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:	)	
APPLICATIONS OF PHILLIPS PETROLEUM COMPANY FOR THE ESTABLISHMENT OF DOWNHOLE COMMINGLING REFERENCE CASES FOR ITS SAN JUAN 29-6, 32-7, 31-6 AND 32-8 UNITS PURSUANT TO DIVISION RULE 303.E AND THE ADOPTION OF SPECIAL ADMINISTRATIVE RULES THEREFOR, RIO ARRIBA AND SAN JUAN COUNTIES, NEW MEXICO	)	CASE NOS. 12,136 12,137 12,138 and 12,139
	)	(Consolidated)

REPORTER'S TRANSCRIPT OF PROCEEDINGS

EXAMINER HEARING

BEFORE: DAVID R. CATANACH, Hearing Examiner

March 18th, 1999

Santa Fe, New Mexico

This matter came on for hearing before the New Mexico Oil Conservation Division, DAVID R. CATANACH, Hearing Examiner, on Thursday, March 18th, 1999, at the New Mexico Energy, Minerals and Natural Resources Department, Porter Hall, 2040 South Pacheco, Santa Fe, New Mexico, Steven T. Brenner, Certified Court Reporter No. 7 for the State of New Mexico.

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I N D E X

March 18th, 1999
Examiner Hearing
CASE NOS. 12,136, 12,137, 12,138 and 12,139 (Consolidated)

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A P P E A R A N C E S

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* * *

WHEREUPON, the following proceedings were had at 10:18 a.m.:

EXAMINER CATANACH: At this time we'll call the hearing back to order and we'll call Case 12,136.

MR. CARROLL: Application of Phillips Petroleum Company for the establishment of a downhole commingling reference case for its San Juan 29-6 Unit pursuant to Division Rule 303.E and the adoption of special administrative rules therefor, Rio Arriba County, New Mexico.

EXAMINER CATANACH: Call for appearances.

MR. KELLAHIN: Mr. Examiner, I'm Tom Kellahin of the Santa Fe law firm of Kellahin and Kellahin, appearing on behalf of the Applicant.

EXAMINER CATANACH: Additional appearances?

MR. BRUCE: Mr. Examiner, my name is Jim Bruce from Santa Fe. I represent Larry Simmons, who is here with me.

I'm not sure which case Mr. Simmons owns an interest in, but I understand Mr. Kellahin is going to consolidate these other cases for hearing.

EXAMINER CATANACH: Is that correct?

MR. KELLAHIN: Yes, sir.

EXAMINER CATANACH: You would request we consolidate these cases at this time?

MR. KELLAHIN: Mr. Examiner, we would ask that you consolidate all four of Phillips' Applications and cases for one evidentiary presentation.

EXAMINER CATANACH: Okay, at this time we'll call Cases 12,137, 12,138 and 12,139.

MR. CARROLL: Application of Phillips Petroleum Company for the establishment of downhole commingling reference cases for its San Juan 32-7, San Juan 31-6 and San Juan 32-8 Units pursuant to Division Rule 303.E and the adoption of special administrative rules therefor, Rio Arriba and San Juan Counties, New Mexico.

EXAMINER CATANACH: Okay, let me call for additional appearances in any of these cases.

Okay?

MR. KELLAHIN: I have two witnesses to be sworn, Mr. Examiner.

EXAMINER CATANACH: Will the two witnesses please stand to be sworn in?

(Thereupon, the witnesses were sworn.)

MR. KELLAHIN: Mr. Examiner, we have two witnesses to present to you. The first witness is Mr. Scott Prather. He spells his last name P-r-a-t-h-e-r. He is a petroleum landman, he resides in Farmington, New Mexico, and he's going to make a presentation concerning notification, identification of interest owners, so we can

describe those issues for you.

It is our request to start with the exhibit book that is identified for the San Juan 29-6 Unit. It's Case 12,136. All of the exhibit books for each case are organized identically, in the same sequence. The exhibits are substantially the same, except the ownership and identity of the interests vary between the units. And so we were going to use this first book as the main presentation and then show you where the differences are as we move through the other three cases.

As you may remember, Phillips has two other units that were approved for downhole commingling reference cases. These are the last four units they are the operator of. We're proposing to obtain authority so that the Mesaverde and Dakota reservoirs in each of these units may be commingled. It would apply to existing wells and future wells. We believe that there is sufficient data in each of these units to demonstrate that both the Dakota and the Mesaverde in each unit is marginal, and so we can satisfy the commingling criteria that at least one zone is marginal.

The Application talked about the Pictured Cliff and the Fruitland Coal. Those are not to be included.

In addition, we believe that there is enough pressure information in these units, and we will

demonstrate that with our petroleum engineer, Mr. Mike Larimer. We are asking for an exception from the pressure criteria, if you choose to do so. We will demonstrate for you that our potential Dakota, both present and future, is going to be at a pressure that is less than the original bottomhole pressure of the Mesaverde.

In addition, we are going to ask you to review the allocation formula that we propose to use. It is a formula that has been reviewed and approved by the BLM. It is consistent with accurately identifying the reasonable share of production to each interest owner, and we have a formula that does it on a reasonable, equitable and fair basis. Mr. Larimer will describe for you that formula.

In addition, we are asking to avoid the administrative burden of providing any further notification to any interest owner anytime we should process a downhole commingling application. As you are acutely aware, when you file an administrative commingling application, you're required to notify the interest owners in each instance that share in that production if they're not the same. They're never the same in federal units. These are divided units. The participation area for the Mesaverde, the participation area for the Dakota, will always be different. And because of that difference in area, there is a difference in the map. And so we always have to send

notice.

We think this matter has become such a routine clerical activity for both the operator and the Division and that you have satisfied yourself over the years with hundreds of cases that the notification to each individual interest owner each time is no longer necessary.

Mr. Simmons has appeared with counsel today. We will do our best to identify where his interests are. If we're not able to satisfy that this morning, we will do that subsequent to the hearing.

There's a gentleman from Albuquerque. I believe his name is Mr. Elliott. He's in attendance here as a result of the notification. We have other operators that are interested in our activities and are here.

To the best of our knowledge, though, Mr. Examiner, after sending hundreds of notices, hundreds of notices, there is no objection to what we are asking you to do. And that is consistent with all these cases, because I am not aware of any objection ever being filed in the end.

So our purpose, in summary, is to streamline the administrative process, take what has become a routine activity of the Division and the operators and have your approval to streamline the process, because commingling is the future for the San Juan Basin in these two reservoirs. This is the only way you're going to see further

development, is on a commingled basis.

SCOTT PRATHER,

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

DIRECT EXAMINATION

BY MR. KELLAHIN:

Q. Mr. Prather, for the record, please state your name and occupation.

A. My name is Scott Prather, and I'm a petroleum landman for Phillips Petroleum Company.

Q. And where do you reside, sir?

A. Farmington, New Mexico.

Q. Has it become your responsibility as a landman for Phillips Petroleum Company to, under your direction and control, have, to the best of your ability, identification of the working interest, royalty and overriding royalty owners for each of the interests in each of the four units?

A. Yes, it has.

Q. And have you satisfied yourself to the best of your ability you've accomplished that?

A. Yes.

Q. In addition, have you prepared in the exhibit books an outline of the configuration of these units?

A. Yes, I have.

Q. And you have identified to the best of your

ability the location of the various kinds of wells?

A. Yes, that's correct.

Q. In addition, do the exhibit books in each instance include, to the best of your knowledge, the current participating areas for the Dakota and for the Mesaverde?

A. Yes, sir.

MR. KELLAHIN: We tender Mr. Prather as an expert petroleum landman.

EXAMINER CATANACH: Any objection?

Mr. Prather is so qualified.

Q. (By Mr. Kellahin) All right, let's turn to the first exhibit book, and let's look at the information for the 29-and-6 Unit. When we turn past the notice letter and the Application, there's a plat?

A. Yes, that's correct, there is.

Q. Was the notice letter, Application and plat sent to all the working interest owners, royalty owners and overriding royalty owners in each of the four units, to the best of your knowledge?

A. Yes, sir.

Q. When you turn past the plat, there's a tabulation of names by individual and company?

A. Yes.

Q. What does this represent?

A. The totality of the working interest ownership, the net working interest ownership, overriding royalty interest owners or royalty interest owners within the 29-6 Unit. So essentially anyone that owns any form of an interest in the 29-6 Unit.

Q. Okay. To expedite the mailing of notification to each of the interest owners in all four units, how was that accomplished?

A. We took the combination of a listing of all interest owners in all four existing units and mailed a copy of each Application to all those. And so you may have ended up with some parties that did not own an interest in the 32-8 Unit getting a 32-8 Application, but by virtue of their ownership in another unit they received the entire package.

Q. All right. So the entire package for each of the four cases, which included the notice, the Application and the plats, were sent to all the owners?

A. Yes, sir, that's correct.

Q. Let me show you what is a tabulation of the notification efforts. Was this prepared by you, and can you authenticate what I'm about to show the Examiner?

A. Yes, sir, I can. This is a copy of the green certification cards that are attached for certified mail for each application, or notice of application, that we

mailed, and an affidavit that I signed stating the same.

MR. KELLAHIN: Mr. Examiner, I have not marked this as an exhibit -- I'll do so subsequent to the hearing -- but this is the notification that we've just described.

MR. CARROLL: How many parties were notified?

THE WITNESS: I believe it's in excess of 400 people. I think 403 or 401. I can't remember exactly, but I know it's in excess of 400 parties.

Q. (By Mr. Kellahin) How did you initially compile that list?

A. We took the ownership records from Phillips Petroleum Company from our Division order section, people that we have on pay, and then checked the records for ownerships, any other determining ownerships within the boundaries of the units.

Q. Okay, and that represented the initial mailing list?

A. Yes, sir.

Q. After you sent that notice, were there instances where you got your notice attempt returned to you undeliverable?

A. There were, I believe, three that were returned as undeliverable with incomplete addresses. We ascertained correct addresses and mailed those, and there was one that

was returned as undeliverable, the party had left no forwarding address.

And I subsequently was able to contact that person by telephone, and we special-delivered a new packet to them. This person had actually been in suspense since the latter part of the Eighties with our Division orders group. We knew their name, but in the latter part of the Eighties, he had neglected to provide a forwarding address and we lost track of him, but I did some checking and was able to track him down.

Q. As part of that effort, then, you're taking the list that you use to pay checks to the people that share in the production?

A. Yes, sir, that's correct.

Q. So that's probably as good a notice list as you could find?

A. Yes, sir.

Q. And one of them was returned to you for an account that had been suspended because that party, both Phillips had lost track of the location of that individual, and that individual didn't bother to keep current as to his status with your company?

A. Yes, that's correct.

Q. All right. As a result of your efforts, what did you do? Were you able to contact this individual?

A. Yes, I did locate him in Albuquerque and advised him that we had been attempting to deliver this -- copies of notices to him. And after I ascertained that he was the correct party and -- I was even able to deliver the news to him that we had about $140,000 in suspense for him, so he advised me he had no problem with any application we were filing.

Q. He was delighted to hear from you, wasn't he?

A. Yes, that's correct.

Q. All right, let's go to the next exhibit tab. It's the tab marked Exhibit 1. When we turn behind that tab, there is again a tabulation of interests. What are you describing here, Mr. Prather?

A. That is a tabulation by participating area of the ownership within each participating area for the 29-6 Unit.

Q. Now, would this identify just the working interest ownership, or would this include the overrides as well?

A. It includes just the working interest ownership.

Q. All right. So if there's a working interest owner involved in this point, they can go to the tabulation, see what you showed to be their percentage of the various participating areas and expansions?

A. Yes, sir, that's correct.

Q. Behind those tabulations there's a color-coded

plat?

A. Yes, sir.

Q. What does that show us?

A. That shows every well for all participating areas within the unit. It's what we -- I guess you could term it as an overall picture or overall plat of the unit, containing all wells for any producing horizon within the unit that a PA has been established for.

Q. Behind that plat there's a series of additional plats. What are we seeing as we go through each of those?

A. Okay, these correlate to the first part of the Exhibit 1 here where, in effect, if you go in and see Fruitland participating area ownership that we had previously discussed, then you go back here to the first black-and-white plat. That is the Fruitland participating area as it's defined currently within the records.

And so it's a picture or a snapshot of where those interest owners own the interest correctly right now. And it's the participating area highlighted with the dots or the dotted area.

Q. Mr. Simmons' counsel has requested that I ask you to identify what your records show concerning his interest in any of these units. Were you able to do that, Mr. Prather?

A. Yes, I was. Let's see, I went in -- After being

advised by you, I went in and researched, and I believe Mr. Simmons owns a royalty interest in the 32-7 Unit, and according to what I was able to ascertain, he has slightly less than one-tenth of one percent royalty interest in the Fruitland Coal and slightly over one-tenth of one percent in the Mesaverde participating area.

Q. Okay. Did your record search indicate an interest for Mr. Simmons in any of the other units?

A. Not that I was able to pull up, no, sir.

MR. KELLAHIN: If Mr. Simmons desires further information subsequent to the hearing, Mr. Catanach, we'll provide that to him.

Q. (By Mr. Kellahin) All right, Mr. Prather, let's take a moment and turn to the Exhibit Book, 32-7 --

A. Okay.

Q. -- for Case 12,137, and let's go through the same type of information, starting -- Let's get the Application, this information, organized in the same way as the original book.

A. Yes, sir.

Q. Let's turn to Exhibit 1, then, and start looking at the plats that show how the unit has been developed. Starting with the first spread sheet, what are we seeing here?

A. Under the plats under Exhibit 1?

Q. Yeah, Exhibit 1, there is a tabulation. What is that?

A. Yes, sir, that's a tabulation of the participating-area ownership for the various participating areas within the 32-7 Unit.

Q. All right. And following that, what is the first plat we see?

A. Again, it's another copy, a color copy of an overall plat that shows all existing productive wells within the boundary outline of the unit.

Q. And then following that plat --

A. -- we go into the black-and-white exhibit, the participating areas.

Q. All right. All right. We'll let you thumb through those displays, and then we'll turn to the next exhibit book. I want to direct your attention now to Exhibit -- 31-6 Unit, which is Case 21,138, and in the same manner, Mr. Prather, let's turn to Exhibit Tab 1 --

A. Okay.

Q. -- and go through these and identify what we're showing.

A. Okay, the first page is the working interest ownership of each participating area within the 31-6 unit. That is followed by a color copy of the overall unit with all existing wells platted on there. And that's followed

by the black-and-white microdot PA ownership maps again, for the 31-6 unit.

Q. All right, and let's turn to the final exhibit book. If you'll look at the 32-and-8 Unit book, it's in Case 12,139. Again, turn behind Exhibit Tab Number 1.

A. Okay, starting with the first page behind Exhibit 1, the participating area ownership for the 32-8 unit, followed immediately by the color plat, the overall plat of all existing wells within the unit boundary. And then the black-and-white microdot copy of each participating area plat within the 32-8 Unit.

Q. Do you know when, approximately, each of these four units was initially created?

A. Yes, sir, in 1952 to 1953.

Q. Do you know approximately how long Phillips has operated these four units?

A. Yes, sir, Phillips was the initial operator when the units were formed. There was a period of time that they allowed or made arrangements for Northwest Pipeline to operate these, and then Phillips came back in approximately 1989 and took over as operator again.

Q. Are these divided interest units?

A. Yes, sir, they are.

Q. And as a result of that division, then, when initial production is established in any pool, there's a

process by which a participating area is created?

A. Yes, sir, that's correct.

Q. And that has occurred in each of these four units, has it not?

A. Yes, sir, it has.

Q. And as production has continued, the participating areas have been expanded, have they not?

A. Yes, sir, that's correct.

MR. KELLAHIN: Mr. Examiner, that concludes my examination of Mr. Prather.

We would move the introduction of his exhibits shown behind the cover sheet through Exhibit Tab 1 in each of the exhibit books.

EXAMINER CATANACH: Any objection?

MR. BRUCE: No, sir.

EXAMINER CATANACH: Exhibit Tab 1 in each of the exhibits will be admitted as evidence.

Mr. Bruce, do you have any questions of this witness?

MR. BRUCE: Just a few, Mr. Examiner.

EXAMINATION

BY MR. BRUCE:

Q. Mr. Prather, what is the total -- Do you know the total acreage in the San Juan 32-7 Unit?

A. The total acreage in the San Juan 32-7 Unit?

Q. Yeah, just the total.

A. I'll have to go back and look. Let's see here. I think we put it in the Application. Yeah, 17,000, I'm sorry. I think you'll find it in the Application, 17,829 acres.

Q. Thank you. Looking just at that 32-7 booklet, going to Exhibit 1 --

A. Yes, sir.

Q. -- the color photo, the overall map --

A. Yes, sir.

Q. -- there's a couple of holes in the unit. Is that acreage that was never committed or that is no longer committed to the unit?

A. Yes, sir, that's correct.

EXAMINER CATANACH: It's no longer committed to the unit?

THE WITNESS: That's correct. It either was not originally included or has -- you know, was eliminated, automatic elimination.

Q. (By Mr. Bruce) Going to the map immediately behind that, which is the Fruitland Coal PA --

A. Yes, sir.

Q. -- do the dividing lines like on a section, say Section 18 on the northwest side of the unit, does that identify well units or leases?

A. Section 18 in the north -- in the upper part of it?

Q. Yes.

A. That actually -- The Fruitland Coal was developed on 320-acre standup spacing, and that is just defining what portion of Section 18 is within the participating area.

Q. Okay. Okay, now, you identify all of the Fruitland Coal wells on this map, correct?

A. Yes, sir, that's correct.

Q. And the same is true for these other PA maps --

A. Right.

Q. -- is that correct?

A. Uh-huh.

Q. Just looking at the Fruitland Coal, there are some that are not in participating areas. Is that because they were not deemed commercial by the BLM or because they have just not yet been expanded to include the PA?

A. Both cases. The majority of them that are not in the participating area have not been deemed commercial, but there are still some outstanding that in no -- you know, we're still waiting to get enough production data on those to submit them for commerciality determination.

Q. Okay. Sometimes it takes the BLM quite a while to make that decision, does it not?

A. Yes, sir, I would agree with that.

Q. Now, I believe Mr. Kellahin said that in this Application you're no longer seeking the commingling authority for the Mesaverde -- excuse me, for the Fruitland Coal and the Pictured Cliffs?

A. Yes, sir, that's what I did hear him say, yes, sir.

Q. Okay. So really today we're just looking at the Mesaverde and Dakota?

A. Yes, sir.

Q. Mr. Prather, let's just look at the Mesaverde and Dakota PA maps.

A. Okay.

Q. It says these are both effective as of the early Eighties. There has been no further expansion of these PAs since that time?

A. Yes, sir, that's correct.

Q. Okay. In looking at Mr. Simmons' interest -- and if you don't know, I'd like an answer afterwards. But Mr. Simmons, in the tracts he owns, is his interest -- is it severed by depth, is what I'm asking?

A. Is it severed by depth? I really couldn't answer that. I mean, I don't know if a -- I know that Mr. Simmons does not show up as a royalty interest owner in the Dakota formation, and I would assume it's because whatever tracts he owns an interest in are not included in the Dakota

participating area.

But he is in the Mesaverde participating area. So the theory -- I mean, unless Mr. Simmons or his predecessor-in-title has, at some point in time, horizontally severed his mineral interests, then no, it should not be.

Q. Mr. Prather, if it's okay with Mr. Kellahin, after the hearing could you just tell me which tract or tracts he owns interest in so I can just -- unit tracts?

A. Yeah, we can get that information for you. I don't have it available here today --

Q. Okay.

A. -- but we can get that information for you.

Q. Yeah, that way we can determine whether, you know, maybe his interests are down in the southern part of the unit, and therefore he's not in the Dakota PA, is what I'm --

A. Well, the only one that I know off the top of my head, to be honest with you, that he does own an interest in is -- and I'm not saying this is the only one, but there are -- the only one I'm aware of would be Section 32 of 32 North, just --

Q. That would be kind of on the middle west side of the unit?

A. Yes, sir, uh-huh.

Q. Okay.

A. And I'm aware of that because I do recall that the Number 2 15 well, which is a Fruitland Coal well, was one of the wells that was admitted to the participating area, and Mr. Simmons did have a royalty interest in that well.

Q. Okay, if we could find that out, that would be helpful.

A. Right.

MR. BRUCE: Okay. I think that's all I have for Mr. Prather. Probably have a few questions for the engineer.

EXAMINATION

BY MR. CATANACH:

Q. Okay. Mr. Prather, in each of these books you've got the working interests shown?

A. Yes, sir.

Q. And the royalty interest ownership is shown where?

A. It's shown in the combined ownership. I don't have it set out by decimal, but it's contained -- any interest owner is contained over here --

Q. That's in --

A. -- immediately following the Application in each book.

Q. Okay. That's the complete list of owners in that unit?

A. Yes, sir.

Q. Mr. Prather, have you been contacted by any other interest owners who have concerns or had questions about your Application?

A. Yes, sir, I have. I had several of them contact me and say, what is this, and asked me to explain it to them. And I tried to give them what I thought was the most reasonable explanation, why we had to go through this. Many of them wanted to know why we got this, and that was the main thing that they were asking, is, why did I receive this?

And I informed each of them in each case that, you know, here's what we're trying to do, here's what we're attempting to do, and, you know, if you don't feel like this is proper then we recommend that you put in an appearance.

Q. How many parties would you say you talked to that had questions or concerns?

A. Twenty. And they were all either royalty owners or overriding royalty interest owners. I didn't have any questions from -- I didn't have any questions from any working interest owners. A couple of them called and said, We're going to send somebody to the hearing, just to

listen, but they didn't have any questions on it, like I say. All the questions came from either mineral interest or overriding royalty interest owners.

Q. Just out of curiosity, Mr. Prather, during the course of operating within these units, do you normally provide notice to royalty interest or override royalty interest for different operations that you do?

A. For just day-to-day operations?

Q. Yeah, I mean, if you're going to drill a well or if you're going to -- Do you know of any instance where you do provide notice to royalty interest owners?

A. Well, no, sir, mainly just when it's regulatory involvement matters. But for day-to-day operations and things like that, no, not for royalty override owners, no, we don't.

Q. That's not anything that's required within the unit operating agreement or anything?

A. No, sir.

Q. Mr. Bruce referred to a couple of areas not included in -- at least the 32-7 Unit.

A. Uh-huh.

Q. Can you refer to that map?

A. Sure.

Q. Can you identify those areas for me?

A. One of them would be in Section 33, the south

half. It would be, actually, the southwest quarter and the east -- or west half of the southeast quarter in Section 33.

Q. Okay.

A. I believe there's another one up in Section 21, the east half of the northwest quarter.

Q. Okay.

A. There's a small piece down to the southwest there in Section 5 and 6. That's a 40-acre tract that's not in the unit. And then down in Section 18, there's also a piece down there.

And to the best of my recollection, most of those, if not all of them -- I know the ones down here in the southern portion were fee ownership where the individual fee owners of the leases did not commit them to the unit, did not sign the unit agreement.

Same situation there in Section 33. The leaseholder there did not or would not sign the unit agreement back in the 1950s, so they were never committed originally to the unit. It wasn't a matter of being contracted out.

Q. Is there a similar situation in the other units?

A. Yes, sir, there is in 32-8. I believe there may be a portion there. I think you have a big hole right at the top.

Q. Okay, that area in Section 16 and in Section --

A. Yes, sir.

Q. -- 21?

A. Uh-huh. And then the other two units, I believe they're fully -- 31-6 and 29-6 are both -- everything represented down there within the boundary outline is in the unit.

EXAMINER CATANACH: Okay. I have no further questions of this witness. You may be excused.

THE WITNESS: Thank you.

MR. KELLAHIN: Mr. Examiner, I need to correct a misstatement I made that was incorrect. The Phillips Application that dealt with the Pictured Cliff in the Fruitland, they desire to have the same type of order that you entered in the other two commingling reference cases. My understanding is that for the PC and the Fruitland, that they did not achieve the classification of either of those zones as marginal economically throughout the unit, nor were they exempted from the pressure criteria.

What they were allowed to do, however, is to avoid sending additional notification for those instances where they chose or would choose to commingle the PC with other formations, the Dakota or the Mesaverde.

So if I may correct my opening comments in that regard, that is what they want to accomplish. It may

invite additional questions of Mr. Prather or from the engineering witness, but I apologize for my misstatement.

EXAMINER CATANACH: Okay.

MR. BRUCE: I don't have any questions of Mr. Prather, but do you mean -- you said -- I just want a clarification.

MR. KELLAHIN: Well, let me restate it. If Mr. Simmons has a spacing unit in which he would share in Fruitland Coal gas, and that contains a well, for example, a Dakota well, in a spacing unit in which he may or may not have an interest, and if they choose to come back later and commingle it with Fruitland Coal, they are relieved from an obligation to send Mr. Simmons any additional notice, other than what he got today.

EXAMINER CATANACH: Okay, this witness may be excused.

MIKE LARIMER,

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

DIRECT EXAMINATION

BY MR. KELLAHIN:

Q. Mr. Larimer, for the record, sir, would you please state your name and occupation?

A. Mike Larimer, I am a petroleum engineer with Phillips Petroleum Company in Farmington, New Mexico.

Q. Mr. Larimer, have you testified before the Division on prior occasions?

A. No, I have not.

Q. Summarize for us your education.

A. I received a bachelor of science in petroleum engineering from Tulsa University, graduated in 1986. For the past approximately 13 years I've worked for Phillips Petroleum in a variety of capacities, production engineer, drilling, reservoir engineer.

Q. As part of your duties assigned to you by your company, have you been involved in its project to achieve a downhole commingling reference case for each of these four units?

A. My responsibilities have been to supervise the gathering of the data and do much of the analysis of the data, so I have been intimately involved with the project.

Q. When we look at the balance of the exhibit books in each instance, those represent your work product, do they not?

A. That's correct.

MR. KELLAHIN: We tender Mr. Larimer as an expert petroleum engineer.

EXAMINER CATANACH: Any objection?

MR. BRUCE: No objection.

EXAMINER CATANACH: Mr. Larimer is so qualified.

Q. (By Mr. Kellahin) Mr. Larimer, let's turn to the exhibit book for the 29 and 6. Turn behind Exhibit Tab Number 2, and let me have you identify the first display.

A. Under Exhibit 2, the first sheet is a plat showing the Mesaverde wells in the 29-6 unit.

Q. What is the purpose of those wells that are color-coded with the green dots?

A. The green dots represent the wells which were primarily used in the study to derive the information that we present today.

Q. That would include for the Mesaverde reservoir the pressure, the forecast estimated ultimate recovery, the various components that went into your analysis?

A. That's correct.

Q. Why did you choose for this unit these particular wells, the seven that we're seeing with the dots?

A. Because they are representative of the wells in this vast majority of the central portion of the unit.

Q. When we look at the conclusions that you ultimately reached, were you able to reach an engineering conclusion that for the Mesaverde reservoir, the future opportunity in this reservoir would be for production that would be marginal?

A. That is correct.

Q. In addition, when we looked at this data were you

able to satisfy yourself that the pressure information you are about to show is representative of the Mesaverde pressure in the unit?

A. Yes.

Q. As we describe your methodology and your conclusions, did you do the same method and reach the same conclusions for each of the four units?

A. Yes, the same methodology was used in each of the units.

Q. Can you generally describe for us what you see as the future opportunity in each of these units for the production of Mesaverde gas from that formation? How are we going to do it?

A. You mean the development?

Q. Yes, sir.

A. Future development?

Q. Right.

A. It varies from unit to unit. Some units have a limited potential. Most of the units actually have a fairly limited potential for drill wells. Most of the potential would be for recompletions, and I can, as we go through the units, describe that.

Here in 29-and-6 Unit, as you can see, the Mesaverde is fully drilled on 160s, and so work in the Mesaverde would come from the optional 80-acre infills, and

right now our current plans would be along the lines of going into existing Dakota wells in this unit and performing a recompletion where that is prudent and economical.

Q. When you ran your economic cases, did you determine that the most effective and efficient means to access and produce the Mesaverde was in commingled wellbores?

A. Absolutely, it's definitely the most efficient completion, something we've been doing in two of our other units, the 29-and-5, the 30-and-5 Unit, for the past two years, found to be very efficient and cost-effective completion.

Q. Let's turn behind the plat and look at the first tabulation of data. What are you tabulating here?

A. On this sheet we do summarize all the units, but for the 29-and-6 Unit, in particular, we have the initial pressures, what we found to be the current pressures in the area from those wells we pointed out earlier, a projected initial rate for well projects we'd be doing in that area, and projected EUR for projects in that area.

Q. All right. And for this tabulation, then, it's the same exhibit Mr. Catanach will find in each of the exhibit books?

A. It's the exact same exhibit for the Mesaverde and

the Dakota in each of the exhibit books.

Q. Let's turn to the topic of pressure. When we compare the current bottomhole pressure in the unit, in the Dakota reservoir, in each instance have you been able to conclude that those current pressures are less than the original, initial bottomhole pressures in the Mesaverde?

A. Yes, we have.

Q. Is it necessary, in your opinion, to continue the criteria under the rule of satisfying the pressure limitations?

A. No, it is not.

Q. Let's turn behind that, and let's look at the components of cost. Identify what you're doing and describe the conclusions.

A. What we've tabulated on this sheet would be a comparison of each of the three different completion methods that we've looked at, a single completion, a dual completion and commingled completion, all dealing with the Mesaverde and Dakota reservoirs.

The top block of information would be a single completion in the Mesaverde and a single completion in the Dakota. For the Mesaverde single completion the total cost would be $483,000. The Dakota, the total cost would be $520,000. And you can see that I've added those together there, so that if we were to drill a single in the

Mesaverde and a single in the Dakota, the total cost would be a little bit over a million dollars.

The next block of data down would be if we took the Dakota and Mesaverde and did a dual completion with all of the downhole equipment and the larger wellbore associated with that. And then we broke that out with costs attributable to each formation. We have one wellbore, but you are completing the Dakota and the Mesaverde in a dual-completion fashion. And the total cost of that completion is $925,000.

And the last block of information is what we've really been focusing on. It's in the commingled completion where you have the cost efficiencies of the single well -- smaller wellbore, without additional downhole equipment. And the total cost of that wellbore for the equivalent that you might see in the dual and the single is $725,000.

Q. So if you look at the summaries, then -- the $725,000, compared to the $925,000, compared to $1,300,000 -- the Division can see the obvious savings that are realized by the commingling completion?

A. That's right, and at this point we see that this is the most efficient completion for us to do.

Q. All right, let's look at the operating expenses associated with these various activities. If you'll turn to the next tabulation, summarize for us what you're

showing.

A. This is, again, a summary of all the units, with the Mesaverde well-operating costs and the Dakota well-operating costs, and basically we just pulled the actual operating expenses that is our historical expenses for these types of wells and presented them here. The main point again is, there are some operating-cost savings by going to a commingled completion, that are greater than you might have in a dual or single-well completion.

Q. Again, you've tabulated the operating costs for each of the units, and you're looking at the Mesaverde and Dakota as your economic analysis?

A. That is correct.

Q. Having got the operating costs and the capital expenses, then you need to forecast what you think these wells will produce?

A. That's correct.

Q. All right, let's turn to the colored curves, if you will.

A. Okay.

Q. Is this a presentation that is similar in methodology to that used by Phillips in the prior reference cases?

A. Yes, it is.

Q. And is it similar to the methodology used by

Burlington in their prior reference cases?

A. Yes, it is.

Q. Refresh our recollection on how to read the display, and then we'll talk about your conclusions.

A. Okay.

Q. What do we find on the vertical axis?

A. On the vertical axis is the ultimate recovery, the EUR, in BCF.

Q. And on the horizontal scale is what?

A. That's the initial first-year rate that you would expect from whichever well is being considered.

Q. There are three curves. Let's start with the top red curve. What does this mean?

A. The red curve represents the analysis of a single Mesaverde well. We're looking at Mesaverde marginal economics here. And using a 20-percent rate of return for the well and running economics at varying recovery rates and initial rates, we come up with points that can be graphed so that a well that is going to be better than marginal economics would have to perform above the curve. And a well that you would plot below the curve would be lower than marginal economics.

Q. As we look at this curve sheet for each of the units, will they be the same curve for each case?

A. The curves will be very similar, but there are

variances in the capital cost to perform that work, and from unit to unit there are some slight variations in cost that are represented.

Q. The slight variations in cost between units is attributed to what?

A. Slight variations in geography or topology.

Q. Additional drilling depth to a formation, that kind of thing?

A. Correct, correct.

Q. All right. So what we're looking at as we go through each of the unit books is, you're going to have integrated the actual costs representative of that unit --

A. Right.

Q. -- into a sheet that looks like this?

A. That's correct, the economics were run independently for each of the different units.

Q. All right. So if I take the risk and drill a single Mesaverde well, and its initial rate is more than 600 a day, and I have forecasted an EUR of 2 BCF, can I afford to drill this well?

A. Yes, by the analysis done here, you would conclude that that would be an economical well.

Q. In your experience as to future Mesaverde wells, that would be highly unlikely, is it not?

A. That is correct, in the 29-and-6 study area, as

actually in all the units that we looked at, we did not find wells with that economic potential.

Q. When I look at the green line, what does that represent?

A. The green line would represent a dually completed well where we've gone in and completed the Dakota and the Mesaverde in that fashion. And you can see that with the cost savings there, the green line is a little bit lower in all occasions than the red line, so that the economics are a little bit easier to make with a dual completion than they are, single completion.

Q. And then finally the purple line.

A. The purple line represents commingling the Dakota and Mesaverde downhole in the same wellbore, with the cost savings you would find there.

Q. And then on the horizontal scale, between 300 and 400 MCF a day, and between zero and one BCF, there's a black dot.

A. The black dot represents what we would expect to get from our future work, the future development we have in this unit.

Q. All right, that is specifically tailored based upon your analysis of the future potential in the Mesaverde within the 29-and-6 Unit?

A. That is correct.

Q. And your forecast is that it's only economic to do so -- in other words, further access that resource -- for a well configured with a downhole-commingling completion?

A. Yes, to develop the Mesaverde reserves that we're looking at in that unit requires commingling, downhole commingling, to be economic.

Q. At this point you can draw the conclusion that for this unit the Mesaverde would be marginal?

A. Yes.

Q. And must be developed as a commingled wellbore?

A. Yes.

Q. Let's turn to the Dakota formation side in this unit. If you'll turn to Exhibit Tab 3, I think we can go through each of these a little more quickly.

The first display is your database of typical wells for the Dakota?

A. That is correct, we pulled the wells that are on the edge of the development in the Dakota in the 29-and-6 Unit and then did analysis of those wells, pulled up the information and collated it together.

Q. What accounts for the fact that the Dakota wells have been generally confined to the southeastern portion of the unit?

A. As is generally true with all the units in the

formations that we've developed over the past 40 years, the development tends to take place in the areas that are better first, judging by production, and then developing out from that. And at a point where the economics go below an acceptable criteria level, the development stops. And so that's what's happened here.

Q. Then as we look to the northwest portion of the unit for the Dakota, can you reasonably conclude that any opportunity for Dakota in there is going to be even riskier, with worse economics, than your typical data-point wells demonstrated?

A. Yes, that is the correct conclusion.

Q. Let's turn behind that, and again we're looking at the same pressure data we saw before for the Mesaverde-Dakota. We've talked about that, right?

A. Yes.

Q. All right. And then the next page is your capital expenses, then your operating costs. And let's turn to the curves, the colored curves.

These curves, again, are different in where they are displayed on the plot, and that accounts for the costs associated with the Dakota, right?

A. That is correct.

Q. Okay. Let's find the black dot.

A. Okay.

Q. Where's the black dot?

A. It is touching immediately adjacent to the curve representative of commingled economics.

Q. And what does that mean?

A. That means that it would be right on the borderline that we would be able to develop the Dakota, even in a commingled situation. In practicality, what this would lend you to is that you might go out and try one or two to see what your results would be.

Q. Having been convinced that the future opportunity in this unit is to commingle the Dakota and Mesaverde, how have you satisfied yourself as an engineer that you can allocate that production back to the appropriate interest owners on a fair, equitable and accurate basis?

A. We have some experience with this that I've represented in Exhibit 4, the allocation methodology.

Q. Let's turn to the information behind Exhibit Tab Number 4. I'm going to ask you to verbalize it in a summary fashion, and then we'll go back and talk about it in detail.

A. Okay.

Q. So let's talk about the method so we can all understand where it takes us.

A. The summary of the method is that initially we utilize a subtraction method, and here we're referring

predominantly to the Dakota and Mesaverde, but the same methodology would apply to whatever formations we were to commingle.

We would initially use the subtraction method, followed by a fixed allocation, a ratio method. And so initially, after we have a stabilized flow rate for the existing zone and for recompletion, that would be from an existing decline curve, and for a new drill it would be from the lower zone -- after we have that initial stabilized rate, we forecast production for that zone by month for a 12-month period.

And during that 12-month period that we have forecasted, we would subtract the forecasted rate that we have forecasted out based upon the stabilized production, we subtract that from the commingled rate, from both intervals together, to determine the production rate on the new zone.

And then after having that being done for six to twelve months, we would be able to say that the total rate for the well has stabilized and can convert to a ratio at that point, which is what you see as the fixed allocation method that we go to after the subtraction method.

Q. Let's go back and review the subtraction method. Let's assume, to keep the example easy, you have a new drill, you drill to the Dakota, you complete in the Dakota

and you establish production. What then do you do? You produce it for a period of time, six to twelve months, until the rate has stabilized?

A. We produce it for a period of weeks, several weeks to several months, so that we are satisfied with the stabilized rate and are satisfied that we can make an accurate forecast of that zone.

Q. It's like a production decline curve, then?

A. Yes.

Q. And once you have that established rate, then you can dash the line out into the future with engineering accuracy and reliability to know what the Dakota is going to give you in the future?

A. Exactly.

Q. And then you go back up and you add the Mesaverde --

A. Correct.

Q. -- in my example?

A. Correct.

Q. That's going to give you a total cumulative sum?

A. Correct.

Q. How do you allocate that sum share back to the Mesaverde?

A. In this example we have the forecasted production from the Dakota so that we subtract the Dakota production

from the total commingled production, and the remainder is the Mesaverde production, what we give to the Mesaverde.

Q. Do you prefer that method to one which is a ratio simply taken off of the initial test of each zone early in the life of the well?

A. In our experience over the past two years, drilling some commingled Dakota-Mesaverde wells, we found this to be the most accurate method that does not incur substantial expense.

Q. Let's finish the hypothetical. If you've commingled the Dakota and the Mesaverde and have a potential in the Pictured Cliffs, how does the formula work?

A. The formula would work exactly the same way. We would have a stabilized rate that we can derive the decline curve from, from the Dakota and the Mesaverde. Then we could add the Pictured Cliffs in, and then when the total well production stabilizes, we would be able to convert it to a ratio.

Actually, I got a step ahead. For the first six to twelve months, the Pictured Cliffs production would be the difference between the forecasted Dakota-Mesaverde and the total well production.

And then after six to twelve months, once that production stabilizes, then we can go to a ratio method

between the zones, based on the subtraction -- the numbers the subtraction method provided at that point in time.

Q. Let's add a fourth zone. Let's add the Fruitland Coal. What do you do?

A. It would be the exact same methodology. We would take stabilized production from the existing wellbore before the recompletion, we would forecast that out, we would go by subtraction for six to twelve months, and then the remainder from the subtraction method would give the additional zone that you had completed in. And then once the wellbore stabilized production, at that point we can go to the ratio method based on the numbers we have at hand.

Q. If your family had a personal interest in one of these zones, Mr. Larimer, would you be satisfied with Phillips paying based upon this formula?

A. Yes.

Q. Let's look at the next step, the fixed-allocation method. What happens in order to achieve that? What do you do?

A. In the fixed-allocation method, it's much like we've alluded to all along, when at the point in time where we say the total wellbore production is stabilized in that, you know, first year of production, we have the forecasted production from a lower zone -- the Dakota, let's say -- and then the Mesaverde will be derived from the subtraction

method. At that point in time, we just take those two numbers and divide each by the total commingled production, and we have the ratio that we attribute to each of the Dakota and the Mesaverde.

In the example I have in the book here, we assume a commingled rate of a million cubic feet a day. The lower rate has been forecasted to be 400 MCF per day at that time, when the well production is stabilized, so that we know by subtraction that the upper zone, the Mesaverde, is 600 MCF per day. And then it's just a number of dividing it and getting the math.

In this example, just to finish it out, the Dakota would get allocated 40 percent for the life of the well, and then the upper zone, the Mesaverde, would get allocated 60 percent.

Q. Do you find this to be an accurate, fair and reasonable basis upon which to allocate the production?

A. Yes.

Q. Let's take a brief review of the other three exhibit books, Mr. Larimer. Let's turn to the exhibit book for the 32 and 7. It's the 12,137 case. Let's turn behind Exhibit Tab Number 2 and have you talk us through this one.

A. Okay, the main difference is, behind Exhibit 2, we're in the Mesaverde. The first plat represents the wells that we looked at, and you can see that our study

area represented pretty much the bulk of the center of the unit there, and we picked the wells that had the best data for us to analyze.

Going through the second pages, the case you've seen before with the pressures and the projected rate and the projected EUR for wells in that study area. Then the capital expenses, then the operating costs, those two you've seen before. Coming to the summary sheet, which is the graph with the curves, that represents what we found to be representative of the 32-7 Mesaverde.

Q. Let's go back for comparison and look at this same curve sheet that you just described for the 29 and 6.

A. Okay.

Q. It's obvious that your analysis demonstrates that the opportunity for Mesaverde production in the 32-and-7 Unit is substantially less than the opportunity in the 29-and-6 Unit?

A. That is correct.

Q. The dot is lower?

A. Correct.

Q. All right. And that explains the lack of Mesaverde development in this unit, does it not?

A. Exactly.

Q. You're on the fringes of the Mesaverde, and it's very risky to achieve that production?

A. The productivity in the 32-7 Unit is less than in the 29-6 Unit.

Q. Let's turn and make that comparison, now, on the curve that you prepared for the Dakota. How does the Dakota in the 32 and 7 compare to the Dakota in the 29 and 6?

A. We see pretty much a similar situation that we do in the Mesaverde. The Dakota is less productive here than it is in the 29-and-6 Unit.

Q. Again, the allocation formula is to be the same for all four units?

A. Yes.

Q. All right, let's turn to the 32-and-8 Unit, it's casebook 12,139. Let's turn behind Exhibit Tab Number -- it's Exhibit Tab Number 2 -- look at your database for the Mesaverde. Describe for us why you've chosen these wells as your typical case.

A. What you see in the 32-8 Mesaverde is more development in the southern part of the unit than in the northern part of the unit, and that is obviously because that's where the more productive wells are. There are some 160-acre infill opportunities in the 32-and-8 Unit, and so that's the area that we concentrated on, the area that we would most likely be developing.

Q. Let's go back to the curve, then, for the

Mesaverde economic case, and compare it to the Mesaverde economic case in our main reference case, the 29-and-6 Unit.

A. Okay.

Q. How do they compare?

A. You see in the 32-and-8 Unit that our project economics for the well is slightly below the curve for a commingled zone, so --

Q. Even for a commingled wellbore in the Mesaverde in this unit, you're below your marginal economics?

A. That is correct.

Q. Can we improve that any by adding the Dakota in a wellbore in that unit?

A. This is the dot that represents the -- Let me say it this way: The purple curve represents what the commingled case would be, assuming that you're adding in the Dakota for a commingled wellbore.

Q. Okay.

A. And so the statement can be made that we don't have much of a chance of doing this type of development unless it is some type of commingled situation.

Q. Okay. Let's look for comparison at the Dakota curve for this unit, compare it to the Dakota curve for the 29-and-6 Unit so we can see that illustration. The conclusion is -- ?

A. Yes, if you can find the dot, it is about half a dot there at 200 MCF a day, which is actually giving it a little bit -- for representation purposes. But basically, the Dakota is not well developed in this area and not very economic.

Q. All right. Let's turn to the last exhibit book, Mr. Larimer, and turn to the 31-and-6 Unit. Let's turn behind Exhibit Tab Number 2, look at the configuration of the unit and look at your data points for the Mesaverde in that unit. Again, describe why you've chosen these three wells to base your analysis on.

A. In the 31-and-6 Unit, the three wells we've chosen to analyze are generally in the center of the area that we see the future development taking place. You can see that there are open drillblocks, open 320-acre drillblocks, as well as open 160-acre drilling locations that can be drilled in.

Q. All right, let's turn to the economic curve, conclusion sheet at the end of this exhibit tab and see where the black dot is in the Mesaverde in this unit.

A. What we're showing here is that our expected economic case would put us just below what a commingled well would do for us, and so we're very close to making that economic.

Q. Okay, if you'll turn to Exhibit Tab 3, then,

let's look at your database for the Dakota data. Again, why have you chosen these Dakota wells?

A. Again, these wells were chosen because they had reasonable data within the area we were studying, the area that we expect to see the future development.

Q. Were you able to conclude that they were characteristic of what you see as the existing and future opportunity in the Dakota?

A. Yes, that is correct.

Q. Let's look at the Dakota curve, then, the economic curve, and have you show us where the Dakota lies in relation to the other curves.

A. In the 31-and-6 Unit for the Dakota, we have some relatively good productivity in this area, and you see what we've been working with.

Q. Again, it's still marginal when it comes to the method of completion, and it does not make your dual-completion case?

A. That is correct.

Q. The opportunity is best realized with a commingled wellbore?

A. That is correct.

MR. KELLAHIN: Mr. Catanach, that concludes my examination of Mr. Larimer. We would move the introduction of his exhibits; they're 3 and 4 in each of the exhibit

books.

EXAMINER CATANACH: Any objection?

Tab Number 3 and 4 in each of the exhibit books --

MR. KELLAHIN: I'm sorry, I misspoke again. It's 2, 3 and 4.

EXAMINER CATANACH: 2, 3 and 4 --

MR. KELLAHIN: Yes, sir.

EXAMINER CATANACH: -- in each of the exhibit books will be admitted as evidence in these cases.

Mr. Bruce, do you have any questions?

MR. BRUCE: Yes, Mr. Examiner.

EXAMINATION

BY MR. BRUCE:

Q. Mr. Larimer, let's just go to the 32-7 booklet, and turn behind Tab 1, which is actually Mr. Prather's exhibit, and go to the last two pages of Exhibit 1. Just some basic information. There's numbers by these wells. Are those just the unit numbers for each well?

A. It's the well number. The section number is in the middle of the section --

Q. Yeah.

A. -- and the number adjacent to the well symbol is the well number.

Q. Are -- Looking at the Mesaverde PA map, are all

of these wells still productive in the Mesaverde?

A. I can see a couple off the top of my head that have been plugged, so the answer would be no.

Q. Is that on the -- I need bifocals, but is that on the map, or is that just information that you know?

A. I see one on the map, and there's one that I know of that was recently plugged --

Q. Okay, so --

A. -- within the past two months.

Q. Which one is on the map that you see that is plugged?

A. It's in Section 8 of 31 and 7, down toward the bottom of the sheet.

Q. Okay.

A. It would be Well Number 5. It says that the Mesaverde was P-and-A'd in 1994.

Q. Okay. And then the same thing on the next map, the Dakota PA map. Okay, I see a couple of those noted as P-and-A'd; is that correct? Or abandoned?

A. Yes. The markings on here should be correct.

Q. Okay. About five of those wells are P-and-A'd or abandoned?

A. Yes, I counted five.

Q. Does this booklet have any production data? And if not, do you have approximate numbers on the total

Mesaverde production from the unit and the total Dakota production, current daily production, from the unit?

A. I don't have that production with me, but I could provide it.

Q. Could we get it after the hearing, please?

A. Sure.

Q. And actually, Mr. Larimer, I'd like that on each of the PAs, on each of the four PAs.

A. The form the data is most accessible in would be to pull it up by the unit, and we would just go to the public databases and collate those together, if that's acceptable.

Q. Yeah, what I would like is just a total unit production --

A. Okay.

Q. -- from each PA.

Okay. Then going to your Exhibit 2, Mr. Larimer, the first page, these are the wells that you used in the Mesaverde; is that correct?

A. That is correct.

Q. To do your study? Why were these wells chosen?

A. They are generally in the area that we expect the future development to take place, and representative of that area.

Q. And the same would be true in the Dakota, which

is behind -- the first page behind Exhibit 3 also?

A. Yes.

Q. Going to your next page where you have the information on pressure, these are again, going over to the second column from the right, these are your projected initial rates for any completion in the Mesaverde and the Dakota in those formations, on average, is that --

A. That's the first-year average production, which is what we use to forecast.

Q. And then going -- not the next page but the one after that, with the operating costs, I just want to make sure I understand that for any unit. Are these the total operating costs in the unit for all of the wells? Would you explain that?

A. I see. This is a per-well cost.

Q. Per-well cost.

A. So just to pick an example, if you look at the Mesaverde --

Q. Uh-huh.

A. -- a single completion, the 32-7 unit, that one well would cost $6900 of operating costs for that year.

Q. Okay. Does -- Looking at the first page of Exhibit 2 and the first page of Exhibit 3, Mr. Larimer, you were talking about, I believe, that what you would prefer to do is recomplete these Dakota wells in the Mesaverde.

Is that -- Did I understand that to be correct?

A. In a number of the units, our plans would consist of going into existing Dakota wells and adding the Mesaverde into that --

Q. Is that because of the --

A. -- as opposed to drilling a well.

Q. Okay. Is that because of -- In certain of these, looking at the two maps, there's already existing Mesaverde and Dakota wells on a number of these units; is that correct? Just --

A. Yes.

Q. At least on the east side of the unit?

A. Yes, we have an existing-well database that we're working with, wells that area already drilled, and so we work around those.

Q. And you would recomplete these because of the recent Division order allowing further infill in the Blanco-Mesaverde Pool; is that correct?

A. That's correct.

Q. Does Phillips have plans in any of these areas to go drill additional Dakota wells or wells to a depth sufficient to test the Dakota and then complete them in the uphole zones also?

A. In all the units or --

Q. Just looking at the 32-7.

A. In the 32-7, there is an area very close to the two green dots there, Section 22, 27, possibly 21, where we might see drilling a Dakota well and then also adding in the Mesaverde.

But if you look at a map with all of the locations on there, some of the quarter sections, some of the 160-acre spots, already have a Mesaverde well there, so we have to work around that.

Q. Looking just at the 32-7 Unit, looking at the four zones that we're talking about today, from top to bottom, which, in your opinion, have the most potential?

A. Currently in the 32-7 Unit, the Fruitland Coal and the Pictured Cliffs are both being developed as singles. We are drilling single completions for both of those wells. They're not marginal economics by our definition, so we're really not looking at doing anything with those immediately.

Q. So we'll still have favorable economics, is what you're saying?

A. As a single completion.

Q. So if you were just drilling a single well, you'd either want to go to the Fruitland Coal or the -- just looking at economics and drilling the best well in that unit, you'd go for Fruitland Coal or Pictured Cliffs?

A. Right, the way that I would characterize it is

that we have drilled a number of wells in both of those two formations, and that we are continuing the development out to a point where it's no longer economic.

Q. And so the Mesaverde and Dakota are not as prospective, shall we say, as the Fruitland Coal and the PC?

A. Now, referring back to the participating-area maps, part of Exhibit 1, looking at the Pictured Cliffs PA map, there hasn't been any expansion in the last 16, 17 years. But you say Phillips is drilling additional wells in those?

A. We have filed some commerciality determinations for some wells in Section 22, 27 and 28 --

Q. Okay.

A. -- but all of that paperwork is not finalized yet, so they're not shown on this map.

Q. Okay.

A. The wells are shown, but all of the associated paperwork is not completed.

Q. Okay, I just couldn't tell from looking at this whether those were old wells or new wells. Okay.

And then finally on Exhibit 4, Mr. Larimer, your allocation method, are you asking that the Division order provide for a minimum test period? You say six to 12 months.

A. What I've tried to represent is what we're actually doing in practice, just to say that after we have added in the second zone, we expect the total wellbore production to take a period to stabilize, and we've generally allowed six to twelve months for that, just to make sure that we have the most accurate determination of allocation before we proceed on to the ratio method.

Q. And during that first six to twelve months, then, you're just producing the one zone?

A. No, if you look at the first dot point under "Subtraction Method" --

Q. Uh-huh.

A. -- and I'll just review that again. We determine the stabilized flow rate for the existing zone in the case of a recompletion, or a lower zone if it's a new drill and it's the initial stabilized rate, and we forecast that production rate by month. For a recompletion we have a well-established decline curve for the well. It could be anywhere from one year to 20 years. For a new drill, we go with the initial stabilized rate, and that could be anywhere from two weeks to several months for us to determine that.

Q. Okay. So for instance, if you recompleted a Dakota well that's still producing, you would have that rate already established?

A. Correct. We would be able to take however much production we had and say that the decline rate has stabilized on this well so that we can come up with an accurate forecast.

And then at that point where we can determine that accurate forecast, then we're comfortable adding the additional zone in and using the subtraction method, using the production we've forecast. And what we've done most recently is the Dakota, using the forecast from the Dakota, to subtract from the total production, to derive the Mesaverde production.

Q. Okay. On the PA determinations, is that effective as the date of completion of a well?

A. Yes, it is.

MR. BRUCE: Okay. I think that's all I have at this time, Mr. Examiner.

EXAMINATION

BY EXAMINER CATANACH:

Q. Okay, Mr. Larimer, let's go back to the study areas you've done in each of these cases. You've done a minimal number of wells that you've looked at in each of the units, and I believe you testified that that's going to be the area where the development is going to take place. I assume that's the area that's got the best economics and got the best chances of recovering more reserves from each

of these zones?

A. That is correct.

Q. Is it likely that you're going to be developing out of these areas, say further on the southern of this -- say the 32-7 Unit?

A. It's possible, but that's not an area that we've concentrated on. And based on the numbers that we have right now, the existing production and EUR for those wells in the southern part of that unit in particular, we don't see developing down there for quite a while.

Q. Okay, the initial producing rates and the estimated ultimate recoveries were just based upon the study wells; is that correct?

A. Yes. I don't want to seem like we didn't look at all -- We looked at all the wells, but we just chose to represent the wells we thought were most representative, and that's what we've done.

Q. Well, were there wells in the unit with, say, higher initial producing rates or higher EURs than what you've represented from the study area?

A. The answer to that would be yes, in individual units that you might look at. But again, if you look at our methodology, we develop the better parts first and then work out to the less productive parts of the unit. And so what we're representing today is what we expect to see from

our future development. And so previous wells that were developed would obviously have higher rates than that.

Q. So you're saying in the study area that you've done, that's where you're going to concentrate your efforts first, and that's where you think you're going to get the best results?

A. Yes, the best results of what's remaining.

Q. That's where you think you're going to get the highest, say, initial rates and highest EURs?

A. Yes.

Q. Okay. What about the pressures? Say you moved down to the southern portion of this unit. How comfortable are we going to be with the pressure data that you've submitted? And did you look at the pressure data from down in that area?

A. In the case, just looking at the 32-7 Unit and looking at the Mesaverde, I'm quite comfortable with the pressure data. If you look at the Dakota behind Exhibit 3, you'll see we do not have a lot of Dakota development within our unit, and so it's fair to say that we don't have any data points there.

Q. So if you move up, off into an area of development somewhere within the unit that's not near your study area, you're likely to get some maybe higher pressures in the Dakota?

A. That could very well happen, yes.

Q. Let me ask you this: How many new drills, say totally new wells, do you think you're going to drill within these units? I'm not holding you to anything, but --

A. Oh, yeah.

Q. -- do you have an estimate of what you might --

A. We tend to plan out over maybe like the next two to three years, is the main thing we look at. Let me just open up each book and refresh my memory.

Q. Okay.

A. In the 29-and-6 Unit, I can see a large number of recompletions, because we have a number of Dakota wells in the unit that were drilled, that we would add the Mesaverde to, and I can see drilling only a small number of new wells there, less than 10, over the next several years, as far as Dakota-Mesaverde commingles.

Q. Okay.

A. Going in order, next is the 32-7 Unit. As I alluded to earlier, we really only have probably less than five or six Dakota-Mesaverde new-drill wells we're looking at, and about that number of recompletions where we would add the Mesaverde to an existing Dakota well.

In the 31-and-6 Unit I can see approximately ten Dakota-Mesaverde new-drills, commingled new-drills. And

then probably a dozen or so Mesaverde recompletions in existing Dakota wells.

And then in the 32-8 Unit, probably less than 10 Dakota-Mesaverde commingles. And one thing to point out in that unit is, we have two wells that are dually completed in the Dakota and Mesaverde that have -- one of them has downhole problems. This will enable us to go in, clean out the downhole problems and commingle those together in the existing wellbore.

Q. And in that unit there's no recompletions. Is that a new -- You said 10 new drills?

A. Less than 10, right.

Q. Okay.

A. And there's no recompletions because the existing Dakota wells are already dually completed in the Dakota-Mesaverde.

Q. Okay.

A. So there would be a rework potential, go in and clean out the existing downhole configuration and make it a more efficient completion.

Q. Okay. Back to the pressure problem. If you drill a new well in an area of the unit, in an area of any of these units where you don't have a lot of data, how are we going to know that those pressures conform to what we've described in the commingling rules? Are you guys going to

actually take bottomhole pressure measurements after you drill, or how do you propose to do that?

A. We occasionally do that, yes. And what we could do in areas where there's really a dearth of production, like the area of 32-7 that you pointed out, we could go in and gather sufficient pressure data to satisfy whatever requirement was necessary. I believe in one of the units we have we're doing this right now.

Q. Well, you may, in fact, have a lot more bottomhole pressure data than you're submitting? Because I mean there's a lot more wells than just the study wells in these units --

A. That's correct.

Q. -- that are completed in the Dakota or Mesaverde, so maybe what I should do is just ask you to submit some additional pressure information within each of these units --

A. Okay.

Q. -- and then we'll go from there, see if we might need something else. I don't know. So why don't you go ahead and submit what pressure data you have?

As far as the allocation methods, what do you see as a good test period to get a stabilized rate? You say from weeks to months, but what does that depend on?

A. We just have to monitor the well pretty much on a

weekly basis and see what it's doing. Our experience has been, over the past two years with the Dakota-Mesaverde wells we've done, generally in the three-to-six-month range. About the shortest that I can recall has been two months, but generally in the three-to-six-month range.

Q. I'm sorry, that's Mesaverde?

A. Dakota.

Q. That's Dakota.

A. We would monitor the Dakota production by itself for that period of time.

Q. And you say that the minimum has been two months?

A. Right.

Q. Okay. How do you know when you've achieved a stabilized rate? I mean, is it something that you look at and it's pretty consistent, or --

A. The answer is, experience. The main indicator is a stabilization in the rate of decline that you see in the well. A typical tight-gas sand transient, you'll have a nice transient spike and it will come down off of that, and you can see it leveling out. And then you can compare it to existing wells in the unit, and that's what I was referring to by experience, what previous wells have done.

Q. Over what period of time would you say that would -- I mean, what period of time -- what criteria would you use to say this -- For 10 days or for 20 days it's

experienced the same decline rate or --

A. You mean in comparing to existing wells or --

Q. Well, that's what you would do, you would compare the decline rate to existing wells?

A. Right, to the peak production and decline of wells nearby, and we would look at the fashion in which they decline, and compare our new well to previous declines.

Q. Does the decline rate change, of these zones, over time?

A. The answer to that would have to be a yes, but if you look at a lot of the data you can pretty much come up with typical decline rates for different formations in different areas.

Q. Has it been your experience that these zones decline at similar rates?

A. Very similar.

Q. Now, you're talking about all of the zones that we're talking about?

A. Dakota and Mesaverde --

Q. Just Dakota and Mesaverde.

A. -- decline at very similar rates.

Q. And not the other two?

A. The other two I have not studied extensively in this fashion, because we really haven't commingled any of

those in with these formations to make that comparison. I could add that in the Pictured Cliffs, that after it's been on production for a certain period of time, the decline rate does stabilize down to a certain nominal rate that's close to the Dakota and Mesaverde.

Q. So you're confident that if we go to a fixed percentage on the Dakota and Mesaverde, that those two zones will probably be declining at the same rate, and therefore your fixed percentage is accurate?

A. They will be very similar decline rates, from our experience from looking at all the wells we have in our units.

I guess the only other thing to add is, from our perspective, that the alternative is to not produce the reserves, because this is the economical fashion to do it.

EXAMINER CATANACH: Okay, I don't have any more questions of this witness.

Are there any other questions?

MR. KELLAHIN: That concludes my presentation, Mr. Examiner.

EXAMINER CATANACH: Do you have anything else?

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

Mr. Examiner, I don't want to submit a proposed order. I would like to submit a letter -- I'd like to get the data that I've requested from Phillips and then submit

a letter stating Mr. Simmons' concerns after the hearing.

EXAMINER CATANACH: Okay, that would be fine with me.

Anything else?

MR. KELLAHIN: No, sir.

EXAMINER CATANACH: Okay, there being nothing further in these cases, Cases 12,136, 12,137, 12,138 and 12,139 will be taken under advisement.

(Thereupon, these proceedings were concluded at 11:55 p.m.)

* * *

I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case No. 12136-39 heard by me on March 18 1999.

David R. Catanach, Examiner
Oil Conservation Division

CERTIFICATE OF REPORTER

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

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

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

WITNESS MY HAND AND SEAL March 21st, 1999.

STEVEN T. BRENNER
CCR No. 7

My commission expires: October 14, 2002