. And he sought to exercise that right under the JOA and say that we could not abandon that Wolfcamp zone. Our plans were to temporarily abandon that, drill to the bottomhole location as stated, and then at some point in time come back and downhole commingle the Strawn and the Wolfcamp.

After that letter from David, again, we evaluated the position, and in an effort to try to compromise, we inquired with Arrington about a nonstandard surface location for ourself, 660 off the north and 330 off the west line of Section 13.

But we felt like that well should be subject to no production penalty. We were going to allow Arrington to produce his Number 7 well at a 50-percent penalty, continue to produce his State Com Number 2 well so that they could produce the allowable of 605 barrels a day, but we wanted no production allowable -- or production penalty, associated with our nonstandard location.

That wasn't accepted by Arrington, so yesterday we delivered to Arrington an AFE and permitted a location for the Hilburn State Number 3 well, or the Hilburn Number 3 well, at the location of 660 from the north and 510 from the west, Section 13. In that permit we provided to drill vertically to encounter the Strawn zone, log test it, evaluate it.

If the testing was sufficient, then we'll run pipe on it, cut a window and kick off horizontally, drill to a proposed bottomhole location of 1980 from the north, 1980 from the west of Section 13, or until the porosity plays out in the Strawn.

Q. Has there been a response to that proposal yet?

A. No, they just -- In their defense, they just got it yesterday.

Q. And of course at that location, 1980 and 1980, there would be no production penalty --

A. No, a standard location for the surface and for

the bottomhole.

Q. All right. Mr. Stewart, in your opinion, were Arrington's Application granted here today, would it adversely affect Permian's correlative rights in the pool?

A. Without doubt.

Q. I'll ask you the same question I asked Mr. Marshall. What is it that Permian seeks to come out of this hearing?

A. Permian seeks that the Mayfly State Com Number 14 -- or State Com "14" Well Number 7 not be allowed to be produced in the Strawn interval.

Q. Were Exhibits 3 through 9 prepared by you or at your direction?

A. With the exception of Exhibit 4, yes. Exhibit 4 was --

Q. Exhibit 4 is the Arrington Application?

A. Correct.

MR. HALL: We'd move the admission of Exhibits 3 through 9, Mr. Examiner, and that concludes our direct of this witness.

EXAMINER CATANACH: Any objection?

MR. FELDEWERT: No.

EXAMINER CATANACH: Exhibits 3 through 9 will be admitted as evidence.

Mr. Feldewert?

CROSS-EXAMINATION

BY MR. FELDEWERT:

Q. Mr. Stewart, I was sitting here listening to your testimony, and I was trying to outline exactly what your concerns were, and I had heard at one time you were concerned about a volatile reservoir and the possibility of nonrecoverable reserves, and I thought you used the term "waste" referring down to the Big Dog-Strawn Pool.

Are you testifying here today that two wells in the northwest northeast quarter of Arrington's acreage there in Section 14, that that's going to cause a damage to the reservoir or some kind of a waste issue? You're not offering that testimony, are you?

A. No, I'm not offering that testimony at all. I'm making a correlation between the South Big Dog-Strawn volatile oil reservoir, which they are limiting the GOR of there, and making correlation between those fields and the Arrington wells as its GOR is responding --

Q. Okay --

A. -- in respect to those wells.

Q. -- I think you've answered what I -- You were just offering that testimony for the purpose of trying to demonstrate that part of the reservoir may come into your section; is that right?

A. I was offering that testimony as evidence that I

believe that the reservoir is a lot larger than the algal mound reservoirs that have been encountered in the South Big Dog-Strawn field.

Q. Okay, and you were relying in part upon what has been marked as Exhibit Number 8, as compared to Exhibit Number 5, right?

A. That's correct.

Q. Okay. And I notice that the first page of Exhibit Number 8 shows a big -- somewhat of a difference, what you perceive as a difference between Arrington's production and what you are depicting there on the first page, and then I kind of flipped through the other pages and didn't see quite as big a difference, but I'm not an engineer or a geologist, so I'm not going to go into that. I will point out, though, that it would appear that at least Arrington's well, you would agree with me, had some kind of a peak initially with it; isn't that correct, if you look at Exhibit Number 5?

A. Peak in production or a peak in GOR or --

Q. Peak in GOR.

A. Yes, but since that time it's flattened out.

Q. Yeah, okay. And it's my understanding here today that you were originally proposing to drill a horizontal well, as well, in your quarter section, but you've now chosen to drill a second vertical well?

A. No, that's incorrect. Our first proposal was to directionally deepen the Hilburn Number 2 by kicking off horizontally and going to a proposed bottomhole location of 660 from the north, 660 from the west in Section 13.

In response to that approved permit and AFE sent to the partners, one of which was David Arrington, David Arrington chose his rights under the JOA to say that we could not abandon a producing zone in paying quantities. We recognize that the Hilburn Number 2 is producing in paying quantities, it's got a positive cash flow at five to six barrels of oil a day. We also recognize that the potential for a 400- or 500-barrel-a-day completion lies at a location of approximately 660-660, or as our next proposal --

Q. This is the Number 3?

A. The Number 3, which would be at 660 from the north, 510 from the west line.

Q. Okay, so you're going to -- Do you know when you're going to drill that Hilburn Number 3?

A. We're waiting on partner approval. The partners have 30 days under the JOA to execute or choose whether to participate or not --

Q. So it's --

A. -- and then it's going to be subject to rig availability.

Q. -- as quickly as possible?

A. As quickly as possible.

Q. Okay, and that would give you, I think, what you called -- Well, that would give you your second well in your quarter section that would be producing from the Strawn; isn't that correct?

A. That would be correct.

Q. Okay. So we would end up in a situation where Arrington has one well that's not subject to any kind of a production penalty producing from the Strawn, a second well that would be subject to a 50-percent penalty for his quarter section, and Permian would have a situation where they're going to have two wells in the Strawn formation, neither one of which are subject to a production pooling; is that correct?

A. That's correct, because both our wells would be at standard locations.

Q. Okay. Now, you said that you thought this Application had to be denied in order to protect your correlative rights. I guess I'm kind of wondering, in light of the fact that there's going to be a 50-percent production penalty on Arrington's proposed well, what is it that is impairing your correlative rights?

A. Well, one of the things that I've got a concern with is the methodology of allocating that oil. I don't

know that -- I may not be that familiar with the rules when a production penalty is assessed. Is it based upon deliverability of the well? Again, is it based upon gauging of the wells?

What's to keep David Arrington from going over and opening up the Number 7 well and producing 50 percent of the -- if it is subject to a 50-percent allowable penalty, producing 300 and 2 1/2 barrels a day, or 50 percent of the 600 and 5-barrel-a-day, and then curtailing the Number 2 well, which would, in effect, encourage the drainage of the reservoir from the east section line, or our west section line? You know, that's one of my concerns.

The other concern is the measurement of it. They're going into a common tank battery. You know, I don't know -- I've got some concerns about Exhibit Number 4 and the daily rates that are expressed on that, as to the actual potential of the Mayfly Number 2. This well is being choked back to 22/64, and I see no -- There's no reason for it.

Typically, you choke a well back because it's either -- the GOR starts to increase and you're trying to prevent waste in the reservoir by losing reservoir pressure, and I see no evidence of that by virtue of this production plot. I mean, we did have a little peak, but

it's been pretty flat throughout there.

And the other reason for choking a well back, typically, is you start to draw in water, to cone up water from the bottom. This production shows two barrels of water -- or four barrels of water that produced for the month of May.

Q. So you think Arrington's choking back its well on purpose with today's oil prices? You don't know one way or the other?

A. I don't speculate that, no.

Q. Okay. All right, do you know how many wells are allowed within a 160-acre spacing unit pursuant to the pool rules that your predecessor developed?

A. As many as you want.

Q. As many as you want? Okay.

A. So long as they're at standard locations.

Q. And pool rules also provide for an unorthodox location, do they not?

A. That's correct.

Q. Particularly where you have already drilled a well and you're completing uphole; isn't that right?

A. That --

Q. That's in the pool rules that your predecessor developed for this pool.

A. And I read those pool rules, and I don't know

that that was the spirit that that was written.

Q. The spirit, or is that not in here?

MR. HALL: Well, if you don't know --

THE WITNESS: I don't know.

MR. FELDEWERT: Okay, we'll go by what's in the pool rules, and that's all we're trying to do here today.

That's all I have.

REDIRECT EXAMINATION

BY MR. HALL:

Q. Briefly, Mr. Stewart, when you were asked about the spirit behind the pool rules for this pool, isn't it true when those pool rules were adopted, vertical wells were the typical drilling technique of the day?

A. Yes, that is a fact, and also I don't believe that there were any deep wells drilled, associated or pene-- you know, saying deep, deeper than 100 feet below the Strawn, drilled within the North Shoe Bar-Wolfcamp or the North Shoe Bar-Strawn field as it was proposed and ordered.

Q. Let's clarify one more thing. When we hear the discussion about the 50-percent production penalty, the Division has not imposed such a penalty for this reservoir, has it? This is only by virtue of Arrington's vague and ambiguous letter agreements with Yates applicable to separate acreage; isn't that right?

A. Separate acreage, separate reservoir. It was

originally proposed for a gas reservoir, and they have come to an agreement that it will be applicable to this oil reservoir. Typical field installations in New Mexico require you meter individual gas wells, you're also required to do deliverability tests. With an oil well or oil wells under common ownership they typically go to the same tank battery, so I have a question how you would impose it and how you would regulate it, lease it.

Q. And this vague and ambiguous letter agreement, do you not address how the penalty would be implemented in this case?

A. No, it does not address that.

MR. HALL: Nothing further, Mr. Examiner.

EXAMINATION

BY EXAMINER CATANACH:

Q. Mr. Stewart, with regards to the Number 3 well that's going to be drilled, you said something about you would drill it to a standard location and then possibly directionally drill it?

A. We would drill it vertically from a standard location of 660 from the north and 510 from the west, penetrate the Strawn horizon at that hypothetical vertical bottomhole location, log it, probably run a DST on it, and then at that point in time make a decision whether we were to run pipe and complete it as a vertical completion, or to

run pipe, cut a window and drill out horizontally through the -- and follow the Strawn porosity.

Q. It would be real similar to the way that the -- mechanically, the way that the Mayfly State Com Number 2 was drilled.

MR. HALL: Mr. Examiner, those well proposal letters are available. If you'd like, then we can get copies made and provide them to you.

EXAMINER CATANACH: I would like that, Mr. Hall.

Q. (By Examiner Catanach) Mr. Stewart, with the data that you have, you are not able to calculate the original oil in place underneath the northeast quarter of Section 14; is that correct?

A. That's correct. The only data that we have that's been released, we had a set of logs on the Mayfly State Com Number 2. They were released in the -- the prior hearing for the Mayfly State Com Number 7. This is the first information that we've seen as far as pressure data is concerned, on this cross-section here, pressure data on the DSTs. We have no flowing pressures, other than what's been presented for the month of May and first couple -- first week of June here.

We can make estimates of porosity, we can make estimates of height, we can make analogies of B_g PVT analysis from the other Yates -- from the Big Dog South

field. But permeabilities, and to do material balance, we have none of that data.

And to do a material balance on one data point, I don't know how you can do that. Material balance typically takes at least two data points, two pressures. It's a calculation of how much you've produced out of a reservoir and how much that production drew the pressure down in that reservoir.

So if you just had the initial reservoir pressure and no subsequent pressures, I don't know how you would do material balance on that.

Q. Okay. So you've done no drainage areas for the Number 2 well also; is that correct?

A. That's correct.

Q. And you've estimated the ultimate recovery from that well, but you don't have anything to compare that to in terms of original oil in place or drainage areas, things like that?

A. No, we don't. And the literature suggests that, again, calculating drainage areas for horizontal wellbores is not similar to calculating drainage areas for vertical wellbores. A lot of the literature states that you need to utilize both volumetrics and material balance or pressure information.

Q. Okay. So how do you know that the Number 2 well

will adequately drain that proration unit?

A. How do I know that it will? I don't know that it will not. But the burden of proof, I believe, should be on the operator. And without proving that that Number 2 well is not going to drain that northeast quarter of Section 14, I don't believe they have any rights to add additional wellbores to it.

If they had engineering data in here that said -- and calculations that showed that drainage area was going to be 80 acres -- or they originally stated that it was going to be 80 acres, but now their cumulative production has surpassed their EUR, so I think their drainage area is now greater than 80 acres -- I don't think they could have missed the height of the saturations by that much -- you know, then we certainly would listen to that information and analyze it.

But for me to say that it's not going to or it's going to, I don't have the data to say that. All I'm saying is that without the proof, I don't believe they ought to be allowed another wellbore in the reservoir.

Q. What if it was a standard location?

A. They they're allowed it.

Q. You're just objecting to not the number of wellbores but the fact that it's unorthodox?

A. Right.

Q. Now, if you had the authority to determine how that penalty should be imposed on the well, do you have any recommendations on how we might do that?

A. I think there ought to be some deliverability tests taken of the Number 7 well. I mean, I think that those ought to be presented to the Commission with appropriate engineering data showing, in effect, the deliverability of the Number 7 well.

And then if there is a production penalty that's imposed, other than -- or if the wellbore is allowed to be completed in the Strawn and a production penalty is imposed, then that production penalty should be imposed based upon the deliverability of that well, and that well should be tanked or metered separately from the Number 2 well. And I do believe there is separate tankage at the Mayfly State Com Number 7 well.

And I also think that if there is a production penalty imposed, rather than not allowing them to complete the wellbore, Permian Resources ought to be given a sufficient amount of time to drill and complete -- drill, evaluate and complete the Strawn reservoir at their proposed standard location.

EXAMINER CATANACH: Anything further of this witness?

MR. HALL: If I might briefly clarify a point.

FURTHER EXAMINATION

BY MR. HALL:

Q. Mr. Stewart, if you're saying, were a penalty to be imposed on data that might subsequently be brought forward to the Division, you're also asking for a delay in production of the Number 7 well until Permian's well is proved up?

A. Right, until Permian's well is drilled, evaluated and completed.

Q. What would be an appropriate amount of time to --

A. 120, 180 days.

Q. 180 days? Do you have enough information -- Does the Division have enough information before it today to establish an appropriate penalty?

A. In my opinion, no.

Q. Earlier you addressed certain literature that addressed how you calculate drainage radii for horizontal wellbores. Were you speaking of certain SPE articles and abstracts?

A. Yeah, there's four or five separate SPE articles.

MR. HALL: Mr. Examiner, we'd be glad to make those available to you as well.

EXAMINER CATANACH: Sure, why not?

THE WITNESS: It's good reading.

EXAMINER CATANACH: Okay, anything further of

this witness?

MR. FELDEWERT: No.

EXAMINER CATANACH: Okay, anything further, Mr. Hall?

MR. HALL: Mr. Examiner, we would request that you take administrative notice of Order R-11,364. It's the order entered in the Marbob case, which I understand is the first order issued by the Division that incorporates the requirements for exceptions to the Rule 104 well-location requirements and sets forth the criteria that the Division likes to see when such applications are made. We'll be glad to give you copies.

EXAMINER CATANACH: Okay, administrative notice will be taken of Division Order Number R-11,364.

Gentlemen, would you like to make closing statements in this case?

MR. FELDEWERT: Real brief, Mr. Examiner.

I think the testimony here shows that there are -- the Strawn completion out there is risky at best, given the nature of the formation. What Arrington is simply trying to do here is salvage a bad well, and they're doing so pursuant to the pool rules that have been drafted by Permian's predecessor.

This unorthodox location is contemplated by, and it is allowed the pool rules, particularly where you have

recompletion efforts like we do here.

The only issue here is -- Well, it's couched in terms of, Oh, my goodness, we're drilling so many wells, too many wells out there. They recognize the pool rules allow various wells to be drilled in a 160-acre spacing unit.

The real issue here is the encroachment upon their property, which is more than adequately covered by the production penalty that Mr. Arrington has agreed to, and that deals with the only issue here, and that's protection of their correlative rights. And I will note, Mr. Examiner, that the Division order that we put before you, R-11,403, talks about the 50-percent production penalty that has been opposed in this well and talks about semi-annual deliverability tests, et cetera. Arrington does not oppose that.

It's also my understanding that they do have separate tankage out there, or batteries out there. So it's not -- you know, the implementation of the penalty is not going to be a penalty, and it's something that everybody except Permian seems to realize is adequate to protect everybody's interests out there. The parties that are affected, the only one that has a problem with it here today, is Permian.

We would submit that their objection here is

nothing more than an effort to delay an Application that was filed back in April. We've already delayed this hearing a month to accommodate their need to have the witnesses here. Arrington has moved forward with this effort under the pool rules in a timely fashion.

Now they're talking about additional delay before Arrington can even go out there and try to make its allowable in its existing wells. We're going to end up with a situation where they're going to have two wells and Arrington is going to have two wells. That Hilburn Number 3 sounds exactly like the same mechanics of the Mayfly Number 2. Nobody's being put at an unfair advantage here. Permian is adequately protected. We are here under the rules, we're acting pursuant to the rules. There is no basis to Arrington's Application.

EXAMINER CATANACH: Thank you.

Mr. Hall?

MR. HALL: Mr. Examiner, that's all well and fine, but I would point out as the Applicant and the operator it is incumbent upon Arrington to carry the burden of proof, and I think the primary concern for the Division is that it acts to protect correlative rights.

Arrington came forward with a single witness, a geologist, certainly a competent geologist, but they offered no credible engineering testimony that would

establish that granting their Application, any implementation of a rather vague production restriction, would act to protect Permian's correlative rights. I think on that basis alone, failure of the proof in the record.

You don't have enough to act on. The Application has to be denied.

EXAMINER CATANACH: Thank you, Mr. Hall.

Anything further in this case?

MR. FELDEWERT: No.

EXAMINER CATANACH: There being nothing further, Case 12,663 will be taken under advisement. And this hearing is adjourned.

(Thereupon, these proceedings were concluded at 3:00 p.m.)

* * *

I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case No. 12663, heard by me on June 11 2007.

David K. Catanach, Examiner
Oil Conservation Division

CERTIFICATE OF REPORTER

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

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

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

WITNESS MY HAND AND SEAL June 20th, 2001.

STEVEN T. BRENNER
CCR No. 7

My commission expires: October 14, 2002