STATE OF NEW MEXICO

ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION

CASES 10,818, 10,819, 10,820, 10821

EXAMINER HEARING

IN THE MATTER OF:

Application of Petroleum Development Company for a short-radius horizontal directional drilling project area and special operating rules therefor, Chaves County, New Mexico

Application of Petroleum Development Company for a short-radius horizontal directional drilling project area and special operating rules therefor, Roosevelt County, New Mexico

10,820, Application of Petroleum Development Company for a high-angle/horizontal directional drilling project area and for special operating rules therefor, Chaves County, New Mexico

Application of Petroleum Development Company for a short-radius horizontal directional drilling project area and special operating rules therefor, Chaves County, New Mexico

TRANSCRIPT OF PROCEEDINGS

BEFORE: DAVID R. CATANACH, EXAMINER

STATE LAND OFFICE BUILDING

SANTA FE, NEW MEXICO

September 9, 1993

A P P E A R A N C E S

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I N D E X

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E X H I B I T S

APPLICANT'S EXHIBITS:

Case Number 10,818

E X H I B I T S (Continued)

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E X H I B I T S (Continued)

APPLICANT'S EXHIBITS (Continued):

Case Number 10,821

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Case Numbers 10,818, 10,819, 10,820 and 10,821

(Consolidated)

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WHEREUPON, the following proceedings were had at 9:50 a.m.:

EXAMINER CATANACH: Okay, we'll call the hearing back to order at this time, and at this time Case 10,818.

MR. STOVALL: Application of Petroleum Development Company for a short-radius horizontal directional drilling project area and special operating rules therefor, Chaves County, New Mexico.

EXAMINER CATANACH: Are there appearances in this case?

MR. KEGEL: W.R. Kegel, attorney, Espanola, New Mexico, for the Applicant.

EXAMINER CATANACH: Additional appearances?

MR. CARR: May it please the Examiner, William F. Carr with the Santa Fe law firm Campbell, Carr, Berge and Sheridan for Yates Petroleum Corporation.

We are not appearing in opposition to the Applications. We will present very brief testimony concerning administrative procedures.

EXAMINER CATANACH: Additional appearances?

All right, Mr. Kegel --

MR. KEGEL: Mr. Examiner, at this time we would like to move to consolidate this case with Case 10,819, 10,820 and 10,821.

We believe the issues are very similar, and the differences can be easily pointed out.

EXAMINER CATANACH: Okay, at this time we'll call Cases 10,819, 10,820 and 10,821.

MR. STOVALL: 10,819 is the Application of Petroleum Development Company for a short-radius horizontal directional drilling project area and special operating rules therefor, Roosevelt County, New Mexico.

10,820, Application of Petroleum Development Company for a high-angle/horizontal directional drilling project area and for special operating rules therefor, Chaves County, New Mexico.

And Case 10,821, Application of Petroleum Development Company for a short-radius horizontal directional drilling project area and special operating rules therefor, Chaves County, New Mexico.

EXAMINER CATANACH: Mr. Carr, your appearances are in all of these cases?

MR. CARR: Yes, Mr. Catanach.

EXAMINER CATANACH: Okay. Mr. Kegel, your witness.

MR. KEGEL: I'll hand some exhibits to you.

EXAMINER CATANACH: Okay.

(Off the record)

MR. KEGEL: Just one more preliminary matter. On all cases except 10,820 we would like to delete the request for including provisions for administrative authorization of any further drain holes.

EXAMINER CATANACH: That's all cases except 10,8- --

MR. KEGEL: -- 10,820, which involves just one 40-acre tract.

EXAMINER CATANACH: Okay.

MR. KEGEL: And on 10,821 we would like to reduce the scope of the project by reducing it to the northeast quarter of Section 7, the south half of the northwest quarter, and the north half of the southwest quarter of Section 8.

EXAMINER CATANACH: North half of the --

MR. KEGEL: -- southwest quarter --

EXAMINER CATANACH: Southwest quarter.

MR. KEGEL: -- of 8.

EXAMINER CATANACH: Section 8, okay.

(Thereupon, the witnesses were sworn.)

J.C. JOHNSON,

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

DIRECT EXAMINATION

BY MR. KEGEL:

Q. State your name, address and occupation, please.

A. My name is J.C. Johnson. I'm president of Petroleum Development Corporation.

Q. And the address?

A. 9720-B Candelaria, NE, Albuquerque, New Mexico.

Q. Have you previously testified before this Commission?

A. Yes, I have

Q. And at that time were your qualifications thoroughly discussed?

A. Yes, they were.

Q. And were you accepted --

A. Yes.

Q. -- by the Commission?

A. Yes, I was.

MR. KEGEL: Offer the witness.

EXAMINER CATANACH: The witness is so qualified.

Q. (By Mr. Kegel) Mr. Johnson, have you had previous experience in this field, with this type of operation that you're asking for here?

A. Yes.

Q. And would you tell the Examiner what your experience has been with that and the results?

A. Starting in about May of this year, we did short-radius arcs out of four wellbores with 5-1/2-inch casing in them.

We went out distances of 650 feet to 1024 foot, which was the last well we did. That's the distance including the arc and the lateral, the length of the arc and the lateral.

The production is still preliminary, we're still seeing how it's doing. However, with the results that we do have, we did have wells that were plugged and abandoned, temporarily abandoned for several years, four or five years, that came in and made top allowable wells.

We had one well that we drilled across an 80-acre tract that came in at 168 barrels of oil per day.

So the success of the program looks pretty good.

We had -- Getting out the distances, we had a little bit of problems with the Baker Hughes INTEQ

steering tools. It's a little rougher here to do it than it is in some areas, to keep this tool going the direction you want it to go. It's a very hard dolomite compared to the dolomites down in the San Andres formation in west Texas.

So the lenience of trying to, you know, keep away from the lease sometimes can be a problem.

In fact, I imagine on these wells where we're drilling toward a lease line, if we get in with 150 to 200 foot from our hard line, which say we'd be 100 foot from the lease line, we're going to be trying to turn that tool back, because sometimes that tool will go 50 or 60 feet in that same direction before you can get it to turn.

And we had two wells that actually, we stopped our lateral length because we did get within 100 foot of the 40-acre boundary lines.

But overall we were pretty well pleased with the overall success. We think we're going to get out a lot farther and learn a lot more on this program that we're going to do this time.

Q. Is it your opinion that this program is going to allow the recovery of substantial additional quantities of oil which otherwise would not be recovered from this field?

A. Yes, I do.

Q. Can you by example, taking one or more wells, relate those to the entire Application?

A. Yes.

Q. Which wells?

A. In the Case Number 10,818, the Strange Number 1 and the Strange Number 3 would cover all the other wells in the -- pretty much cover all the other wells in all four cases.

Q. And what is the difference between what you're asking for and the two examples that you're giving?

A. On the Strange Federal Number 1, we're going to be drilling a well on a 40-acre spacing unit.

However, this time we have also requested to, if we can get out the farther distance, go ahead and cross the 40-acre boundary line on the same lease.

In the Strange Number 3 well, our intent is to, since we have an undrilled location, offsetting the Strange 3 to the west, we're going to cross the 40-acre boundary line into the west offset 40-acre tract and apply for an 80-acre allowable of 160 barrels of oil a day. And even further, go to the south of there, into another 40, to even go into a 240-barrel allowable if we cross into three separate 40-acre tracts.

Q. All right. Let's go to the Strange Federal Number 1, then. Will you explain the exhibits which you have attached to that request?

A. Okay, the Strange Federal Number 1, we have an ownership map showing the locations of the lease and the well. The -- It's shown, there, the Strange lease is underlined in red, and the Number 1 well is circled in red.

Exhibit two shows the offset operators to this particular lease.

The Exhibit 3 is a detail of the horizontal drilling procedure.

Exhibit 4 is a schematic of our plan of operations.

Q. Exhibits 1 and 2 pretty well speak for themselves.

Is there anything additional as to 3 and 4 that you wish to explain?

A. I guess that's up to -- Mr. Examiner, should I go through this detailwise, or what our plans are to do?

EXAMINER CATANACH: You might just touch on the highlights, Mr. Johnson.

THE WITNESS: Okay. To start off, we are going to set a cement retainer above the pay zone that

we're interested in horizontal drilling across and squeeze off those existing old perforations, which -- We'll also have perforations in all our cases even deeper than the zone we wanted. And a lot of times we feel like that's where some water came from the wells.

So we're trying to eliminate our horizontal hole breaking back into that old wellbore at that point.

We then have perforations above, open up into the P1 and zones above the P1 even, that we'll have to set a packer and squeeze off those perfs.

We would then drill out the perforations down to the cement retainer. We'll mill out a section of casing of approximately 50 feet, set a cement plug, and then drill out to 4026 feet.

The reason for this is, why we're doing the 50-foot radius is, the survey tools are 16 foot above the pit, and you have to be below the casing stub about 14 foot or you get interference on your azimuth readings. And we're real concerned about being sure that we get kicked off in the right direction.

After we drill out to our cement plug, we're going to run a directional survey to determine where the bottom of the hole is located.

We'll then go in with the horizontal tools,

kick off of the cement plug at 4026 feet, drill a 60-plus-foot radii curve to an inclination of approximately 85 or 90 degrees. We'll be conducting surveys every five feet of the arc.

We will then pull out of the hole and run in with more of a straight-shooter type horizontal tools and drill a lateral approximately 800, plus or minus, feet.

And we're going to try to keep the thing at a true vertical depth of 4080 to 4124. We'll conduct surveys every 30 foot in the lateral. We'll maintain a distance of 100 feet by the horizontal hole from the lease line.

The other thing we've applied for on this Application is that -- By looking at the map we're going to be taking this well, for example, in a northerly direction.

The reason for this, of the four wells we previously did, we had two wells we went northwesterly on, and we had one well we went northeasterly, and we had one well we went southwesterly on. The wells that we went northeasterly and southwesterly were the best wells.

Now, we don't have any idea of the orientation of the fractures out there. I've had

several geologists that I've talked to; they have ideas.

But it turned out we got our best wells drilling with the fractures rather than across them, what they think they've got out there.

The other thing, though, the two wells that we got the best results from also were the farthest links.

So we're going to tend in this program to go northeasterly/southwesterly, except in one case I'll be going in a northwesterly direction, hopefully to maybe get out 1000 foot or better on that particular well, to see if the direction really makes that much difference in our programs out there.

By going northeasterly, I'll be swinging -- I'll have an offset operator there to me, to the west, Murphy Operating. I'll be aiming the tool better than 200 foot from the lease line, because I don't want to run into my 100-foot boundary line because that stops me. I want to cross into the 40-acre tract just north of me, which is on the same lease.

And there is a situation that we'd like to have the Commission also consider.

The Number 4 Strange well, just north, was horizontally drilled about 650 feet. We had no

recovery on that well. We acidized, it broke back into the old wellbore. This well will only make about 12 barrels a day.

So we want -- In the event we do cross that 40-acre boundary line to the north of that lateral, we would like to have an allowable set for those two horizontal wells that we could make 160 barrels a day out of both wells, like 150 out of one and 10 out of the other, for example.

I requested in my Application, of course, to drill the direction of our choice. We were very successful in our kickouts by kicking out with the -- by milling out the 50-foot section of casing and going 30 foot below on a kickoff point below the upper stub to get kicked off. So we're feeling pretty good now about getting kicked off in the right direction.

The thing that happens to someone -- I think everybody will want to apply for that type of situation to go a direction of their choice. If something goes wrong and it kicks out the other way, you've got to go back and plug that baby off and cement it and drill it out again, and it costs you about $30,000. And the other direction may not make that much difference to you, to want to do that.

Q. (By Mr. Kegel) Now, your example of the

Strange Federal Number 1 applies in what manner to the other cases?

A. Well, the Strange Federal Number 2 is a well just west of the Number 1.

Here again, we're going to be taking this well to a northeasterly direction and hopefully get out far enough distance to cross either into the Number 1 40-acre tract offsetting it, or crossing into the Number 3, to the north. That's a 40-acre tract offsetting the Number 2 well in the north.

So here again, we're not going to be going toward lease lines at all; we're going to be going toward inner boundary lines, which we have again requested we can drill to them and cross them.

In our hearing, our prior hearing, we applied for 100 foot from boundary lines.

I had one situation on the Strange Number 4 well that we drilled. We were going in a northwesterly direction. We got too close, we crossed -- We didn't cross it, we got up to within about 15 foot of the west boundary line, which actually crosses a 40-acre boundary on our own lease. But since I didn't apply for that, we had to shut her down.

So this time, I think as long as we're applying on the basis that as long as we're crossing

40-acre boundaries on the same lease, and that happens to us, we can keep going and get out this additional distance, because I am convinced that the distance is a very important part of what type of wells and drainage we're going to get out there.

The other two -- the Strange -- This goes down to the Wattam Number 1 well. It's over in Section 6 which you can even see on this map too, in the unit B of 831, that well will be going to the -- We're going to try that well to the northeasterly or southwesterly direction. Because it's spaced 660-660, we're offset all the way around that well by offset operators.

We --

EXAMINATION

BY MR. STOVALL:

Q. Excuse me, let me --

A. Okay.

Q. -- get oriented here.

Are you now on Case 10,821; is that correct?

A. Yes.

Q. The Wattam Number 6?

A. No, the Wattam Number 1. I'm -- That's 10,820. I was just saying what the similarity was.

Q. Well, I think one of the things we're going to have to look at here specifically on these , Mr.

Johnson, is where -- Since you are talking about crossing quarter quarter section lines, let's make sure we're kind of going through that. That's probably the most important distinction --

A. Yes.

Q. -- is recognizing where we're --

A. Okay.

Q. -- going into quarter sections.

A. Okay.

Q. This is 10,820 and it looks to me like it's Exhibit Number 1 in that case?

A. Yes.

Q. Is that correct?

A. That well is offset all the way around. It's checkerboarded in there, and we're offset by offset operators.

What I found on these wells -- for example, if you look at the Unit H -- Well, let's go to D to the west there, two locations.

The Wattam 7. We horizontally drilled that hole to the northeast direction. That well was a crooked hole, the bottom of the hole ended up being over 100 foot -- 150 foot south and like 40 or 50 foot east of the surface.

So we were actually able to take that well

out by going to the north, sort of north to northeasterly direction, about 900 feet.

Here the Wattam 1 -- It will depend on where the bottom of that hole is. If the bottom of that hole goes to the north we're more likely going to go in a southerly direction. If it goes to the south, we're more likely going to go to a northerly direction, because that allows us from the -- if it's off 100 foot, it just allows us to get out another hundred foot going the opposite direction.

Q. You're talking about the bottomhole of the vertical wellbore?

A. That is correct. In both cases, on the Wattam 4 and 7, the bottom of the hole was over 130 foot from where the surface of the hole was.

The Case Number -- The other wells that we're drilling on 40-acre spacing units are Case Number 10,819, which are the Mountain Federal wells.

Here we have wells that are currently spaced in the range of 990 feet from the lease line.

The Number 5 well, our plans are to go in a northwesterly direction, because that allows us to get out 1200 foot on a diagonal direction.

The Number 4 well, we will be going in a northeasterly direction. And the main reason I'm doing

that, I'm trying to find out a little bit about fracture orientation, which is still experimenting with a fracture-orientation situation.

I do want to be able to, on the Number 4 Mountain States, which I will be trying to do --

Q. Now, let's --

A. Okay.

Q. Let me ask you to do something here --

A. Okay.

Q. -- to keep -- We've got a little bit of a problem, because you don't have any plan views that show your orientation and --

A. No.

Q. -- spacing.

Each of your exhibits shows a cross-sectional view of your -- kind of a schematic directional drill.

A. Yeah.

Q. And I think one of the things that we may need to get is a plan view kind of showing the orientation in the target area for each of these --

A. Well, but I don't want to be held to that, is the problem.

Q. Well --

A. I mean, here again, what I'm asking for is that on any 40-acre tract, we're drilling a horizontal

well, that we have the right to cross a 40-acre boundary line on the same lease.

Q. Let me --

A. Okay.

Q. -- take you back and let's do a little organizational stuff.

A. Okay.

Q. As far as the drilling process itself, now I notice -- you know, we styled these cases, a couple of them talk about high-angle/horizontal drilling, and a couple of them talk about short-radius horizontal directional drilling.

Do you -- What's the difference as far as you know? I mean, is there any difference or are they all the same process, drilling process?

A. It's all the same process.

Q. So they all could have been called short-radius drilling --

A. Should have been called short-radius.

Q. -- and that would have been accurate?

A. I think in the last hearing they called them high-angle -- I mean on the last application that we had.

But they're both the same. We're going to be cutting -- Well, we're going to be aiming at cutting

60- to 80-foot radii, is what we're going to be looking at cutting.

Q. Now, my understanding is, and correct me if I'm wrong, is that "short-radius" refers to the manner in which you build curve?

A. That is correct.

Q. "High-angle" refers to the, if you will, the path, the horizontal/vertical path of the well itself, of the horizontal section of the well; is that correct?

A. Yes, yes.

Q. And high-angle is something above 45 degrees from vertical, or what is it -- where's -- where would you --

A. Where would you break it off at? I'd say 45 would be a pretty high angle, in my opinion. I don't think anybody's got anything I know of that says exactly.

Of course, what we're talking about, we're talking about 80 to 90 degrees.

Q. So there's no question that these are high-angle. They're also short- -- They're both short-radius, high-angle?

A. That is correct.

Q. Now, your intent, then, in each of these cases is to go into existing wellbores, mill out the

50-foot section, get your orientation and go?

A. That is correct.

Q. Now, I think what we need to do so that we understand what you're doing -- and again I think what I'm going to maybe recommend to the Examiner -- Well, let me back up and ask you.

On some of these specific wells where you own an offsetting 40-acre -- These are all on 40-acre spacing; is that right?

A. That is cor- --

Q. The San Andres oil?

A. Yes.

Q. On some of these wells, you own the offsetting 40-acre tract?

A. And it's on the same lease, yes.

Q. And you would like to cross the boundary and, in effect, form an 80-acre proration unit; is that correct?

A. That is correct.

Q. Let's go through and identify the wells by reference to the case number and exhibit, and let's focus your attention right now on which wells you would propose that you be given the authority to form a nonstandard 80-acre and to cross the quarter quarter section line with the wells.

A. Okay.

Q. And we just need to do it one at a time, because --

A. You bet.

Q. -- while we may not tie you to exact windows, we are going to say, You can't go across that line unless you've told us which one and we approve it.

A. Okay.

Q. Why don't you start with 10,818, and --

A. Okay.

Q. -- let's go through those wells and --

A. Okay. 10,818, the Strange Federal Number 1 well.

Q. That's Exhibit A?

A. Yes.

I have three -- That well is located, for example in the southeast southeast quarter. I'm offset there with the 40-acre to the north on the same lease, the 40 acres to the west, and the diagonal 40 acres to the northwest.

Q. Okay.

A. I would like to have the authority out of that well to be able to cross any one of those 40-acre tracts, depending on the direction this hole goes.

Q. Well, let's --

A. Okay.

Q. -- let's take a look at this case in particular, because that's kind of -- Now, it appears to me in looking at it, you've got the Number 1 in the southeast northeast --

A. That is correct.

Q. -- Number 2 in the southwest northeast, and the Number 3 in the northwest northeast?

A. That is correct.

Q. Each of these is a proposed high-angle well?

A. That is correct.

Q. Are you looking to be able to take each of these across a quarter-quarter section line?

A. Yes. I'm not saying I'm going to do it on one of those, I'm going to do that.

On the Number 3 well, I'm setting up to definitely go in a westerly southwesterly direction and apply to go into the west offset 40-acre tract, okay?

Q. That would take you into the northeast northwest?

A. Yes.

Also, if I can get out to distance, I'm going to try to go to the southwest there.

I could cross a corner of the northeast northwest and continue across into the 40-acre tract --

well, the Strange Number 5 well, which would be the southeast of the northwest.

Q. Well, I guess my problem here, Mr. Johnson, looking at this example in particular, is, you're sitting there playing with three wells on all these, and we don't know where they're going to go, and yet you're doing three wells in the same proration unit, is what it amounts to.

A. That is correct. But our idea here is to cover a situation where we're going to drain this whole area out here, is what we're trying to do.

The Number 5 well has, for example, has gone out 1024 foot -- that's arc and lateral -- in a southwesterly direction.

Q. Okay. The Strange Number 5 has already been drilled and already gone?

A. That is right. It's gone to a southwesterly direction.

Q. So it's gone into the southwest northwest?

A. Yes. Southwest southwest, yeah.

Q. I'm sorry, southwest southwest.

A. Yes, it's crossed --

Q. So it's an 80-acre --

A. It is an 80-acre spacing unit at this time.

Q. Was that approved --

A. Yes.

Q. -- as an 80-acre spacing unit?

A. Yes, it was.

Q. Okay.

A. Now, what I'm saying, like the Number 3 well, I'll cross into the west boundary line. I'm going in the same -- parallel to that lateral, in essence.

If I can get out -- I mean, you know, the thing is going to be where my depth's going to be limited.

But if I can cross a little bit into the southwest southwest there, I'd like to get out an extra 100 length and not be stopped because of it, because I think the length on these are going to give us the drainage pattern.

Q. Okay, you're --

A. Yeah.

Q. Let's go back and look at this. All right, let's assume -- Okay, if I draw a line more or less west southwest from the Number 5, I can get the existing wellbore; is that correct?

A. That is correct.

Q. And you're proposing to parallel that with the Number 3?

A. Yes.

Q. Now, which way do you want to go with the Number 2?

A. Okay, the Number 2 well, I plan on going into a northeasterly direction.

Q. Northeasterly?

A. Yes.

Q. Okay. And which way to you plan to go with the Number 1?

A. In a northeasterly direction.

Q. Well, you can't go much east on the Number 1. You've got to --

A. Well, it will be swinging more north than it will east, you bet.

In fact, that well I'll have a -- In other words, that well, when I draw my projection line, I'm likely to have it like 660 from the north of the 40-acre tract to 360 to the east up there where I cross into the northeast of the southeast quarter, and I'll still be -- I'll be 200-plus feet away from that lease line.

And the -- what -- I'm trying to do two things here.

Number one, I'm trying my best to get my direction going where I want it to go. And right now it may turn out northeast-southwest is the trend.

That's what I see on my best two wells.

But also my best two wells are the longest lateral.

But what happens here -- Let's take the Number 1, for example.

I go up here and I do that, and I'm out 800 foot, and I'm then on the boundary line of the 40-acre tract that we own, on the same lease.

If I can get out farther, I don't want to be stopped at 800. I want to cross on in and take that thing out 1000 feet.

MR. STOVALL: Okay.

EXAMINATION

BY EXAMINER CATANACH:

Q. Mr. Johnson --

A. Yes.

Q. -- do you know what the direction -- Do you pretty much know what the direction of these things is going to be at this point in time?

A. Yes. What happens to -- You know, the thing that happens to us here is, I don't think -- If I say I'm going northeasterly on Number 1 and this thing ends up going northerly or a little bit northwesterly, I wouldn't want to be stopped from going that way.

The Number 3 well, which I've definitely got

an undrilled location offsetting me that I'm trying to offset to the west, if I don't get going the right direction there I'll have to plug back and redo it. I definitely know that well. I'm going to go in a west to southwesterly direction.

The same way with the Number 2. I'm going to try to get that well going in a northeasterly direction. But if it happened to be going due north or a little bit northwesterly, I'd want to be allowed to go ahead with it rather than have to plug back and redo it.

The system using this isn't a guaranteed system.

FURTHER EXAMINATION

BY MR. STOVALL:

Q. Let me ask you a question, just from a --

A. Yeah.

Q. -- from a regulator's standpoint. I think I understand from an operator's standpoint what you're trying to do.

But let's assume you -- What's the status of the Number 4? Let's start with that.

A. That well is making about 10 to 12 barrels a day, and about 11 or 12 barrels of water.

Q. So in effect, what you're going to is, if you

go -- Let's say you take the Number 1 north and you cross into the northeast northeast.

A. Yes.

Q. You have got an 80-acre proration unit and a 40-acre proration unit which encompass -- One of the 40s is common to both?

A. No, I'm asking only for a 160-barrel allowable out of both wells.

Q. Yeah, but what's the -- So are you just going to make that an 80-acre proration unit with two wells on it? Is that what your --

A. Yes.

Q. -- proposal is?

A. Uh-huh.

Q. Now, what happens if you take the Number 2 northeast and you end up into the northeast of -- or end up anywhere in the east half of the northeast?

A. East half of the northeast? Anywhere in there?

EXAMINER CATANACH: East half of the southeast.

Q. (By Mr. Stovall) Southeast, I'm sorry. I keep thinking we're in the north.

A. I would like to see -- I mean, you know, we can say, Good, we only want 80.

What I would personally like to see in these type of situation, you've got three horizontal laterals now that have crossed into each other. I'd like to see the allowable be set where we could make 80 barrels -- 240 barrels out of those three wells. We could make 150 out of one, 70 out of the other and 50 out of the other, or whatever.

I'm not hard on that, I'm just throwing that out as a positive selection.

But if, for example, we already say that if I cross over like the Number 1 into the Number 4, we can take an 80-barrel-a-day well and make an 80-acre tract get a 160-barrel-a-day allowable.

Well, the Number 4 is only making 10 barrels, and I can make 160 out of the Number 1. I'd shut Number 4 in and make the 160 out of Number 1.

All I would say is, let it -- You know, there again, that's sort of up to the Commission. That's just a suggestion I'm saying we should have, is, if we've got two laterals in there, we cross in with another well producing on it, and that well is still economical at 10 barrels, go ahead and pull the 10 out of it, but also get the 150 out of the well that drilled the lateral into it.

(Off the record)

MR. STOVALL: Mr. Examiner, I suggest we take a moment here off the record and meet with Counsel and kind of -- I'm not sure the Applications are really getting what you want.

You've got a practical oilfield problem, and you've got a regulatory problem here, and you've got to figure out how to bring them together, and I'd like to -- I think we may have a solution here, but let's talk about it off the record before we go any further with this.

EXAMINER CATANACH: Okay, let's do that.

(Thereupon, a recess was taken at 10:30 a.m.)

(The following proceedings had at 10:55 a.m.)

EXAMINER CATANACH: Okay, we'll go back on the record at this time.

MR. STOVALL: Mr. Johnson, after conferring here, I think we may have figured out a solution for you, and it probably is what you were really trying to ask for anyway but weren't quite sure how to do it.

THE WITNESS: Okay.

MR. STOVALL: Let me ask you a couple of preliminary questions here.

Q. (By Mr. Stovall) South Half of 25, you say that is a common lease?

A. That is a common lease, yes.

Q. And the ownership is absolutely uniform throughout?

A. That is correct.

Q. And so if you were to adjust proration units or participation or anything, you really wouldn't have to do any accounting or anything like that; you'd just plug in all the wells and say, Okay, everybody's sharing in this expense, regardless of which method we use to do it; is that right?

A. That is correct.

Q. What would your response be to setting this up as a south-half project area and for the moment not set up proration units within that project area? Include it as basically a unitized-type operation on a lease basis?

A. That would be fine with me.

Q. And then in that case, then authorize you to -- well, depending on what we come up, you know, authorize the drilling of these wells as dictated by the geology and the technology of drilling?

A. Right. In other words, what we would be able to do, we'd be able to -- On any of these leases, we would be able to take the laterals across the 40-acre boundary lines on the same lease; is that correct? So --

Q. Well, you wouldn't worry about the 40 acres. Now, the allowable --

A. Oh,

Q. -- question we haven't quite got to yet.

A. Okay, yeah, well --

Q. I'm just talking about from a drilling standpoint --

A. Yes.

Q. -- from the standpoint of drilling the wells and getting permission to -- As I understand what you're going to do is, you're going to get down there and find out what the geology is at the specific well site and pick a direction and go and see how it works.

A. Yes.

Q. And if I understand correctly, you don't just go a nice straight line with these type of wells. You kind of have to let the bit wander a bit to be successful; is that correct?

A. Yes, it's a pretty good wandering snake action.

I feel like -- you know, Baker Hughes INTEQ doesn't necessarily agree with me. The Number 4 well, our Wattam 4 well that we only got out a distance of 650, they had too stiff a tools in there. We got out about 650 feet, and we couldn't get -- any way get way

to the bit.

They thought the arc broke.

I said, You kept the doggone thing too straight.

The other three wells, we got out much farther distances, but we had the big weave in it.

So there has to be a weave to get that distance, in my opinion, yes.

Q. Mr. Johnson, I'm going to hand you an exhibit from another case we heard this morning, and I don't remember which one it was. I think it was the Collins and Ware cases.

This is the book prepared by Baker Hughes INTEQ, and I'm looking behind tab G.

Would you just take a look at the profiles of those wells for a moment? Now, that's a different formation. We're talking about a different formation, much deeper there, but --

A. Uh-huh.

Q. -- there's several pages there if you'd kind of look at that.

I believe those show some horizontal deviations of the well. Those exhibits show kind of where it was intended to go and where it actually went?

A. Yes.

Q. Is that --

A. Mine are similar to that, yes.

Q. Okay. That's the sort of thing that you would expect to experience and have experienced in the past?

A. Yes.

Q. And it's the same drilling company, right? Same --

A. It is the same.

Q. -- engineering company that's doing it, so --

A. Yes, it is the same company.

And yes, we had exactly -- The one thing here, if you notice on these, I was just looking at mainly the distances. They didn't come close to going out the distances that I went out. These wells went out about half the distance that I went out on my wells.

Q. Okay. Yeah, that doesn't matter, but --

A. Yeah.

Q. -- it's more the concept that we're looking at, rather than --

A. That is concept. You're going to have this -- the snaking action. And I can tell you, like here, more than likely -- I have one just like this on mine.

Q. Now, which page are you --

A. Okay.

Q. Is there an identification on that? Look at the top of it. Maybe there's something you can tell at the top, so we know which "here" you're talking about.

A. I don't even see a well on the thing.

Q. Does it have a county or something at the top? I've forgotten what that exhibit looks like.

A. It has Chaves County, New Mexico.

Q. Okay, I think that's a reference. It would be about -- what? The third page in from the front of that tab?

A. This book is -- Baker Hughes INTEQ book?

Q. Yeah.

A. Here is the situation; I'd just like to show you on Chaves County, New Mexico. Here we are, right here. They're trying to turn this line back here to get back, okay?

Q. And the "right here" you're pointing to is really kind of where the words are that say "actual well path"?

A. Yeah, "actual well path", and what they did, they just kept going to the south.

Q. Uh-huh.

A. And I know what they did, because that's my well. I was yelling and screaming like an idiot at

them for -- keep going.

See here where it went down? And even there, they got there and we said, Get this thing turned around, you're going to stop us. And it went -- it kept going --

So that's a good example of what the control situation is. Because that is my well, by the way.

Q. Well, maybe that was a good example to use, then. More specific than we...

Okay, so if we set you up with a project area here, are there any restrictions that you think we ought to put on as far as, for example, proximity of the wells?

Now, I think you're talking about 100 feet from the lease line?

A. Yes, yeah.

Q. You've operated under that before?

A. I feel like that we should stay a hundred foot from lease lines, yes.

Any others, I don't know of any other --

Q. What about the proximity to each other? Is there any distances that the wells --

A. I will be -- in most cases I will be trying to -- I'm going to try to parallel them.

But you could have a situation come up that

the doggone thing just got going the wrong way on you; you want to pull it on down.

I'd rather at this time, until we get some more information on the drainage situation, is not to have a set limit of how far we could go from drainage holes.

I don't have any plans myself of -- I imagine I'm going to try to stay 400 to 600 foot from other drainage holes myself on my wells.

But I don't think we -- I think that's -- From what we learn with this particular program, maybe we can come up with some good ideas of how we want to do it. But I don't think we want to be limited at this time because of the control situation.

Q. You don't think there are any engineering reasons, production reasons, that if two wells got relatively close to each other they would cause -- they would interfere or cause any problems?

A. I think if they got -- they were on -- You know, if they're on the same lease, they'd both be draining out of the same wellbore, and as an operator I'm going to do everything possible to keep that from happening, normally, myself. I want to have them far enough apart to get better drainage.

The other thing that can happen here, though,

is, we're going to be able to eventually, after we find out the economical situation here, to go in these wellbores and cut out another direction out of the existing wellbores too, after we get some history and we see what these drain holes do.

We don't think we're getting a full drainage that's -- the oil in place that we can recover, we'll be applying to go back in those wellbores and drill out the -- and pick out these points between the wells that we want to hit, and to get further drainage if we see the economics are there.

Q. So you're thinking you might even come back and ask for authority to have a second horizontal leg off the same wellbore?

A. That is correct.

MR. STOVALL: Just for reference in the record, the well which you identified from yours is the second from the last behind tab G, so --

THE WITNESS: Okay.

MR. STOVALL: -- if we ever go to look at it again, we'll know which one it is.

Mr. Examiner, I recommend that we just either administratively or by incorporation recognize this -- I don't think the exhibit was marked.

MR. CARR: No, it wasn't marked Mr. Stovall.

It is Collins and Ware Exhibit 9 --

MR. STOVALL: Okay.

MR. CARR: -- in Case 10,814, 10,815 and 10,816.

MR. STOVALL: Do you have any objection to including reference to that in this case? I think it's very helpful, Mr. Carr, particularly since it's Mr. Johnson's well in there.

Q. (By Mr. Stovall) How about allowable? Basically, offer you a suggestion and see what you think about it.

As you drill, the allowable will be based upon a multiple of -- It's 80 acres per 40 out there, is it, right now?

A. That is correct.

Q. For each 40 acres that is contacted by a well, you will get one 80-barrel allowable.

A. Yes.

Q. And if you have two or three wells contacting that 40, you still only get 80 barrels for that 40?

A. Yes.

Q. So in effect what this would mean is that as you drill, your allowable for the project area will go up as you contact new 40s. But if you put them all in the same 40, it ain't going to do you any good as far

as allowable; does that make sense?

A. Yes, definitely. Why it does to me, my reasoning would be, I need the allowable 80 acres, say, like on the Strange Number 2 well.

But if I get up here and everything is still going good and I'm well within -- I mean, I've set my drilling program to drill this well on a 40-acre tract, okay? The Strange Number 2 well.

Q. Correct.

A. However, if the operation is going good and all, I'm going in a northeasterly direction that's parallel with the other wells I've got out there, generally, and I'd like to take that thing out another 200 foot, crossing into the north 40, I'd like to be able to do that because I feel like we'll get a better drainage from that wellbore and for the acreage as a whole.

But I wouldn't ask for -- No, I'm not asking for additional allowable. I think what you said was exactly right.

Q. In other words, if you took the Number 2 up and you crossed into the -- well, let's take the -- Are the 1, 2 and 3 all shut in at this time?

A. The Number 3 is P-and-A'd, and the 1 and 2 are TA'd, they're temporarily abandoned, yes.

Q. Okay. And Number 4 is producing?

A. It is producing. The Number 5 is producing.

Q. Okay. If you take a -- Let's say you take the Number 3, let's use that as the example. Let's say you cut across the south -- I guess it's the southeast southeast -- or southeast southwest?

A. We'll be going southwest.

Q. Okay, let's assume that --

A. Mainly westerly, southwesterly, yeah.

Q. Okay. Now, let's assume you take that -- When you drill that well and you get a horizontal section in the northwest-southeast, you get an 80-barrel allowable for that well --

A. Yeah, I'd say northeast southwest.

Q. -- or that adds 80 barrels to the project area --

A. Yes.

Q. -- that's new?

A. Right, that is correct.

Q. If you cross over into the northeast-southwest, you'll add an additional 80 barrels, because that will be new acreage that's touched?

A. That is correct.

Q. But if you get into the south half of the southwest, that acreage has already been contacted by

the Number 5, so you don't add any additional allowable, but you do get 80 for each of the 40s contacted by the Number 5?

A. That is correct.

Q. Okay. I think we're talking the same language.

A. Yes.

FURTHER EXAMINATION

BY EXAMINER CATANACH:

Q. Okay, let me address something that I've got a little bit of concern with.

Mr. Johnson, you're now talking about a project area that's pretty large, as opposed to a single 40-acre tract. You're asking for authority to go within 100 feet of the boundary of that project area.

A. Yes.

Q. You've got a lot more flexibility in the south half of this section.

Why can't you stay within the normal 330 setback requirements in an instance like this?

A. If I can, let me explain to you.

Say the Strange Number 1 well, for example. We're going to be going -- From what I've seen so far, I'm going to be aiming this in a northerly direction,

not due north. I can go due north with no problem.

But I feel like from the data I've received right now, it looks like that maybe northeast-southwest is the direction to contact the fractures.

So what I will do when I drill this well, I will more likely take the well out by 360 to the east, as an aimed area, and 660 to the north, which will really be sort of north northeast.

Now, because of the problem we have there -- So I'm going to be trying to aim the thing where I'm definitely going to stay 200 foot or so from the lease line. But I still need to go to the northeast to hit the drainage pattern I think we need in this area.

Well, I get out here and that baby starts curving on me, let's have some leeway for all of us. If it starts -- we can't get it turned, we've got -- we aim 200 for the lease line and we're about to get the thing to turn, so we go within 190 and we get it turned back.

We're not going to just keep going until we go to -- I'm going to try to stay from -- 100 foot from the lease line.

But I can get that thing turned and go on back the other direction, north, to hit my projected line I could get out --

On this Number 4 well, for example, we went northwesterly. I got out 600 feet, and I hit the 100-foot 40-acre boundary line, and it was going to the same lease there.

What I'm saying, if I want to go sort of a northeasterly direction to the offset operator -- okay? I could hit that thing at 600 foot and be shut out on a lateral. If I can get it turned back before I get to 100 foot going the other way on my projected pattern, I could get it out 800 to 1000 foot.

The offset operator is going to want to have the same advantage. We don't want to get our lateral stopped, because we're having trouble turning that thing and getting it back.

Now, lateral length and the direction, I think, are going to be two things we'll find out as we go along. That's why one of these wells I'm going to take in a northwesterly direction. I'm doing it -- One reason, it's spaced right to go northwesterly. You get a longer length. I can take that well out 1200 feet. And maybe it'll prove something -- Maybe I made a big mistake, I missed the fractures like I did in the Strange Number 4 well, and I get very -- I don't make a very good well.

Q. What my question or what my concern would be

is, you've had some success with these horizontal wells; you're now producing some of these horizontal wells.

You get within 100 feet of the lease line, you may be talking about -- I understand your technology problems, but you now may be talking about correlative rights issues, being too close to a lease line and maybe draining some portion of the offset lease that you shouldn't be legally draining.

That is my concern with the 100-foot setback.

A. Well, of course, what our situation will be here is, we know right now the vertical holes -- In my opinion, I know that the vertical holes aren't draining this field.

This field right now, the holes made about 5 million barrels of oil, and I feel there's another 20 million barrels out there to be had.

So again, I stress the situation is, we -- none -- I don't think any of the operators are going to want to be limited on these things, in my opinion, to stop that length and stop the direction, because if --

Say, an offset operator drills northeasterly, say, toward my lease, as an example. I've got the offset well. I tell you, I'm not going to -- and he hits good fractures, he makes a good well.

I'm not going to drill northwesterly and maybe miss the fractures and not tie to his wellbore. I'm going to drill parallel to that well that he did and go for the same fractures in a northeasterly direction.

This is something, I think, that will have to be sort of worked out with the operators in the field, what the importance is here.

Do we want to have wells that we can't go the right direction, and go the length to drain the total acreage on each side? Or do we want to get together and work it out drain it all?

MR. STOVALL: There's only one well on this particular Application that's really an issue on that, and that's the Number 1, I think?

THE WITNESS: Yes, on this one here it's the Number 1. That is correct.

Q. (By Examiner Catanach) Okay. The offset operators to the project area, the south half of Section 25 I understand.

To the east you've got Murphy operating in Section 30?

A. That is correct.

Q. Are there any other offset operators besides Murphy, Mr. Johnson?

A. Now, you mean -- Are you talking about the one case or all of the cases?

Q. I'm talking about just the south half of Section 25.

A. Yates Petroleum has a diagonal offset there, by the way. They have the northwest of the northeast quarter.

Q. Of -- ? Of what section?

A. 36, I'm sorry.

EXAMINER CATANACH: West of the northeast.

MR. STOVALL: In most of these case you're going away from them because you're drilling north, and they're to the south?

THE WITNESS: That is correct. I'm going away from them in this particular case, yes.

Q. (By Examiner Catanach) Now, are those the only two offset operators that you know of?

A. To this thing?

Q. Yes, sir.

A. I know it is, yeah.

Q. Because on the lease map I show various other entities.

A. Well, I'll tell you what. Okay, you're showing -- If you look at Section 26 --

Q. Uh-huh.

A. -- for example, I own that now.
Q. All of Section 26?
A. That's right, I'm the operator of that.
Q. Okay.
A. You look at Section 35, I'm the operator.
Q. All of Section 35?
A. That is correct.
The northeast quarter of Section 36 --
Q. Okay.
A. -- I'm the operator, or Petroleum Development Corporation is.
Q. Okay.
A. And also the northeast of the northwest of Section 36, Petroleum Development Corporation is the operator.
Q. Okay. How about the north half of Section 25?
A. Yates Petroleum is operator.
EXAMINER CATANACH: Yates.
MR. STOVALL: Mr. Johnson, I'll make a suggestion for you on the --
THE WITNESS: Yeah.
MR. STOVALL: -- in future cases. It would make our job a lot easier, and probably yours, if you'd -- I don't think Midland Map Company maps necessarily

reflect current ownership.

THE WITNESS: Right.

MR. STOVALL: Perhaps it would be helpful to you and us to draw surrounding -- your own plat maps and show the surrounding ownership so that we can better --

THE WITNESS: I understand, definitely will. I will definitely do that, because I recently bought these acreages and so forth, and they're all in filings and so forth at this time.

But I have assignments on all the leases I just told you about, and they have been filed.

Q. (By Examiner Catanach) The northwest quarter of Section 36, it looks like you've got -- or the northwest northwest of 36.

A. Yates Petroleum.

Q. That's Yates.

Northwest of Section 30, do you know who that is?

A. Murphy -- Well now, wait. Are you saying 31? You mean northwest of 31?

Q. Northeast of 31.

A. Yeah, Murphy.

Q. That's Murphy, okay.

And the southeast of 30 is Murphy -- I mean

southwest.

And northwest of 30?

A. Well, the west half of the northwest is Murphy.

Q. Okay.

MR. STOVALL: The rest of Section 30 is another one of the cases we're considering, isn't it?

THE WITNESS: That is correct.

Q. (By Examiner Catanach) All right. Now, as far as you know, all of the Strange 1, 2 and 3 wells will be drilled in the same manner --

A. That is correct.

Q. -- as the manner you've got outlined in your exhibit?

A. That is correct.

Q. Okay. And at this point you do not know the extent, the horizontal extent, of any of the wells, how far they're going to go out?

A. I --

Q. I'm not trying to hold you to it, I'm just --

A. Yeah.

Q. You don't know at this point?

A. I would -- With what we learned on this past program that we did, I'm hopeful where I'm going to cross the 80-acre tracts, I'm going to be shooting to

get out 1200, 1400 foot if I can, without forming 80-acre spacing units.

The world record short-radius arc is 1400 foot somewhere over in the Middle East. I'll hopefully get out 800 to 1000 foot in every well.

EXAMINER CATANACH: Okay.

MR. STOVALL: Let's move along here quickly and --

THE WITNESS: Okay.

MR. STOVALL: -- now that we've addressed the concept, let's move on to the other cases and make sure we're okay.

How about 10,820? It looks to me like that's a 40-acre tract, and it's 40 acres --

EXAMINER CATANACH: What happened to 10,819?

THE WITNESS: Yeah, 10,819?

MR. STOVALL: Oh, I'm sorry. Okay, we've got to...

MR. STOVALL: Well, let's do 10,820 since I asked that. Then we'll go back to 10,819. 10,820 is easy.

THE WITNESS: It's just a 40-acre tract. I'm offset there by Yates Energy --

EXAMINER CATANACH: Hang on a second.

THE WITNESS: Okay, I'm sorry.

MR. STOVALL: Okay.

THE WITNESS: Okay.

EXAMINER CATANACH: Okay, you were going to go into the offset --

THE WITNESS: Okay, the offset to the north, it's Yates Petroleum.

EXAMINER CATANACH: Uh-huh.

THE WITNESS: Okay, the 40 to the east is Yates Energy.

The diagonal southeast is Petroleum Development Corporation.

EXAMINER CATANACH: Okay.

THE WITNESS: The south 40 is Yates Energy.

The diagonal to the southwest is Petroleum Development Corporation.

And the 40 to the west is Yates Energy.

EXAMINER CATANACH: Okay, how about the northwest?

THE WITNESS: The northwest, the north and the northeast are all Yates Petroleum.

MR. STOVALL: Mr. Carr, are you representing Yates Energy as well as Yates Petroleum?

MR. CARR: No, I'm not.

MR. STOVALL: Okay.

EXAMINER CATANACH: Okay, let me see here.

(Off the record)

EXAMINER CATANACH: So in this case we're basically talking about a single well being able to drill to within 100 feet of the boundary --

THE WITNESS: That is correct.

EXAMINER CATANACH: -- of the 40-acre boundary.

Do you know what direction this well is going to go in?

THE WITNESS: Depending on where the bottom of the hole is, I'm going to either be trying to go in a northeasterly or a southwesterly direction, so it's really going to depend.

MR. STOVALL: In other words, if you think that hole has moved, then you're going to go the way that gives you --

THE WITNESS: Boy, I'll tell you, that Wattam 4 and Wattam 7 were moved. I don't know who did the surveys when they drilled it, but they weren't right. I can tell you that.

MR. STOVALL: You have re-surveyed these wells, so you --

THE WITNESS: We've run a directional survey on them, yes, sir. We know -- Both Wattam 7 and Wattam 4 that I did in this last program, they were as much as

140 foot from the surface location, the bottom of the hole.

So if it's sort of northerly or easterly, I'll go southwesterly where I can get the longest lateral. If it's the other way, I'll go northeasterly.

MR. STOVALL: Do you want to go 10,819 yet?

EXAMINER CATANACH: Yeah, let's go to 10,819.

MR. STOVALL: Let's go to 10,819.

That looks like it's a two-well program on the -- Let's talk about the lease on there. Is that a single lease?

THE WITNESS: Yes, that's a single lease. It's the northeast quarter and the east half of the northwest quarter of Section 30.

MR. STOVALL: And you own and operate the entire lease?

THE WITNESS: I do.

EXAMINER CATANACH: Northeast quarter and the east half of what?

MR. STOVALL: Northwest.

THE WITNESS: Northwest quarter.

MR. STOVALL: How many wells are currently producing on that lease?

THE WITNESS: I think there are about -- I've shut in a couple of those. There's hardly any of them

making a -- I think I've got two wells producing at the present time. I mean, the pump report.

MR. STOVALL: Is your proposal here similar to that on the Strange, on a smaller scale?

THE WITNESS: That is correct.

MR. STOVALL: Which way is the Number 4 going to go, do you think?

THE WITNESS: The Number 4, I will be going in a northeasterly direction.

MR. STOVALL: And which way is the Number 5 going to go?

THE WITNESS: The 5 will go in a northwesterly direction.

MR. STOVALL: So it's not going to -- If the 5 goes the way you're talking about, it's not going to cross the 40?

THE WITNESS: No, it will not.

MR. STOVALL: It's going to stay on 40?

THE WITNESS: It will stay on 40.

The reason is, that Number 5 is right at 990 from the north line and 990 form the west line at the present time. It's a little bit off of that, but -- approximately where it is.

MR. STOVALL: But the Number 4 may go into the northeast?

THE WITNESS: The Number 4 could go -- I will be aiming the Number 4 like 300 feet south of the boundary -- of the lease line and toward the northeast quarter, the Number 6 well, yes. Because I would rather be going a little -- I want to go northeasterly, but I want to go far enough south that I don't hit that 100-foot boundary line, see --

MR. STOVALL: Got you.

THE WITNESS: -- to the north, and stop me, if I can get out 1000, 1200 foot on that particular well.

MR. STOVALL: Is the Number 6 producing?

THE WITNESS: Yes, it's producing at this time.

MR. STOVALL: Do you have any plans for additional -- if these are successful, to do any more on this lease?

THE WITNESS: Yes, I'll do them all.

MR. STOVALL: Should this be considered as perhaps a project area under the same rules as the Strange?

THE WITNESS: Yes, it should.

MR. STOVALL: And you've already identified all the offsets except to the north and east, I think, haven't you?

THE WITNESS: The north, the northeast and the east are Yates Petroleum.

MR. STOVALL: And Murphy to the south?

THE WITNESS: And Murphy to the south and to the west and to the northwest.

Murphy also offsets that diagonal there to the northwest.

EXAMINER CATANACH: So Yates and Murphy are the only offset operators?

THE WITNESS: That is correct.

MR. STOVALL: And the interest is absolutely uniform throughout that unit?

THE WITNESS: Yes.

MR. STOVALL: 10,821 is the last one. You've got two different wells in -21; is that correct?

THE WITNESS: That is correct.

MR. STOVALL: Case -21, Case --

THE WITNESS: Yeah, Case -21.

MR. STOVALL: -- 10,821.

Let me get my bearings here. Okay, why don't you give us a description of the lease situation in that one?

THE WITNESS: Okay, it's listed in the Application notice. What I have asked for is to apply for the northeast -- This is a project area also, the

northeast quarter of Section 7, the north half of the southwest quarter and the southwest quarter of the northwest quarter of Section 18.

EXAMINER CATANACH: Run that by me again.

MR. STOVALL: 18 or 8?

THE WITNESS: I'm sorry, 8, you're right.

EXAMINER CATANACH: Run that description by me again.

THE WITNESS: Okay, the north half of the southwest quarter.

EXAMINER CATANACH: North half of the southwest quarter.

THE WITNESS: And the south half of the northwest quarter.

EXAMINER CATANACH: Okay.

MR. STOVALL: Those would really be two separate project areas; is that correct?

THE WITNESS: Right. There will be two 160-acre tracts.

And the reason on those, we are -- The Number 6 well, for example, we are going to go in a southwesterly direction on that well, which will cross over into the west 40-acre tract, which will be the northwest to northeast, and possibly if we get out far enough, even cross into the southwest quarter of the

northeast quarter.

MR. STOVALL: That's the only well in that quarter section at this time; is that correct?

THE WITNESS: That is correct. That particular well is currently plugged and abandoned.

MR. STOVALL: And the Number 2, I bet, is going northeast, isn't it?

THE WITNESS: The Number 2 is going to go northeast, with the same idea: We'll cut acrost, and we'll possibly cross into the third 40-acre tract going to the northeast.

MR. STOVALL: Now, it appears that that is all one federal lease; is that --

THE WITNESS: That is correct.

MR. STOVALL: And the ownership again?

THE WITNESS: That's the same lease as -- actually -- The other Wattam wells are all one lease.

MR. STOVALL: But this part is not checkerboarded?

THE WITNESS: No, I own all that lease.

EXAMINER CATANACH: Okay. Let's see, can we go over the offset operators on that project area?

THE WITNESS: Okay, the only offset operator on the 160 acres in Section 8 is Murphy.

EXAMINER CATANACH: Okay.

THE WITNESS: The -- On the Section Number 7, we have Murphy to the east and to the northeast. We have Yates Energy to the north. And on the attachment we have a group of people that have the minerals in the northwest quarter -- I mean the north half of the northwest quarter of Section 7, and I have them all listed out.

MR. STOVALL: That's your Exhibit 2 in the --

THE WITNESS: Yes.

MR. STOVALL: -- Exhibit 2 to Exhibit Number 1 in this case?

THE WITNESS: That is correct.

EXAMINER CATANACH: That's currently unleased?

THE WITNESS: Yes.

MR. STOVALL: Let's see, that's A2 is what I guess that is, Mr. Examiner, for the record.

EXAMINER CATANACH: Okay. All right, is that it as far as --

THE WITNESS: That's right, that's correct.

I think we have -- Did we give the copies of notices, return receipt requested, to all these offset operators? I think we had three copies of that. It just lists all -- we notified --

MR. KEGEL: We can file those after the

hearing.

MR. STOVALL: Why don't you just give them to us right now if you've got them?

MR. KEGEL: All right.

MR. STOVALL: Oh, I see, you haven't got them quite ready yet, Mr. Kegel? Okay, then we can wait. I'm sorry, I thought you had them all ready.

EXAMINER CATANACH: Okay, I don't think we have anything else.

MR. STOVALL: I think, Mr. Johnson, we are going to ask, particularly on these project area ones, of course, that you, in addition to filing with the District, let us know where these wells ended up and what's happened with them.

THE WITNESS: Yes, I did -- The last wells I sent you all the plots just like you -- I sent the full surveys to your office, plus Hobbs.

MR. STOVALL: Be sure to send a copy to Baker Hughes so they can put it in their next book.

THE WITNESS: Okay.

MR. STOVALL: Now, that's not a direction, that's just --

EXAMINER CATANACH: Okay, the witness may be excused.

MR. STOVALL: Mr. Carr -- Well, Mr. Carr, did

you have any questions of the witness?

MR. CARR: Actually, I did not.

EXAMINER CATANACH: Good. Mr. Carr, you can put your witness on if you care to do so.

MR. CARR: Mr. Catanach, at this time we call David Boneau. The witness has previously been sworn.

DAVID F. BONEAU,

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

DIRECT EXAMINATION

BY MR. CARR:

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

A. David Francis Boneau.

Q. Where do you reside?

A. Artesia, New Mexico.

Q. By whom are you employed?

A. I'm employed there by Yates Petroleum Corporation as reservoir engineering supervisor.

Q. Have you previously testified before this Division?

A. Yes, sir.

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

A. Yes, sir.

Q. Are you familiar with the Applications filed in each of these cases by Petco?

A. Yes, I am.

Q. And are you familiar with the status of the -- generally, the status of the acreage involved in these Applications?

A. Yes, sir.

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

EXAMINER CATANACH: They are.

Q. (By Mr. Carr) Initially, Dr. Boneau, Yates is not here today to oppose the Application of Petco; is that correct?

A. That's absolutely correct, yes, sir.

Q. Would you provide the Examiner with a brief history of Yates's involvement in the area and, in so doing, identify their current interest in the general area which is under consideration in these cases?

A. Yes, I can do that.

Mr. Johnson approached us about two months ago asking help, cooperation, whatever you want to call it, in setting some administrative rules for this area, and we took his request seriously -- maybe more seriously than he intended -- and we looked at rules for horizontal wells in other states.

And we drafted a set of rules that's two or three pages long that we thought addressed some of the issues. And we've had some discussions with Mr. Johnson, and there's some -- really some small differences of opinion, I guess you could say.

And Mr. Johnson decided to go ahead and file his seven wells, and then we saw the advertisement with words about administrative rules, and we were concerned that we get some good administrative rules when we get some rules.

Mr. Johnson's and our interests are slightly different, probably based on the fact that he has some wells with 5-1/2-inch casing, out of which he can make these small-angle turns and relatively long laterals.

The Yates wells in the area are all or almost all cased with 4-1/2-inch casing, out of which this procedure cannot now be done. And what we're looking at doing is drilling a new well that would not turn so sharply, that would be a medium-radius well. And we actually think that we could get a lateral that's longer than what he's talking about that way, a 2000- or 2500-foot lateral.

So the rules, in our opinion, need to, you know, encompass both these ideas plus some other things, maybe, down the road.

So Yates is going to come with an application for a horizontal well fairly soon.

We think that there need to be some general rules for the pool, for the State, for some such thing, and we're recommending, really, that you do what it's turning out you are doing today in hearing the Petco case, but we'd like to encourage the formation of a group to set some rules.

We're going to go on trying to get some rules on our own, but that's really not a good way to do it. I would rather see a group that included operators and hopefully somebody from the NMOCD that could put together rules for this area or for the whole State, if that's what you need to be, and bring those rules back at a separate hearing later this year.

Q. Dr. Boneau, Yates is prepared to participate in that effort; is that not correct?

A. Yes, sir, that's correct.

Q. And is it your recommendation that this process take place outside the confines of any individual application for a particular horizontal drilling project?

A. Yes, I think that would be the most effective way to do it.

Q. Do you have anything further to add to your

testimony?

A. No, sir. Frankly, ours was as short as you expected.

MR. CARR: And as short as his lawyer. And with that, we have no further questions on direct of Dr. Boneau.

MR. KEGEL: I have no cross.

EXAMINATION

BY MR. STOVALL:

Q. Dr. Boneau, we didn't -- Actually, as you may know, horizontal rules is something the Division has kind of been looking at and not, quite frankly, because of time, been able to act on yet.

I would encourage Yates to make that effort, get involved with operators from the northwest and come up with statewide rules.

And I would say we encourage you to invite others to participate in your effort, rather than us inviting you to participate, because I think your approach is what we need to, and we've discussed this with Mr. Carr and other attorneys before, so we encourage that.

As far as this Application, do you think that the approach we've taken as this has evolved this morning is the approach on these wells that should be

taken; is that correct?

A. Yes, that's correct. We saw the words "administrative rules" in the hearing --

Q. I understand.

A. -- and we didn't want something to happen that we consider wrong. And since nothing is happening, nothing wrong is happening.

MR. STOVALL: No more questions.

EXAMINER CATANACH: Is there anything further in Case 10,818, 10,819, 10,820 and 10,821?

MR. KEGEL: For the record, I'd offer these exhibits into evidence.

EXAMINER CATANACH: Might be a good idea. The exhibits in each of those cases will be admitted as evidence. And Mr. Kegel --

MR. STOVALL: "These exhibits" being the notice exhibits; is that --

EXAMINER CATANACH: Well, and the other exhibits, I believe.

MR. STOVALL: Oh, yeah.

EXAMINER CATANACH: We didn't do those, did we?

And Mr. Kegel has just handed me notice exhibits which are marked as Exhibit Number 2, and we shall enter those.

MR. KEGEL: Those are the consolidated cases --

EXAMINER CATANACH: Correct.

MR. KEGEL: -- for all of the --

EXAMINER CATANACH: Okay, that's fine. Exhibit Number 2 in all of the consolidated cases will be admitted as evidence.

Is there anything further in these cases?

There being nothing further, these cases will be taken under advisement.

(Thereupon, these proceedings were concluded at 11:39 a.m.)

* * *

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 21st, 1993.

STEVEN T. BRENNER
CCR No. 7

My commission expires: October 14, 1994

I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case No. 10418, 10421 heard by me on September 1993.

David R. Catanach, Examiner
Oil Conservation Division