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

ORIGINAL

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

CASE NO. 14878

APPLICATION OF ENERGEN RESOURCES CORPORATION FOR ESTABLISHMENT OF A SPECIAL INFILL WELL DEVELOPMENT AREA IN PORTIONS OF THE GAVILAN-PICTURED CLIFFS POOL FOR EXCEPTIONS FROM RULE 19.15.15.11, APPROVAL OF UNORTHODOX WELL LOCATIONS AND FOR DOWNHOLE COMMINGLING, RIO ARRIBA COUNTY, NEW MEXICO.

REPORTER'S TRANSCRIPT OF PROCEEDINGS

EXAMINER HEARING

DOCKET NO. 21-12

BEFORE: RICHARD EZEANYIM, Hearing Officer

JULY 12, 2012

Santa Fe, New Mexico

1:07 PM

This matter came on for hearing before the New Mexico Oil Conservation Division, RICHARD EZEANYIM, Hearing Examiner on THURSDAY, JULY 12, 2012, at the New Mexico Energy, Minerals and Natural Resources Department, 1220 South Street Francis Drive, Room 102, Santa Fe, New Mexico.

REPORTED BY: Lisa Reinicke
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A P P E A R A N C E S

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Present for the Jicarilla Apache Nation:

Curt Sandoval
Dickson Sandoval

I N D E X

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MR. EXAMINER: Now we go to the last case. At this time I call case number 14878, Application of Energen Resources Corporation for establishment of the Special Infill Well Development Area in portions of the Gavilan-Pictured Cliffs Pool for exceptions from Rule 19.15.15.11, approval of unorthodox well locations and the downhole commingling, Rio Arriba County, New Mexico.

Call for appearances.

MR. HALL: Mr. Examiner, Scott Hall, Montgomery & Andrews Law Firm from Santa Fe appearing on behalf of Energen Resources Corporation. I have three witnesses this afternoon.

MR. EXAMINER: Any other appearances?

MR. BRUCE: Mr. Examiner, Jim Bruce of Santa Fe and I'm representing NM&O Operating Company. I have no witnesses nor any objection to the application. And as such, I don't think I'll be spending the afternoon here.

MR. EXAMINER: Okay. You are interested to enter an appearance?

MR. BRUCE: That's right.

MR. EXAMINER: Okay, very good. At this point the three witnesses stand up, state your name, and then be sworn.

MR. LEHMAN: Donald Lehman.

MR. LEWIS: Bryan Lewis.

MR. VAN VOAST: Zachary Van Voast.

[Whereupon the witnesses were duly sworn.]

MR. EXAMINER: Okay. Mr. Hall, call your first witness.

MR. HALL: I'm going to ask Mr. Bryan Lewis to take the stand. First of all, some brief introductory comments for you, Mr. Examiner.

MR. EXAMINER: Okay, good.

MR. HALL: I want to make clear that when you look at the application there it enumerates several wells and spacing units associated with those wells. They are set out in the application for purposes of identifying candidates for the addition of Pictured Cliffs recompletions to existing Mesaverde wells. And it also identifies several candidates for the drilling of new Mesaverde wells, which will be duly completed in Picture Cliffs as well.

I did want to make clear that the scope of the application exceeds just those specific well spacing units. Because we're asking for infill authority throughout the entire acreage lot that Energen owns we called it the special infill well development area. So it's an important aspect of the application. So in

addition to the commingling for the identified wells we're asking for infill authority throughout that area, drilled are not to date. So I did want to make that clarification.

I'd also like to note for the record, Mr. Examiner, that the lease acreage is located on the Jicarilla Apache Nation. We've notified the Jicarilla Apache Nation and the Bureau of Indian Affairs. And present at the hearing today are Mr. Curt Sandoval, who is a representative for the BIA Jicarilla Apache Nation and Mr. Dickson Sandoval, who is the oil and gas administrator for the Jicarilla Apache Nation. And they may or may not wish to comment, but check in with them at the end of our presentation.

MR. EXAMINER: Are the members of the Jicarilla Apache Nation present today?

MR. HALL: Yes, sir.

MR. EXAMINER: Are they objecting to the application?

MR. HALL: Well, I think we can answer that in the course of the examination of the witnesses.

MR. EXAMINER: Okay. So they can make comments. I will give them the opportunity.

MR. HALL: If they wish, yeah.

MR. EXAMINER: Now, before we start there's

something I wanted to clarify. When I read your application, this is what I think you're asking for. I'm going to read them out. If it's wrong let me know. The first one you are asking is the division to establish special entryway development; is that correct?

MR. HALL: A development area.

MR. EXAMINER: Yeah, special entryway development in the area. Okay. And then to provide where there is well limitations, right?

MR. HALL: Yes.

MR. EXAMINER: What are the current limitations, do you know?

MR. HALL: We have a witness that will address that for you.

MR. EXAMINER: We need to know what you are asking an exception to.

MR. HALL: Yeah.

MR. EXAMINER: Number three, approve the well locations in that particular unit.

MR. HALL: When some of these existing Mesaverde wells have these pay adds in the Pictured Cliffs they will be unorthodox as to the Pictured Cliffs pools, so we need to get approvals for those locations.

MR. EXAMINER: Number four, authorized approval in the PC and the Mesaverde well formations,

right?

MR. HALL: Yes.

MR. EXAMINER: And then downhole commingling authority.

MR. HALL: Yes.

MR. EXAMINER: Do that in five days, you are asking?

MR. HALL: Right.

MR. EXAMINER: Okay. Now we established what you are asking. Let's go now and establish them.

MR. HALL: And I think at the close of the presentation I'll have a recommendation to you on how to structure an order particularly around the downhole commingling rule. It's something of an awkward rule. I think I can help on that.

MR. EXAMINER: You can help with awkward which is good. It's interesting. Go ahead with your first witness.

BRYAN LEWIS

after having been first duly sworn under oath, was questioned and testified as follows:

DIRECT EXAMINATION

BY MR. HALL:

Q. For the record, state your name.

A. Bryan Lewis.

Q. Mr. Lewis, where do you live and by whom are you employed?

A. I live in Farmington, New Mexico and I'm employed by Energen Resources.

Q. And what's your position with Energen?

A. District landman.

Q. And, Mr. Lewis, you've not previously appeared before the division and had your credentials as a landman accepted as a matter of record?

A. I have not.

Q. You worked as a landman for a number of years?

A. I have, for roughly 30 years.

Q. Why don't you give the Hearing Examiner a summary of your experience working as a landman.

A. Okay. I worked as a contract landman lease broker from 1981 through 1989. I did in-house land work with Morgan Richards and Operating Company in Denver, Colorado from 1989 to 1992. I was an in-house landman with Morgan Energy Company in Denver from 1992 to 2000. And I was an in-house landman with the Richardson Operating Company in Denver from 2000 to 2001. And an in-house landman with Coleman Oil and Gas in Farmington, New Mexico from 2001 to 2011. And I've been with Energen since October of 2011.

Q. How much of your experience has been in

New Mexico, the San Juan Basin?

A. About 12 years.

Q. Your familiar with the application that Energen has filed in this case?

A. I am.

Q. And you're familiar with the lands and leases that are the subject of the application?

A. I am indeed.

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

MR. EXAMINER: Mr. Lewis, in all of those 30 years have you been certified as a CPL?

MR. LEWIS: I have not.

MR. EXAMINER: Well, that's fine. Mr. Lewis is so qualified.

Q. (By Mr. Hall) If you would, Mr. Lewis, why don't you summarize for the Hearing Examiner what it is Energen is seeking by its application. And if you prepared the PowerPoint presentation you can refer to that.

A. There's five things that we're asking the division to issue an order for. One is approving the establishment of a special infill well development area and portions of the Gavilan-Pictured Cliffs pool Rio Arriba County, New Mexico.

Two, we would like to provide for an exception to the well density development limitations applicable to the pool to allow two producing wells per 160-acre spacing throughout our special infill well development area.

Number three, we would like authorization to recomplete our existing Mesaverde formation wells into the Pictured Cliffs formation and approving unorthodox well locations for certain of those wells.

Number four, we'd like authorization to dual complete new wells to be drilled to both formations.

And, five, we would like for area-wide downhole commingling in the special infill well development area.

MR. EXAMINER: Exactly what I just read.

MR. LEWIS: Yes, sir. It's reiterating what you mentioned earlier.

MR. EXAMINER: Okay. Go ahead.

MR. HALL: Mr. Examiner, we provided you with a binder of exhibits, neglected to mark them, but I'm going to refer to the binder which consists of 22 pages as Exhibit Number 1.

MR. EXAMINER: The one is Number 1?

MR. HALL: Yes. And we'll refer to Exhibit 1 by page number. They're all numbered at the top. And we have a corresponding PowerPoint

demonstration for you too.

MR. EXAMINER: Okay.

Q. (By Mr. Hall) So if you would, Mr. Lewis, let's look at page 2 of Exhibit 1, pages 2 and 3. And then also page 4, if you would just again give us some direction of what we're doing, why we think the application is warranted. And then if you could identify the location of the infill area.

A. I plan to give the land overview. We're going to have a geologist from our Birmingham office testify to the geology. And then our engineer from also the Birmingham office is going to talk about reservoir engineering and do a conclusion and summary.

Our proposal is Pictured Cliff infill drilling and completions in the northern part of the Gavilan-Pictured Cliffs pool in Rio Arriba County. Current PC drilling spacing units are 160 acres with one well allowed per unit. The current Mesaverde drilling spacing units allowed calls for 320 acres with four wells allowed per unit.

The Pictured Cliffs would be pay adds to existing or newly drilled Mesaverde wells and there will be no infringement of correlative rights or it will cause no waste. It will be more efficient drainage of the Pictured Cliffs reservoir, and it will give us better

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economic incentive to drill the new wells.

If we go to page 4.

Q. What does page 4 show us?

A. This page 4 shows us all of the Pictured Cliffs pools in the San Juan Basin. Our Gavilan Pool is this area right here, this bluish area. And the area that we're talking about for our special infill well development area is outlined in red, I believe, right in through here. It's a little hard to see on the slide up there. It might be a little easier to see on the handout in front of you.

Q. Now, does the proposed infill development area, is it contained completely within the pool boundaries for the Gavilan Pictured-Cliffs pool?

A. It is.

Q. And let's talk about Energen's leaseholds out there. If we could turn to page 5 and page 6. Why don't you summarize the ownership situation?

A. Okay. The yellow, these yellow tracts here, are Energen's leasehold. Energen owns 100 percent of the operating rights. It's on Jicarilla Nation leases. The Jicarilla Nation owns the minerals. The outline of the Gavilan pool PC is in the blue line here. It's the northern part. It's not all of the Gavilan pool. It's just what we're concerned about.

The blue around our yellow acreage represents the offsetting operators or owners, and I can identify those starting up here. That WPX stands for Williams Production. The COP is Conoco Phillips. And then we have more Williams Production. And then this ERC stands for Energen, that we have acreage offsetting that's outside of the pool.

And then we have Williams. We have more Energen here. And at the very bottom we have Enervest. And then going here we have Dugan, et al., Merrion et al., and then Coleman, et al., and then we have Jayco here, and then another little piece of Energen right here in the blue, and then Jayco again right there.

Q. When you say Jayco, would you identify who that is?

A. Jicarilla Oil and Gas.

Q. And do all after Energen's leases within the infill development area comprise a single continuous block?

A. We do.

Q. And does Energen own 100 percent of the two formations you're seeking to commingle?

A. We do.

Q. Both the Pictured Cliffs and the Mesaverde?

A. We do, yes.

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MR. EXAMINER: 100 percent?
MR. LEWIS: Yes, sir.
MR. EXAMINER: On both PC and Mesaverde?
MR. LEWIS: Yes, sir.
MR. EXAMINER: And we are talking about that yellow outline?
MR. LEWIS: The yellow outline is Energen's acreage, yes, sir.
MR. EXAMINER: And then there's no other working interest except Energen?
MR. LEWIS: Right.
MR. EXAMINER: With 100 percent embodied in PC and Mesaverde?
MR. LEWIS: Correct.
Q. (By Mr. Hall) And is the underlying mineral interest ownership 100 percent Jicarilla Apache?
A. It is, yes.
MR. HALL: Let's turn to page 7. And, Mr. Examiner, we've provided you with a blowup of page 7, a little easier to read.
MR. EXAMINER: Before you go ahead, on that yellow outline, that acreage, is that unitized acreage?
MR. LEWIS: Is it unitized?
MR. EXAMINER: Yes.
MR. LEWIS: No, sir.

MR. EXAMINER: It's not, okay.

MR. LEWIS: It is not unitized.

MR. EXAMINER: Okay. Go ahead.

Q. (By Mr. Hall) So let's look at page 7, and if you could refer to the legend up there, help us explain to the Examiner what this map shows.

A. Okay. The Energen operated PC wells are shown in the filled in dots. Energen operated Mesaverde wells recommended for PC pay add are shown in circles. Energen Mesaverde Mancos wells recommended for PC pay adds are shown in the diamond, shown by a diamond. And Pictured Cliffs non-standard locations would be shown with the red triangle.

Q. And why don't you take your laser pointer and show the Examiner where on the map you're proposing new drill locations?

A. There's one right there, that little, tiny circle, one right above it right there. It's hard to see.

MR. EXAMINER: They're not there yet because they would be in red triangle? As you said, they would be in red triangles.

MR. HALL: No. These are new drills.

MR. EXAMINER: Yeah, the new drills would be in red.

MR. HALL: No.

MR. LEWIS: No.

MR. EXAMINER: Which ones would be in red?

MR. LEWIS: The one with the red triangles is a PC pay add that would become a non-standard location.

MR. EXAMINER: Is there any red triangles in this map?

MR. LEHMAN: You've got two different maps you're looking at.

MR. EXAMINER: Oh. Where is that? We are looking at this, right, that one on top?

MR. HALL: Yes. And I misspoke, the blowup is of page 15, not 7. So that helps clarify it.

MR. EXAMINER: I'm looking at page 7 now and I can see some red triangles. So we are not talking about this?

MR. HALL: Right. So, yeah, my mistake. I created some confusion here, I'm afraid.

MR. EXAMINER: That's okay.

Q. (By Mr. Hall) So let's go back to page 7.

A. Okay. We're looking at page 7 in the book.

Q. In the book. What are the red triangles on there?

A. The red triangles on page 7 in the book are PC

locations that would become non-standard, unorthodox.

MR. EXAMINER: And they would be new drills?

MR. LEWIS: No, sir, they would not be new drills.

MR. EXAMINER: They would be a throw back. They would have been drilled, but you want to complete them in the PC?

MR. LEWIS: They're already drilled. We would want to complete them in the PC. But by means of completing them in the PC they would become non-standard locations as to the PC.

MR. EXAMINER: They are currently in the Mesaverde. Where are they now, those wells?

MR. LEWIS: They are Mesaverde.

MR. EXAMINER: That's what I wanted to understand, going back to PC.

Q. (By Mr. Hall) So explain to the Examiner how we would locate the undrilled locations on here. Where are those spots?

A. They are on -- they're little, tiny dots. One of them is right there.

MR. EXAMINER: And those would be new drills?

MR. LEWIS: Yes, sir, new drills. We have seven --

MR. EXAMINER: Is it reflected in this page 7?

MR. LEWIS: It should be.

MR. EXAMINER: And they are very tiny dots?

MR. LEWIS: Very tiny dots, yes, sir.

MR. EXAMINER: And those I see very well. Okay.

Q. (By Mr. Hall) So, Mr. Lewis, for example, if we looked at township 26 north, range 3 west, section 14, there are two empty circles there, empty location symbols. Does that show us where the new drill locations would be?

A. I'm sorry. Come again?

Q. In 26 north, 3 west.

A. Right.

Q. Section 14.

A. They would show where new drills would be, yes, correct.

Q. So the record is clear on this, we looked back at Energen's acreage within the infill well development area. Energen is the only operator of any formation in that acreage; is that correct?

A. Correct.

Q. And is there any other owner of any other correlative rights within the infill development area?

A. There is not.

Q. The Gavilan-Pictured Cliffs formation in the Blanco Maseverde formation, that is not a pool commendation that is preapproved for commingling, is it?

A. No, it is not preapproved for commingling.

Q. Okay. Let's refer to page 8. If you would explain what that shows to the Hearing Examiner.

A. Page 8 shows in tabular form a list of the 51 potential PC pay adds within the area that we're talking about. And at the bottom of it, it shows the seven potential new drills in a separate block there down at the bottom. And it lists it by well name. It's got the API number, section, township and range, footage. Yes, it does have the footage.

Q. And if the Hearing Examiner needs a quick way to reference the footage locations for the resulting unorthodox locations because of the recompletions can he look at page 8 and go over to column 10 and does that show NSL locations?

A. It does. It lists the NSL locations right there. The first 16 would be NS L locations.

Q. If you look at the far right of that spreadsheet, does that show the producing formation?

A. It does.

Q. And if we look at that, we identify three wells

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as shown as producing from both the Mancos and the Mesaverde; is that correct?

A. That's correct.

Q. And those three wells, have they previously been approved for downhole commingling in those two formations?

A. They have been previously approved. And let me give you some details on that.

Q. All right.

MR. EXAMINER: Before you go there.

MR. LEWIS: Yes, sir?

MR. EXAMINER: There's one point I want to clarify. When we look at page 8, the first 16 wells, are these in the Mesaverde wells will be unorthodox whenever you completed the Pictured Cliffs, right?

MR. LEWIS: When we complete the Picture Cliffs, it will become --

MR. EXAMINER: Are those the 1 through 16 wells? Then the rest of the wells would be standard?

MR. LEWIS: Yes, sir.

MR. HALL: When you complete?

MR. LEWIS: Right.

MR. EXAMINER: I just wanted to make sure. And then your new drills will not require the NSL because your new drills will be short lived.

MR. LEWIS: Right.

MR. EXAMINER: The Picture Cliffs and the Mesaverde. Because I think they have a different requirement for the standard well. I don't know, I have to go check.

MR. LEWIS: Actually, I have testimony in a minute that talks about the different limitations, if that would be okay.

MR. EXAMINER: That would be fine.

MR. LEWIS: Thank you.

Q. (By Mr. Hall) Go ahead.

A. The three wells that are currently completed in the Mancos and Mesaverde are the Johnston Sheer Number 1A. And its downhill commingling order is order number DHC 2741, and that was May 30th, 2000.

MR. EXAMINER: DHC what?

MR. LEWIS: DHC 2741. That is the Johnston Sheer Number 1A.

MR. EXAMINER: Where is that, is it on page 8?

MR. LEWIS: It is well number 29 on page 8.

MR. EXAMINER: Okay. Go ahead.

MR. LEWIS: The second well is Jicarilla 95, number 3C. And the downhill commingling order is number DHC 3833, and that was December 14th, 2006. And that is

number 1 on page 8.

MR. EXAMINER: Okay. Jicarilla 95, 3C?

MR. LEWIS: Yes, sir.

MR. EXAMINER: Okay. Go ahead.

MR. LEWIS: And the third well is the Jicarilla 95, number 6C, and its commingling order is DHC 3231, and that was January 14th, 2003.

MR. EXAMINER: We did this in both the PC and the Mesaverde, right? What am I going to find when I go to these others?

MR. LEWIS: No. They will be in this Mancos and Mesaverde.

MR. EXAMINER: Not the Pictured Cliffs yet?

MR. LEWIS: No, sir. And that is number 10 on the list on page 8.

MR. EXAMINER: Okay.

Q. (By Mr. Hall) And referring back to all these well locations, are any of the existing wells or the recompleted wells or the new drills any closer than 660 feet from the outside boundary of this special infilled well development area?

A. No, they're not.

Q. Why don't you explain to the Hearing Examiner what the well density and the location limitations are for the two pools?

A. I'll start with the Gavilan-Pictured Cliffs pool. The Gavilan-Pictured Cliffs pool is governed by division Rules 19.15.10C and 19.15.11C, which provide for 160-acre spacing units, require wells to be no closer than 660 feet to the outer boundary of their assigned units or closer than 10 feet to any quarter, quarter section line or subdivision inner boundary. These rules do not currently provide for drilling, recompletion, and production of a second gas well within a single 160-acre spacing unit.

MR. EXAMINER: Where is that citation of the Rule 19.15.15.10?

MR. LEWIS: Yes, sir.

MR. EXAMINER: 19.15.15.10?

MR. LEWIS: 19.15.10C and 19.15.11C.

MR. EXAMINER: No. 19.15.15.10, right? Because there are two 15s, right? There should be so we can find it. Chapter 1 is the way they name it. You know, three years ago we did this because I used to call it Rule 308 or 305 or something but now I have to go 19.15.15. So what is the correct citation of the rule?

MR. HALL: That's correct. It's 19.15.15.10C.

MR. EXAMINER: Okay. So it's not just 19.15.10C because that would be a chapter which is 10

again. And you said that the rule says the way it is, is 160?

MR. LEWIS: 160 acres.

MR. EXAMINER: And then 660 for the unit boundary?

MR. LEWIS: Correct.

MR. EXAMINER: And then 10 feet?

MR. LEWIS: Correct.

MR. EXAMINER: And this is not appropriate development?

MR. LEWIS: It says it only allows for one well within the 160-acre spacing unit.

MR. EXAMINER: And that's why we're here, you're asking for an exception to that rule.

MR. LEWIS: Yes, sir.

MR. EXAMINER: Okay. Go ahead and tell me why.

Q. (By Mr. Hall) Let's talk about the Mesaverde.

A. Okay. Order number R10987A and R10987A1 established a special pool rules for the Blanco Mesaverde pool. They provide for 320 acres, standard gas proration units and allow for an initial well and up to three infill wells. Well locations are also subject to a 660 foot setback requirement and may be no closer than 10 feet to any quarter, quarter section line or

subdivision boundary.

MR. EXAMINER: That is for the Mesaverde?

MR. LEWIS: That is for the Blanco Mesaverde.

MR. EXAMINER: Okay.

MR. HALL: And it's the statewide rules that apply.

MR. EXAMINER: Right.

Q. (By Mr. Hall) Energen does not seek to amend either the statewide rules or the special pool rules for the Blanco Mesaverde, correct?

A. Correct.

Q. Seeking exceptions to those limitations?

A. Right.

Q. Referring back to the non-standard locations, we've already identified those, but in each case, in the case of each of those non-standard locations, who was the operator of the offsetting unit towards which those locations encroached?

A. That would be Energen.

Q. If Energen's application for infill development is granted will any additional surface disturbance result?

A. There will be no additional surface disturbance on the PC pay adds. If we do drill the seven

proposed -- any of the seven proposed new drills there would be the regular normal amount of new surface disturbance that would normally occur.

Q. All right. And has Energen undertaken engineering and geologic evaluations of this proposed project?

A. They have.

Q. And has Energen's evaluation led it to conclude that Energen will be able to produce additional Pictured Cliffs reserves that would not otherwise be produced?

A. Yes.

Q. And does Energen have a geologic and engineering witness to testify to that?

A. We do have those people to testify.

Q. All right. And if you would take a copy of Exhibit 2 before you. Do you have that? If you look at the second page of Exhibit 2, which is our notice affidavit, Mr. Examiner. Can the Examiner refer to that for the identification of all of the offsetting operators who were notified of this application?

A. Yes, he could.

Q. And by the way, did Energen receive any objections to the application from any of the offsetting interest owners?

A. We did not receive any objection.

Q. Were there offsetting spacing units to the proposed infill development area where there was no designated operator?

A. There was. And if we could refer back to land map that has the yellow and blue.

Q. That's page 6?

A. That is page 6, yes. We had right here, Coleman et al., Merrion, et al., and Dugan, et al. There were no operators, per se.

Q. And so has Energen notified Coleman, Merrion, and Dugan, et al., in their capacity as leasehold working interest owners?

A. We have.

Q. And did you receive objections from any of those working interest owners?

A. We did not.

Q. If we look back at Exhibit 2, does this show us that the Bureau of Indian Affairs and the Jicarilla Apache Nation and the Bureau of Land Management received notification of the application?

A. Yes, it does show that.

Q. And was Energen's proposal discussed with these agencies?

A. It was. In fact, we showed it to them in our office in Farmington on June 28th. We had myself

present. We had Charlie Donahue, a local senior engineer, and we also had our two other witnesses teleconferenced in from our Birmingham office to talk about it and show it also.

Q. Did any of the governmental agencies indicate an objection to the application?

A. No one voiced an objection. And, in fact, one individual with the BLM, and I'm sorry I didn't get his or her name, stated that it sounded like a win/win situation and didn't know why it wouldn't be approved. Jim Lovato with the BLM explained that they can no longer support or oppose action such as this. They just would not show up at the hearing.

Q. So in your opinion, Mr. Lewis, would approval of Energen's application serve the interest of conservation, prevent waste, and result in the protection of the correlative rights?

A. Yes, it would.

Q. And did you participate in the preparation of the Exhibit 1?

A. I participated, yes, in the preparation of Exhibit 1 as to the land map on page 6, and it was done under my direct supervision. And I collaborated with my other witnesses on the rest of the exhibit.

MR. HALL: All right. At this point,

Mr. Examiner, we can establish through the remaining witnesses their assistance in the preparation of the remaining pages. I'll go ahead and tender into evidence Exhibit 1. And Exhibit 2 is our notice affidavit. And you can refer to the offset operator and interest owner list and a form of notification letter. And we have copies of all of the certified notice green cards and the return receipts.

MR. EXAMINER: Okay.

MR. HALL: And with that we will conclude our direct examination of Mr. Lewis and turn him over for questions.

MR. EXAMINER: Okay, very good. At this point Exhibits 1 and 2 will be admitted. I guess there's no objection.

Okay. Yeah, it was a good question when you tried to establish on page 6 the ownership there and who got notice and who didn't get notice. I wanted to make sure all those interests were noticed and there were no objections. And all the governmental agencies like Jicarilla, federal land, who owns the land?

[Exhibits 1 and 2 admitted.]

MR. LEWIS: The Jicarilla Apache Nation owns the minerals.

MR. EXAMINER: The minerals, okay.

MR. LEWIS: Yes, sir.

MR. EXAMINER: And you discussed it with them and there were no objections?

MR. LEWIS: They showed up at our June 28th show -- when we showed it in our Farmington office. They asked questions. They had a consultant, Jerry Simon, who asked a lot of questions, and I think his questions were answered. He had some follow-up phone calls to Charlie Donahue, our senior lead engineer, and I think his questions were answered there. And I have not heard any objections from the Jicarilla Apache Nation or the BIA Jicarilla Agency.

MR. EXAMINER: Okay. That's good then. I have no further questions for you. You may step down.

MR. LEWIS: Thank you, sir.

MR. HALL: Mr. Examiner, we would call Mr. Don Lehman to the stand.

MR. EXAMINER: Mr. Lehman, you have been sworn so you are still under oath.

DONALD LEHMAN

after having been first duly sworn under oath, was questioned and testified as follows:

DIRECT EXAMINATION

BY MR. HALL:

Q. For the record, state your name.

A. Donald Lehman.
Q. And where do you live, Mr. Lehman?
A. Birmingham, Alabama.
Q. By whom are you employed?
A. Energen Resources.
Q. In what capacity?
A. Geologist.
Q. Mr. Lehman, you previously testified before the division and had your credentials as an expert petroleum geologist established as a matter of record, right?
A. Yes, I have.
Q. You're familiar with the application that's been filed in this case?
A. I am.
Q. And the lands and the wells that are the subject of the application?
A. Yes, I am.
MR. HALL: Mr. Examiner, we reoffer Mr. Lehman as a qualified petroleum geologist.
MR. EXAMINER: Mr. Lehman is so qualified.
Q. (By Mr. Hall) Mr. Lehman, are you prepared to provide the Examiner with an overview of the geology of the Picture Cliffs and the formation in this area?
A. Yes, I am.
Q. Why don't you proceed to do that.

A. If you'd refer to page number 10, this shows a cumulative production map of the Pictured Cliffs San Juan Basin. And off to the far east side is the Gavilan pool separated from the other Pictured Cliffs production. Your eye is drawn to the orange color, which is one 1BCF of cumulative gas per well or greater. And as you can see, the major part of the Picture Cliffs productions is in the central portion of the basin.

The Gavilan pool has some wells that have produced over 100 -- I mean 1BCF. Also, we'll show a blowup map in a little bit. But this is just a locator map showing where the production is at. It's the easiest way to map the Picture Cliffs producing reservoir and the San Juan Basin due to lack of modern wells for identifying porous and vertical sand. The production map is the easiest way to do that.

Our next page is page 11. This shows a typical log section that we are perforating and completing in the Gavilan pool. This is a single zone approximately 50 feet thick. The red bar off to the far left-hand side of the log is the perforated interval. The green shows density porosity greater than 8 percent. And the red is restivity that is higher than background. It's a shaley sand, varies considerably throughout the field. But this is a very good section of Picture Cliffs right

here, and one of the few modern logs we have in the field also, open hole log.

Q. All right. Let's turn to page 12. What does that show us?

A. Page 12 is a depth map. If you'll kind of refresh your memory back to the production map you'll see that a lot of the productions, shallower depth in the Gavilan field. The Gavilan field pool again noted off to the east. And the red, the heavy contours are 1,000-foot contours, and the 4,000-foot depth contour is just north and west of our Gavilan pool.

The majority of the Pictured Cliffs production is located between 2 and 3,000-foot depth off to the west. The reason for the depth map is that often times you see lower porosity and permeability with deeper depths, and that's one of the reasons that we feel that the Gavilan pool is a candidate for infill drilling, infill completions.

MR. EXAMINER: So it's 3,000 to 3,500?

MR. LEHMAN: For the Gavilan pool?

MR. EXAMINER: Yes.

MR. LEHMAN: Actually, between 3500 and 4,000.

MR. EXAMINER: Oh, okay. Go ahead.

A. And if we go to the next page, this also relates

to the lower porosity and permeability and also lower production here. We have a higher original bottom hole pressures in the Gavilan pool due to the deeper death. As you can see, the Gavilan pool lies between the 1200 and 1300-foot original bottom hole pressure contours. And, again, a lot of production off to the west had lower original bottom hole pressure.

And corresponding to that, we have original remaining bottom hole pressure both in our area as well as the higher productive area off to the west. The reservoir engineering discussions will get into some of the remaining pressures that we've had in this area and why we feel it's favorable for infill drilling.

Q. (By Mr. Hall) And just for the record, we're referring to page 13?

A. That's correct. I'm sorry, page 13.

Q. Anything further with respect to the bottom hole pressure information?

A. This information was gathered from older wells, drill sym test pressures, and a combination of newer wells where we had known fluid heights and tread pressures. Not a lot of information but enough information to construct a map of this nature. And, again, with the higher -- with the deeper pressure or the higher pressure we feel it's a plus in our infill

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program.

If we flip to the next page, page 14.

Q. What is that showing us?

A. This is a map that shows the currently operated, Energen operated Mesaverde Pictured Cliffs commingled wells as well as two-ended solo or standalone Pictured Cliffs wells. They're kind of hard to see on the map. The Pictured Cliffs wells are the brown dots. The ones that are also commingled with Mesaverde have a red -- I'm sorry, a black circle around them. The only two that don't have black circles around them are the two Pictured Cliffs wells down in section 24 to the south. Those are standalone Pictured Cliffs wells.

So Energen operates a total of 49 Pictured Cliffs completions in the Gavilan pool.

Q. Let's turn to exhibit -- or page 15.

A. Yeah, page 15 is a map that we were actually looking at earlier. There's a lot of information on it. But this has all of the wells in the infill area, both the 51 wells plus the seven new drills that Bryan was talking about earlier as well as all of the 49 producing Mesaverde wells that Energen currently operates. And we'll probably refer to this map during the reservoir and engineering discussion also. But that's just a base map showing all of the wells.

And one thing I hadn't mentioned, the green circles, if you look at the legend there, are actually Pictured Cliffs completions that have been PNA'ed for one reason or another. Either they produced out or they've had casing problems and they had to PNA them. Several of them, however, are still producing from Mesaverde. For instance, this well right here. It's hard to see again, but it has a black circle around it so it's still a Mesaverde producer.

MR. HALL: And, Mr. Examiner, page 15 corresponds with the blowup.

MR. LEHMAN: That's the blowup, yes.

MR. EXAMINER: Okay.

MR. HALL: Sorry about that.

MR. EXAMINER: Yeah, that's okay.

A. And I may also note the three Mancos wells that we discussed earlier have the black triangles around them. There's one here in this section, in section 3, and one up here in 35, another one there in section 1, I believe. I'm sorry, 36. 35 and 36 to the north and also in section 3. The black diamonds are the three Mancos wells, Mesaverde Mancos wells.

Q. (By Mr. Hall) And I guess we should clarify, on this map, page 15, the potential neutral locations are indicated by the dark triangle?

A. The blue triangles, correct. There's six down here and there's one up here to the northwest.

MR. EXAMINER: Those would be the seven new drills?

MR. LEHMAN: That's correct.

MR. EXAMINER: And then they would go on to Mesaverde?

MR. LEHMAN: I'm sorry?

MR. EXAMINER: They will go to Mesaverde?

MR. LEHMAN: That right there would be Mesaverde. We wish to get approval to make them Mesaverde Pictured-Cliffs commingle completions.

MR. EXAMINER: Oh, okay. That's why you're asking for dual completions?

MR. LEHMAN: Correct, commingled completions.

Q. (By Mr. Hall) Two years ago, Mr. Lehman, did Energen receive authorization from the division to conduct a pilot project infill study for portions of the Gavilan and some other Pictured-Cliffs pools in the area?

A. Yes, we did.

Q. And did that authorization come from order number R-13347A?

A. Yes, it did.

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Q. Based on that pilot project study, did Energen conclude that basin-wide infill development was warranted in the Pictured Cliffs?

A. Yes. That it was not warranted basin-wide, correct.

Q. Why don't you discuss the results of that pilot project study and explain to the Hearing Examiner why it's meaningful to the second case.

MR. EXAMINER: How many years ago, three years ago?

MR. HALL: Two years.

MR. LEHMAN: Right. We came back to report on it two years ago. Actually, it started in 2003. If we refer back -- Zach, if you'd refer back to the cumulative production map, page 10. Flip to it in your book, page 10. Just a brief history because Zach will talk specifically about a couple of the wells. Page 10 of the cumulative production map. There we go.

In 2003 the commission gave approval for Burlington Resources, BP, and Energen Resources to, I think there were 29 pilot locations spread out throughout the basin. Energen's were concentrated over on Jicarilla Nation. Burlington and BP were over the central portion of the basin. Again, looking at this map where there was higher productive wells, their

conclusions as well as ours was that the central portion basin did not warrant infill drilling, so that case was presented -- the results of that case were presented two years ago and the conclusions were no basin infill or 80-acre drilling.

At that point we received permission to, I believe, five more pilots, or was it six? Five? Five more pilots? And several of those were in the Gavilan field. And with that we had actually continued success. We had success in our 2003 program. I believe we drilled nine pilots, and the program overall was successful if you look at the cost we incurred and the production increase we had. And the pilots we did two years ago, results were still preliminary but they were very encouraging, which we'll speak to in a few minutes.

So that's what has kind of precipitated us to come back to the commission to present this case today.

MR. EXAMINER: Yeah, that's why you got the pilot program.

MR. LEHMAN: Correct, right. And Gavilan field is where we had -- it's just this model that we're looking at better than any other properties that we operate.

MR. EXAMINER: Okay, thank you. Continue.

Q. (By Mr. Hall) So anything further with respect

to the pilot project study?

A. Okay. Actually, we filled in the Gavilan pool portion of the Pictured Cliffs productive basin. We have lower porosity permeability, as I spoke to with the slides earlier. And the drainage area is not as large as in the higher porosity permeability portion of the basin which leads us to the conclusion that we feel that additional wells in the drilling spacing units are warranted.

Q. In your opinion, Mr. Lehman, is there a reasonable probability that there are additional PC reserves that will be available to the infill wells that are not otherwise being efficiently recovered by the parent wells in each of the existing spacing units?

A. Yes.

Q. And in your opinion will granting Energen's application serve the interest of conservation, the prevention of waste, and the protection of correlative rights?

A. Yes, it will.

Q. And did you also participate in the compilation and creation of the geologic exhibits comprising Exhibit 1?

A. Yes, I did.

MR. HALL: That concludes our direct

examination of Mr. Lehman, and we'd move the admission of the exhibits comprised in Exhibit 1.

MR. EXAMINER: Which ones do you want to admit?

MR. HALL: We've already tendered the entirety of Exhibit 1, so there's no need retender it, but I did want to establish it for the record.

MR. EXAMINER: Yeah, part of Exhibit 2 were admitted too.

MR. HALL: Right.

MR. EXAMINER: Let the record reflect that all of Exhibits 1 and 2 are now admitted.

Okay. I'm going to ask you about these well locations. You were going to tell me about why you are asking for those unorthodox locations when you plug back to the Pictured Cliffs. Are you going to tell me what's happening there?

MR. LEHMAN: I'm sorry. On non-standard locations?

MR. EXAMINER: Yeah.

MR. LEHMAN: Well, there are existing Mesaverde bore holes, so we're dictated by Mesaverde bore hole locations for our pay add program. The only way we feel that this program is economic, worthwhile doing, is as pay adds or as second completions in a new

Mesaverde drill.

MR. EXAMINER: Because these are all vertical wells?

MR. LEHMAN: Correct.

MR. EXAMINER: And then when you complete the PC the location becomes non-standard, some of them become non-standard.

MR. LEHMAN: Some of them will be non-standard, correct.

MR. EXAMINER: Like those 16 we looked at previously, right?

MR. LEHMAN: Right.

MR. HALL: And I can explain, Mr. Examiner. Those Mesaverde locations either preexisted the special pool rules for the Mesaverde, but in each case they were non-standard at the time and each of the Mesaverde completions had received division approval for their unorthodox status. That authorization did not exist for any formation outside of the Mesaverde so we felt it was necessary to get division approval for the record for the resulting Pictured Cliffs' non-standard locations as well.

MR. EXAMINER: Okay, very good. At any point you can go back to Exhibit 1 and then you answer the questions as we go along. And I wanted to -- you

know, I don't normally call people up to ask questions but sometimes I forget. You know, if I ask those questions, it helps me along.

Now, you have touched on five items, four of the five items. The fourth one is the established special infill development. Have we talked about that? Did we say about what you need in that request?

MR. HALL: We hope to convey to you that we're asking for authorization to develop on an infill basis throughout the entirety of the development area that we've established. We have additional -- I think Mr. Lehman's geologic testimony justifies the need to do that, to pick up additional Pictured Cliffs reserves that aren't to be recovered now by the existing parent wells. And the upcoming engineering testimony can shed some additional light on that.

MR. EXAMINER: That shows me that your requests, number one and two, are not really -- they're not usually exclusive. So when I establish your special infill I'm trying to approve your exception to the well in the requirements in the whole Gavilan Pictured Cliffs area, right?

MR. HALL: That's right. And we thought this was the most official way to go about that rather than to request pool-wide down spacing and infill

development, rather or more correctly. Because the entirety of the acreage plot is controlled by one operator and it owns 100 percent of the working interests, and the underlying mineral interest is the same, it's Jicarilla Apache Nation. So we thought this was the most efficient way for the division to administer this particular request.

MR. EXAMINER: Okay. You may step down. No further questions.

Call your next witness.

MR. HALL: Mr. Examiner, we would call Mr. Zachary Van Voast.

ZACHARY VAN VOAST

after having been first duly sworn under oath, was questioned and testified as follows:

DIRECT EXAMINATION

BY MR. HALL:

Q. For the record, state your name.

A. Zachary Van Voast.

Q. Mr. Van Voast, where do you live and by whom are you employed?

A. I live in Birmingham, Alabama and I'm employed by Energen Resources.

Q. In what capacity?

A. I'm a senior reservoir engineer.

Q. Have you previously testified before the division and had your credentials as an expert petroleum engineer established as a matter of record; is that correct?

A. That is correct.

Q. And you're familiar with the lands and the wells that are the subject matter of Energen's application today?

A. Yes, I am.

MR. HALL: And, Mr. Examiner, we would reoffer Mr. Van Voast as a qualified expert in petroleum engineering.

MR. EXAMINER: So qualified.

Q. (By Mr. Hall) Mr. Van Voast, have you undertaken an engineering review of the data derived from Energen's parent and infill wells from the 2010-2011 pilot project study?

A. Yes.

Q. Would you summarize the results of your review of that data for the Examiner?

A. Basically we recompleted two Pictured Cliffs wells in the Gavilan pool. One well that was authorized was the Jicarilla 96, 5A and it didn't have sufficient casing integrity for a PC recompletion. So it was replaced by recompleting to the PC in a 160-acre unit where the original PC had been abandoned. Both wells

were successful in that DUR. In this report I will review the production and bottom hole pressure results of these two wells and also the results of three other wells already shown in testimony in 2010 to the NMOCD.

Q. Explain the methodology utilized in doing your evaluation.

A. I used the Aries program to do a decline curb analysis.

MR. EXAMINER: What program is that?

MR. VAN VOAST: Sir?

MR. EXAMINER: What program did you say?

MR. VAN VOAST: Aries.

MR. EXAMINER: Oh, Aries. Okay.

Q. (By Mr. Hall) Let's turn to page 17. If you could explain to us what that shows.

A. After the infill well, which was the Jicarilla 94, 5C which is illustrated in red, was put on production it appears that the line in blue, which is the parent well, went on a steeper decline. And I projected this to be about 20 percent, and it appears it started about eight months after the pay add was put in, the new well, the infill well, excuse me.

I forecasted both of these wells using a maximum of 25 years, which I think is a conservative estimate. This is the same assumption I used in the 2010 testimony

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regarding PC infills. The EUR, which is the estimated ultimate recovery for an infill was forecasted to be 1104 MMF for the 5C well. 1107, excuse me.

MR. EXAMINER: 1107, okay.

MR. VAN VOAST: For the parent well, before the infill, I estimated EUR of 962, and it was on a 4 percent decline. After the infill it went on a steeper decline, as I stated before, about 20 percent. And I'm estimating the NCSUR to be 528 MMF. The EUR lost to the parent is 434 MMF. This will be recovered by the infill well and the 434 MMF is acceleration.

MR. EXAMINER: You know you need to -- this is really the crux of the matter here, because I will detect what you are asking for in your development here. Could you start with the infill, parent infill starting at the bottom, what we lost because you had to lose something. I mean, if I allow you to lose something they are not preventing waste which the regulation says you can't do. So go back and explain what you just said because that was very important.

MR. VAN VOAST: About the acceleration part?

MR. EXAMINER: No, no, no. When you said that we lost 434 MMCF, why did we do that, because we didn't do the infill?

Q. (By Mr. Hall) Can you explain to the Hearing

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Examiner how --

MR. VAN VOAST: I'm sorry. I just want to clarify one thing. I do have a little bit of a hearing problem, so it's real hard for me to understand you at times.

MR. EXAMINER: Let me say it very quitely because this is very, very important to me. At the bottom of page 17 you said that we lost 434 MMCF. I don't want that to happen. So why did we lose it and what are you trying to do? That's my question.

MR. VAN VOAST: Maybe the wording is a little bit incorrect. The parent well is going to recover less reserves because the infill well is going to recover some of those reserves and taking those reserves or EUR from the parent well. It's interference. Okay, it's interference.

And my estimate right now is that it's on about a 20 percent decline. So we're not really losing reserves to the 160, it's just that the parent well is going to pick them up. And that's why at the very bottom of this I say the overall EUR increased to 160 is 673 MMF. That wouldn't have happened if we hadn't drilled the infill well or recompleted the infill well.

Q. (By Mr. Hall) The 673 increase is attributable to the entire 160-acre unit?

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A. That's exactly right. And that includes that 434, if you want to use another word, it's transferred from the parent well to the infill well.

MR. EXAMINER: Okay. So what you are telling me is that if this is not approved you are going to lose 673 MMCF, is that what you are saying? If we didn't approve your infill requirements or your requests we are going to lose in the formation 673 MMCF?

MR. VAN VOAST: Oh, if you did not, yes. If you did not do it we would not have gotten 673 MMF. Is that the same thing?

MR. EXAMINER: Yeah, that's the question I'm asking. Yes.

MR. VAN VOAST: Yes.

MR. EXAMINER: Okay. On your parent well, what you refer to as parent wells, the well was initially drilled, right? The first well is what you call the parent well?

MR. VAN VOAST: Yes.

MR. EXAMINER: Okay. Now go back to where you have it. These declines, they are just straight lines declined, right? How did you do it? I know you used the area to calculate your decline, right? I want you to go back to that parent well and discuss where you said that the estimated would be 962.

MR. VAN VOAST: Right.

MR. EXAMINER: But before the infill you get this and after infill you get that and then you lose 434. I want you to explain that sequence.

MR. VAN VOAST: Right.

MR. EXAMINER: So go ahead and explain that because that is very important. You did the work.

MR. VAN VOAST: Okay. The parent well, which is the 94, 5A, I used the best history match over a 10-year period. You don't see that on this particular graph here. I've got a graph if you want to see it.

MR. EXAMINER: Okay. No, I don't want to see it.

MR. VAN VOAST: But it's a very good fit. And that gave me that 4 percent decline.

MR. LEWIS: Could you point that out on the screen, please, with a pointer?

MR. VAN VOAST: But that goes back 10 years back to here. And I think the Examiner is aware of that, that it doesn't show all of that.

MR. EXAMINER: Yes, I understand that. Go ahead.

MR. VAN VOAST: And then to determine the 20 percent decline I used the best match that I could see, and that really is about six months of history

since it starts -- it's obviously something that's changing, and I have done enough -- I have worked with these PCs now for four years and I've done a lot of these pilots and almost everybody single one of them has seen interference. But in every case the reserves for the 160 have gone up as a consequence of doing it. So we've done a lost reserves, it's just been a matter of transferring it from the parent to the pilot well.

MR. EXAMINER: Okay.

MR. VAN VOAST: So my best estimate is that it's on about a 20 percent decline right now. And that's how we get to that EUR of 528, and the difference between those is 434.

MR. EXAMINER: Okay. Go ahead. I think I understand what you are trying to do. And now if you go back to the red decline there that's where you have the infill.

MR. VAN VOAST: Yeah.

MR. EXAMINER: Okay.

MR. VAN VOAST: So the red line, and this is important, it peaked at 730 MCF per day. This is the pilot well, Jicarilla 94, 5C, and then when on a hyperbolic decline. It had an initial decline rate of 53 percent, a B factor of 1.2. And this is a curve match for 12 months of production.

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MR. EXAMINER: Okay.

MR. VAN VOAST: And that gives us an EUR of 1107 MMF.

MR. EXAMINER: Okay. Go ahead.

Q. (By Mr. Hall) The increase that you showed for the EUR for the spacing unit, is some portion of that attributable to acceleration and some attributable to incremental recoveries?

A. Right. The 434 would be acceleration, the incremental recovery would be 673.

Q. Have we adequately explained how you forecast both the pre- and post-infill?

A. Yes, I think we just did that. Yeah.

MR. EXAMINER: I'm very convinced what you said. Okay. Go ahead.

Q. (By Mr. Hall) Let's turn to slide 18, page 18. And can we locate this well on the map? Where is this well?

MR. VAN VOAST: Don, is that --

MR. LEHMAN: Okay, I'm sorry. It's section 35 of 27 north. The 1B is right above the well.

MR. EXAMINER: Okay. Section what?

MR. LEHMAN: Section 35, right below it.

MR. EXAMINER: Oh, okay.

MR. VAN VOAST: Yeah, all the well spots are

below the well ID numbers. Do you see that? Can I show him?

MR. EXAMINER: Yeah, can you approach?

MR. LEHMAN: The 1B is right there.

MR. EXAMINER: Okay, thank you.

Q. (By Mr. Hall) This well is not an infill?

A. It is not.

Q. Explain that.

A. Well, it's actually a replacement well for the Jicarilla 95, number 9. And unfortunately that's not on that map.

MR. LEHMAN: Yes, it is. It's the green dot.

MR. VAN VOAST: Oh, it's the green dot?

MR. EXAMINER: It's southeast of that?

MR. LEHMAN: The green dots are PNA, pressure points.

MR. VAN VOAST: And I see it now, sorry. I misspoke there. Do you see it?

MR. EXAMINER: Yeah, I see it.

MR. VAN VOAST: So it's a replacement well, quite fairly close to the Jicarilla 95, number 9, which was plugged and abandoned in 1999. It was PNA'ed because it had casing leaks. It's cum was 550 MMCF. And even though this technically is not an infill well,

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in other words, the Jicarilla 95, 1B, it shows production from a second well in the 160-acre unit. So it's similar to like infill because it's showing what two wells can do versus one well producing from a 160.

Again, this well peaked at 350 MCF per day, and it went on a hyperbolic decline. The B factor was 1.4, and decline rate is 61 percent. And I forecasted the CUR to be 222 MMF, so that's a 222 increase for the 160-acre unit. There's no acceleration here because the parent well has already been plugged. It's just a net increase.

Q. Let's turn to page 19. Is that a summary of the results from the 2011 infill program?

A. It is. And I just basically would like to say that looking over in the average column other there that the average EUR for the pilot well is 665 MMF, the average EUR increase for the 160 is 448, and the average EUR for the quarter section is 1.2 BCF. It's just a summary tape of what we saw in those graphs there. That's all.

MR. EXAMINER: Yeah, I understand.

Q. (By Mr. Hall) And if we turn to the page 20, is that a summary of the EURs from the area-wide pilot project authorized spec in 2003?

A. Yes, it is. And this is basically the same

testimony that was presented in 2010. It's exactly the same. The numbers have not changed. So the EUR for the average infill was 283. The average EUR increase was 45, and this includes the interference. And the average EUR for a quarter section was 1.1 BCF.

I guess you obviously can see that when you look at the 2003 program versus the 2010 the pilot -- the parent wells had a higher cum. But, you know, the EUR for the quarter section is very similar, 1.1 BCF versus 1.2 BCF. So we had better candidates to pick from in 2010 or 2011 program than we did the 2003.

MR. EXAMINER: Interesting. Go ahead.

Q. (By Mr. Hall) Let's look at page 21. Tell us what that shows.

A. This is a summary of the bottom hole pressure data. And we collected the bottom hole pressure in two different methods. I would like to first say that all the bottom hole pressure data collected was used by downhole bombs, nothing surface. It was all downhole pressure gauges, tandem pressure gauges.

In 2011 we used pre-frac data from the DFIT, which stands for diagnostic fracture injection test. And after that we had a 96-hour fall off test with bottom hole pressure gauges downhole. So this is really a pressuring up situation, then a fall off to arrive at

a P star.

MR. EXAMINER: And what is P star? P star is a measurement of the bottom hole pressure.

MR. VAN VOAST: Sir?

MR. EXAMINER: P star measures bottom hole pressure?

MR. VAN VOAST: It is my estimate of bottom hole pressure. We use the 100 plot.

MR. EXAMINER: Okay.

MR. VAN VOAST: I think that, without going into too much detail, I think that the DFIT is a procedure we like a lot. We can follow up right after we've done this 96-hour fall off test and go right in and do the frac and then start recovering the fluids right away and put the well on quicker. And what I'm explaining to you next is maybe one of the reasons some of the wells were not as good in the 2003 program is we did what was a post frac data from a 30-day build up, and this was after a flow back after the frac. So what happens is we frac the well. We had a four-day flow back to clean it up. And then we had a draw down situation.

And then we had the bottom hole pressures gauged in the hole and we waited for 30 days for the pressure to build up. The problem with that is it took us

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30 days at least, sometimes 45 days to continue to clean up and put the wells on production. I think that might have hurt us. So we all seem to like, in our company, the DFIT procedure. Well, that's what we're going to be doing from now on.

The highest pressure we saw was 1270, and that's virgin bottom hole pressure. That's no pressure depletion at all, and that was in Jicarilla 94, 5C. It was also offsetting the lowest cum in a parent well. The lowest bottom hole pressure we saw was 427 in the Jicarilla 958B and it was offsetting the highest cum for the parent well. Average pressure of the five wells, 669, that represents 47 percent pressure depletion. There's a lot left. It's not unusual to see PC wells get down to 90 percent pressure depletion.

Q. (By Mr. Hall) The 47 percent depletion is for the Gavilan pool; is that correct?

A. Yes. Yes.

Q. But you're saying in other PC pools --

A. I have seen some very, very low pressures in the PC in my surface data. We're down 50 pounds. And we take that down to bottom hole, still only maybe 70 pounds. So there's a lot of pressure depletion there.

Q. Let's turn back very quickly to page 13, which is

the original bottom hole pressure.

A. Oh, yeah. Yeah, what that illustrates is the 5C well is right up there, the northern part of the Gavilan pool. Okay. And there's a data point right there. You see the 1255. Okay. That's right, fits in perfectly with that pressure map that we already had. So, I mean, we didn't really have to change the pressure map for that data to fit in there. So that kind of validated the pressure map.

And, also, I mean, it's interesting that you had this offset well, you had production. If you saw where that was located you had production above it and you had production below it. And we complete a well and there's no pressure depletion at all, so it doesn't get any better than that. We have some that are going to be worse than that. But that's a very good well. We're very happy with that well.

MR. EXAMINER: That's what we want to see.

MR. VAN VOAST: Yeah.

Q. (By Mr. Hall) Okay. Anything further with respect to your bottom hole pressure analysis?

A. I believe that's it.

Q. Let's talk about the commingling aspect of the application.

MR. EXAMINER: Before we go into that

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commingling, one thing I would say is I don't know whether you started it but hopefully it is in the Mesaverde. I know you may tell me that later, but I think ahead of time. Do you have any idea of what the bottom hole pressure is in the Mesaverde wells?

MR. VAN VOAST: Normal?

MR. EXAMINER: Well, normal and then after several -- like we're talking about the PC now and what the pressure you currently have. So I want to know, what is the normal when we drill these new drills what will be the normal?

MR. VAN VOAST: I think about .3. Is that what you're asking for, the --

MR. EXAMINER: Yes.

MR. VAN VOAST: -- gradient is what -- I think Don would agree with that.

MR. EXAMINER: In the Mesaverde.

MR. VAN VOAST: Mesaverde and also PC approximately.

MR. EXAMINER: Okay. What is the depth of the Mesaverde? What is the depth?

MR. VAN VOAST: I have that. Let's see.

MR. HALL: Don, can you answer that?

MR. LEHMAN: I don't know right offhand. I have something in my briefcase that would give me

accurate --

MR. EXAMINER: And I'm sorry, Mr. Hall. I wanted to add that question because I didn't want any questions on gradient between the two.

MR. VAN VOAST: 5958.

MR. EXAMINER: The depth is 5958, okay.

MR. VAN VOAST: Right. And the PC is at 3730, and that comes off that type --

MR. EXAMINER: PC is what?

MR. VAN VOAST: 3730.

Q. (By Mr. Hall) This is shown on the type log?

A. Yeah, that type log that we put up there before.

Q. Page 11.

MR. EXAMINER: That is very important, the normal grade. But you think Mesaverde is about .3?

MR. VAN VOAST: .3. That's what it started at. It's probably .15 or less now.

MR. EXAMINER: Yeah, okay. After the completion.

MR. VAN VOAST: Well, in this area it's about 50 percent depleted, so it's probably about .15 too.

MR. EXAMINER: Okay. Go ahead.

Q. (By Mr. Hall) We'll address commingling now, so I'll ask Mr. Van Voast, are the fluids from both the

Pictured Cliffs and Mesaverde compatible?

A. They are. We have had numerous, throughout the basin, PC Mesaverdes commingle. We've never had a problem with that.

MR. EXAMINER: Yeah, you've got a lot of downhole commingling between the PC and the Mesaverde.

MR. VAN VOAST: Very common. It's very common.

Q. (By Mr. Hall) And in your opinion, does commingling present reservoir damage at all?

A. No.

Q. And will commingling jeopardize the efficiency of present or future operations in the pools to be commingled?

A. No, it will not jeopardize it. It will help the efficiency.

Q. For all of the identified wells, is the bottom perforation in the lower zone within 150 percent of the depth of the top perforation in the upper zone?

A. Well, the answer has to be no. I mean, we're just missing it by 350 feet when you do the calculation. But using those same numbers I just told you of 3730 and you take the 150 percent times that you come up about 350 feet shy of the 5958. It's very close. But 5958 is 350 feet deeper than 5595, which is the calculation of

150 percent times 3730.

MR. EXAMINER: Yeah. I understand what you're saying. But you understand what you're asking me to do now? If you said in individual cases, those several ones that have been approved, we reviewed them in the office, right? But now you are asking me for a summary approval in that Gavilan unit so that wherever your drilling was you commingle. Whenever you drill you commingle.

So this is the point in time we are going to take care of all those, you know, make sure that we are doing the right thing. Because otherwise if you don't, if we don't approve it all you are going to be doing is that whenever you do new drills in the Mesaverde, do it complete, then you have to come in with a downhole commingling application. But what we're trying to do today is to give you some reapproval. I think that's what you're asking for.

MR. HALL: Yes.

MR. EXAMINER: And I like that. Why I like it is because it reduced my work here. Because you drill several wells, and you want a downhole commingle application. But if I'm able to give you a summary approval for the whole unit you don't have to come from approval. Once you drill the well you just do it

complete and downhole commingle. And that's what I understand Energen is asking, right?

MR. HALL: Yes.

MR. EXAMINER: That's what you're asking, right?

MR. HALL: Yes.

MR. VAN VOAST: But there was a clarification you were going to make at the end of this.

Q. (By Mr. Hall) Let me ask it this way, can you estimate how many Pictured Cliffs Mesaverde wells in the basin Energen operates?

A. A couple hundred probably, at least.

Q. And in any of those wells has Energen experienced any difficulties with pressure differentials between the two formations?

A. No.

MR. EXAMINER: That's really what I'm concerned with because I will be to give approval to do that as long as I know there have been no problems with them if there is a breakdown or whatever, there have been no problems with the formations, which we look at when we get it individually. We have to examine everything today to make sure we are satisfied with those. You asked a good question, have you seen any pressure that would make us not approve it. And your

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answer was no, right? Was that your answer?

MR. VAN VOAST: It was no for that 150 percent rule.

MR. EXAMINER: Okay, yeah. That's really where I'm coming from.

MR. VAN VOAST: Right.

MR. HALL: What we're doing here, if you look at the C107 applications, there's a checklist of questions you must answer. And we're trying to establish on the record that there's enough information based on experience and what bottom hole pressure we do have that could justify area-wide approval for commingling. We want to eliminate in the Examiner's mind the possibility that there's any problem that may exist from commingling anywhere in the area. And I have a couple questions about that.

MR. EXAMINER: Okay, yeah. That's what I'm looking for. Go ahead.

Q. (By Mr. Hall) Mr. Van Voast, is the lower zone in the Mesaverde at or below normal pressure?

A. It is below normal pressure, and that gradient I estimate to be .3.

Q. And will shut-in or flowing well pressure succeed any commingled formation's fracture parting pressure?

A. No, it will not. I estimate the parting pressure

to be .6, and I've done several different calculations. That would be the absolute lowest parting pressure, would be .6.

MR. EXAMINER: How did you come up with that .6?

MR. VAN VOAST: Just experience. And I have not down a study. I've just seen what the parting pressures are in fracs. They can go higher than that, but .6 would be kind of the minimum I've seen.

MR. EXAMINER: I've seen .65.

MR. VAN VOAST: Huh?

MR. EXAMINER: I've seen .65.

MR. VAN VOAST: Yeah, higher. Yeah. So we're trying to look for the worse-case, you know, .6. And if you take the numbers here, and I've done some math here, they just don't add up. You just can't have a depleted Mesaverde frac into a PC. You can't have -- and because the grading is on a .3 to begin with. You can't get from .3 to a .6 gradient with a gas. Now, if you had liquid in there, you know, but we're talking gas.

The other thing is, too, when we complete these wells we put a bridge plug in there and we frac the PC with the bridge plug in place which isolates the Mesaverde. We frac the PC and then we produce the PC.

And I'm getting a little ahead of myself here but I might as well go ahead. We produce the PC until we get a stabilized 60-day rate. And then that's what we use, we use the subtraction method both before and after to come up with what the PC incremental production is.

We had a before, which is the Mesaverde. And after we pull that plug we get a 60-day stabilize rate of the PC. Then we pull the plug and we've got a combined rate of everything. And then the subtraction of what was after versus what was before is the PC production, and we use that as our allocation method.

MR. EXAMINER: Okay, very good. That's where you allocate, between PC and Mesaverde.

MR. VAN VOAST: That's exactly right.

MR. EXAMINER: And that's what you're doing now for the ones we have already approved.

MR. VAN VOAST: Yes. That's what we're doing right now, as a matter of fact.

MR. EXAMINER: Okay, good.

MR. HALL: And this is a good point for me to refer you to what we've marked as Exhibit Number 3, Mr. Examiner.

MR. EXAMINER: Is that number 3?

MR. HALL: Yes.

MR. EXAMINER: Okay. Go ahead.

MR. HALL: And Exhibit 3 is a list of all of the administrative downhole commingling approvals issued by the division to Energen within this area.

MR. EXAMINER: Excellent.

MR. HALL: In the even you wanted to refer to any of them they would show how they allocated gas for these cases.

MR. EXAMINER: Good. That's one of my questions I wanted answered. When I go to these orders I see how you allocate your gases. Very good.

Q. (By Mr. Hall) While we were on your subtraction method, Energen has used this methodology to allocate production between the Pictured Cliffs and Mesaverde in the past in this area?

A. Yes.

Q. And has this methodology proved reliable to Energen?

A. Yes.

Q. And has the methodology been acceptable to the division's Aztec district office?

A. Yes.

Q. We have three Mancos potential trimingles.

A. Correct.

Q. How does Energen propose to allocate production to include the Mancos?

A. Well, we have used the subtraction method again. And basically the allocation is already set up between the Mesaverde and Mancos, so whatever we get for the PC, the remainder is allocated that way, using that allocation between the Mancos and Mesaverde and now you have the PC too. So it's pretty simple. It is a subtraction method.

MR. EXAMINER: Right. On the new drills, are you going to have trimingles?

MR. HALL: Not to my knowledge. I don't believe that's the plan now.

MR. EXAMINER: But if it is the plan, we could do it. I like what I'm hearing. But we need to say whether you want to do it. We can do trimingles. There is nothing wrong there. We've done it before. But you need to present evidence to show you can do it. You started with Mancos and I was asking whether you want to add Mancos to the pooling or you want to commingle so you get trimingle. Do you envision with the new drills you are going to also commingle the Mancos with the Mesaverde and the Pictured Cliffs?

MR. VAN VOAST: That's a good question. I hadn't thought of it before. It's probably a more geological question.

Don, do you have any --

MR. LEHMAN: I would say no, but we may want to go ahead and include it just because it's easy to do.

MR. EXAMINER: Yeah. Well, to include it, I think you are really prepared because I would love to see that. Because once we do the Mesaverde and PC, I would like to turn my back behind you unless you have problems. You see what I mean? So I don't think it is necessary for us to include the Mancos. I just asked because you mentioned it. I wasn't thinking about Mancos until you started asking the question and then I say, okay, if we can do the Mancos at the same time, why not do it now? But if you don't have -- it's not ready yet. To answer questions when I ask you when you go to the Mancos and ask you about the Mesaverde and ask you about PC. But nobody has been talking about the Mancos.

So let's hope you are not going to. But, however, it's an easy thing. If you want to add the Mancos to that summary approval we can do it later. But I don't think we can do it without notifying those offsets in the Mancos. I don't have my legal examiner because there are a lot of things, as you know, that we can do. We can discuss, as you suggest, including the Mancos because wasn't in the -- it wasn't given to your offset operators that you are going to include Mancos. Nobody knows whether anybody would object if you include

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the Mancos. So in that case I am going to refer that -- you know, you just made me think by asking that question. If you didn't, I won't go there.

MR. HALL: Well, that's an accurate observation, and I'm sure Mr. Brooks would counsel you that it's beyond the scope of this application and the advertisement. Energen would love to have it, no doubt, and I'm not going to stop you.

MR. EXAMINER: If I tell him that I did it he'd say I did something wrong, and I'm not an engineer. I'm not your lawyer now. It is because of what he tells me now.

MR. HALL: But just to be clear, we are asking for the authority to commingle, actually trimingle with the three existing Mancos commingles. And we have provided you with the downhole commingling order numbers for those three existing Mancos producers.

MR. EXAMINER: For those three?

MR. HALL: Yes.

MR. EXAMINER: Okay. Yeah, sure. But for new ones I'm talking about.

MR. HALL: Right.

MR. EXAMINER: Okay. So the new ones, we're not going to do the new ones because it wasn't in the advertisement. But for the period that is already

approved, no problem. But if you want to add the Mancos on your new drill I think that would be a problem because it wasn't advertised.

MR. VAN VOAST: I tend to agree with you.

MR. LEHMAN: We don't want to slow down the process.

MR. EXAMINER: Do you understand what I'm trying to say?

MR. LEHMAN: Absolutely.

MR. EXAMINER: Of course I love what you are doing. Don't get me wrong, I love what you are doing. What you are doing is very excellent. If you go home now and determine with your geologist that you need that trimingle within the Mancos, all you have to do is advertise. It will not take that long as this one. We just have to provide some data on that Mancos compiled with those so we can include it. It's a simple thing. I think we can do that. I don't want you to do it wrong. I'm open minded now. I'm not your lawyer. But, you know, where we are going. Okay. So go ahead.

MR. HALL: Right. I think that's the proper thing to do.

MR. EXAMINER: Yes.

MR. HALL: If the Mancos takes off, and it may, we'll come back and amend this order.

MR. EXAMINER: I want you to take off. You come back and do it. Yeah, I want you to take off because that's what I want you to do. I love your explanation of how if we deny it what you are going to lose. And as my job as the chief engineer, I would like that to happen. So we don't want to lose the production. Why do we do it? That's a lot of gas. Even though I'm not happy with the price of gas at present. I don't know, it's bothersome to me. Anyway, go ahead.

Q. (By Mr. Hall) A couple of questions remaining to commingling. Mr. Van Voast, are the relative UV values for the gas produced from both the Mesaverde and Pictured Cliffs within a reasonable range?

A. Yes, they are.

Q. And will commingling of gas from those two formations reduce the value of that gas?

A. No, it won't.

Q. Let's turn to your very last slide, page 22. If you could summarize what we're asking for.

A. Pretty much the same thing everybody else has said. This won't cause any new surface disturbance except in the event of new drills. That's obvious. You have to have surface disturbance in a new drill. But it's important to emphasize that with pay adds it's a

pretty simple thing. You know, it's more reserves with very minimum surface disturbance. We produce gas that would not otherwise be produced, as we've shown. It will cause no waste or infringement upon correlative rights and will provide for better economics to justify new drills in the Mesaverde wells.

Q. It will generate additional severance tax revenues for the State of New Mexico and royalty revenues for Jicarilla Apache?

A. Yes. The answer is yes.

Q. And did you participate in and contribute to the creation of the exhibits that comprise our Exhibit Number 1 binder?

A. Yes, pages 16 through 22.

MR. HALL: That concludes my direct examination of Mr. Van Voast.

MR. EXAMINER: Thank you very much. Before I ask a couple of questions, is there anybody here who wants to make a statement concerning this case? Any people who want to make any statement? This is your opportunity. This is why we have an open meeting. Is there anybody who has anything to say about this case?

Yeah. Very good. Now, you stand up, state your name. We don't need to swear him in?

MR. HALL: No.

MR. EXAMINER: No. It's just a statement. Go ahead. You stand up, state your name for the record, and tell us what you want to say about this case. And this is regarding case number 14878. Okay. Go ahead, stand up, state your name and tell us what you need to say.

MR. SANDOVAL: My name is Dickson Sandoval. I'm with the Jicarilla Apache Nation, oil and gas administration director.

MR. EXAMINER: Go ahead.

MR. SANDOVAL: What I want to -- you know, we have several questions. And when we're talking about commingle production, the infill well, existing infill well, I mean, let's just say existing Mesaverde and you do pay adds. In our system we do an allocation system based on the BTU. Naturally the Mesaverde has more BTU than the PC. But are we to say -- and then how do we determine which value do we take on BTU? Wouldn't the well generally be a higher BTU when you commingle? Can you address that? PC does have lower BTU than the Mesaverde.

MR. VAN VOAST: I don't think there's a whole lot of difference there. It varies between 1100 and 1200 in general. But, you know, there's variances. And right here I haven't done a study on this, you know,

in this particular area other than to say they're fairly close. It would be virtually impossible to just, without having dual completions in these, which would be economically unfeasible. That would be the only way to physically separate these completely and not commingle them to get the actual perfect BTU production, so to speak. Does that answer your question?

MR. SANDOVAL: Well --

MR. EXAMINER: Yeah, Mr. Sandoval, that was one of my questions I wanted to ask him. But since you brought it up, let me clarify. You know, I said the gas from PC and Mesaverde, and that's what you're asking, you know, the quality of the gas and the BTUs. I think your question was how does the BTU from the PC compare with the BTU from Mesaverde. And your answer was they are very close.

MR. VAN VOAST: Yes.

MR. EXAMINER: Do you have any idea of numbers?

MR. VAN VOAST: It's approximately 1100 to 1200 BTUs.

MR. EXAMINER: 1100 and 1200?

MR. VAN VOAST: 1100 to 1200.

MR. EXAMINER: Okay.

MR. VAN VOAST: There's fairly rich gases,

yeah. They make a lot of product.

MR. EXAMINER: Yes, 1200 BTU is a good gas. So go ahead. Does that answer your question? Because that's one of the questions I should have asked, what the BTUs are at. Because you were right, in case we approve this we want to make sure that the BTUs are compatible. Does that answer your question?

MR. SANDOVAL: Yes. But I just kind of wanted to know some factual information on the existing -- you know, based on the studies you've done, what have been the BTUs on all those wells?

MR. VAN VOAST: I would just have to do some research on it. It's not going to effect the overall dollars in a sense. I mean everything is all at the same percentages. It's just a matter of, I guess, your accounting, right?

MR. SANDOVAL: Yes, for accounting purposes. We calculate our gas on a BTU basis.

MR. VAN VOAST: Right.

MR. SANDOVAL: On liquids, what we have for liquids.

MR. VAN VOAST: I don't know if you have access to all of our records and that kind of stuff, but we could send you analysis of it.

MR. SANDOVAL: Okay. We can look into that.

But I just kind of wondered. Let's say we have 1300 BTU. Then suddenly the PC had the greater volume then you would refer back and say, well, now it's 1100. And then that affects a lot of price between 1100 and 1300. That's the only question I have.

MR. EXAMINER: Yeah, I know where you are coming from. For downhole commingling that's a different animal. When I do surface commingling, and the difference between the two wells, like, you know, one well is producing something like 1300 BTU and one is producing 1100 BTU, we can still approve it even though there is a difference of 200 BTU. We have to approve it based on value and what the value BTU is. We do it on BTU not on volume because it's easier if you do it on volume.

If you do it on BTU basis, which is right, regardless of what volume you have, you get your volume based on BTU when you commingle. But this is on the surface. But downhole is a different fit. And I know why you are asking for that. Let's say I own interest in PC only. I don't have anything in Mesaverde. And you downhole commingle 1300 at PC. I'm using that as an example. I'm not saying that's where they are at. The 1100 from the Mesaverde, I may not like it because there is no allocation pool because everything is based on

volume, the way you do downhole commingling.

But on the surface I can forget about volume and deal with the value, which is BTU. So in that case I have been able to approve most of these surface commingling instead of BTU, if you understand what I am trying to say. But you are right. I think you may be concerned, they might be able about to furnish you with numbers. But that's my own conviction, that the BTUs are mostly different, different from the other ones, from the Mesaverde.

The one we talked about is the Mancos, if we have to do that we will do it too. So that's why I was talking about the Mancos to trimingle.

So if you have any more questions for Mr. Van Voast, you can go ahead.

MR. SANDOVAL: You mentioned the trimingle including the Mancos. How would this impact if we're doing horizontal? I mean what we're calling here is vertical, right?

MR. EXAMINER: Are you asking me or are you asking him?

MR. SANDOVAL: I'm asking him.

MR. VAN VOAST: You're asking what now? I'm sorry.

MR. SANDOVAL: I'm saying that what you're

proposing to do, let's say we're doing trimingling and you include the Mancos on a vertical.

MR. VAN VOAST: Right.

MR. SANDOVAL: Let's say the new wells come in with the horizontal. What happens on that?

MR. VAN VOAST: Well --

MR. SANDOVAL: I mean horizontal would just be just a Mancos only.

MR. VAN VOAST: Yes, it would be. Yeah, but we're talking about a vertical well.

MR. SANDOVAL: A vertical well.

MR. VAN VOAST: Yeah. A horizontal(is another issue.

MR. SANDOVAL: Oh, okay.

MR. VAN VOAST: I mean, yeah, it's just another issue completely. You wouldn't have a commingling situation with a horizontal well. Horizontal wells penetrate one horizon and that's it.

MR. SANDOVAL: But it's still from the same formation, vertical or horizontal.

MR. LEHMAN: We would not complete any of the vertical sections on horizontal wells. Some companies do, but we would not. We would not complete the Pictured Cliffs in Mesaverde on a horizontal Mancos.

MR. SANDOVAL: I'm not saying you're

completing that. I'm just saying they're both coming from the same formation. You know what I'm saying? You're completing the Mesa -- I mean the horizontal Mancos versus the vertical.

MR. LEHMAN: Yeah. There's three producing Mancos wells right now. We would probably avoid those if we did any close on them.

MR. SANDOVAL: All right. That's it.

MR. EXAMINER: Any further questions?

MR. SANDOVAL: No. I think that's about it.

MR. EXAMINER: Very good. When you do the new drills, are you going to use the existing well pads? Because you said no further surface exists.

MR. VAN VOAST: Well, we didn't really -- I think if we do a new drill there may be surface disturbances. It would have to be taken on, I guess, its own merits.

MR. LEHMAN: We haven't decided yet whether we would do new locations or use existing drill pads.

MR. VAN VOAST: We want authorization in the future if it's economic to be able to do it from an infill standpoint.

MR. EXAMINER: Okay, now the pool in the Pictured Cliffs is Gavilan-Pictured Cliffs, right? You are going to commingle with what pool in the Mesaverde?

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MR. VAN VOAST: Mesaverde Pictured Cliffs.
MR. EXAMINER: Yeah. What is the pool?
MR. VAN VOAST: The Blanco Mesaverde.
MR. EXAMINER: With the Gavilan. Okay. That's what I'm looking for.
MR. HALL: Those pool codes are on the application.
MR. EXAMINER: Okay. I think that's all I have. So what other comments? Anybody have anything else to say? If you have anything you want to say about this case this is your opportunity to say it.
MR. HALL: I have something to say.
MR. EXAMINER: Okay, go ahead.
MR. HALL: When you go to draft your order, Mr. Examiner, I have a recommendation on how you might proceed to do that. And what I would do is direct you to what I think is the applicable rule, it's 19.15.12.11.
MR. EXAMINER: 19.15?
MR. HALL: 19.15.12.11D, as to the commingling aspect of the application. If you look at that rule you'll see what we have, in essence, requested the division to approve is a reference case for area-wide approval rather than pool-wide approval of commingling. If you look at the sub parts one and two

of that particular rule for commingling it suggests you can do one of two things. One is to allow an operator to dispense with the filing of the C10 -- I'm sorry, C107B altogether.

MR. EXAMINER: C107A?

MR. HALL: C107A. You're familiar with the contents of C107A. When you draft your order you can decide which of those elements, those requirements, blanks on the form that you wish Energen to provide to you. What we hope to provide to you by way of the hearing today is enough information to do away with providing any of that information except perhaps the reference to an area-wide reference case order, the order number that results from this particular case.

MR. EXAMINER: Okay.

MR. HALL: You can show that on a C107A. The alternative is you can simply show that on a C103 completion report under the rule. There is a blank on there, commingling fill in the blank order number. That's one way of doing it.

The way this case has been presented to you, we're suggesting that you continue to require the C107A methodology. Do away with all of the information required on there except the allocation formula information. I think you've heard Energen testify that

they do -- they install a bridge plug and produce the well for 60 days, and derive their subtraction methodology data /and they plan on continuing to do that and they continue to provide that to the Aztec district office. And that will be the basis for allocation.

So that's our recommendation for the way for you to go. I think all of the other information called for in the form can be dispensed with other than the API number and the order number.

MR. EXAMINER: Yeah, I understand what you are saying. If this is approved somewhere I would like you to go to the district and, therefore, we are going to derive from C103 -- what you see from C107, it's coming here. You can't submit from C107A to the district because any preapproved applications like this is being handled by the district. So I think I would prefer to handle it in the district unless for one reason or the another you don't want to do that.

If you are coming here to do that all you have to do is do it on C103 or from the sundry, let them know you are doing that because it's preapproved.

MR. HALL: Right. But on the C103 that would be effective if the order were to provide an area-wide ratio. We're not doing that here. We're going to continue to do that on a well-by-well basis for

allocation only.

MR. EXAMINER: Oh, I see.

MR. HALL: So we can't assume, say, a 70/30 ratio allocation blanket-wide. We still have to do that portion well-by-well.

MR. EXAMINER: Well, what I would like you to do is draft this order, try to put it together so I can figure it out. I want to get your draft from you on how you want your client -- what you want your client to do. So once you provide it then I will determine how we can handle it and provide another for your client.

MR. HALL: But that's still our recommendation that it go to the Aztec office for approval.

MR. EXAMINER: What did you say?

MR. HALL: That it's our recommendation that it be processed by the Aztec district office on a well-by-well basis.

MR. EXAMINER: Is that your recommendation? Is that what you want?

MR. HALL: Yes. But with a very abbreviated C107A submittal.

MR. EXAMINER: Why do you want to use a C107A?

MR. HALL: Because it has the line item on

there that allows an operator to provide you with these well-specific allocations. The C103 doesn't do that. What the C103 would do, it would simply refer to the order. And we're not asking for the entry of an order that presumes a specific allocation applicable on an area-wide basis.

MR. EXAMINER: So what you are saying is just to -- because if it's approved you don't even need the approval for C103 anymore but you need to submit this to say this is what I'm doing on a well-by-well basis. Is that what you're saying?

MR. HALL: Yes, but only as to the allocation line item. That's all that the division Aztec office should need if they refer to the order that results from this hearing.

MR. EXAMINER: Oh, okay. This is very important. That's why I want you to draft the order and then put it that way. I think I understand what you are saying. You don't have to approve anything once we approve it here. You see what I mean? The only thing -- it's just like somebody who has the consensus from C102 and then give it to them to say that.

But when we approve this, we approve this, they don't have to approve anything else because it's already approved. So I understand in that case this is an

allocation basis. They have to get this information because this would too hard to handle. So they get it and see this is what you are doing. They are not approving anything else. Is that what you're saying on this government area?

MR. HALL: That's correct. When you look at some of the commingling orders that are referenced in the rule itself, pool-wide commingling, many of them presume allocations by ratio of 70 percent/30 percent between whatever formations are commingled. We're not proposing that you do that here. We're going to do it on a well-by-well basis. But everything else, you don't need the pressure information. You don't need the ownership information. You don't need anything with respect to non-standard location or the infill authorization.

MR. EXAMINER: Yeah, you understand your client, so draft an order.

MR. HALL: We'll do.

MR. EXAMINER: And then I will take a look at it and see how I want to go with it. But once you draft that order I will be able to look at it and see what your client wants and we can go forward from there.

MR. HALL: We'll do that.

MR. EXAMINER: If you can get that order

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that would be nice. I like this project because I don't want any waste.

At this point does anybody have any other comment? You can step down. I don't have any more questions for you.

MR. HALL: And we're ready for the case to be taken under advisement.

MR. EXAMINER: Okay, very good. At this point case number 14878 will be taken under advisement. Thank you all for coming.

[Case number 14878 taken under advisement.]

[Docket number 21-12 concludes at 3:09 PM.]

I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case No. 14878 heard by me on 1/27/2021.

Examiner
Oil Conservation Division

REPORTER'S CERTIFICATE

I, Lisa Reinicke, New Mexico Provisional Reporter, License #P-405, working under the direction and direct supervision of Paul Baca, New Mexico CCR License #112, Official Court Reporter for the US District Court, District of New Mexico, do hereby certify that I reported the foregoing proceedings in stenographic shorthand and that the foregoing pages are a true and correct transcript of those proceedings and was reduced to printed form under my direct supervision.

I FURTHER CERTIFY that I am neither employed by nor related to any of the parties or attorneys in this case and that I have no interest whatsoever in the final disposition of this case in any court.

Lisa R. Reinicke,
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Ex count: