STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION

APPLICATION OF VETERAN EXPLORATION, INC. TO AMEND DIVISION ORDER NO. R-9330, SANDOVAL COUNTY, NEW MEXICO. 10332, APPLICATION OF VETERAN EXPLORATION, INC. FOR A NON-STANDARD OIL PRORATION UNIT, A HIGH ANGLE\HORIZONTAL WELLBORE THAT EXCEEDS THE SET-BACK REQUIREMENTS FOR THE SAN ISIDRO (SHALLOW) UNIT AREA AND SIMULTANEOUS DEDICATION, SANDOVAL COUNTY, NEW MEXICO.	)	CASE NO. 10331 10332

REPORTER'S TRANSCRIPT OF PROCEEDINGS
EXAMINER HEARING
BEFORE: MICHAEL E. STOGNER, Hearing Examiner
June 13, 1991
Santa Fe, New Mexico

This matter came for hearing before the Oil Conservation Division on June 13, 1991, at the Oil Conservation Division Conference Room, State Land office Building, 310 Old Santa Fe Trail, Santa Fe, New Mexico, before Linda Bumkens, CCR, Certified Court Reporter No. 3008, for the State of New Mexico.

FOR: OIL CONSERVATION DIVISION
(COPY)

BY: LINDA BUMKENS CCR
Certified Court Reporter
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APPEARANCES

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MR. STOGNER: We're going to hear these last two at the same time, Jim?

MR. BRUCE: Yeah.

MR. STOGNER: All right. Come to order. Call case number 10331. At the applicant's request, consolidate 10331 and 10332.

MR. STOVALL: Case number 10331, application of Veteran Exploration, Inc., to amend division Order No. R-9330, Sandoval County, New Mexico, and 10332 is the application of Veteran Exploration, Inc., for a non-standard oil proration unit, a high angle/horizontal wellbore that exceeds the set-back requirements for the San Isidro (Shallow) unit area, and simultaneous dedication, Sandoval County, New Mexico.

MR. STOGNER: At this time I'll call for appearances in both cases.

MR. BRUCE: Mr. Examiner, Jim Bruce from the Hinkle Law Firm in Albuquerque representing the applicant. I have one witness to be sworn.

MR. STOGNER: And since there's nobody else in the room, will the witness please stand to be sworn?

(Witness sworn)

MR. STOGNER: Mr. Bruce.

MR. BRUCE: As an introductory matter, Mr. Examiner, in case 10332 Veteran's application to drill a horizontal well across section lines and develop and dedicate two half sections to that well.

In the related case 10331, applicant seeks to change the special operating rules which were instituted last year in order to allow the operator to apply administratively for permission to drill wells across section lines. The special operating rules were adopted in case, I believe it was 10100.

We do not have a landman here today because there was land testimony presented in the prior cases 10099 and 10100. That testimony showed that the San Isidiro Shallow Unit area encompasses about 18,000 acres of federal minerals in Sandoval County. I have just for your information -- information purposes -- a copy of the land plat that was submitted at one of the prior hearings.

MR. STOVALL: You want to move for incorporation of that into this just for the --

MR. BRUCE: Sure.

MR. STOGNER: Case number 100 --

MR. STOVALL: Just the land plat exhibit is really all that needs to be --

MR. BRUCE: Yeah, just the land plat exhibit.

MR. STOVALL: It was previously sworn to and testified about and admitted as an exhibit; is that correct?

MR. BRUCE: Yes, sir. I believe this one is specifically from 10099 and that would be sufficient.

MR. STOVALL: Moving the admission of Exhibit 1 in the case 10099 into the record of this case.

MR. BRUCE: Yes, sir.

MR. STOGNER: So be it. Please continue.

EXAMINATION

BY MR. BRUCE:

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

A. My name is Tracy Chancellor.

Q. And where do you reside?

A. Denver, Colorado.

Q. What is your occupation?

A. I'm a geological consultant.

Q. And who are you working for in this matter?

A. I'm a consultant for Veteran Exploration Company.

Q. Is Veteran now the operator of the San

Isidiro Shallow unit?

A. That's correct.

Q. Okay. Have you previously testified before the OCD?

A. I have not.

Q. Would you outline your educational and work experience for the examiner, please?

A. B.S. In geology from Fort Lewis College in 1978, employed for four years in Midland, Texas and Denver for various small and larger independents as a petroleum geologist, exploration geologist, and have been independent for the past eight years as a consulting geologist both exploration and in the field as well as owning my own exploration company.

Q. Okay. And what is your familiarity with the Mancos and Niobrarra formation?

A. I've worked in the Niobrarra throughout that 8-year period throughout the Rockies. However, in the San Juan Basin I've been involved with the Mancos in the Niobrarra equivalent for about a year.

Q. Okay. And are you familiar with the Mancos geology of the San Isidiro Shallow Unit?

A. Yes, I am.

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

MR. STOGNER: Mr. Chancellor is so qualified.

Q. (By Mr. Bruce) referring to your exhibits, first Exhibit B, Mr. Chancellor, would you describe what that is for the examiner?

A. This is the Federal unit outline in 20 north two and three west, Sandoval County, New Mexico. It outlines the pro well production history as of probably a year ago, the location of our first two horizontal holes in section 11 and 12.

Q. And that's the 1114 well and the 1210 well?

A. That's correct. And our proposed Johnson 7-3 well spudding in section 7 of 20 north 2 west, and bottom hole location in section 6 of 20 north 2 west with a basement fault trace, and is showing that some of the best production in the field is associated with that basement fault.

Q. Okay.

A. That's basically what Exhibit B shows.

Q. And some of the poorer wells are a little further away. You note there the 1500-barrel well and some other 2,000-barrel wells that are further away from the basement fault; is that correct?

A. Yes.

Q. And we'll get into this one in a little more detail. Is that the basic reason Veteran seeks

permission to drill across section lines?

A. That is the basic geologic reason to be located on both sides of a horizontal wellbore to this fault trace.

Q. Okay. Would you please then move on to Exhibit C and just very briefly discuss what that shows?

A. Exhibit C I have traced on Exhibit B this basement fault, and just to show the commission that we have worked the seismic and we are looking at approximately 800 to 1,000 feet of throw on this basement fault, and it has disturbed the Mancos rocks, the shallower Mancos pay zones, the A, B, and the C, and the D which the field produces from except for one Menefee well, and that's basically what it shows.

Q. Okay. And then moving on to Exhibit D, would you discuss the Mancos structure in this area?

A. The Mancos is not particularly faulted, however, over -- the basement fault has caused a monocline in the Mancos over the basement fault, and we're getting areas of where there's greater range of change in dip than other areas, and the yellow highlighted area is the trace of the axis of the monocline which would be the maximum flecture in the

Mancos A, B, C, and D pay zones, and if you'll refer back to Exhibit B, you'll see that it has shifted quite a bit, and it truly does align with the best production in the field, that being 20 north 2 west section 6, the 88,000 barrels and 20 north 3 west, section 12 the 90,000 barrels, and 20 north 3 west section 11, the 135,000 barrels.

Q. So in your opinion, it's necessary to stay near this fault to have the best chance of getting a good well in the Mancos?

A. Yes. And not only near it, but to have -- yes, that's correct.

Q. And this will not require wells to be drilled across section lines in every case, will it?

A. No it will not; however there may be a few other cases.

Q. Okay. Then please refer back to Exhibit A and describe that for the examiner.

A. Exhibit A -- shall we put this up or can we just --

MR. STOVALL: We can spread it out,

A. Exhibit A as is, as you can see, from C-C' southwest and northeast through the field, and the Federal Unit showing the top of the Mancos A, the B, the C zone, and the D zone, some of the wells were

openhole completed, some wells were set pipe, cemented and fract and basically this exhibit is just to show you our pay zones. The field does produce from all four. We will be drilling basically between the San Isidiro 12-4, five wells over from the left, and the Johnson 6-16 well.

Q. Okay. What is the primary producing zone in this area?

A. Well, as I've said A, B, C, D are the primary zones; however, the C zone, there needs to be more testing, but we feel like the C zone has been probably the best producer.

Q. Okay. In referring just briefly to Exhibit E, would you describe what that is, please?

A. Exhibit E is a proposal and outline from Great Land Directional Drilling Company in Casper for Veteran. After the title page is a pretty good well summary that we will be kicking off at approximately 39 -- no, actually we should go to the third page with the well profile, the columns and bill rates and so forth.

Q. And this is for the Johnson 7-3 well?

A. That's correct. Johnson 7-3 well. We will be kicking off at approximately 3874 and building a 14-degree-per-hundred curve to the C zone with a TVD

of 4420. At that point we will drill an 85-degree angle hole in the C zone. The dip in that area is about three to five degrees, and staying in the C zone for approximately 4,000 feet TVD is at 8122, and the curve on the next page, the diagramatic curve of the wellbore shows that diagramatically -- kickoffs and so forth, and the last page is that we -- well profile as far as north 10 degrees east will be our direction with approximately 4,000 feet of wellbore.

Q. Okay. And you're the well site geologist for Veteran, are you not?

A. That's true.

Q. Now, as originally proposed, this well would be about 132 feet too close to the section line if it's drilled as stated therein; is that correct?

A. That's true, too close to the half section line.

Q. What does Veteran plan to do with respect to that?

A. Veteran plans to -- either we will not drill any closer than 660 feet to that half section line, and to solve that we will be either stopping short of the 4,000-foot target, or we will arrange

our angle back to the west possibly one or two degrees, and I think we are in the process of taking care of that with the commission as far as --

Q. Okay. So you do not desire to be closer than 660 feet to the outer boundary?

A. That's correct, and one purpose of the way we have to design this wellbore across the section line.

Q. Okay. Now this drilling plan, is this similar to plans previously submitted for the other two horizontal wells that have been drilled to date in the unit?

A. It is, yes.

Q. Okay. Were Exhibits A through E either prepared under your direction or compiled from company records?

A. They were.

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

A. Yes, they are.

MR. BRUCE: Mr. Examiner, I move the introduction of Exhibits A through E plus of, course, prior Exhibit number 1 from case 10099.

MR. STOGNER: Exhibits A through E will would

be admitted into evidence. Okay.

MR. STOVALL: I have a quick question to start it out. What is the participating area for this proposed well? Is it an extension of the existing participating area of the unit, or is it going to be a new participating area?

A. This will be, I believe -- yes. A new participating area as is each of the first two wells.

MR. STOVALL: They're each separate participating areas?

A. Yes, they are.

MR. STOVALL: So in other words, cost and revenue sharing is on a drill block basis really so far in this unit; is that correct?

A. I believe so.

MR. STOVALL: Now, my memory is not all that great as far as the unit itself. It's 100 percent Federal Unit; is that correct?

A. That's correct. That is correct.

MR. STOVALL: What about the overriding royalty interests, are they uniform throughout or do you know?

A. They do vary.

MR. STOVALL: What about working interests?

A. They vary as well, and this lease section 6 and 7 happens to be the same lease, but the working interests do vary throughout the unit.

MR. STOVALL: Let's see. The east half of section 6 is also in the unit; is it not?

A. That's correct.

MR. BRUCE: Yeah, looking at Exhibit 1.

MR. STOVALL: Now, that good well that's in the southeast quarter of Exhibit 1, what was the proration unit to that well? Was that the east half?

A. The 88,000-barrel well?

MR. STOVALL: Right.

A. I do not know. Jim, if you have an idea as far as -- see, I believe this is on 320-acre spacing if that answers --

MR. STOVALL: That's correct. I think the pool is on the 320-acre spacing, but you don't know what the proration is?

A. I do not; I don't.

MR. STOVALL: Which means you don't know whether you're, in fact, whether the southwest quarter is already committed to a proration unit; is that correct?

A. I as a geologist do not know the answer to

that question.

MR. BRUCE: If you give me a minute, we can go look that up.

MR. STOVALL: Let's find out if there's anything else we don't know before we go on. If it's the south half of this section 6 proration unit for that well on the southeast quarter, then, in fact, what could be happening is that the southwest quarter could participate in two wells and the northeast quarter would participate in none with two wells in section 6, which I think proposes a bit of a correlative rights problem.

Mr. Bruce, perhaps you can answer it as well. Were the 12-10 and the 11-14 -- were those both 640-acre units, do you remember?

MR. BRUCE: Just a second. 11-14 was not in the 12-10. I believe the east half is dedicated to the 12-10 that was a simultaneous dedication.

MR. STOVALL: The east half was also dedicated as a 90,000-barrel well; is that correct?

A. That's correct. We do know that the east half of six has already been dedicated to the 7-3, and the east half of 7 is dedicated to the 7-3.

MR. STOVALL: You mean the west half.

A. I'm sorry. The west half, I believe, Jim.

MR. STOVALL: The west half of 6 and the west half of 7 are your proposed proration unit for this well that you're talking about; is that correct?

A. Yes, sir, I believe so.

MR. STOVALL: Now, you talk about -- where's the 7-11 well? Is that that 5900-barrel well down there in San Isidro?

A. No, sir. That is -- oh, I'm sorry, it sure is.

MR. BRUCE: Excuse me for interrupting, but I'm looking at administrative order DD52H, the 12-10 has 640 acres dedicated to it.

MR. STOVALL: So it's a simultaneous dedication with three wells on that dedication; is that correct?

MR. BRUCE: Yes, per the division orders.

MR. STOVALL: But the 11-14 is just a single dedication of the west half?

MR. BRUCE: Yes.

MR. STOVALL: Well, let me just express a concern to both of you on this. If one of the advantages of -- and I'm expressing my own opinion and my own concerns from a legal correlative rights operational standpoint -- one of the advantages of unitized operations is you bring a -- drill a

substantial area under common ownership and control which allows -- one of the real advantages -- is it allows some broad-area planning and particularly the opportunity to do projects such as -- I guess Veterans has really done it, it took over Sand Dune before the well was drilled; is that correct?

A. Yes, they did the first two holes, that's correct. Then we --

MR. STOVALL: However, by virtue of the way this unit is set up, the correlative rights problem still exists because it's on -- essentially on a drill-block basis, and when you start encroaching wells, crossing lines, straining proration units, simultaneous dedication particularly next to -- it doesn't look like we've got a particular problem, but next to undeveloped tracts in some areas, because there's not a common ownership in the larger parcels involved, it still keeps that correlative rights problem.

A. There is a common ownership in that -- Jim, correct me if I'm wrong -- you mean is there one owner or are there five owners?

MR. STOVALL: Well, I guess what I'm asking you is this unit is 18,000 acres, and it's put together different working interests, owned

different tracts within the unit --

A. That's correct.

MR. STOVALL: Based on their leasehold position when the unit was formed?

A. Yes.

MR. STOVALL: When you establish -- I mean, if it's what's referred to commonly as an undivided unit, the entire unit pays all costs and shares all revenues. This is what I just commonly refer to as a divided unit.

A. In this particular -- I apologize for not -- I wish I understood more about the problem, but Veteran now owns 96 percent -- well, no, that isn't quite true, so -- I'm not qualified to really answer that question.

MR. STOVALL: And that's my concern. I don't know. We're not getting the information which says, for example, who has got an interest in the east half of section 6. They're the ones who probably are most affected, whose correlative rights are most affected by this, counter balanced with the fact that they've had a pretty good production out of a well if, in fact, that's the proration unit. If the northeast quarter is not in a proration unit, then there's a major problem. Section -- what is it,

section 1 to the west -- we've got two proration units and we don't know what the dedications are. What is the effect of it?

MR. BRUCE: Well, as long as you're not overlapping proration units, though, I don't understand the correlative rights problem.

MR. STOVALL: Well, are we overlapping proration units in section 6, or do we know?

MR. BRUCE: We can go check. The BLM, as I understand it, and you can ask Mr. Chancellor, has approved this well.

MR. STOVALL: Really. I'm assuming, we don't have confirmation, but I -- we'd hope that homework was done ahead of time that the east half is dedicated to that other well which is unidentified.

A. As far as I understand, that is true. I was somewhat involved in hearing the dedication and that's definitely the reason for staying 660 away from that half section line.

MR. STOVALL: What's the effective drainage radius of your proposed 7-3? Do you have any idea how -- particularly if you intersect that fracture successfully, what's that going to do as far as --

A. We have --

MR. STOVALL: Fractures in the Mancos have

been known to produce from a long ways away?

A. Sure, they have and, again, I'm not the qualified man to answer it, but I have worked with our engineer and we're showing 320-acre drainage in this area, and 250,000 barrels a well for horizontal wellbores. I think you can see from the production in the area that --

MR. STOVALL: It's really spotty in that?

A. Yes, it is.

MR. STOVALL: I think that's pretty well known from the east side of the Mancos formation throughout. You hit the fracture you get a barn burner, but if you hit the tight matrix, you don't get anything.

A. Yes.

MR. STOVALL: But when you do hit the fracture and get a barn burner, the reason you do so is because that fracture is connecting you to a fairly large radius within the fracture system.

A. And, as you know, it can, and in our area, unfortunately, we do not appear to be as well fractured as some other more impressive Mancos pools in the San Juan Basin. Thus the reason for the 320-acre spacing in this field, as some of this production history has already shown, our best well

has only made 135,000 barrels out of section 11. We don't really have too many half million barrel wells in here.

MR. STOVALL: How long has the 11-14 been on?

A. It's been on -- I believe that well was drilled in '84. It made --

MR. STOVALL: Isn't that the horizontal well?

A. No. The 11-14 is one of the horizontal wells.

MR. STOVALL: You're talking about the 135,000-barrel well?

A. Yes, sir. That's the 11-16.

MR. STOVALL: How long does -- the 11-14 been what, a year, or less probably?

A. Yes, sir, that's correct.

MR. STOVALL: Okay.

A. Oh, I'm sorry. If I could let you understand a little more. We twinned the plug producer that you see next to the 11-14, and the plug producer had made 11,000 barrels of oil, and our hole, the 11-14, we are still working on completing, but we are a little disappointed in the production of that well for various geological and engineering reasons why it was drilled.

MR. STOVALL: But it has crossed what you

believe to be that basement fault, right?

A. It has crossed that basement fault, however, if you would refer to Exhibit D for just a minute, you can see that this is the main flecture in the pay zone, and it goes much farther south. It's migrated up in the Mancos, and it does go much farther south. I apologize. The 11-14 horizontal hole is not marked on there, but you can see --

MR. STOVALL: It approximately starts about on that -- by the 805 there?

A. That's right.

MR. STOVALL: Right above it?

A. And actually there is a splay hinge coming off of this main flecture from section 12 over above that 805, crossing the wellbore that we crossed, or that we drilled, and we feel now that it's a much smaller fracture zone, and would have rather concentrated on this lower flecture line.

MR. STOVALL: In other words, down south from that starting point rather than north.

A. That's correct, and even though it appears we have crossed the basement fault, the top of it we did, but what's more important is the flecture highlight in Exhibit D, and we were north of that and in a smaller zone, and that may not be the main

reason the well has not performed as we had hoped. There are other reasons.

However, we are convinced that the better production in the field is at or certainly within 1,000 feet of that highlight. We feel like it's very important to stay -- to drill horizontal wellbores on both sides of the fracture zone and staying at an angle such that you don't get too far away from either side of the fracture zone.

MR. STOVALL: I want to go back and visit with you a little bit about the unit. Going back to Exhibit 1 from 10099, it appears that the unit boundary is on the east section line of sections 5 and 8. On your map it appears that it's on the east line of section 6 and splits section 7.

A. I apologize. I'm sure that --

MR. STOVALL: Which one's correct?

A. I'm sure Exhibit B is incorrect.

MR. STOVALL: What it does now, I look at --

A. If I could just look here for a moment. 5 and 6, yeah. It's Exhibit --

MR. STOVALL: It looks like Exhibit B has got the unit boundaries all substantially different from the one we've just admitted.

A. Yes. The exhibit that Mr. Bruce has shown

you is correct.

MR. STOVALL: You're talking about Exhibit 1 from case 10099?

A. Yes. It has not changed from this submittal since the first day of its inception. It has sections 35 and 36; that's correct.

MR. STOVALL: You get down on the south it looks like it's got the wrong section. You don't have section numbers on your Exhibit B. That makes it a little tougher for us, at least as I'm seeing it.

A. The exhibit -- is this Exhibit 1? This is correct. I would be glad to correct this and get it to them as soon as possible. The problem is, Veteran and the original owner have been talking about several possibilities of trades in the area, and we have gone through many different outlines for thinking about shrinking our other federal unit outlines and --

MR. STOVALL: Contracting the unit, you mean?

A. Yes, sir. And this is correct, Exhibit 1.

MR. STOVALL: For some reason, Mr. Bruce, I feel sort of like I'm missing something, but I'm having trouble putting my finger on exactly what I'm missing. I think I want to ponder this for a

minute. I think if the Examiner's got any questions on the technical engineering aspects of the well itself. My concern is primarily to the correlative rights, and a lot of these tracts are "GW, et al," and are the "et als" the same in each tract, and how does that work together and is it better to --

MR. BRUCE: If I may -- just looking through the previous file in case 10099 and the unit agreement -- which is the unit agreement -- and it does set forth the ownership, and I'm not going to go into any detail, but if I may say that so long as we don't have the overlapping proration units that you've discussed, as long as we don't have that problem, I mean, you are merely dedicating acreage to a well, and although it may cross section lines.

MR. STOVALL: I fully concur: The section lines are artificial boundaries drawn by some guys on horses a long time ago, and sometimes they don't make geologic sense, so I don't particularly have a problem crossing those lines in this type of situation. I'm wondering if we need more of a big picture, but let me ask you this: assuming this application were granted for this 7-3 well, would you want an allowable equal to two times the 320-acre oil allowable?

A. No. I don't think that, in my opinion, that would have been necessary because this is a sensitive reservoir and we are not that interested in producing it hard anyway.

MR. STOVALL: You're on what, a gas-drive type?

A. It's a combination solution-gas-and-gravity drive.

MR. STOVALL: You recover more oil then if you produce it more slowly at a maximum efficient rate, so to speak, rather than --

A. Yes, sir, But that really -- I don't know Veteran's full intent. I do not believe that is an intent at this point as for as a double allowable.

MR. STOVALL: I don't think it's advertised for that, so I don't think that.

A. This is strictly a geological -- keep the production down.

MR. STOVALL: Maximize your contact --

A. Yes, sir.

MR. STOVALL: And produce it at the best rate that would make the best recovery; right?

A. That's correct. We can't really see a way to drill a horizontal hole in 6 alone, or 7 alone where we would cross both sides of the flecture

without crossing into the --

MR. STOVALL: I understand. Then you've got more of a problem because you're not -- what, in fact, you're doing is forming a larger drilling block here because you're producing from both -- you're in both sections, so you're forming a nonstandard proration unit, large drilling block, whatever you want to call it. And that addresses some of the correlative rights issue, I grant you that.

I guess I'm thinking about it also in terms of the application for rules for administrative approval for similar applications, and that perhaps is more of a problem to me than this individual well. I think at this time I'll conjugate while the examiner asks whatever technical questions he's got.

MR. STOGNER: Well, I think we got the unit boundaries taken care of. That was one of the main questions I had, but we got that straightened out, and this well is going to be dedicated in the existing 7-11 well; is that correct?

A. Yes, sir, that's correct.

MR. STOGNER: Now are there horizontal wells in this particular unit area, or are we going after

that basement fault? Is that what Veteran's proposals are on these horizontal wells at this point?

A. The real intent is even though we're going after the basement fault on Exhibit B, we're really going after the point of maximum flecture on the Mancos B seismic horizon in Exhibit D, and it just so happens that the basement fault has caused that maximum flecture, and we really are going after Exhibit D, not the faulting in Exhibit B; however, they are both interconnected and related to each other, and unfortunately they are just right on top of each other.

MR. STOVALL: In other words, if it faulted here, it may have lifted the rock and pulled it here?

A. That's exactly correct. And it hasn't migrated much, but especially, for instance, in section 6 they're pretty much right on top of each other and 20 north 2 west, but when you get into section 12 of 23, the maximum flecture map is coming on down to the south, and the basic fault in the basement is taking a more northerly -- it's taking --

MR. STOVALL: It's going more westerly and the

flecture is coming more southerly; is that what you mean?

A. That's true.

MR. STOVALL: Let me say to you now that I think, quite frankly, I don't think we've got, in my opinion -- discussion with the examiner indicates he may feel the same way -- as far as the administrative approval process, I think we're simply lacking in information to deal with that, and if you wish to continue that and supplement, we can discuss what we need to do in a less formal setting and then continue that hearing. I'm not sure what we would use to justify that application, in granting that application at this point. And I'd leave it up to you, Mr. Bruce.

MR. BRUCE: Well, let's continue that.

MR. STOVALL: And see where we want to go with that. I'm not saying that is a bad idea; I'm just saying that I'm concerned about the amount of information we've got, and how to base that. You know more specific details about what would be -- how it would work.

A. So it's more a land ownership proration.

MR. STOVALL: Yeah. What's the criteria for it? Is it a geologic criteria, what ownership

requirements have to be satisfied, how does the notice have to work, and what proration unit, and, in fact, in some cases you would always have a nonstandard proration unit. It would be a nonstandard one size. Is it always going to be an unorthodox location? Exactly what is being asked and how -- what criteria would be used to process that administratively?

A. What we need to show the commissioners today, Jim, as far as the ownership, do you feel like maybe we're not prepared to give them at this time?

MR. STOVALL: I think what we can do is continue the case and then we can discuss it off the record and figure out what you need to do here to get this together. I don't have a problem doing that as far as that application. Now, I think we can continue to look at the specific well. What's your timeframe for drilling this particular well; do you know?

A. Thirty days is what we're trying to shoot for.

MR. STOVALL: You don't have any leasehold problems? This whole unit is now held by production; is it not?

A. That's correct.

MR. BRUCE: It's held by production and this specific 7-3 well -- actually, if you look at Exhibit 1, all of sections 6 and 7 are the same federal lease and referring back to the unit agreement, has common ownership throughout, working interests, overrides, et cetera.

MR. STOVALL: Yeah. I don't have a particular problem with -- Let me go back to this question. Since we've got simultaneous dedication, you've already got a well. What is the 7-11 doing? It's obviously not a real great well if it's only produced 5900 barrels.

A. The 7-11 it is not -- that well is shut in, and it's only capable of probably three or four barrels a day.

MR. STOVALL: So it really doesn't make any difference as far as proration unit allowable.

A. Yes.

MR. STOVALL: Are you prepared to give any information, more specific, detailed information as to the drilling techniques used for the 7-3? How it will be drilled?

A. Yeah. It will be -- basically we're looking at the same method as we drilled the 12-10

well, very much unlike the 11-14 well which will be foam drilling -- air mist basically -- with a stiff foam, and, however, this time we will probably set casing through the curve instead of drilling the curve open hole with an NWD assembly, and setting an intermedial liner, or setting the full production liner.

However, in this case, we probably may drill a 6-and-a-half-inch hole and setting 4-inch production liner unsubmitted. In this case it's a possiblity, however, basically the same as the 12-10 well.

MR. BRUCE: Would you discuss the results of the 12-10 well?

A. The 12-10 well has made approximately 25 to 30,000 barrels to date. I think it's been on production for four or five months, and has -- is currently producing about approximately 230 barrels a day, and low gas, and we do not appear to be seeing much decline in that hole.

MR. STOVALL: Did it choke back?

A. I really do not know what the choke on it is, but it is choked back. I think that is true.

MR. STOVALL: I'm not going to get any further into technical questions on this particular well

unless the examiner has any further questions. He's the engineer.

MR. STOGNER: You've obviously done the other two successfully; right?

A. We have from an engineering standpoint, however, the 11-14 is not a great producer at this point. We feel now after the 12-10 that we have the learning curve to move ahead.

MR. STOGNER: And that may or may not enter into the picture on the amendment to R-9330, but it's something to consider. Is that all you have at this point, Mr. Bruce?

MR. BRUCE: Yes, sir.

MR. STOGNER: At this time I want to take the case 10332 under advisement, but I want to leave the record open and continue case number 10331 to a later date. Should we just go ahead and continue that until the next examiner hearing?

MR. BRUCE: Let's continue it.

MR. STOVALL: You want to go to the next four weeks? It's your choice, Jim.

MR. BRUCE: Let's do it two weeks. I mean, I can always continue it again.

MR. STOGNER: That will be the July 11th hearing. That's right. You may want to consider

bringing somebody who can answer those land-type questions especially after presenting Exhibit Number 1, and I do want to definitely review. Which one is right, B or 1?

MR. BRUCE: We'll verify that.

MR. STOVALL: And you check that proration unit question for section 6 to make sure you don't have a double dedication.

MR. STOGNER: And if Exhibit B is the right unit.

MR. STOVALL: No. They're saying that Exhibit B is incorrect.

MR. BRUCE: Well, we will verify that and do that on the record at the next hearing.

MR. STOGNER: Well, it may be too late then because you did not notify offset operators. That is the proper way when there are offset operators, if not then --

MR. STOVALL: Do you want to take them both under advisement? Will that help to check that? That gives you the ability if there is an error. I think he's got a point. Did you notify the offsets to the Johnson?

MR. BRUCE: No, we did not notify anyone.

MR. STOVALL: Would it be better to take them

both under advisement to give you that option rather than to find that it was a defective order and have to reopen and do the whole thing?

MR. BRUCE: On the 7-3 well, could we just leave the record open, say, until next Thursday?

MR. STOVALL: And then, provided that Exhibit 1 from 10099 is correct as to ownership, and that there is no overlapping proration units, it can be taken under advisement at that time.

MR. BRUCE: Yes.

MR. STOVALL: Does it make sense?

MR. STOGNER: Yes. Case 10324 will be taken under advisement. I'm sorry. I mean 10332 is going to be taken under advisement; however, I'm going to leave the record open until next Thursday, and 331 will be continued to July 11, 1991. And with that, that will be done with the Veterans Exploration at this point.

MR. BRUCE: Okay.

I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case No. 10331 and 10332 heard by me on 13 June 1991.

Examiner
Oil Conservation Division

STATE OF NEW MEXICO)
) ss.
COUNTY OF BERNALILLO)

REPORTER'S CERTIFICATE

BE IT KNOWN that the foregoing transcript of the proceedings were taken by me, that I was then and there a Certified Shorthand Reporter and Notary Public in and for the County of Bernalillo, State of New Mexico, and by virtue thereof, authorized to administer an oath; that the witness before testifying was duly sworn to testify to the whole truth and nothing but the truth; that the questions propounded by counsel and the answers of the witness thereto were taken down by me, and that the foregoing pages of typewritten matter contain a true and accurate transcript as requested by counsel of the proceedings and testimony had and adduced upon the taking of said deposition, all to the best of my skill and ability.

I FURTHER CERTIFY that I am not related to nor employed by any of the parties hereto, and have no interest in the outcome hereof.

DATED at Bernalillo, New Mexico, this day July 29, 1991.

My commission expires
April 24, 1994

LINDA BUMKENS
CCR No. 3008
Notary Public

STATE OF NEW MEXICO

ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION

IN THE MATTER OF THE HEARING CALLED BY THE OIL CONSERVATION DIVISION FOR THE PURPOSE OF CONSIDERING:

APPLICATION OF VETERAN EXPLORATION, INC., TO AMEND DIVISION ORDER NO. R-9330, SANDOVAL COUNTY, NEW MEXICO

CASE NO. 10331

REPORTER'S TRANSCRIPT OF PROCEEDINGS
~~VOLUME II (Pages 37 - 94)~~
EXAMINER HEARING

BEFORE: JIM MORROW, Hearing Examiner
July 11, 1991
8:20 a.m.
Santa Fe, New Mexico

This matter came for hearing before the Oil Conservation Division on July 11, 1991, at 8:20 a.m. at the Oil Conservation Division Conference Room, State Land Office Building, 310 Old Santa Fe Trail, Santa Fe, New Mexico, before Maureen R. Hunnicutt, RPR, Certified Shorthand Reporter No. 166, for the State of New Mexico.

FOR: OIL CONSERVATION DIVISION

BY: MAUREEN R. HUNNICUTT, RPR
Certified Shorthand Reporter
CSR No. 166

I N D E X

July 11, 1991
Examiner Hearing
CASE NO. 10348. VOLUME II (Pages 38 - 94)

*No Exhibits were marke during the course of this hearing.

A P P E A R A N C E S

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* * *

EXAMINER MORROW: Call Case 10331.

MR. STOVALL: Application of Veteran Exploration, Inc., to amend Division Order No. R-9330, Sandoval County, New Mexico.

EXAMINER MORROW: How about appearances?

MR. BRUCE: Yes, Mr. Examiner. My name is Jim Bruce from the Hinkle law firm representing the applicant. My client had to run out right now, and I wondered if you would mind taking the KLM case first.

EXAMINER MORROW: All right.

(At 8:23 p.m., the hearing was adjourned and resumed at the approximate time of 10:31 a.m. as follows:)

MR. STOVALL: Okay. The application of Veteran Exploration, Inc., to amend Division Order No. R-9330, Sandoval County, New Mexico.

EXAMINER MORROW: Call for appearances.

MR. BRUCE: Mr. Examiner, my name is Jim Bruce from the Hinkle law firm in Albuquerque representing the Applicant, and I have one witness to be sworn.

(The witness was duly sworn.)

MR. BRUCE: Mr. Examiner, before the witness starts testifying, this matter was heard, as Mr. Stovall knows, four weeks ago, and we presented geological evidence. The witness today, Mr. Jacobsen, is the president of the applicant, and will explain a little bit more on the

operational side of the request, and he will just briefly outline what we've discussed previously in the geology side of this, just for your information and not really -- he's not going to be testifying as an expert.

MR. STOVALL: If I may add to that, Mr. Examiner, primarily to clarify the record, I believe -- Mr. Bruce, correct me if I'm wrong -- this was heard in conjunction with an application for a specific horizontal well, proration of units for which crossed section lines, based upon the geological information which was presented in that case.

And at the time of that case, I believe I indicated to you and the witness who testified in that case that there wasn't really a problem with the geologic explanation, but that that particular witness was not prepared to testify or informed. He was a geologist. He didn't have knowledge of what Veteran sought in the broader sense of special operating rules and exceptions. He addressed the specific case, the specific well in that situation, wasn't able to explain the unit -- manner of unit operations and way to allow us to write some sort of special operating rules or change the rules. That is the purpose for the continuation of this particular case out of the two, this testimony today, if I'm not mistaken.

EXAMINER MORROW: Is this the same area that Gary All

(phonetic) or Gary Williams --

MR. BRUCE: Yes. Veteran Exploration is the successor unit operator to Sam Gary.

EXAMINER MORROW: Sam Gary.

MR. STOVALL: Yeah, that's the unit you approved or the unit you approved several months ago. This is the same unit you've approved and heard before.

EXAMINER MORROW: So the rule that you want exception to are the rules that were adopted in that case.

MR. BRUCE: That's correct.

EXAMINER MORROW: All right.

MR. BRUCE: And primarily, Mr. Examiner, that rule did allow administrative -- allowed the operator to apply for administrative approval of horizontal wells based upon the development since then or their gain in knowledge since then. The applicant has -- believes that in certain circumstances it will be necessary to drill horizontal wells across section lines.

EXAMINER MORROW: Which was not approved.

MR. BRUCE: Which was not approved by that order, and the applicant would like or in this case is in essence seeking authority for administrative approval to drill across section lines.

EXAMINER MORROW: To change the rules so that in future situations he could apply for administrative approval to do

it, is that what you're saying?

MR. BRUCE: That is the thrust of this application.

EXAMINER MORROW: But there is a specific well involved also; is that correct?

MR. BRUCE: That is another application that has been taken under advisement, but we will discuss that for your information.

EXAMINER MORROW: So this, the case today just concerns the rule?

MR. BRUCE: Yes.

ROBERT PETER JACOBSEN,

the Witness herein, having been previously duly sworn, was examined and testified as follows:

DIRECT EXAMINATION

BY MR. BRUCE:

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

A. Yes. Robert P. Jacobsen.

Q. Who are employed by and in what capacity?

A. By Veteran Exploration, Inc., out of Denver, Colorado, as its president.

Q. As its president are you in charge of the operation of the company?

A. Yes, I am.

Q. And the operation of the San Isidro Shallow Unit?

A. Correct.

MR. BRUCE: Mr. Examiner, I'll hand you just for your reference what was marked Exhibit B at the last hearing and admitted into evidence. And showing that to Mr. Jacobsen . . .

Q. (By Mr. Bruce) Although you're not a geologist, Mr. Jacobson, could you describe the basis for the Veteran's seeking to drill across section lines?

A. Yes, and you have the same exhibit in front of you, do you not?

Q. Yes.

A. The yellow line represented there is what we call a "hinge line," and there are actually several of these throughout the San Isidro Unit area; and basically this is the point of greatest flexure or rate and change of depth, which we have done exhaustive studies on as they have in Puerto Chiquito West. And along this hinge line, you will also notice that most of the best production in this area is associated with this greatest flexure area or rate of change of dip known as the "hinge line."

Q. If -- and, therefore, in essence, Veteran in certain circumstances, I believe it was testified by Mr. Chancellor at the last hearing, would like to drill across section lines in certain instances to be near that line of maximum flexure.

A. Correct. As I'm sure you're all aware,

Mother Nature did not lay down her geology in perfect sections, unfortunately, and for conservation purposes, if you will notice in Section 7, below our location of the 7-3 well, you'll see the number 5900 next to the well in the west half of 7. That is the cumulative production from the Mancos in that well; and obviously at today's prices, you'd be looking at a gross of approximately $110,000 in production on a well that costs, under today's prices, between 250,000 and $400,000 to drill.

A horizontal well, we have drilled two in there at a cost of $2.2 million to date; and again, for reasons of both economics and conservation, the reason we're applying to drill across section lines is very simple, that the west -- the very north half of the Section 7, and specifically in the northwest of Section 7, in our opinion, will contain the greatest fracturing area in 7.

And with normal spacing rules of 660-feet insets for many section lines or lease lines, it would not allow us, then, to cross over that section line; and thus in 6 to the north -- in Section 6 north of 7, and also in Section 7, you would be prevented from producing off of that section line, again where we feel the greatest fracturing is, and thus you would lose approximately 1300 feet of productive Mancos formation.

Noting again that the well in the west half of 7

that has been produced from the Mancos, that's produced just under 6,000 barrels, it would be very difficult at any time geologically to warrant my company from outlaying an approximate $1 million to pursue pulling any more reserves off of Section 7 and, in our opinion, would leave behind a vast or tremendous amount of oil in the north half of 7 and the south half of 6.

Q. In your opinion will the unit, this particular unit area, be fully developed or developed to its maximum if you cannot drill across section lines?

A. No, there are many other circumstances in here of the exact scenario that we're discussing here. One example that I might give is a well in Section 11. There's a well there labeled the "11-14." That is a horizontal well that we drilled in October, Veteran as the operator or agent for Gary as the operator. We have approximately $1.2 million in that well. No participating area has been established for we have not achieved any commercial production from that well.

At some date, again it is our hope, that with the permission of the Oil and Gas Commission, it is our opinion if we could take that same wellbore and drill to the south crossing into Section 14, that again we would get a very economic producer, but certainly not in the location that we had drilled this well.

So there are numerous circumstances in this. In order to develop this unit fully, we will need to get across these section lines and/or lease lines to fully develop the field to its potential.

Q. Besides the 11-4 well, you've also drilled the 12-10 well that's noted on that map, have you not?

A. Correct. We drilled that starting November 5th of 1990.

Q. And is that a commercial producer?

A. Yes, it is.

Q. Before we get into the participating areas, what are your future plans? You've mentioned the 7-3 well. Now that one has not been finally approved yet, has it?

A. No, it has not.

Q. If you obtain approval, will you drill that well and any other well?

A. Yes. It is our intention upon approval of the 7-3 well that we would start operations to drill that well the last week of July or the first week of August of this year.

We also are planning shortly thereafter, also in 1991, to drill in Section 15, which is across the unit to the southwest, not labeled on your plat here. The Section 15 is just on the north of the highway -- that says 197 where the symbol for that is -- and there's a well on there

shown at 35,000 barrels and another one at 4300.

So we plan, then, upon drilling that, we will have covered an area that so far is approximately 4-1/2 to 5 miles across; and our future plans, again we hope upon success of these, and obviously it depends upon success and economics, this technology will continue to work to develop into the west half further and also into the north where there are some very marginal producers vertically.

MR. BRUCE: Okay. I know Mr. Stovall probably has a few questions to ask, and I don't know how to anticipate his questions.

MR. STOVALL: I would be perfectly willing, if you don't have a problem, just to go directly to the specific things that I have rather than --

MR. BRUCE: If that's okay, yes.

MR. STOVALL: -- try to go through some . . .

MR. BRUCE: I just wanted to get this background.

MR. STOVALL: We appreciate it.

EXAMINER MORROW: Let me ask just a couple of questions before Bob starts on what you've said this morning.

EXAMINATION

BY MR. EXAMINER MORROW:

Q. Would you give us some more information on the producing capacities of wells Nos. 11-14 and 12-10?

A. Yes. More specifically, in Section 11 there are

three wells that have been drilled. The 11-14 is the horizontal. There is an abandoned producer, as you might notice, which is a twin to this. That well had produced approximately 11,000 barrels of oil and was plugged, and in the very extreme southeast of Section 11 is a well that to date has made a 135,000 barrels of oil, and we have that one currently on production at approximately 70 barrels a day and have just recently put it on pump. It's also --

Q. Is that a vertical well?

A. Yes, it is.

Section 14 there is one well, as you'll note.

Q. No. The horizontal well, that's the one I was really interested in --

A. Okay.

Q. -- knowing what it's making now and what its initial potential was.

A. Current production, again, on the 11-14, that well we never got a potential for it. I think our greatest day of production ever on that well has been approximately 25 barrels of oil, and it will pump off, sir, in approximately three to four days and make a cum of 50 or 60 barrels, so we pump that well approximately six days a month.

Q. You have not filed completion reports on that well yet?

A. Completion reports have been filed; however, no participating area has been requested from the Bureau of Land Management due to the fact that participating areas are only accepted by them for commercially productive wells.

MR. STOVALL: Get back to the specific question: On your completion report, what did you indicate on the blank that calls for an IP? Do you remember?

THE WITNESS: No, I really don't, but the IP that we've probably got on there is about 25 barrels a day, I would imagine.

Q. (By Examiner Morrow) Is the well producing at this time?

A. Yes, it is.

Q. All right. How about the well in Section 12, the horizontal well?

A. Okay. I might want to clarify your question on the production, on your question if it's producing. We produced that well, approximately, five or six days a month for the sole purpose that we had the parting of what we called our "parasite" string or "air-injection" string that was sitting there to aerate the mud system originally.

That failed during the drilling of this well, and so we had some water leaking through the parasite string into the Mancos formation, which we feel is highly detrimental to put water on a shale. Therefore, since it

produces approximately 50 percent water with the oil that is produced, we are primarily pumping it to try to keep the water off the formation until we may be able to try and do some further work after research.

Again the cumulative production per month on that, an estimate of barrels produced per month would be approximately a hundred barrels per month, so it's highly uneconomic.

Q. Okay.

A. And Section 12, the 12-10, known as the "San Isidro 12-10 horizontal well," that well on an initial rate, I believe, was reported as 150 barrels per day. That well was put on in January, the very first part of January of 1991, and current production on that well is approximately 150 barrels a day.

EXAMINER MORROW: Okay. Bob, that's all the questions I had.

EXAMINATION

BY MR. STOVALL:

Q. Okay. Let's start with a real technical question. As far as the unit, at the last hearing there was some -- a question raised as to the unit boundaries; and if my memory serves me correctly, this exhibit demonstrated a -- showed a unit boundary that was smaller than the unit boundary that was originally submitted in the unit approval

and cases heard by Examiner Morrow last fall.

I believe at that time at that hearing, Mr. Bruce stated that he thought the old boundaries were the boundaries shown on, I think it was, Exhibit 1 in the previous case was correct, and I think we've subsequently received a letter indicating that the unit has been contracted. Would you clarify on the record the actual boundaries of the unit?

A. Yes. To my knowledge, it has not been -- to my knowledge, for fact, it has not been contracted as of this time. It is anticipated that we are in negotiations currently with Sam Gary, Jr., & Associates, an oil company out of Denver that we originally farmed-in on this lease from, that he is wishing to pursue drilling to the west, directly west of this Federal Unit for purposes of drilling horizontal Mancos wells.

It is contemplated that this unit may be requested by Veteran, who is now the unit operator, to be reduced or contracted under the basic outline shown on Exhibit B.

Exhibit A from the previous hearing is the outline that is currently the Federal Unit as it stands today, as it will stand upon the drilling of the 7-3 horizontal well for which we're applying today. So the unit as it -- again just to kind of reiterate, the unit as it

stands today is the one on Exhibit A, the full 18,800-plus acres, is Exhibit 1.

Q. That includes the east half of Section 7, then, doesn't it, if I remember correctly?

A. Yes, it would include --

Q. Could we look at an Exhibit 1 here just so I know what you're . . .

A. Yes. There are obviously questions about be drilling on the very edge of the unit of the last lease or section within a unit boundary about correlative rights, possibly of the offset leases outside of the boundary of the unit. We do not plan to go 660, but for purposes again of this well as it would stand today, our wellbore shall never be less than one mile from the boundary of the Federal Unit.

Q. Okay. So the actual unit includes Section 5 and Section 8 as well as the east half of Section 7?

A. Correct.

Q. The vertical wells -- none of the vertical wells were drilled under unitized operations, were they?

A. No, they were not.

Q. Are they operated under unitized operations or do they remain on a proration unit tract, operational basis? Are they part of the unit? Are they unit wells?

A. Yes, that's a double-sided question. I guess the answer to that is "maybe," as a lot of things in life. The

units -- the vertical wells that are in this unit are operated by us under the unit agreement and under the terms of the unit agreement; however, as far as future participating areas for those vertical wells, if a horizontal well should be applied for and accepted that would encompass those, they will become part of the participating area, but there shall be no cross remuneration between any of the working interest owners for previously produced or drilled wells prior to the establishment of this Federal Unit in July of 1990.

Q. Okay. In other words, let's look at Section 6. I'm just going to use it as an example. Assuming the Johnson 7-3 is drilled across the line, the participating area was a long, narrow 640, I believe, or the drilling block; is that correct?

A. The drilling block, correct, would be the 640 -- 640, two 320 standups in the west half of 6 and west half of 7.

Q. And the east half of 6 would remain dedicated as a separate proration unit for accounting purposes, production purposes, allowable purposes, everything --

A. Correct.

Q. -- as a separate to that well in the southeast quarter?

A. Correct.

Q. Now, would you explain to me, there are three different concepts involved in this unit operation if I understand correctly. One concept is that of a drilling block, the other concept is that of a participating area, and then the hired concept, of course, is unit ownership and participation. Is that a correct statement?

A. Yes.

Q. Would you explain the difference between the three?

A. Yes, the drilling block is a concept to basically establish an area to be dedicated towards the drilling of a particular well.

Q. For cost-sharing purposes?

A. Yes. Basically established for cost-share purposes, and to also establish what the paying revenue to the working interest would be, and obviously that encompasses the economics of the proposed site. So that is generally for the benefit of the working interest owners that would participate in the actual cost of that operation.

Drilling blocks as set forth in the unit agreement are to be proposed as 640-acre drilling blocks or a minimum of 640-acre drilling blocks, but not necessarily a contiguous -- make a correction on that -- always contiguous; however, not in a perfect square. So you may have two 320 standups, you may dedicate a 320 with a 160 to

the northwest and a 160 to the southeast.

Q. Let me stop there and make sure that we get this perfectly. I actually am going somewhere with this. I've got a purpose in mind as I go through this process. You're saying that the unit agreement requires that for each of the horizontal -- and this unit was primarily formed for horizontal drilling purposes, was it not?

A. Correct.

Q. For each horizontal well that's drilled, the unit agreement requires that a 640-acre contiguous area drilling block be established. Did I hear you say that correctly?

A. Yes.

Q. Now, the pool rules for this pool establish a standard proration unit at 320 acres; is that correct?

A. Correct.

Q. So in effect, you would have two proration units per well for every well that's drilled, horizontal well drilled under the unit agreement.

A. Correct, but to possibly clarify that --

Q. In terms of acreage, not necessarily shape and orientation.

A. Yes, but also upon establishing commercial production, you may then go back and apply for a 320 participating area, which is the next one that we'll tackle, and therefore that drilling block, although dedicated as 640

originally or proposed under 640, may not encompass 640 acres upon production.

Q. Okay. Now why don't you go ahead and explain how the participating area concept works within this unit operation?

A. The participating area is basically established by the operator who submits engineering, geological data in order to determine a common pool of hydrocarbon under the ground and trying to establish an area of drainage associated with the drilling of that pool. So participating area is not necessarily along the same lines that you would normally have drilling wells where you would establish a set amount of acreage for a well.

Q. The proration unit, as we call it, under the rules --

A. Correct.

Q. -- is that what you're talking about?

A. Correct. Whereas a state may say 320 acres is what a well drain is and that's a proration unit, a participating area is to fully develop for the benefit of all parties in that area a common pool. So upon the initial drilling as a common practice -- and what we are planning to do is to try to establish, and we're going to apply for the geologic and engineering data, what these wells we feel will drain for that area.

As the field develops, however, and you were to drill an offset well, as an example, a mile offset to a particular well that was in production, and you find that the pressures are very similar, and that there's communication, you feel it is the same pool and reservoir, then upon drilling that well, you may then want to expand and pull in. When you apply for the participating area for that second well, you would then pull into that the other well a mile in another direction and may, in fact, end up with a participating area which would go into the thousands of acres and eventually into the entire field if you determine it to be one pool.

Q. Let me take an example and work through this, because I think it makes a lot of difference in terms of what you are asking for here. You drilled the 11-14, and it has been determined to be a noncommercial well; is that correct?

A. Correct.

Q. Do you believe based upon what your technical experts have told you that that is because of mechanical problems in the well, or did you just simply not hit the appropriate fracture system to get production?

A. There was some contradiction between the experts on that, to be very truthful with you, fairly difficult to ascertain exactly. However, it is my opinion that it's

fairly difficult to ruin a tremendous well; and therefore, the offset well -- I shouldn't say the offset, but the 11-16 well in the southeast of that same section, which is very economic today and has produced very well. As a matter of fact, it's the best well in the field to date -- had we intersected the same system of that well, we should have seen some interference, and we should have seen better results than we did.

So it would be my personal conclusion at this time, backed by some of the experts that work with me, that it would not necessarily be considered to be in the same pool or same system that the 11-16 produces out of.

Q. Probably hits the matrix with no fractures, so you can't get the oil out; is that what you're saying?

A. Correct.

Q. In real simple terms.

A. Right.

Q. What was the drilling block for the 11-14? Do you know?

A. The 11-14 --

MR. BRUCE: I'm pretty sure, Mr. -- I think looked that up, and I believe it was just the west half.

MR. STOVALL: It was a 320-acre drilling block at that time?

MR. BRUCE: I'm almost positive of that.

MR. STOVALL: And that was also established as a proration unit for the well under the pool; isn't that correct?

MR. BRUCE: Yes.

Q. (By Mr. Stovall) So it would be your intent, as long as that well continues to be a producing will, however marginal, it will just stay a 320-acre proration unit, producing block. The people who own an interest in that 320 acres paid the cost of the well, and they share in what little revenue it will produce, correct?

A. Yes, or expense.

MR. STOVALL: Right.

FURTHER EXAMINATION

BY EXAMINER MORROW:

Q. I was drifting. To be sure -- I dozed off a moment there, but the drilling block is going to be the participating area block for the 11 well; is that correct?

MR. STOVALL: It's not a participating area in terms of terminology, I think, Mr. Examiner; and I think we need to be careful of that because they mean different things. It's the proration unit.

Q. (By Examiner Morrow) I know it's the proration unit.

Who is -- which working interest owner will share in the production of the well?

A. Just the interest owners that put up the funds to drill it.

Q. Which were working interest owners for that 320; is that correct?

A. That's correct.

Q. May call it that.

A. This does get very confusing, so if I can be of any help -- again, a participating area can only actually even be applied for under the terminology of the Bureau of Land Management once commercial production is established. At that point is when you would apply for participating area. Under no circumstances will there ever be a participating area either applied for or approved without first achieving commercial production.

MR. BRUCE: Mr. Examiner, if I may, if you'll look at Exhibit 1 -- that's right in front of you there, that Section 11, it is a -- the west half of Section 11, which was the proration unit for that well, is one federal lease. It's Tract No. 12 of the unit agreement.

EXAMINER MORROW: It doesn't make that much difference whether it is a participating area or not, I guess.

MR. BRUCE: Yeah, they would --

EXAMINER MORROW: Essentially, it's one --

MR. BRUCE: Yeah.

EXAMINER MORROW: -- federal lease.

MR. STOVALL: I think the distinction here is in terms of sharing of revenue and stuff, the participating area and the proration unit could be synonymous terms except the participating area is a concept that requires BLM approval and establishment, and OCD is not involved in any way in the establishment of a participating area.

MR. BRUCE: Participating area is mandated by the unit agreement itself.

Q. (By Examiner Morrow) And does it provide for the area to extend between more -- between two or more BLM leases? Is that part of the concept?

A. Well, yes. The participating area has no -- no boundaries nor do they take into consideration who the ownership of the leases may be, whether it be BLM leases, fee or state. It so happens that we were fortunate that 98 percent of the leases in here are federal leases. However, again, if there was a fee lease adjoining a federal lease with a state lease to the north of that adjoining again, the participating area does not know those boundaries, and the premise or the purpose for the participating area, again, is for all parties, royalty owners, overriding royalty owners and working interest owners to mutually benefit from the development of a common pool.

EXAMINATION (RESUMED)

BY MR. STOVALL:

Q. Let me take the example one step further, and I think that may clear this up. Let's move over to the 12-10.

A. Okay.

Q. It's a good well. Was that drilled on a 320 or a 640 block, do you remember, drilling block?

MR. BRUCE: I believe under the administrative order that approved that well, it was technically a 640-acre drilling block --

MR. STOVALL: Okay.

MR. BRUCE: -- because there was a chance it was going to cross the half-section line.

Q. (By Mr. Stovall) That was my memory, too, that the 12-10 and is a -- in that drilling block is the section, if I remember correctly.

A. Correct.

Q. So the interest owners within -- I guess that's Section 12, isn't it?

MR. BRUCE: Yes.

Q. (By Mr. Stovall) -- shared the cost of that well, shared the cost of drilling that well based upon their interest in that section.

A. The answer to that for all future wells would be yes. In this particular instance, since it was a farmout, Veteran was the hundred percent interest owner. In the

farmout the drilling block was established. We had a farmout on all of 12, so --

Q. All the interest owners paid the cost.

A. That's correct.

Q. You just happened to be all of them?

A. Okay.

Q. Okay. Now that is a commercial well?

A. Correct.

Q. Have you yet applied for a participating area for that well?

A. Yes, we have.

Q. Is it the 640-acre drilling block?

A. No. For that well we established a -- we applied for a 320-acre participating area on the east half based on Dick Schuster, our engineer who testified here back in August at the first hearing. He's a consultant for us, and his estimates of drainage area for that well are 280 acres.

Q. Okay. Let's move on over here, again working on concept more than anything. Let's assume you drill the 7-3 and it is a commercial well. You have established for the drilling purposes a 640-acre block, consisting of the west half of 6 and 7?

A. Correct.

Q. And those are the -- the working interest there, whether they be Veteran or Veteran and others, will pay a

100 -- will pay the costs for that well?

A. Correct.

Q. If that well is established as a commercial well, it is conceivable that, if the engineering and geological information which you derive supports it, you could apply for an expansion of the participating area created with the 12-10 to now have a participating area which included the 12-10 and the 7-3; is that correct?

A. That's correct.

Q. And then you'd do some sort of accounting mumbo-jumbo to balance the interests, and then from that point, once that was done, the owners in that participating area which would now be 960 acres, would share in production based upon their interest in that participating area, correct?

A. Correct.

Q. And similarly, you could go back and drill a well on the west half of 7 -- excuse me -- 12, expand the participating area there, correct?

A. Correct.

Q. And then if you go to the 11-14, say, you talk about reentry and based upon just looking at this map, I would assume you'd go reenter and turn your wellbore around and go south.

A. Correct.

Q. And if you establish commercial production, you could conceivably do one of two things: form a new participating area or extend the existing participating area to include that if you thought that that was all draining the same reservoir through that flexure or fracture system.

A. Absolutely.

Q. Okay. What you are seeking -- Now, let's go back to the proration unit concept to make sure we've got that. Up to this point all we've talked about in this participating area situation is governed by the unit agreement and requires BLM approval.

A. Correct.

Q. Now, under the OCD there are special pools which govern this pool, and they establish 320-acre spacing units with well setback requirements of -- what is it -- 790, I believe.

A. 660, I believe.

Q. 660.

MR. BRUCE: I think 660 in the pool.

Q. (By Mr. Stovall) Okay. So for any well drilled under standard rules, you drill a well at 660 feet from the outside boundaries and you dedicate a vertical or horizontal half section to the well?

A. Correct.

Q. If you were dealing straight rules?

A. And you're talking outer boundaries of a particular section, correct --

Q. Right.

A. -- or half section, as it may be?

Q. Right.

A. Right.

Q. Right. And so now what we're finding as a result of that -- now let me back up for a second -- one, is that those rules are designed to accomplish two things. They are, number one, designed to permit only that number of wells which is presumably required to drain the pool to be drilled and not excessive wells. Are you agreeing that that's what --

A. Yes.

Q. -- happens?

A. (Witness nodded.)

Q. And she can't write down a nod of the head. I'm sorry.

A. No. Yes, absolutely.

Q. And the second thing is that there is an oil allowable established under statewide rules which is based upon the size of the proration unit and the depth of the well.

A. Correct.

Q. And any well drilled would be subject to that oil

production limitation.

A. Correct.

Q. Now, would I be -- would it be fair to say that what you're seeking to do is to develop a set of special rules for this unit which would bring the unit operating requirements and the rules established by the OCD into a pattern which would allow -- allow you to maximize the advantage and flexibility of common ownership and operation by paying less attention to those artificial survey boundaries that some guy on horseback created a hundred years ago?

A. That would be absolutely correct. And to take that even a step further, under the scenario that we were going through before of development in Section 6 and possibly another well on Section 12 and a successful recompletion of a well on 11, if we were to establish an entire area, then, as a pool, it may encompass as much as, say, 3,000 to 4,000 acres and have that approved as a participating area, then we would be restricted, that we'd have this participating area as a common pool, but for the development of that common pool, we still could not cross over any artificial boundaries or get closer than 660 to any lease line, again which may even been that half-section line; thereby you have a common interest and a common sharing of the resources from that pool and are unable --

Q. You have an artificial limitation in effect.

A. Totally artificial limitation. You almost certainly in certain instances will never recover the oil that you otherwise would, especially with horizontal drilling.

Q. Now, would it be a safe characterization of, say, if you were operating a development plan without this artificial limitation, that what you would do, assuming your geology is correct, is you would continue to drill horizon wells across your hinge line, as you've identified it on this exhibit. Just move west along that hinge line; is that correct?

A. Correct, correct, to the northeast and to the southwest.

Q. Have your geologists indicated to you whether there might be other similar flexures in the pool that might -- for example, up towards the northwestern corner of the pool that might provide a similiar opportunity?

A. Yes. We have identified. We have approximately 120 miles of seismic covering about 150 miles in this area as well as numerous other studies, and it shows other basement faulting and subsequent hinge lines that we would like to develop in the same manner.

Q. And so what you're asking for, if I understand correctly, under the special operating rules for the unit,

you now have authority to apply administratively for a horizontal well subject to the restrictions contained in those special operating rules?

A. Correct.

Q. And you would like those special operating rules to be revised to reflect the fact that those horizontal wells may not necessarily stay within the particular section or your half section or even a section; is that correct?

A. That is correct.

Q. Would it make sense to develop special operating rules which would allow you to establish for each proposed horizontal well a drilling block of, say, not less than -- and I need to ask another question to back up here first. Let me -- You said that the unit agreement requires drilling blocks of 640 acres?

A. Could.

Q. And yet one well was drilled on a 320-acre drilling block?

A. Yes. And that statement came from James, and I would not want to contradict that; however, under the initial well, I could not personally speak that for a fact it was not a 640 that was anticipated, that a 320-acre proration unit would be established for that well.

EXAMINER MORROW: Within a 640?

THE WITNESS: Correct. And again, a 640 drilling block

is again generally for the benefit of only the working interest partners that would pay for the drilling of that well, to establish their working interest, net revenue interest and common interest within that block, but the block itself has no bearing on either a proration unit that may be applied for or applied to that well or a participating area that may be applied for and subsequently approved.

MR. STOVALL: Mr. Examiner, one thing I would like to recommend with Mr. Bruce's concurrence; if we did not do so at the last hearing in this case, I would like to recommend that we incorporate into this record the unit agreement from the original case approving the unit.

Which case was that, Jim?

MR. BRUCE: The case approving the special operating rules for the unit was Case No. 10100, Order No R-93-30. The unit agreement itself was marked Exhibit No. 2 in the companion case, 10099, which was to obtain the approval to drill the initial well, the 11-14 well.

MR. STOVALL: And was the unit operating agreement also part of Exhibit 2 where it is a single exhibit?

MR. BRUCE: The unit operating agreement, yes, it was all part of the same exhibit.

MR. STOVALL: Mr. Examiner, I would recommend that that be incorporated into this, because I think that's an

essential part of the evidence you'll need if you want to --

EXAMINER MORROW: The unit agreement from that original case, whatever the order number was. I don't know.

MR. STOVALL: Well, the case number is 10099, and the Exhibit No. is 2. I think that's --

MR. BRUCE: I would agree to that.

MR. STOVALL: Because I think that helps to tie together what they're seeking to do in this case.

EXAMINER MORROW: All right.

Q. (By Mr. Stovall) Would it make sense, then, if the division were to determine to do so from a purely operational standpoint, would it make sense to write a special rule which required you for each well to establish a drilling block of at least 320 acres substantially in the form of a rectangle, or 640 acres?

A. Yes.

Q. Something to that effect?

EXAMINER MORROW: Excuse me just a minute. I thought you said the unit agreement required a drilling block of 640 acres.

MR. BRUCE: If I can answer that Mr. Examiner --

EXAMINER MORROW: Or is at least.

MR. BRUCE: I am not sure on whether -- Are you sure they have to --

MR. STOVALL: And that's why I've recommended inclusion

of it because I think we can check that. There is some question in my mind whether that --

MR. BRUCE: You know, I am going --

MR. STOVALL: -- within --

MR. BRUCE: -- past practice that, you know, it is well known that at least as to well spacing units, the Bureau of Land Management has followed OCD requirements on spacing units, and I've just been madly searching through the unit agreement, and I couldn't find any particular number as to drilling blocks; and therefore, I think it would fall back on the OCD regulation.

MR. STOVALL: Well, my -- and the reason I'm phrasing the questions the way I am is I believe that is a -- I think we can find that information by incorporating it. I want to give that flexibility if --

EXAMINER MORROW: Oh, all right. What I thought his testimony was was that it was 640 required by the unit agreement. If that were the case, I don't think we would want to write a rule that said it should be -- could be either 640 or 320.

MR. STOVALL: I agree with you.

EXAMINER MORROW: His testimony was not that, I mean.

MR. STOVALL: His testimony was that. I'm not sure the unit agreement says that. That's what I'm . . . Anyway, I hear exactly what you're saying, and I agree with what

you're saying, but I want to confirm that the unit agreement does in fact say what he says it does.

MR. BRUCE: You know, unit agreement or unit operating agreement, one way or the other.

MR. STOVALL: Correct.

Q. (By Mr. Stovall) But moving along, and again I'm not making a recommendation; I'm asking you what your feeling is about the thoughts that I'm throwing out. Subject to the requirements of the unit agreement, would you agree with an operating rule which said that you shall establish a drilling block, and I'm going to say, not less than 320 because that's the pool rules.

A. Okay.

Q. And if the unit agreement says 640, a drilling block of not less than 640 acres, which I believe those drilling blocks should consist of contiguous half sections. Would that make sense? Can you think of any circumstance under which contiguous half sections would not make sense?

A. Truthfully, yes, I possibly could. Again, rules, as you put it, a hundred years ago off a horseback have been established assuming that a well drills in a perfect radius around a borehole, be that vertical or horizontal.

Q. Uh-huh.

A. And --

EXAMINER MORROW: Actually they don't assume that, they

establish the drainage area and make that drainage area fit the surface geography that's already established there as best we can, to clarify that.

THE WITNESS: Right. And there are restrictions as to how that can be done, and obviously in a contiguous-type sand reservoir you will have normally a fairly constant radial pattern of drainage. In the fractured reservoir, you generally will not have that same type of radial drainage, so for purposes of the ruling very possibly a 320, I believe, would fit our needs for the development of the field; however, if they're constant 320 half sections, and it is possible to dedicate 160s also to that for purposes of the lease ownership as well as the direction of drainage for the well, but that could, in fact, assist us.

Q. (By Mr. Stovall) Okay. Let me back that up and rephrase it then, because I'm trying to come up with something that if we decide to grant what you're looking for or to meet your requirements, that is still workable from an enforcement standpoint. How about a minimum drilling block of 320 or 640, if that's required by the -- with the drilling block being contiguous and not at the corner quarter sections? For example, looking at Section 12 -- excuse me; 11 --

A. Okay.

Q. -- and to say if you were to drill a drilling

block from the 11-14, you could make the southwest quarter of 11 and the northeast -- northwest quarter of 14 as a 320-acre drilling block, assuming the unit agreement allowed that. Would that make sense?

A. That would make perfect sense, yes.

Q. And that the well be drilled within a window which was 660 feet, no closer than 660 feet to the outside boundary of the drilling block.

A. That would work very well.

Q. So in other words, you could do -- what I would envision that that working is conceivably you could do a drill block which consisted of the west half of 14 and the southwest quarter of 11?

A. That would accomplish, in my opinion --

Q. A 960 --

A. -- a greatest economic benefit to us as a operator to develop the field; correct.

Q. I mean, that would be 480-acre drilling block, with that kind of restriction on the window of the well, and then in terms of oil allowable, something would allow an allowable based upon the proportion of land included within the drilling block compared to -- in proportion to the standard 320-acre drilling block. If you use that as a fracture, would that be something that would be reasonable and make sense in terms of this, what you're seeking in this

application?

MR. BRUCE: Yes, Mr. Stovall, and I think --

EXAMINER MORROW: I think the current rules do that.

MR. BRUCE: The current rule does provide for, yes, either a 320- or 640-acre depth bracket allowable.

MR. STOVALL: Well, I think if you had 480 --

MR. BRUCE: If it was 480, it would be prorated accordingly.

MR. STOVALL: And again, let me make it perfectly clear that I haven't discussed this with the examiner or the division director, and I have no idea whether what I am proposing is acceptable to the division. I'm doing it for conceptual purposes primarily, and if the examiner elects to proceed along these lines, then that's his decision.

MR. BRUCE: Regarding the drilling block, if I could just say one thing, the unit operating agreement, Section 9.2 provides for a drilling block not to exceed 640 acres.

EXAMINER MORROW: Okay.

MR. STOVALL: Okay.

EXAMINER MORROW: So 320 is permitted there.

MR. BRUCE: Yes.

EXAMINER MORROW: Okay.

MR. STOVALL: Okay.

THE WITNESS: Thank you, because it is a lot of documentation to go by memory.

MR. STOVALL: I understand.

THE WITNESS: May I speak for a second to the economics which may be of benefit to the examiner and to the commission of horizontal drilling, which to me is very imperative for the development of this unit and for the development of all the reserves that are possible to recover under here?

We're all aware that horizontal drilling is being implemented in order to more efficiently gain access to fractures and actually decrease the risk involved in drilling uneconomical wells and increase the economics for the development of the field; for this field that we are speaking of here in the San Isidro Shallow Unit has certainly been to date very uneconomic and on a cost-return basis is to date certainly within the lost column.

In taking this field over to use horizontal technology to develop it, the greatest benefit to the horizontal is the longer the extension of a horizontal borehole, you increase your odds for success, you increase your odds for greater production and recoveries and decrease your odds for failure the further that you go and every extra foot that you achieve in the horizontal borehole increases your odds and decreases your risk, in my opinion.

In Lea County, Texas, Union Pacific has now set the record for horizontal displacement length at 6200 feet.

EXAMINER MORROW: I hadn't heard that.

THE WITNESS: Thereby, obviously, crossing section lines and probably numerous leases that they --

MR. STOVALL: And even counties.

THE WITNESS: And they're working further towards that end. But very important, in my opinion, to this is the fact that to get to the point of being 90 degrees or to be horizontal to your formation, you have spent in most cases approximately 65 or 70 percent of the total dollars it's going to take you to the point of completion and equipping the well.

So therefore, knowing that you've spent 70 percent of what you're going the spend on that, whether you achieve 300 feet of horizontal or 6,000 feet of horizontal, and in that ballpark, your economic benefit, then, to be able to drill greater distances, again increases your probability for success, and of course, it also increases the amount of reserves that you're going to be able to achieve in the development of the field. And again I would go back to the point that with a 660 restriction from a section line or lease line, would then leave 1320 feet approximately that you did not encounter with a borehole; and unless you then had an offset well that would perfectly encounter the fractures that may be there on another lease setback 660, which in my opinion would be

impossible to achieve, you will never recover the reserves that sit under that 1320-acre sliver on the north side -- in this case on the north side of 7 and the south side of 6; and I just thought that I would bring that to your attention because very few people are aware that once you're actually horizontal, you are committed to a vast amount or the majority of the money that you're actually going to spend.

Q. (By Mr. Stovall) It's getting around the corner, not going on down the line that costs you money, right?

A. The truth is the way that most people drill them with a down-hole motor, which is a great cost, that their horizontal sections are probably 50 percent of their budget; however, we rotary drill the entire horizontal section, or at least as much of that as possible; and therefore, we decrease greatly the cost of drilling that horizontal section, so that we are actually rotary drilling in the horizontal, so the curve -- getting to the curve, setting your pipe, which you cement back to surface in this area, which is nonrecoverable, then, building that curve with the expense of the equipment that goes in the hole, again you are going to be between 60 and 70 percent of your budget versus going 300 or 3,000 feet, and we're proposing on this well 3,000 feet. If we're having good success, we would like to go 4,000 or even possible further, Again, the test as an exploratory way to test the northern boundaries of

Section 6.

Q. What about --

EXAMINER MORROW: Go ahead.

Q. (By Mr. Stovall) And if we, given that statement I think that's really what we've been saying all along -- is if we preserve the integrity of our basic, fundamental rules by requiring minimum-sized drilling blocks in accordance with the rules, but provide for special rules for this unit to allow more flexibility in the creation of those drilling blocks, and to allow for larger-sized drilling blocks with incumbent additional allowable, or whatever, that would accomplish the result that you're seeking to be able to be maximize your ability to hit the flexure and fractures and get your maximum practical length borehole and still protect correlative rights, and it would appear to me it would go even further to prevent waste because you'd be fewer wells to get more oil. Isn't that correct?

A. Correct.

EXAMINER MORROW: Have you got some more? I've got a few questions.

MR. STOVALL: I don't think so. I think I'll let you.

EXAMINER MORROW: Okay. Let me talk a while, and then you'll maybe have some more.

FURTHER EXAMINATION

BY EXAMINER MORROW:

Q. You indicated that you were applying for the 7-3 today. Now, you didn't mean in this hearing in here. You're not applying for it, I'm assuming.

MR. BRUCE: Mr. Examiner, if I may answer that, that was the Case 10 --

EXAMINER MORROW: That's the one that was taken under advisement.

MR. BRUCE: -- 332, I believe, or 330, which was --

MR. STOVALL: We haven't the number, but it was heard.

MR. BRUCE: It was heard in June, and the record --

EXAMINER MORROW: You're not applying for any well here today?

MR. BRUCE: No.

EXAMINER MORROW: Okay.

MR. BRUCE: No, that was heard and taken under advisement. I think the record was left open, and some additional materials were submitted; that that is not being heard today. It's just being used to help you understand --

EXAMINER MORROW: Oh, all right. I wanted to be sure --

MR. BRUCE: -- what our plans are.

Q. (By Examiner Morrow) The well in Section -- the current well in Section 7, the one that has made 5900 barrels, will it be included as a part of the 7-23 unit if 7-3 makes a well, participating area, or do you -- you don't

know, I guess, is probably the answer.

A. The truthful answer to that is I don't know. Depending on the production and what the geologists and the engineers feel that we are draining would be the participating area, then, that we would apply for, which may be different from the drilling block. The way it is situated, my inclination at this time would be that it would be fairly tough to draw the conclusion that since the fracture trending is running from southwest to northeast, predominantly, that we're going to have a draining effect some 3,000 feet away to the south of where that well would be.

Q. Is it a part of the proration units that's currently assigned to the well? Is it included in the spacing unit for 7-3 as it's applied for?

A. Yes, it I think it would. Yes, it would be.

Q. How would you sort out the interest, if you, say, you had various working interest owners in a standup 640, two 320s stood up to make a 640, and you had variations in working interest owners who participated in that drilling block, and you later decided that all of that should not be included in the participating area, how would you sort out the working interest? Is that covered in the unit operating agreement and the unit agreement --

A. Yes.

Q. -- or not?

A. Yes, it is, probably with two attorneys and three accountants, but it's all covered within the operating agreement and the unit agreement as to how you would divide production as well as associated costs both prior to establishing a participating area and after the establishment approval of a given participating area for a well.

Q. Would all of a proration unit -- say you drilled a well and assigned the proration unit to it, would all of that be a part of the participating area in all cases?

A. Could I ask you to repeat that?

Q. All right. Let's say you drill this 7-3, and you determine that -- well, I'm assuming your spacing unit for that at the current time is, I believe you testified to that, is the west half of 6 and the west half of 7.

A. Correct.

Q. Okay. Well, let's assume that you decided that 400 acres of that is productive and should be a part of the participating area. Would you then come back in and revise your proration unit so that it would be the 400 acres also?

A. I do not believe that either the BLM would approve that nor that we would apply on that type of a basis, that we would generally try and keep it -- the application, and I'm sure the BLM for approval purposes

would attempt to keep that into possibly the 480 acres that was talked about earlier where you may have a quarter section of one lease and a 320 standup.

Q. So you'd have at least either a half section or a quarter section?

A. Yes.

Q. You might eliminate that southwest quarter -- southwest quarter from the proration unit. Is that what you're saying?

A. Yes, basically, and I could see where there could be a circumstance where maybe you have an 80-acre lease in there, but then it changes over to a, you know, a 180-acre lease contiguous to that where you may include that 80 acres, but generally you would try and keep your application -- and I'm sure the approval process with the BLM into a proration unit or participating area that would be for an area that would encompass full leases and not cut leases into division.

Q. I guess what I'm really trying to ask is: If you assigned a spacing unit for a well and then later found out that part pay of that was not productive, would you continue to leave that assigned to the spacing and proration unit for that well, even though it was not a part of the participating area, or would you have eliminated that?

MR. STOVALL: Let me follow up with a question that may

help clarify that, because I understand where the Examiner is going with this. Let's look at the Section 7-3. It has dedicated to it for drilling block purposes, 640 acres which include the southwest quarter of Section 7. Southwest quarter of Section 7, I assume, the west half was -- that well in the southwest was a west half dedication originally.

MR. BRUCE: Yes, it was.

MR. STOVALL: I believe that's correct. That's a noneconomic well. It would indicate that the southwest quarter is probably nonproductive in any significant -- noncontributing and significant amount?

THE WITNESS: Correct.

MR. STOVALL: Under the concept I proposed, you could just as easily propose a 480-acre drilling block consisting of the northwest of 7 and the west half of 6, and then apply for a nonstandard proration unit consisting of the southwest quarter of 7 --

THE WITNESS: Correct.

MR. STOVALL: -- which would not be in a participating area. It would be a nonstandard, 160-acre, nonparticipating area proration unit.

THE WITNESS: Correct.

MR. STOVALL: Which would lead me to my next recommendation -- and I hope this gets to what you're asking, Mr. Examiner, is that I would think that -- I would

say that participating areas as established -- and I think in order to be compatible -- would have to also be approved on a proration-unit basis, consistent with the proration unit rules. In other words, you would have to come back in if you established a 480-acre participating area, then form a nonstandard unit, it would seem to me, of the southwest quarter in order to have the wells properly dedicated under our rules as well as the unit agreement.

THE WITNESS: Yes.

MR. STOVALL: Is that where you're headed?

EXAMINER MORROW: All right. Let me ask my final question.

Q. (By Examiner Morrow) Under the terms of the unit agreement and operating agreement, what are the obligations and benefits to owners of interest within this unit area who are not a part of the participating area?

A. The benefit is -- the direct benefit is zero. They do not participate in the production of that well for which they are not part of a participating area; or wells, as it may be.

Q. Well, do they have any obligations?

A. No, they do not.

FURTHER EXAMINATION

BY MR. STOVALL:

Q. Let me go back and go a little further with that.

There are two different types of interests that we would be concerned with. From the standpoint of a royalty owner, the royalty owners who own leases which are not a participating area, the disadvantage in general terms is that they have leases that are being held by unit wells in which they share no royalty benefit; is that correct?

A. That's correct.

Q. But in this case the royalty owner is common throughout. It is the federal government.

A. Correct.

Q. So that disadvantage is negated somewhat by virtue of the fact that you have a fairly powerful royalty owner who has some say in what goes on who can protect their interests substantially.

A. Hopefully --

EXAMINER MORROW: Very powerful.

MR. STOVALL: I don't think anybody questions the power of the royalty owner in this case.

Q. (By Mr. Stovall) Now apparently the other side of that is the working interest side of the thing, is that it would be the working interest owners in nonparticipating areas would have the advantage of no expense and the disadvantage of no revenue but also the advantage that their lease continues to be -- they continue to hold their working interest by virtue of the unit operations, so that even if

they don't participate in a well at any point in time, they continue to maintain the asset of the lease; is that correct?

A. Correct. And at any time of the unit operating agreement, they may propose a well to establish production, and under the same terms as the unit operator, being Veteran Exploration, they would propose a drilling block for that proposed well; and again if that entailed or encompassed other working interest partners, then they would share in those costs or obviously be under the nonconsent provision.

I might add that the real burden and any detrimental benefit that may come out of this is really on the operator in going through all the rules and regulations. For if you are to drill across a lease line, for instance, and do not get the ratification and approval of the overriding royalty interest holders, in such case you will pay a double override for your well, and in no instance, if they don't approve it, will they be penalized. As a matter of a fact, it's the operator that's penalized.

And further to that extent, as I stated before, you can only apply for a participating area once commercial production is established. If that participating area should then be deemed by the BLM either to be larger than you applied for or what you applied encompassed working interest owners that did not participate in the original

cost of that well and thus the risk, they will share in the production and after success have the opportunity to come in at actual costs, pay their way into a successful well for which they did not bear the risk. So in all instances the burden is put to the operator in this unit, but again he may end up paying double royalties.

Q. Overrides, not really royalties.

A. Not royalties. Overriding royalty interests and also bringing in subsequently into successful wells working interest owners that do not share in the risk of the proposed well.

EXAMINER MORROW: And that same burden would be on any working interest owner who participated in the drilling block as well as the operator --

THE WITNESS: Correct.

EXAMINER MORROW: -- assuming it was different, that you didn't have a hundred percent there?

THE WITNESS: Correct.

EXAMINER MORROW: Okay.

MR. BRUCE: Mr. Examiner, I might point out, as usual with these units, the unit operating agreement provides that lands not included within a participating area within five years of the establishment of the first participating area are then automatically excluded from the unit, so there is --

EXAMINER MORROW: Okay.

MR. BRUCE: -- kind of a time deadline on Veteran, really, drilling the unit, developing the unit appropriately.

EXAMINER MORROW: So that powerful royalty owner probably insisted on that.

THE WITNESS: Yeah, also I do believe, from my notes again yesterday, that you need to establish once every twelve months and by the first quarter, by March 31st preferably of every year, your development plans for the field to the BLM for the approval of their acting agent; and upon that development plan, if they do not feel that you're developing the field in a pace that fits with their definition of properly, prudently developing the field for everybody's benefit, they may in fact -- they have the power to then dismantle the entire unit, except for the participating areas that are already out there, but other than that, they can, in fact, take the unit apart for whatever is not already --

Q. (By Mr. Stovall) Excuse me. Contracted to the existing participating areas?

A. Correct.

MR. STOVALL: Well, I think -- you know, starting back in -- just my final comment on this, when Sam Gary originally applied for this, I saw the potential for what

could be the advantages that could be gained by unit operation, and Jim and I have been through several conversations on this over the last several months, but I think we've been able in this hearing to focus on some significant advantages that can be gained by applying modern drilling technology, the horizontal drilling approach, within the unitized operation concept, and I think it gives us an opportunity to at least look at how we can be flexible in our structure as a way to address and maximize those advantages in rulemaking.

I appreciate your taking the time to come down and go through this exercise with us, because I think -- it's our intent someday to develop some general rules regarding horizontal drilling, and this just takes us one step closer to making these rules more real-world oriented, and I appreciate it.

THE WITNESS: Well, thank you. I'm glad we could be of -- have some input and be of a little help.

MR. STOVALL: I have no further questions.

EXAMINER MORROW: Mr. Bruce, do you have anything else?

MR. BRUCE: I have nothing further, Mr. Examiner.

THE WITNESS: Mr. Jacobsen, do you want to add anything?

MR. JACOBSON: No, no thank.

EXAMINER MORROW: Case 10331 will be taken under

advisement, and today's hearing is adjourned.

(The foregoing hearing was concluded at the approximate hour of 1:05 p.m.)

* * *

I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case No. 10331, heard by me on June Monroe 19 on 7/11/91.

Michael E. Stogner, Chief Hearing Examiner
Oil Conservation Division

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

REPORTER'S CERTIFICATE

I, MAUREEN R. HUNNICUTT, RPR, a Certified Shorthand Reporter and Notary Public, DO HEREBY CERTIFY that I stenographically reported these proceedings before the Oil Conservation Division; and that the foregoing is a true, complete and accurate transcript of the proceedings of said hearing as appears from my stenographic notes so taken and transcribed under my personal supervision.

I FURTHER CERTIFY that I am not related to nor employed by any of the parties hereto, and have no interest in the outcome hereof.

DATED at Santa Fe, New Mexico, this 20th day of September, 1991.

Maureen R. Hunnicutt

MAUREEN R. HUNNICUTT, RPR
Certified Shorthand Reporter
CSR No. 166, Notary Publicy

My Commission Expires:
April 25, 1993