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. 11,841
APPLICATION OF YATES PETROLEUM CORPORATION FOR POOL CONTRACTION AND EXPANSION, EDDY COUNTY, NEW MEXICO	)	ORIGINAL

REPORTER'S TRANSCRIPT OF PROCEEDINGS

EXAMINER HEARING

BEFORE: DAVID R. CATANACH, Hearing Examiner

September 4th, 1997

Santa Fe, New Mexico

This matter came on for hearing before the New Mexico Oil Conservation Division, DAVID R. CATANACH, Hearing Examiner, on Thursday, September 4th, 1997, at the New Mexico Energy, Minerals and Natural Resources Department, Porter Hall, 2040 South Pacheco, Santa Fe, New Mexico, Steven T. Brenner, Certified Court Reporter No. 7 for the State of New Mexico.

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I N D E X

September 4th, 1997
Examiner Hearing
CASE NO. 11,841

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E X H I B I T S

Applicant's	Identified	Admitted
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* * *

A P P E A R A N C E S

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By: WILLIAM F. CARR

* * *

WHEREUPON, the following proceedings were had at 8:43 a.m.:

EXAMINER CATANACH: All right, let's go on to the second Yates case, Case 11,841.

MR. CARROLL: Application of Yates Petroleum Corporation for pool contraction and expansion, Eddy County, New Mexico.

EXAMINER CATANACH: Call for appearances in this case.

MR. CARR: May it please the Examiner, my name is William F. Carr with the Santa Fe law firm Campbell, Carr, Berge and Sheridan. We represent Yates Petroleum Corporation in this matter, and I have two witnesses.

EXAMINER CATANACH: Call for additional appearances?

Will the witnesses please stand to be sworn in?

(Thereupon, the witnesses were sworn.)

BRENT MAY,

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

DIRECT EXAMINATION

BY MR. CARR:

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

A. Brent May.

Q. Where do you reside?

A. Artesia, New Mexico.

Q. And by whom are you employed?

A. Yates Petroleum.

Q. Mr. May, have you previously testified before this Division?

A. Yes, I have.

Q. At the time of that testimony, were your credentials as an expert witness in petroleum geology accepted and made a matter of record?

A. Yes, they were.

Q. Are you familiar with the Application filed in this case on behalf of Yates Petroleum Corporation?

A. Yes, I am.

Q. Have you made a geological study of the area which is the subject of today's hearing?

A. Yes, I have.

Q. And are you prepared to share the results of that study with Mr. Catanach?

A. Yes, I am.

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

EXAMINER CATANACH: Yes, Mr. May is so qualified.

Q. (By Mr. Carr) Could you briefly summarize what Yates Petroleum Corporation seeks with this Application?

A. It seeks the contraction of the Indian Basin-

Upper Penn Gas Pool to delete Section 6 of Township 22 South, 24 East, in Eddy County, New Mexico. It also seeks to expand the Indian Basin-Upper Penn Associated Pool to include Section 6 of Township 22 South, Range 24 East.

Q. And who operates Section 6?

A. Yates Petroleum does.

Q. Are there other interest owners or partners in this section?

A. Yes, there are. Santa Fe Energy holds an interest in this section.

Q. Could you just summarize the rules that govern the development of the upper Pennsylvanian or Cisco/Canyon formation in the two pools we're talking about today?

A. The Indian Basin-Upper Penn Gas Pool has special pool rules that were adopted by Order R-2516 on July 9th, 1963. They allow for 640-acre spacing for gas and with 1650-foot setbacks.

The Indian Basin-Upper Penn Associated Pool has special pool rules adopted by Order R-9922, dated July 6th, 1993. It allows for 320-acre spacing. It allows for multiple wells on that 320-acre proration unit on every 80 and also has 660-foot setbacks.

Q. Let's go to Exhibit Number 1, the orientation map, and I'd ask you to review this for the Examiner.

A. This map shows Section 6 of 22 South, 24 East, in

the center, with the surrounding sections around it. Section 6 is shown by the blue stipples. It shows the operators of each section in the lower portion of each section. It shows the current development around Section 6 and within Section 6.

The different well spots have basically two different color codes. The green color codes denote the wells that are in the Upper Penn -- Indian Basin-Upper Penn Associated Pool, and the red denote the wells that are in the Indian Basin-Upper Penn Gas Pool.

Might note that in Section 6, which is Yates' Brannigan lease, the Brannigan Number is shown in red. It is currently in the Indian Basin-Upper Penn Gas Pool. The Brannigan Number 2, which is down in the southeast quarter of Section 6, is currently in the Indian Basin-Upper Penn Associated Pool. And then the Brannigan 4 in the southwest quarter of Section 6, Yates feels like, should be put in the associated pool.

Q. If we look at how the pool boundaries are defined in OCD records, Section 6, all of it, is included within the gas pool; is that right?

A. That's the way I understand it, yes.

Q. And then if we go back and we look at the individual records that are kept on the pool by the OCD and the pool code numbers that have been assigned to,

particularly, the Number 2 when it was drilled and completed, the Oil Conservation Division has indicated that those wells are in the associated pool?

A. We feel like -- Yates feels like the Brannigan 2 has been placed in the associated pool, even though there is some confusion in the files at the Artesia office and the Santa Fe office, but we do have documents that show that it has been placed in the associated pool.

Q. And in fact, Mr. May, the records in Santa Fe don't even match the records in Artesia; is that correct?

A. That's what I understand, yes.

Q. You reviewed this matter with Mr. Gum, did you not?

A. Yes, I and Mr. McWhorter talked to Mr. Gum, oh, maybe a month, month and a half ago, to talk to him about placing the Brannigan 4 in the associated pool, and at that time he said he would have to defer to Santa Fe. And later we learned that we needed to come to hearing to settle this.

Q. If we look at the two wells immediately offsetting Section 6, south of you in Section 7, those wells were operated by Santa Fe?

A. That is correct, the old Ranch Canyon lease in Section 7.

Q. And they have been placed in the associated pool?

A. That's correct, both the Number 1 and the Number 2 are currently in the associated pool.

Might note, over by the Old Ranch Canyon "7" Number 2, there is another -- an old gas well spot, which is in red. That was an older well that has since been plugged. It was originally in the Indian Basin Gas Pool, and it's currently plugged at this time. The two --

Q. And that section is defined by the OCD as being in the associated pool?

A. That is correct, both -- all of the producing wells in that section currently are in the associated pool.

Q. Could you generally describe the nature of the Pennsylvanian reservoir in these two pools?

A. The upper Penn reservoir is a dolomite. It's been -- The State term calls it upper Penn. I sometimes call it Canyon, other people call it Cisco, some people call it Cisco/Canyon, but we can call it upper Penn here.

Basically between the associated pool and the Upper Penn Gas Pool, it is the same formation. It's continuous from the associated pool up into the gas pool.

In general, in the gas pool, most of the wells have been completed in the upper part of the dolomite, whereas in the associated pool most of the wells have been completed either in the middle and lower part of the dolomite or all of the dolomite section.

Q. Why don't we go to Exhibit Number 2, the structural cross-section, and I'd ask you to refer to that and then again review how these pools relate to one another.

A. I might point out that -- I believe it's Exhibit 3, has the trace of the cross-section on it.

Exhibit 2 is a structural cross-section, A-A'. It's a north-south cross-section with north on the far left and south on the far right. It essentially shows the upper Penn or what I term sometimes as the Canyon section.

I've got the top of the upper Penn or Canyon limestone marked, along with the top of the Canyon or upper Penn dolomite. I also have a datum, which is a minus 3900 subsea. And I also have the base of the upper Penn dolomite marked. Note that the top and the base of the dolomite has been highlighted in purple.

We also might note that I have correlated a stratigraphic interval. It's the next line below the top of the Canyon dolomite. And what I've tried to do with this is show above that line within the dolomite is, in general, where some of the older wells in the Indian Basin Gas Pool have traditionally been perforated. And then below that line, or all through the whole section of the Canyon dolomite, the associated pool wells have been perforated.

I've also, at the top of each well, designated which pool they're currently in.

Starting on the left-hand side of the cross-section is the Devon Winston Number 1 in Section 31 of Township 21 South, 24 East. It's currently designated as a gas well. Note that it has a full section of Canyon dolomite. That has been perforated in the upper part of the Canyon dolomite, on the upper Penn dolomite. And it is an Indian Basin-Upper Penn Gas Pool well.

At the base of the well log, down the cumulative production, this well through the years has produced in excess of 21 BCF, and that's a typical well in the Indian Basin Gas Pool.

The next well on the cross-section is the Yates Brannigan "ANF" Federal Number 1 in Section 6 of 22 South, 24 East. This well has also been designated as a gas well, and it's currently in the Indian Basin-Upper Penn Gas Pool, so it is one of the wells that we're seeking to remove from the gas pool and put into the associated pool.

This well was originally drilled in the 1960s and perforated in the upper part of the Canyon dolomite only at that time. The perforations open at that time were basically from 7430 down to about 7555, and those were the only perforations open in that well at that time.

That well produced in excess of 28 BCF, again

very similar to the Indian Basin Gas Pool wells.

Back in, I think, 1993, Yates Petroleum re-entered this well after it had been plugged and opened up several more perforations in the middle and lower part of the dolomite, along with leaving the old perforations open. So basically, we opened up a full section of the upper Penn dolomite.

That well to date, through the end of 1996, has cum'd about 1.4 BCF and about 2000 barrels of oil or condensate.

The next well on the cross-section is the Yates Brannigan "ANF" Federal Number 2 in Section 6 of 22 South, 24 East. This well is currently in the associated pool. This well was drilled back around 1993 or 1994, I believe, by Yates. Essentially, most of the Canyon section has been perforated. You note that part of the upper dolomite is -- it's actually lime; it was not dolomitized as compared to the other wells. But essentially the vast majority of the Canyon dolomite has been opened in this well.

This well has been designated as an oil well. It's cum'd about 1.2 BCF and 80,000 barrels of oil through the end of 1996, and it is currently in the Associated Pool.

The next well on the cross-section is the Yates Brannigan ANF Federal Number 4, and I might point out there

is a problem with the location on this, on the cross-section. It says Section 7 of 22 South, 24 East; it should read Section 6. That's an error that I didn't catch.

Again, it's in the southwest quarter of Section 6, 22 South, 24 East.

This well was just recently drilled by Yates, completed in June of this year. It has been designated as a gas well, and this is a well that Yates thinks should be put into the associated pool. It IP'd for 2.3 million cubic feet of gas a day and 2 barrels of oil and gas a day.

Might note, comparing this log to the Brannigan Number 2, which is in the associated pool, basically they look very similar. That same -- Similar sections are open and, with the exception of having a little more dolomite at the top, they're geologically very similar.

The next well on the cross-section is an associated pool well. It's been designated an oil well. It's the Santa Fe Energy Old Ranch Canyon "7" Federal Number 1 in Section 7 of 22 South, 24 East. It's in the northeast quarter of that section. It was drilled by Santa Fe back in around 1994, in that time period.

It's been completed basically in the basal part of the Canyon dolomite, and it's cum'd through the end of 1996 about 1.5 BCF and 25,000 barrels of oil.

The last well on the cross-section, on the far

right, is another associated pool well, again another Santa Fe Energy well, the Old Ranch Canyon "7" Federal Number 2 in the northwest quarter of Section 7, 22 South, Range 24 East. This well has been designated as an oil well, and note that most of the section has been perforated through the Canyon dolomite.

Going down and looking at the production numbers, the cumulative production numbers, through the end of 1996 this well cum'd 1.3 BCF and 4000 barrels of oil. Even though this well was designated as an oil well, it's really a gas well. And it -- Compare this well to the Brannigan 4, and they're very similar in production and in the section, in the dolomite section.

The main thing I want to show with this cross-section is that the wells in Section 6, the Brannigan wells, the 1, 2 and 4, the wells that we want to remove -- well, some of the wells that we want to -- they're in the section that we want to remove from the gas pool and place into the associated pool. Comparing those to the current associated pool wells, they look very similar geologically and very similar in the way they're completed.

And comparing those same wells to the Devon Winston Number 1 on the far left-hand side of the cross-section, one of the gas pool wells, geologically it's a little bit different, and completionswise it's vastly

different.

Q. Let's go to Yates Exhibit Number 3. I'd ask you to identify and review that.

A. This is a structure map on the top of the upper Penn dolomite. Again, the Section 6 is stippled in blue, and it's in the center of the map. Again, the trace of the cross-section is shown on this. The same color code as Exhibit Number 1 is used.

I might also note that there is a thick green line, and that is designating at the time -- before we completed the Brannigan 4, of where the associated pool boundary is at.

This is, again, a structure map. The contour interval is 50 feet. In general, it's showing a closure, a high closure, in the upper part of the map, which would be in Sections 31 and 32 of 21 South, 24 East, and that is in the Indian Basin-Upper Penn Gas Pool, the high, with the structure in general dipping from the northwest to the southeast as you go from the gas pool into the associated pool.

So in general, most of the associated pool wells are structurally lower than the gas pool wells.

Q. Mr. May, when we look at Exhibit Number 3, you've shown the pool boundary. That line reflects how wells have been classified; isn't that right?

A. That's correct.

Q. And the pool boundary, as defined in the pool rules, would put all of Section 6 in the gas pool?

A. That's the way I understand it, even though --

Q. And we're asking that the entire section now be placed in the associated pool?

A. Right, even though the wells -- some of the wells in Section 6 have been designated as associated pool wells.

Q. Let's go to Exhibit Number 4, the isopach. Would you review that?

A. This is an isopach map of the upper Penn dolomite, basically a thickness of the dolomite. Again, the well spots and the outline of the pools are shown, along with Section 6 being highlighted. 50-foot contours are used on this.

In general, it shows a thick in the upper left-hand corner of the map, which would be in Section 6 of 21 South, 23 East, and also in Section 31 of 21 South, 24 East, and also a little bit in Section -- I'm sorry, Section 31 of 21 South, 23 East, and also Section 1 of 22 South, 23 East, and in general shows a thinning -- that should -- Let me back up. Shows a thick in the area of the Upper Penn Gas Pool. It shows a thinning as you move towards -- in general, as you move towards the associated pool, which would be to the south and to the southeast.

There is a localized thick over in Section -- in the west half of Section 5 of 22 South, 24 East, but in general it's thinning to the south and to the southeast.

Q. Mr. May, what conclusions have you reached from your geological study of this area?

A. Based on looking at the wells that are currently producing in Section 6 and comparing them to the wells that currently produce in the associated pool and the wells that produce in the Upper Penn Gas Pool, the wells in Section 6 look more like and act more like the wells in the associated pool.

Q. Were Exhibits 1 through 4 either prepared by you, or can you testify as to their accuracy?

A. Yes.

MR. CARR: At this time, Mr. Catanach, we would move the admission into evidence of Yates Petroleum Corporation Exhibits 1 through 4.

EXAMINER CATANACH: Exhibits 1 through 4 will be admitted as evidence.

MR. CARR: And that concludes my direct examination of Mr. May.

EXAMINATION

BY EXAMINER CATANACH:

Q. Mr. May, the Brannigan Number 1, that was, you said, drilled in the Sixties and produced for a

considerable amount of time?

A. I'm not sure exactly when it was plugged, but I think it was around in the Eighties, but it was -- it produced long enough to make over 28 BCF of gas.

Q. 28 BCF?

A. 28 BCF.

Q. Do you know how much oil it made?

A. I'm showing 194,000 barrels of condensate.

Q. And that well was initially just completed in the upper part of the reservoir?

A. That is correct. It was initially completed in those perforations, basically from about 7430 down to about 7555, and then all other perforations were added later when Yates re-entered the well.

Q. So since your re-entry of the Number 1 well -- back in 1993, did you say?

A. I believe it's somewhere around that period.

Q. Okay. That was about the same time that you drilled the Number 2 well?

A. Pretty close. I think we re-entered the Number 1 first and then soon thereafter drilled the Number 2.

Q. Okay. Those two wells look like they're -- I mean, they're perf'd in the whole dolomite section, right?

A. That's correct.

Q. The cumulative production -- It's similar for the

gas, but it's considerably more -- produced considerably more oil in the Number 2 well.

A. That's correct.

Q. How do you account for that?

A. This reservoir, what I have seen working it, has been highly complex, and I would go so far as to say it's probably compartmentalized, can be compartmentalized, and sometimes you can see different fluids in some of these different compartments.

Also, I'm sure some of those upper perforations, the old perforations, are still contributing quite a bit of gas. We've seen down through this section where zones can be gassy -- or, excuse me, zones can be oily, and then you can go a little bit lower in the section and get a gassy zone.

I've seen that back in the discovery well, we saw that, the Hickory Number 1 down in Section 17 of 22 South, 24 East. It's not on these maps, but I pull it out of -- off the top of my head because I distinctly remember when we completed that well, that well was one of the first ones, the discovery well, and we -- each zone, we went in and actually tested each zone to find out what was in it.

And I distinctly remember going into that well, and starting at the top, there was -- it was an oil zone at the top. We went lower down and encountered some more oil

zones, and then near the base we hit a gassy zone.

And so it's -- there's different fluids in some of these compartments. But also, like I said, the upper, the old Indian Basin section can also still add a lot of gas too. But it's not a clear-cut oil -- excuse me, gas-oil-water, like you see in the textbook models.

Q. That -- I guess I'm a little confused on the pool boundaries.

A. So are we.

Q. You mentioned that all of Section 6 is currently included in the gas pool, and did you say that was in an order somewhere?

A. Currently the plats at the OCD show all of Section 6 in the gas pool.

Q. Okay.

A. But you go to the files on each individual well, and the Brannigan Number 2 is being shown in the associated pool, and then we have applied for the Brannigan Number 4 to be placed in the associated pool.

Mr. McWhorter, too, will have some more exhibits and testimony on -- Some of it's confusing, but yes, it is confusing because there's some discrepancies going on.

Q. Now, you can drill -- In the gas pool, you can drill more than one well on the proration unit; is that correct?

A. In the gas well, yes, but it's prorated.

Q. Right. Doesn't the Number 1 well, in your opinion, act more like a typical gas well?

A. I'd almost call it -- It looks kind of like both, because -- in the opinion, yes, it's making a gas well. But then you look at the Santa Fe Old Ranch Canyon "7" Federal Number 2, which is currently in the Associated Pool, and it looks similar as far as production goes. It's, like I said, cum'd about 1.3 BCF and 4000 barrels of oil. And it was even designated as an oil well.

So those two wells, you look at the production figures and they look very similar.

Q. That Old Ranch Canyon "7" Number 2 was drilled in close proximity to what used to be a gas well?

A. That's correct.

Q. And that was a gas well in the gas pool?

A. That's correct, yes, sir. It's been kind of confusing, yes.

Q. There's not really a -- I mean, you can't really look at this geologically and derive where the boundary of this pool should be?

A. There is not a distinct line you can draw, no.

Q. I mean, as you testified, a lot of it depends on where the operators perforate the wells?

A. Yes, as far as the history of some of the

associated pool wells, where they have been perforated, the wells in Section 6 are more similar to those than they are where the old gas pool wells have been perforated.

Q. Structurally, it looks like the Number 1 well may be more of a -- in a kind of a structurally similar position than some of the gas wells in the gas pool.

A. That is true. Structurally it is similar, as far as the top of the dolomite. But you also can go over into Section 5 in 22 South, 24 East, the Santa Fe -- the Nagooltee Peak "5" Number 2 is also in a similar structural position, and it is an associated pool well.

EXAMINER CATANACH: I think that's all I have right now. I might have something else.

MR. CARR: At this time, Mr. Catanach, we call Pinson McWhorter.

PINSON McWHORTER,

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

DIRECT EXAMINATION

BY MR. CARR:

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

A. Pinson McWhorter.

Q. Where do you reside?

A. Artesia, New Mexico.

Q. By whom are you employed?

A. Yates Petroleum Corporation.

Q. What is your position with Yates?

A. Reservoir engineering supervisor.

Q. Have you previously testified before this Division?

A. Yes, I have.

Q. At the time of that testimony, were your credentials as an expert in reservoir engineering accepted and made a matter of record?

A. Yes, they were.

Q. Are you familiar with the Application filed in this case on behalf of Yates Petroleum Corporation?

A. Yes, I am.

Q. Have you made an engineering study of the area surrounding Section 6, Township 22 South, Range 24 East?

A. Yes, I have.

Q. Are you prepared to share the results of that study with the Examiner?

A. Yes.

MR. CARR: Are Mr. McWhorter's qualifications acceptable?

EXAMINER CATANACH: They are.

Q. (By Mr. Carr) Mr. McWhorter, let's refer back to what has been marked for identification as Yates Petroleum Corporation Exhibit Number 1. Will you review the

production information on that exhibit for the Examiner?

A. Yes, this exhibit shows in the cross-hatch the section in question, Section 6, 22-24.

All the wells that are portrayed on this exhibit that are red in color, along with red cumulative production numbers, are wells that are in the Indian Basin-Upper Penn Gas Pool.

All wells that are in green, with green production numbers, cumulative production numbers, are in the Indian Basin-Upper Penn Associated Pool.

With regard to a statement made a while ago about the confusion on the pool boundaries, as we checked into this the plats that are maintained by the OCD does not show Section 6 as being within the Upper Penn Associated Pool boundary, but it shows it being in the Upper Penn Gas Pool boundary.

However, documents from the OCD, we had the OCD in Santa Fe send us a listing, a computer-generated listing, of wells that are contained, that are of record at the OCD, in the Indian Basin-Upper Penn Associated Pool.

Q. Is that list what's been marked as Yates Exhibit Number 5?

A. That's correct.

Q. And what does that show?

A. That shows that the Brannigan Number 2, which is

down in the southeast quarter of Section 6, is carried as being an active well, an active oil well, in the Upper Penn Associated Pool, has a record by the OCD.

Additionally, it shows that the Brannigan Number 3, which is in the northeast quadrant of Section 6, as being a temporarily abandoned well in the Upper Penn Associated Pool. Another well that's north and close to the Brannigan Number 1.

Our contention is that there are at least two wells within this section that the OCD has formally recognized in their records as being in the Associated Pool, despite the drawings on plats which would indicate that Section 6 is only part of the Indian Basin-Upper Penn Gas Pool.

I would like the Examiner just to note for the record that we're talking about an associated pool, and it is perfectly legitimate -- in fact, by definition -- that there would be oil wells and gas wells in an associated pool. And consequently, this listing indicates that there are several gas well completions and several oil well completions within the Upper Penn Associated Pool.

With regards to some of the questions concerning the nature of the hydrocarbon production, the sort of the ratio of hydrocarbon productions that you had of Mr. May, I would like to note that typically these wells do produce

with a lot of gas production, a lot of free gas production, and very high GORs, which indicates that there is a lot of free gas production, which indicates there is some semblance of free gas, maybe a gas cap -- that's why it was designated as an associated pool -- and the Brannigan 4 may have producing characteristics very similar to the Brannigan 1.

And that's not all that unusual in an associated pool, is what I'm saying, is that we will have gas wells in an associated pool. They're part of the associated gas cap. And they do produce in very similar manners.

I have some backup data that shows -- tabular data that shows that the producing GORs for several of the wells that are in the Indian Basin-Upper Penn Pool have very high producing GORs, GORs that would really, technically classify them as gas wells.

So again, another indication that the producing characteristics of the Brannigan 1 are not really all that unlike the producing characteristics of several of the wells that are in the Upper Penn Associated Pool already.

Another thing that I would like to mention is the fact that -- and just maybe reiterate what Mr. Brent [*sic*] had said, that even extending this pool, contracting the Upper Penn Gas Pool and extending the Upper Penn Associated Pool, is not all that unlikely an event, given the fact

that these wells all, for the most part, produce out of the same dolomite interval.

And they also produce similar reservoir fluids. And by that I mean very fresh waters, which is very unusual, but they each -- The whole dolomite section produces very fresh waters and sour gas and sweet liquids or sweet oil, is what I'm saying.

We find this commonly, whether we're talking Brannigan 1, Brannigan 2, Brannigan 4, Old Ranch Canyon "7" Number 1 or 2. All these have these same similar fluids, which to me indicate that they -- probably in the same pool there, is what I'm --

Q. Mr. McWhorter, when you looked into the confusion that exists concerning how wells in the section are classified, you've even found discrepancy between records in Artesia and the records in Santa Fe, have you not?

A. That's correct. What we found when we -- subsequent to our conversation on July 8th with Mr. Gum in our Artesia office, we -- At that point we were speaking with Mr. Gum about putting this well in the associated pool.

And we indicated at that time, because it was -- the Brannigan 4, that is -- that it was in close proximity to the Brannigan 2, which was in the associated pool, and the Old Ranch Canyon wells in the associated pool.

We used the OCD files -- and I have a copy of those files -- in Artesia, which indicated that the Brannigan 2 was, in fact, placed in the Upper Penn Associated Pool, even though the plats that we were looking at did not have any of Section 6 in the Upper Penn Associated Pool.

Q. You also find this confusion in the prorationing records, do you not?

A. That's correct.

Q. Now, in terms of resolving this confusion, when you've looked at the way the wells in this reservoir perform from an engineering perspective, in your opinion is it appropriate to include all wells in Section 6 in the associated pool?

A. Yes, I do.

Q. And is that how you are recommending to the Examiner that this confusion be corrected and the problem resolved?

A. Yes, that's what I'm recommending.

Q. In your opinion, will the deletion of Section 6 from the Indian Basin-Upper Pennsylvanian Gas Pool and the addition of this acreage to the Indian Basin-Upper Pennsylvanian Associated Pool be in the best interests of conservation, the prevention of waste and the prevention of correlative rights?

A. Yes, I do.

Q. Do you believe that moving this section to the associated pool is consistent with the information you have on how the wells in this section are actually performing?

A. Yes, I do.

Q. Were Exhibits 1 and 5 either prepared by you or compiled under your direction?

A. Yes, they were.

MR. CARR: At this time, Mr. Catanach, we move the admission into evidence of Yates Petroleum Corporation Exhibits 1 and 5.

EXAMINER CATANACH: Exhibits 1 and 5 will be admitted as evidence.

MR. CARR: And that concludes my examination of Mr. McWhorter.

EXAMINATION

BY EXAMINER CATANACH:

Q. Mr. McWhorter, the --

A. Yes, sir.

Q. -- Indian Basin-Upper Penn Gas Pool is prorated --

A. That's correct.

Q. -- is that your understanding?

A. That is correct.

Q. Do you know what the gas allowable is at this

point?

A. I'm going to tell you, I don't know the exact number, but the range is 5 to 6 million a day.

Q. Under the rules for the Indian Basin Associated Pool, do you know what your gas allowable would be for -- Well, you would have -- in the Indian Basin-Upper Penn Associated Pool you would have two different proration units; is that correct?

A. That's correct, sir.

Q. So --

A. We would have an east-side stand-up 320 and a west-side standup 320.

Q. Okay. What's your understanding of the gas allowable in that pool?

A. The way the rules read for the Indian Basin-Upper Penn Associated Pool, that each 320 has a top allowable of 1400 barrels of oil production a day and a limiting GOR of 7000. I believe that calculates out to be somewhere in the neighborhood of about 9.8 million a day per 320. Any combination of wells in that proration unit, in total, in sum, can produce up to 9.8 million a day.

Q. What is the current producing rate of the Number 1 well?

A. Currently, the Number 1 is shut in. But it has the capability, when it was producing, of producing about 2

million a day of gas.

Q. How about the Number 2?

A. The Number 2 currently is producing 269 oil, 2934 MCF a day -- 2.9 million -- and 3746 barrels of water.

Q. How about the Number 4?

A. The Number 4 is producing 20 barrels of oil a day, 4570 MCF a day and 3220 barrels of water.

Q. Are there any plans to reactivate the Number 3 well at this point?

A. I would say that that is a plan. It's not like a plan that we're going to go out and do within the very near time frame, but that would be a plan to investigate the possibility of re-entering the Number 3 well. It's a possibility.

We are studying compression in this area. These wells have a lot higher flowing bottomhole pressure right now than -- These wells have a lot more producing capacity, is what I'm saying, and we believe that in the near future that these wells will be able to perhaps produce even a little bit more gas than what we're able to produce at this time.

Q. So your wells in Section 6 are capable at this point of probably -- production of probably 9.4 million a day?

A. That's correct right now.

Q. So by placing the wells in the associated pool, you will be able to produce all of this gas --

A. That's right.

Q. -- as opposed to being in the gas pool, which will have an allowable?

A. Yes, sir.

Q. Who are you competing with in the offset sections, and how are you -- Aren't you gaining an advantage to the proration units to the north and the west by placing these wells in the associated pool?

A. Well, the Brannigan 1, I think, will be able to produce about -- It's the one, the one well, that is close to our offset producers here, Devon Energy and ourselves. We're to the west; Devon Energy is to the north. That well will probably only be able to produce a little bit more than what it's already currently producing as a well in the prorated gas pool, is what I'm saying. Therefore it will not encroach any more, even if it's placed in the Upper Penn Associated Pool, than what it's currently doing in the Upper Penn Gas Pool.

The Brannigan 4 to the south is significantly east of our own proration unit, which is to the west located in Section 1. Therefore it's more than a legal setback for an Upper Penn Associated Pool, which has the ability to produce up to 9.8 million a day. And it's at a

legal setback from Santa Fe Energy, which is to the south, and therefore it could legally produce up to 9.8 million a day, although it would never get to that rate.

So my contention is, from that statement, statements, that the correlative rights of the offset operators will be protected and there will be no advantage gained to Devon or the other offset operator, Santa Fe Energy.

Q. Yates operates the two offset sections -- well, Section 1 and 12; is that right?

A. That's correct, yes, sir.

Q. And Devon -- Is that the only well in Section 31, is that one Devon Winston Number 1?

A. It's not the only well, sir, but it's the only upper Penn gas well in that section. These wells that I have posted on here are not necessarily an exhaustive posting of all wells within these sections. They're only wells that are completed or have been completed in the Upper Penn Gas Pool and the Upper Penn Associated Pool.

There are Morrow penetrations that are in the northern part of Section 31, I believe, there's a Morrow well up in the northern part of Section 31, that is not reflected upon this plat.

Q. Well, do you know if any of these offset proration units that are in the gas pool, do you know if

they're limited by the gas allowable? I mean, are they capable of producing in excess of the gas allowable?

A. That I don't know. I cannot give you an answer. I don't know if those wells operated by Devon are really restricted.

But I will say this. It may have the capability of producing, but the Winston Gas Com Number 1, which is Devon's well to the north, is currently listed as inactive.

So I can't testify to what the producibility of that well is, but obviously Devon doesn't have a very high opinion of the producibility of the well because it's an inactive well.

Q. Okay. Do you know anything about the Oryx wells in Section 36?

A. Both of the Oryx wells in Section 36 are also being carried as inactive at this time.

Q. Well, do you have knowledge about your proration units in Section 1 and Section 12, as part of --

A. Yes, I do, and those wells -- I wish they could, but they cannot even come close to producing anywhere near the current prorated allowable for the prorated gas pool.

Q. The three wells that you operate in Section 1, you're talking about?

A. The wells that we operate in Section 1, and in Section 12 also.

Q. So both those proration units are not capable of producing the allowable?

A. That's correct. That is correct, sir.

Q. As far as you can tell, if we reclassify these wells you're really not -- you don't think you're gaining an advantage over these offset proration units?

A. No, sir, I do not.

EXAMINER CATANACH: Mr. Carr, who do we give notice to in this case?

MR. CARR: At the end of the case I'm going -- or I can now, move the admission of Exhibit Number 6, which is my affidavit confirming that notice of this hearing and Application has been provided to all the offset operators. Attached on the letter are some return receipts showing that notice was given to Santa Fe, Oryx, Devon, Maralo and Citation.

Q. (By Examiner Catanach) Have you guys received any -- Have you been in contact with any of these offset operators, or have they called or voiced any --

A. No.

Q. -- concern?

A. No, they have not.

Q. Aside from the work that you may do on the Number 3, are you planning to drill any more wells in Section 6?

A. I'm not going to preclude the possibility that we

might drill more wells in Section 6. I want to say that that is a possibility, that we could, or would.

EXAMINER CATANACH: I believe that's all I have of this witness, Mr. Carr.

MR. CARR: Mr. Catanach, I'd move the admission of the notice affidavit, Exhibit Number 6.

EXAMINER CATANACH: Exhibit Number 6 will be admitted as evidence.

MR. CARR: And that concludes our presentation in this case.

EXAMINER CATANACH: All right, there being nothing further in this case, Case 11,841 will be taken under advisement.

(Thereupon, these proceedings were concluded at 9:37 a.m.)

* * *

I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case No. 11841, heard by me on September 4 1997.

David R. Catanach, Examiner
Oil Conservation Division

CERTIFICATE OF REPORTER

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

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

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

WITNESS MY HAND AND SEAL September 5th, 1997.

STEVEN T. BRENNER
CCR No. 7

My commission expires: October 14, 1998