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

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

APPLICATION OF HILCORP ENERGY COMPANY FOR AN EXCEPTION TO THE WELL DENSITY REQUIREMENTS OF THE SPECIAL RULES AND REGULATIONS OF THE FULCHER KUTZ-PICTURED CLIFFS GAS POOL, SAN JUAN COUNTY, NEW MEXICO. CASE NO. 16222

Consolidated with

APPLICATION OF HILCORP ENERGY COMPANY FOR AN EXCEPTION TO THE WELL DENSITY REQUIREMENTS OF THE SPECIAL RULES AND REGULATIONS OF THE AZTEC-PICTURED CLIFFS GAS POOL, SAN JUAN COUNTY, NEW MEXICO. CASE NO. 16223, 16227

Consolidated with

APPLICATION OF HILCORP ENERGY COMPANY FOR AN EXCEPTION TO THE WELL DENSITY REQUIREMENTS OF THE SPECIAL RULES AND REGULATIONS OF THE SOUTH BLANCO-PICTURED CLIFFS POOL, RIO ARRIBA COUNTY, NEW MEXICO. CASE NOs. 16224, 16225, 16226

REPORTER'S TRANSCRIPT OF PROCEEDINGS
EXAMINER HEARING
June 14, 2018
Santa Fe, New Mexico

BEFORE: MICHAEL McMILLAN, CHIEF EXAMINER
DAVID K. BROOKS, LEGAL EXAMINER

This matter came on for hearing before the New Mexico Oil Conservation Division, Michael McMillan, Chief Examiner, and David K. Brooks, Legal Examiner, on Thursday, June 14, 2018, at the New Mexico Energy, Minerals and Natural Resources Department, Wendell Chino Building, 1220 South St. Francis Drive, Porter Hall, Room 102, Santa Fe, New Mexico.

REPORTED BY: Mary C. Hankins, CCR, RPR
New Mexico CCR #20
Paul Baca Professional Court Reporters

APPEARANCES

FOR APPLICANT HILCORP ENERGY COMPANY:

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EXHIBITS OFFERED AND ADMITTED

(10:41 a.m.)

EXAMINER McMILLAN: I'd like to call the hearing back to order.

I'd like to call Case Numbers 16222 through 16227, application of Hilcorp Energy Company for an exception to the well density requirements of the special rules and regulations of the Fulcher Kutz-Pictured Cliffs Gas Pool, San Juan County, New Mexico. That's Case 16222.

Case 16223 is application of Hilcorp Energy Company for an exception to the well density requirements of the special rules and regulations of the Aztec-Pictured Cliffs Gas Pool, San Juan County, New Mexico.

16224 is the well density requirements of the special pool rules and regulations of the South Blanco-Pictured Cliffs Pool, Rio Arriba. And that's the same for Case Numbers 16225 and 16226.

And 16227 is application of Hilcorp Energy Company for an exception to the well density -- well density requirements of the special rules and regulations of the Aztec-Pictured Cliffs Gas Pool, San Juan County, New Mexico.

Call for appearances.

MR. FELDEWERT: May it please the Examiner,

Michael Feldewert, with the Santa Fe office of Holland & Hart, on behalf of the Applicant. I have three witnesses here today.

EXAMINER McMILLAN: Are there any other appearances?

Please proceed.

If the witnesses would please stand up and be sworn in at this time.

(Ms. McCubbin, Mr. Pippin and Mr. Osborn sworn.)

MR. FELDEWERT: We'll call our first witness.

EXAMINER McMILLAN: Please proceed.

WYN McCUBBIN,

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

DIRECT EXAMINATION

BY MR. FELDEWERT:

Q. Will you you please state your name, identify by whom you're employed and in what capacity?

A. My name is Wyn McCubbin. I'm employed as a senior landman for Hilcorp Energy Company.

Q. How long have you been a landman with Hilcorp?

A. A year and a half.

Q. And do your responsibilities at this time

include the San Juan Basin of New Mexico?

A. Yes, it does.

Q. Have you previously testified before this Division as an expert in petroleum land matters?

A. I have.

Q. And are you familiar with the applications that have been filed in these consolidated cases?

A. I am.

Q. And are you familiar with the density restrictions applicable to the three pools that are involved here?

A. Yes, I am.

MR. FELDEWERT: I would retender Ms. McCubbin as an expert witness in petroleum land matters.

EXAMINER McMILLAN: So qualified.

Q. (BY MR. FELDEWERT) Ms. McCubbin, there are three pools involved in these consolidated cases; is that correct?

A. That's correct.

Q. Case 16222 is the Fulcher Kutz-Pictured Cliffs Gas Pool?

A. That's correct.

Q. 16223 and 16227 involve the Aztec-Pictured Cliffs Gas Pool?

A. That's correct.

Q. And then the remaining cases, 16224 through 26, involve the Blanco-Pictured Cliffs Gas Pool; is that correct?

A. That's correct.

Q. Now, with respect to those last three cases, that Blanco-Pictured Cliffs Gas Pool, do those cases involve acreage within the San Juan 29-7?

A. That's correct.

Q. All right. Now, what are the spacing and density restrictions on each of these three --

A. The Fulcher Kutz and the Aztec, for all three of them, 160 acres, one -- one well -- one Pictured Cliffs well per 160.

Q. Is there an issue that -- additional issue with respect to the spacing that arises for the wells in the Blanco-Pictured Cliffs Gas Pool within the San Juan 29-7 federal unit?

A. The federal unit agreement allows for the Pictured Cliffs to be developed on 320-acre spacing with two parent wells in the 320 acres.

Q. Okay. So, for example, if we look at the C-102s that were filed a number of times for these 29 and 7 units within this gas pool, what would they show?

A. They will show that it's spaced for 160 acres

for density purposes but 320 acres for accounting purposes.

Q. For revenue and expenses?

A. Revenue and expenses.

Q. On a drill-block basis?

A. On a drill-block basis.

Q. What relief is Hilcorp seeking in these consolidated cases?

A. We are asking for additional -- for increased density for an additional Pictured Cliffs well in this drill block.

Q. Why?

A. We are wanting to increase production from the Pictured Cliffs. We don't feel that our current wells are draining the Pictured Cliffs adequately, and we're using existing wellbores to do the recompletes.

Q. Okay. So we're not talking about drilling new wells?

A. That's correct.

Q. In each of these cases, you're seeking to recomplete existing wells within the Pictured Cliffs pools that are involved here?

A. That's correct.

Q. Are there circumstances where this relief sought, coming uphole with existing wells, that will

require approval for downhole commingling?

A. Yes. And we will cross that bridge when we get there.

Q. So that'll be handled administratively?

A. Administratively, yes.

Q. In addition, are there circumstances where the relief sought will potentially result in unorthodox well locations with respect to these pools as you come uphole?

A. That's correct.

Q. And how will you handle that?

A. Administratively.

Q. So today we're just dealing with the density restrictions?

A. That's correct.

Q. And has the company brought both a geologist and a reservoir engineer today to discuss in more detail the reason for seeking these exceptions to the density requirements?

A. We have.

Q. Now, in front of you, there is a black notebook with a number of tabs. How is this notebook organized?

A. The letter A is going to be just shown where all the drill blocks are located and then also a little bit more information about the Pictured Cliffs.

Q. Okay. So let me stop you there. So we have a Tab A that's going to be Hilcorp Exhibit A, and that will be reviewed by whom?

A. That'll be reviewed by me and also the geologist.

Q. Okay. And then following this Exhibit A, there are then additional tabs. And how is this organized?

A. They're in order of case number for each individual case.

Q. Now, have you -- generally in order. Have we also grouped these by pool?

A. Yes, we have.

Q. So Case 16222 involves one pool, right?

A. That's correct.

Q. And Case 16223 and 16227 involve that second pool?

A. Correct.

Q. And then the remaining three tabs in the cases on here involve the Blanco pool within the San Juan 29-7 Unit?

A. That's correct.

Q. Okay. And do each of these cases have exhibits that are in the same basic order?

A. They're in the same basic order.

Q. And do each of the cases within those exhibits

cover the same basic facts?

A. That's correct.

Q. Okay. And with respect to the notice and the descriptions of those, the beginning of the exhibits under each case number?

A. Yes.

Q. And how -- just as an overview, how did the company provide notice of each of these cases?

A. We noticed either by letter -- by letter and by publication.

Q. Okay. And who did you notify?

A. We noticed either the offset operator or our working interest partners.

Q. When you say working interest partners, what do you mean there?

A. If we are the operator and we have partners within the Pictured Cliffs, we notified them.

Q. And how did you handle the wells that were located within the 29-7 Unit?

A. We noticed the Pictured Cliffs participating area working interest owners.

Q. Okay. All right. Were there two of the cases that didn't require any notice?

A. There are two that we are the offset operator, and we have 100 percent working interest.

Q. And so under the applicable exhibits within those cases, I see it'll say "100 percent Hilcorp"?

A. That's correct.

Q. And so we'll get to those in a minute?

A. That's correct.

Q. All right. Let's go, then, to the first case here, 16- -- well, let's go to Exhibit A, the first page under Exhibit A. What is that?

A. The first picture shows the San Juan area -- San Juan Basin area where the Pictured Cliffs drill blocks are that we will be asking for increased density.

Q. So we see six of them here?

A. There are six total.

Q. And how are they designated on this exhibit, for the record?

A. They are shown in the lime green color.

Q. Okay. Now, for each of these six drill blocks or spacing units that are involved, do we then have close-ups of each of those spacing units as one of our exhibits?

A. Correct, under each tab.

Q. So let's go to the first case, 16222. And if I turn to that tab and I go to Exhibit 1 under that case, this involves that Fulcher Kutz-Pictured Cliffs Gas Pool?

A. That's correct.

Q. And if I go to Exhibit 1, is this a close-up of the spacing unit or drill block that's involved?

A. Yes, it is.

Q. And what's reflected on here? How did this get designated with these areas?

A. The 160-acre drill block is shown in green, and then the notice area is shown in orange. The currently existing Pictured Cliffs well is shown in the black circle, and then the well we want to recomplete to the Pictured Cliffs is shown in the blue triangle.

Q. So to put a name to this, if I'm looking at Case 16222, on Exhibit 1, I see a blue triangle for the J C Gordon D SE well?

A. 3E.

Q. I'm sorry. 3E. Thank you.

A. That's correct.

Q. And is that the well that you seek to recomplete?

A. Yes.

Q. And then the J C Gordon C 1 well is the existing well for that spacing unit?

A. That's correct.

Q. Okay. Now, as we go through here, did you attempt to locate and provide the Examiner with the

existing C-10- -- with the C-102s for the existing well in the spacing unit?

A. We did.

Q. Were you always able to find one?

A. No, we were not.

Q. So in this particular case, the existing well is the J C Gordon C 1, right?

A. That's correct.

Q. If we go to Exhibit Number 2, you couldn't find a readable C-102 in the Division's files?

A. That's correct.

Q. Okay. So what have you provided under Exhibit 2 in this case?

A. This is a 1951 letter from the OCC allowing for an unorthodox location for the J C Gordon C #1 well, so the existing PC well.

Q. And the nice thing about this is it provides the location for that existing well?

A. It does.

Q. Okay. All right. Then you mentioned the notice materials, and in circumstances -- there were some circumstances where Hilcorp was 100 percent both the operator and the working interest owner all the way around?

A. Yes.

Q. Is this one of those cases?

A. Yes.

Q. So if I look at Exhibit Number 3, you have the notation "Hilcorp 100 percent"?

A. That's correct.

Q. And would normally Exhibit Number 4, under this case, contain an Affidavit of Publication?

A. It would.

Q. But in this case, it wasn't needed because you are 100 percent owner?

A. That's correct.

Q. Okay. Then the remaining exhibits, 5, 6 and 7, will they be reviewed by another witness?

A. They will be.

Q. Let's then go to the next case, which is 16223. What pools are involved with that case?

A. This is the Aztec-Pictured Cliffs.

Q. Okay. So now let's go to Exhibit Number 1 in that case because it's a little bit different, right?

A. That's correct.

Q. We see, again, the spacing unit or drill block?

A. The drill block is shown in green, and then the notice area is shown in orange.

Q. All right. Now, in this case how many wells do you seek to add to the spacing unit?

A. We're seeking to add two Pictured Cliffs wells.

Q. And how are they designated under Exhibit 1 under Case 16223?

A. The existing Pictured Cliffs wells, the Reid 11 is shown with the black circle. The Reid 22M is shown as a blue pentagon, and that's one of the wells we want to recomplete. And also the Jackson Com 1E is shown as a blue triangle, and that's another well we want to recomplete to the Pictured Cliffs.

Q. Now, in examining this, you have the notice area around that?

A. And the notice area is shown in orange.

Q. Okay. Is this an irregular spacing unit?

A. It is.

Q. And how was this created? Was this created by a Commission order?

A. Yes, it was.

Q. If I go to what's been marked as Hilcorp Number 2 --

A. Yes.

Q. -- does this contain, within the first three pages, the 1955 Commission order that created this nonstandard irregular spacing unit?

A. It does.

Q. And in particular, where would I find that

designation within this order?

A. It's on page 3 of the order, and it's highlighted in yellow, under letter F.

Q. And it reflects that this was designated by the Commission as a 205.08-acre spacing unit in this pool?

A. That's correct.

Q. Then if I can continue on within this exhibit and I go to the next page, do we have a -- it looks like kind of a hand-drawn depiction of the spacing unit?

A. It is a hand-drawn 205.08-acre spacing unit.

Q. And this was from the Division's files?

A. Yes, it is.

Q. And it references Order R-658? Do you see that?

A. Yes.

Q. Is that the order we just looked at?

A. That's the order we just looked at.

Q. And then as I continue through, again, you were trying to find a C-102 for the existing well?

A. That's correct.

Q. Did you have any luck?

A. No.

Q. So what did you provide for the Division?

A. So this is approval for an unorthodox location for the existing Reid #11 well.

Q. And it provides the footage location within this irregular spacing unit for that existing well?

A. It does.

Q. Okay. All right. Then in this case, did we have parties that we notified?

A. Yes.

Q. And is that reflected -- under Exhibit Number 3, is that an affidavit prepared by my office with attached letters providing notice of this hearing?

A. It is.

Q. Okay. And how many parties did you notify?

A. Two.

Q. Okay. And if I look at the very last page of Exhibit 3, it indicates they received the notice of the hearing, right?

A. It shows the notice was delivered and signature, received.

Q. Out of an abundance of caution, if I turn to Exhibit Number 4, is this an Affidavit of Publication in the "Farmington Daily Times" directed by name to these affected parties?

A. It is.

Q. Okay. Now, we have another case involving the Aztec-Pictured Cliffs pool, right?

A. That's correct.

Q. Is that 16227?

A. It is.

Q. Is that the next tab in this book?

A. That is the next tab.

Q. Let's go to that. We see again under Exhibit 1 in that case the designated existing spacing unit within this pool?

A. Yes, we do.

Q. And the notice area?

A. Yes.

Q. And how many wells do we seek to add to this particular spacing unit?

A. We are seeking to add one additional well.

Q. And which one is that?

A. We are asking to add the Zachry 19E, which is shown as the blue triangle.

Q. And then you show one existing well?

A. The Zachry 1R is shown as the black circle. That's the existing Pictured Cliffs well.

Q. Now, when this application was filed, you identified two wells existing in the spacing unit, right?

A. We did.

Q. And what did you subsequently find out?

A. The Zachry 1 was depicted earlier, and we found

that that well is no longer producing from the Pictured Cliffs. And so it's still producing from the Fruitland Coal. The Zachry 1R is a replacement Pictured Cliffs well for the Pictured Cliffs that was producing in the Zachary 19.

Q. All right. So if you look at the application or you look at the notice of the hearing here today, it indicated initially that there were two existing wells within this spacing unit?

A. Correct.

Q. But the fact is there is only one existing well?

A. There is only one currently producing Pictured Cliffs well.

Q. And that's shown on Exhibit Number 1?

A. Correct.

Q. Okay. Now, is this, again, a nonstandard or irregular spacing unit?

A. Yes, it is.

Q. If I turn to what's been marked as Exhibit Number 2, do we see that same order that we saw before?

A. It is.

Q. Okay. And where within this order did the Commission create this nonstandard irregular spacing unit?

A. On page 2, under 1C and it's also highlighted in yellow, it's a 202.82-acre spacing.

Q. All right. If I continue through this time, the last page of this exhibit, did you find the C-102 for the existing well?

A. We did.

Q. And that's provided here on the last page of Exhibit Number 2?

A. It is.

Q. And that reflects that it's dedicated to that nonstandard 202.82 spacing unit?

A. It does.

Q. Okay. If I turn to Exhibit 3, is this a case where you did not have any notice parties?

A. That's correct.

Q. So Exhibits 3 and 4 reflect that Hilcorp owns 100 percent?

A. That's correct.

Q. Okay. Now, the remaining cases involve wells within the 29-7 Unit, correct?

A. Correct.

Q. All right. When I look at the description of the application that was filed and I look at the description of what was noticed, it said for each of these cases, that it was the South Blanco-Pictured

Cliffs Gas Pool?

A. That's correct.

Q. What did you subsequently find out?

A. We found out that these wells actually fall in the Blanco-Pictured Cliffs pool.

Q. And is that -- that's a different pool?

A. It's a totally different pool.

Q. With a different number?

A. Correct.

Q. Okay. And so has the company, therefore, as of this week, filed amended applications correctly naming the pool that are involved in these three cases?

A. We have.

Q. And in the process, then, of providing notice again of these three applications to the affected parties, if any?

A. We have.

Q. And as a result, will this case need to be re-called on July 12th to deal with those notice and advertisement issues?

A. They will.

Q. But the company would like to present the testimony today?

A. We do.

MR. FELDEWERT: So with your permission,

Mr. Examiner, I'd like to continue with that testimony.

EXAMINER McMILLAN: Proceed.

Q. (BY MR. FELDEWERT) All right. So now we're in the 29-7 Unit, within what is now the Blanco-Pictured Cliffs Gas Pool?

A. Yes.

Q. Let's go to Exhibit Number 1 under Case 16224. What do we see here?

A. This depicts the existing PC wells in black circles, the San Juan 29-7, the 168 and the 159. The well we want to recomplete to the Pictured Cliffs is the San Juan 29-7 Unit 79M, as shown in the blue triangle.

Q. All right. Now, we show a drill block here of the west half of Section 5?

A. That's correct.

Q. Why?

A. The federal unit agreements allow the Pictured Cliffs to be developed on stand-up 320-acre spacings.

Q. Stand-up?

A. Stand-up, east-west.

Q. Okay.

A. East-west-west -- east half-west half drill block.

Q. Okay. Thank you.

So north-south orientation?

A. Correct.

Q. And that's why you have a 320-acre drill block here?

A. That's why I do.

Q. Okay. But what -- is this drill block then comprised of two 160-acre spacing units for density purposes?

A. For density purposes.

Q. And in this case, you seek to add an additional well to the drill block -- a portion of the drill block that will be the -- what? The southwest quarter of the northwest quarter?

A. Yes.

Q. With respect to the notice area, you mentioned that the area is developed on stand-up 320s. Is that why we see the notice area encompassing stand-up 320s?

A. Yes, that is why.

Q. There is a note in here, "Offsets operated by Hilcorp Energy Company and Marion Oil & Gas"?

A. That's correct.

Q. What does Marion operate in this area?

A. They operate in 30 -- 30 -- Township -- 30 North, 7 -- Range 7 West.

Q. Is that outside of the San Juan 29-7 Unit?

A. Yes, it is.

Q. And which acreage does Marion operate specifically; do you know?

A. I believe Section 32 of 30 North, 7 West.

Q. Okay. All right. And so then you notified Marion?

A. We did.

Q. What did you with the remaining areas within the San Juan unit?

A. We noticed the Pictured Cliffs participating area working interest owners.

Q. Okay. Gotcha.

All right. Then continuing on, if I go to Exhibit Number 2, do we see some C-102s for the existing wells?

A. We do.

Q. And you mentioned that they had that unique designation of the 60 acres for density purposes, and in this case, it looks like 315.10 acres for revenue purposes?

A. That's correct.

Q. And that's reflected on the first page of Exhibit 2 about halfway down?

A. Halfway down on the right.

Q. All right. And then we see the C-102 for the second existing well on the second page of this exhibit?

A. Correct.

Q. If I then go to Exhibit Numbers 3 and 4, we left those blank because we're filing amended applications, right?

A. Correct.

Q. Okay. If we went through each of the exhibits for the remaining cases here, would your testimony be the same?

A. It would.

Q. And are the exhibits organized in the same fashion?

A. They are.

Q. Okay. And has the company provided notice of this hearing to the affected parties?

A. We have.

Q. And I know we're amending those applications, but we did provide notice on the prior application?

A. We did.

Q. Have any of the affected parties objected to the relief that's sought here?

A. They have not.

Q. Were Hilcorp Exhibits 1 through 4 in each of these consolidated cases prepared by you or compiled under your direction and supervision?

A. Yes, they were.

MR. FELDEWERT: I would move admission into evidence of Hilcorp's 1 through 4 for each of these consolidated cases.

EXAMINER McMILLAN: Exhibits 1 through 4 in Cases 16222 through 16227 may now be accepted as part of the record.

(Hilcorp Energy Company Exhibit Numbers 1 through 4 are offered and admitted into evidence.)

MR. FELDEWERT: That concludes my examination of this witness.

EXAMINER McMILLAN: Go ahead.

EXAMINER BROOKS: No questions.

EXAMINER McMILLAN: I don't have any questions.

MR. FELDEWERT: I would call our next witness.

EXAMINER McMILLAN: Please proceed.

EDDIE PIPPIN,

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

DIRECT EXAMINATION

BY MR. FELDEWERT:

Q. Would you please state your name, identify by whom you're employed and in what capacity?

A. Eddie Pippin, by Hilcorp Energy as a senior geologist.

Q. How long have you been a senior geologist with Hilcorp?

A. With Hilcorp, about ten months.

Q. What did you do prior to operating as a senior geologist with Hilcorp?

A. I had the same position with ConocoPhillips and associated companies since '92. I've also been in the Basin and responsible for various things in the San Juan Basin since 19- -- yeah, 1983.

Q. Mr. Pippin, we had some confusion with the pools in this case, right?

A. Yes.

Q. Okay. Also, let me ask you: Are the pools up there in the San Juan Basin fairly complicated?

A. They apparently seem to be.

Q. And is it also difficult to ascertain whether there are special pool rules for each of these pools that still exist?

A. Yes, sir.

Q. Okay. And is the company in the process of working with the direct office to determine whether the former special pool rules actually still apply to each of these three pools?

A. Yes, sir.

Q. And that will determine to what extent they need to apply for a nonstandard location, right?

A. Right.

Q. All right. Have you previously testified before this Division as an expert in petroleum geology?

A. I have.

Q. Are you familiar with the applications filed in these consolidated cases?

A. Yes, I am.

Q. And in particular, have you conducted a study of the Pictured Cliffs Formation in this area in particular as it would be applicable to each of these three pools?

A. Yes, sir.

MR. FELDEWERT: I would tender Mr. Pippin -- retender Mr. Pippin as an expert witness in petroleum geology.

EXAMINER McMILLAN: So qualified.

Q. (BY MR. FELDEWERT) If we turn -- you're going to review Hilcorp Exhibit A, correct?

A. Yes.

Q. Which would be applicable in all these cases?

A. Yes, sir.

Q. First off, we've already heard some testimony

about the first page of this exhibit identifying the drilling blocks or spacing units at issue, correct?

A. Yes.

Q. If I then turn to the next page, page 2 of Exhibit A, how does this relate to the first page?

A. So the red -- the seven red stars on here correlate with the lime green drill blocks outlined on the first exhibit.

Q. Okay. And then what do you show -- with that orientation, what do you show on page 2 of Exhibit A?

A. So this is a Pictured Cliffs acreage map for Hilcorp Energy, and actually this represents just the heritage, ConocoPhillips interest position. We have since acquired XTO, as well as WPX acreage that has not been blended into this map yet, so some of the white spaces we see, particularly in the southwestern part of the Basin, have been filled in with those recent acquisition.

The colors on here: Yellow is 100 percent interest. Orange is 75 to 100 percent. Green is 50 to 75, and then purple and blue are lesser acreage positions.

Q. Okay. Anything else about this exhibit?

A. No, sir, just that the seven red stars represent the seven wells we're talking about today.

Q. Okay. And if we go to page 3 --

A. Yes.

Q. -- what do you show? Where did this come from and what does it provide for us?

A. This is kind of an orientation of when we came here earlier in the year. We used the same slide to talk about our plans to recomplete Mesaverde wells, and we gave a fairly good kind of geology lesson for the San Juan Basin. We're not going to do the full geology lesson again this time, but we are looking to do kind of a similar project in that we are moving uphole from the Mesaverde to the PC, still trying to utilize existing wellbores that have been drilled and completed to deeper horizons.

What this allows us to do is to gain access to additional reserves in the PC without having additional surface disturbance, without the extra burden of permitting, as well as with a recomplete versus a new drill, economics look much better.

Q. And is this the first 4A [sic] by Hilcorp in the recompletion efforts for the Pictured Cliffs?

A. We actually have already completed some Pictured Cliffs wells in the Basin to the northeast of where some our 29-7 wells are.

Q. And in those circumstances, did that require a

density exception?

A. It did not.

Q. Those were cases that were coming up to spacing units in the Pictured Cliffs that had not been previously developed?

A. That is correct.

Q. Is this the first ever by the company to move uphole in the spacing units to have older existing wells?

A. Yes.

Q. Okay. Anything else about this exhibit?

A. No, sir.

Q. Okay. Let's then turn to page -- page 4. And first off, do you have some stars on there to orient us?

A. Yes. Again, same seven red stars as before. Some of them are a little bit more difficult to see with the background colors here. Same star, same location as what we saw on the acreage map.

Q. Okay. And what are you showing here?

A. So this is just a simple contour map of cum production within the PC. Colors are -- the white and blue represent lower production volumes. Whereas, the red, yellow and into green in some areas represent the higher cum production. Then we also have the red kind of squiggly line around the outside of the Pictured

Cliffs outcrop for the Basin, and we've also got a blue dot on here by one of the 29-7 wells which represents the type log that we'll show next.

Q. So basically the bluer areas have less production than we see in the red or the yellow?

A. That is correct.

Q. And is that -- what can that be a function of? Why would there be a difference?

A. Primarily that goes to where the pay is for the PC.

Q. Okay. Now, you note on here -- in addition, you have a blue circle with an arrow that says "type log."

A. Yes, sir.

Q. If I turn to the next page of this exhibit, is that a type log in that particular well?

A. That is the type log.

Q. So turning now to page 5, what are you showing on this type log?

A. So this is from the 29-7 of the 177 well, the well that's already been completed to the PC. Again, it is very nearby the three wells that we are talking about today in the 29-7 Unit.

On the left-hand side is the log itself. It's got a three-track presentation. The track to the

left of the depth track has a gamma ray and caliper curve. To the right of the depth track are the resistivity curves, and then the far right track are the density-neutron-porosity curves. And in the depth track itself, we've got arrows indicating where this well was perforated and stimulated.

So what we can see from this log, near the top of it is the base of the Fruitland Formation and the coal that is completed in other wells, and then we see the top of the PC and a lower PC top marked with the red lines. Those are two different inches that we see for the PC in this well.

In talking a bit more directly to the geology of the PC, it is a deltaic deposit for the sand within and redistributed along the shoreline, along the coastline. So you tend to have upper shore phase, middle and lower shore phase sands in the PC. You also have longshore bars and the occasional storing deposit represented on logs.

PC tends to be a much better reservoir at the top of these benches, so you have cleaner gamma ray, more resistivity, greater porosity and permeability. That tends to degrade as you go lower in the section, and you see that on the log. From the top of the PC, the reservoir degrades as you go down towards the --

what's marked as the lower PC. Again, you have a little higher-quality reservoir at the very top of that before it grades again down to where it transitions into the Lewis Formation below. With this, you can also have a pretty good buildup of sand. As listed on here, you can have anywhere from 60 to 100 feet of gross sand --

Q. Mr. Pippin, were you able to find a picture of the outcrop that shows the depositional aspects of the Pictured Cliffs Formation that you just discussed?

A. Yes, sir.

If we turn to page 6 of Exhibit A, this is a picture. It is from a road cut in Durango, Colorado. It is a number of miles away from the 29-7 wells, but shows roughly the same, sort of, looking section. We're at the top of this cliff or road cut. You can see kind of overhanging sand. That would be the higher quality reservoir at the top of the PC section. That then degrades down to another bench in the PC about midsection there. Where the rock again kind of sticks out, that would be comparable to that second bench from the type log, and then that quickly degrades down into the Lewis.

The one section you can see within the Lewis -- if you look at the white water truck kind of in the center, lower of the picture but up to the left and

just above the road itself, you see another sand that probably represents a storm event -- a single storm event where the sands then pulled off the beach and deposited a little further out into the seaway. Being isolated [sic] like that, without much gradational change, I believe that is a single event rather than just a natural movement of the coastline further away.

Q. And you mentioned that -- I'm going to use the porta potties. But you use the porta potties -- is that the Lewis Shale that we see there?

A. Yes. Generally, the darker rock you see towards the bottom, directly above the road itself would be more the Lewis Shale.

Q. And that's the bottom of the Pictured Cliffs; is that right?

A. Yes.

Q. Does that mark the Pictured Cliffs?

A. The top of the Lewis Shale would mark the base of the Pictured Cliffs.

Q. The base. Okay. Thank you.

Anything else about this picture?

A. No, sir.

Q. All right. Now, if I then go on to the next page, A7, what are you showing here starting with the axis?

A. So this is just a little history of the development of the PC. The red curve on here, the axis is on the left-hand side. That is just a graph of the daily production for PC alone. The right-hand axis goes with the black curve, which is an active number of PC completions. PC itself, the first wells in the Basin were drilled in the 1920s. There were all of four wells drilled. And then there was additional development in the '30s and '40s, but really development -- larger development in the PC did not occur until the '50s.

Q. So your timeline starts in the '50s?

A. It starts in the '50s. That's when drilling took off. There was a pipeline brought in the Basin in the 1950s. There were close to 2,400 wells drilled. So you can see the increase in the active well count and the associated increase in production, coming up to late '50s where we had really the maximum production of the PC basin.

Through the '60s, development eased off a bit; thus, so did production until another uptick in activity in the '70s, so then that sagging production increased again. But then from the '70s until really current day, activity in the PC as far as new completions being brought on line had steadily decreased. For the last, say, 20 years, there has only

been a handful of wells completed in the PC.

There has been a change, of course, in technology with everything else in our industry. The first wells, particularly in the '50s, were nitroglycerin shot. In the '60s, we started giving them -- or giving them, new wells, hydraulic stimulation. And then in the late '90s, early 2000s, the industry had a pretty widespread re-frac program where we take some of the early wells, particularly the '50s wells that were nitro shot, and case and frac those with a modern stimulation. And you can see the effect on the production graph. There are about 2000-ish that production has kind of leveled off before again declining.

Q. Now, the company then examined the availability of existing wells to recomplete in certain Pictured Cliffs spacing units, correct?

A. That is correct.

Q. And was there certain data that the company pulled together and utilized to identify the areas that were candidates for recompletions with existing wells?

A. Yeah. Really the first step was to look at a production map, and the next exhibit --

Q. Okay. So we'll go to A8. What does this show us?

A. So this is another cum production map of the PC. This time instead of the contoured, it's a bubble map. The larger, greener circles, although hard to see at this scale, represent greater production. They are the equivalent to the hotter colors that we saw on the first production map. The smaller, lighter circles, less production equivalent to the blue contours from first production map.

So the first thing was to identify where candidates might be, where there might be a need for additional candidates. And essentially you're looking for white spots within the trends of existing production. So wherever we would not see good green dots but in a densely populated well area would kind of be a kick off to let's look a little bit further and see if we have the reservoir quality to go after, or if there is a reason that there is a white spot in production there.

Q. So, again, we have the stars to orient us to the current cases, right?

A. Yes, sir. We've got the same seven stars in the same locations. We also have a black box, which represents what we'll see on the next exhibit.

Q. Okay. And then if we go to page A9, is this the area within the black box?

A. Yes, sir, it is.

Q. Again, we see the same stars orienting us to the spacing units at issue?

A. Yes, same stars, same locations.

Q. And how does this data build on what you previously discussed?

A. So what this represents is PC net sands, so where the PC sand has developed a little bit better. So if you have thicker sand, you have a higher likelihood of having reservoir-quality sand increase from. When you have thinner sand, maybe not so much potential.

The actual colors on here, the reds and yellows represent thicker sand. The greens, blues, even the purples represent the thinner sand. So kind of the process that we would use, again, we first look at a production map looking for white spaces between the other wells. Then you take that to this map (indicating). If you then have thicker PC sand that looks like it has potential in the reds, yellows or even into the greens, then you would look a little bit further and see if you have an existing wellbore that you might be able to utilize for a recompletion.

Q. You told me yesterday, Exhibit -- page 8, is that the -- tool, right?

A. Yes. That would be the first step in

identifying where you might look further. This net sand would be kind of the second step, looking for: Do you have that reservoir quality? The third step: Do you have a wellbore that you can use to recomplete?

Q. And did the company then utilize this data, along with some additional data that we're going to review in a minute, to ascertain areas where there were existing wells completed in deeper formations that were candidates for uphole completion in the Pictured Cliffs?

A. Yes, sir.

Q. And as the next witness goes through each of the cases -- or in each case, will we see a PC net sand map similar to what we see on page A9?

A. Yes. You will see the same net thickness map with just a single star for the well we're talking about. You'll also see a zoomed-in version of the bubbled cum map from page 8, kind of a nine-section zoom for the same green dots, same information being presented for each of the cases.

Q. Okay. Now, based on your analysis, Mr. Pippin, are there areas within the Pictured Cliffs Formation that are not adequately drained by existing wells?

A. I believe there is.

Q. And in your opinion, will the additional recompletions proposed under these consolidated cases

recover additional gas in place that will not otherwise be recovered?

A. Yes, sir.

Q. And in your opinion, will the granting of these applications prevent waste and serve the interest of conservation?

A. I believe it will.

Q. Was Hilcorp Exhibit A prepared by you or compiled under your direction and supervision?

A. Yes, sir.

MR. FELDEWERT: Mr. Examiner, I would move admission into evidence of Hilcorp Exhibit A, which is comprised of pages 1 through 9.

EXAMINER McMILLAN: Exhibit A may now be accepted as part of the record.

(Hilcorp Energy Company Exhibit A, pages 1 through 9, is offered and admitted into evidence.)

MR. FELDEWERT: And that concludes my examination of this witness.

CROSS-EXAMINATION

BY EXAMINER McMILLAN:

Q. I was very surprised you said this was deltaic deposit. Looking at your Pictured Cliffs production, I would have thought it was longshore bar, but --

A. Well, originally it was a deltaic deposit, but then that sand course reworked and kind of smeared along the coastline. So yes, originally deltaic, then it becomes a little more of a longshore. So you've got kind of a mixture of sands there that you're looking at in the PC.

EXAMINER McMILLAN: David?

CROSS-EXAMINATION

BY EXAMINER BROOKS:

Q. Well, I was going to ask you about your exhibit. The -- this doesn't have anything to do with what you're working on, but the Mancos Shale is shown. And I take that -- well, first of all, what's the significance of the colors, the red, green and blue?

EXAMINER McMILLAN: He's on page 3.

Q. (BY EXAMINER BROOKS) Yeah. I'm on page 3.

A. The reds just represent -- so, again, this is a basin-centered gas play with stacked horizons.

Q. Right.

A. The red is representing more of a gas play. There are oil legs represented in green, though, for some of the different horizons.

Q. Yeah. So this -- what portion of this map -- the reason I ask is I'm curious about what looks like a gap between what you show as the Mancos and what you

show as the Dakota. And I had thought that the base of the Mancos was the top of the Dakota more or less.

A. It more or less is. It's a little difficult to show sometimes in a cross section. Really, the Mancos is everything from the base of the Mesaverde to the top of the Dakota. You are correct about that. The play that is going on in the Mancos in San Juan is just a portion --

Q. Right.

A. -- of that, so more of a Gallup and Niobrara. It's not entirely the Mancos that's being targeted. It's kind of a subset of the Mancos.

Q. What you're saying is very consistent with what other witnesses have said.

A. Oh, that's good.

Q. It is. It's kind of surprising for a geologist. They're kind of like lawyers. If you ask two of them a question, you get two different answers.

A. At least two different answers, right?

Q. Yes.

No more questions.

MR. FELDEWERT: We have one more witness.

EXAMINER BROOKS: How long do you think it will take?

MR. FELDEWERT: As long as this witness.

EXAMINER BROOKS: I need to leave at 11:45. I mean, I can -- the next witness is what? An engineer?

MR. FELDEWERT: Uh-huh.

EXAMINER BROOKS: I don't think I really need to hear that testimony. I think I'll leave it with you.

EXAMINER McMILLAN: That's fine, whatever you want to do.

MR. FELDEWERT: Okay. We'll call our next witness.

JAMES OSBORN,

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

DIRECT EXAMINATION

BY MR. FELDEWERT:

Q. Would you please state your name, identify by whom you're employed and in what capacity?

A. James Osborn. I'm a reservoir engineer for Hilcorp Energy Company.

Q. Have your responsibilities for Hilcorp included the San Juan Basin?

A. Yes.

Q. And, Mr. Osborn, you have also previously testified before this Division as an expert in oil and gas reservoirs?

A. Yes.

Q. Are you familiar with the applications filed in these consolidated cases?

A. I am.

Q. And have you conducted a study of the Pictured Cliffs reservoir in the subject area?

A. I have.

Q. And, in fact, Mr. Osborn, did you participate in the efforts, along with Mr. Pippin, to locate spacing units that are candidates for recompletions?

A. I did.

MR. FELDEWERT: I would retender Mr. Osborn as an expert witness in petroleum reservoir engineering.

EXAMINER McMILLAN: So qualified.

Q. (BY MR. FELDEWERT) Now, Mr. Pippin described pages 8 and 9 in Exhibit A and how they were used in developing and analyzing the area for finding candidates, correct?

A. Yes.

Q. And you participated in those efforts?

A. I did.

Q. In your opinion, do each of these consolidated cases represent areas where the company's analysis shows that portions of the spacing unit or the area in which

the well's located are not being effectively drained by the existing wells?

A. That's correct.

Q. And do each of these consolidated cases under Exhibits 5 through 7 contain similar exhibits supporting this conclusion?

A. They do.

Q. Let's go to Case 16222. Now, this is a case that involves the Fulcher Kutz-Pictured Cliffs Gas Pool?

A. Yes.

Q. And if I look under Exhibit 1, this is a case where you seek to recomplete the J C Gordon D 3E well, correct?

A. Yes.

Q. Now, if I keep my finger here and I go to Exhibit Number 5, do I see a close-up of this particular spacing unit in the center?

A. Yes.

Q. Okay. And is this a close-up, then, also of the same bubble map, Exhibit A8, that Mr. Pippin just reviewed?

A. It is.

Q. Okay. Explain to us what you show on this exhibit in detail.

A. Okay. On the right side of the exhibit is some

well-specific information about the location, API, that sort of information.

On the left side is the aforementioned bubble map zoomed in over the J C Gordon D 3E well, which is indicated by the red circles centered on that well.

Looking at the map, the map includes all wells at all depths on this map with locators. The green circles on those locations indicate Pictured Cliffs' cumulative gas production to date. The larger the circle and the darker the green indicates more cumulative gas production.

Q. Now, does this map show historically all wells?

A. Yes, it does.

Q. And so does it include wells that are no longer producing?

A. That's correct.

Q. Does it include wells that have been temporarily abandoned?

A. Yes.

Q. And wells that have been plugged?

A. Yes.

Q. So, for example, on this map, if I look at the northeast quarter of Section 23, which is a different spacing unit, but if I look there, I see symbols that

indicate that these were Pictured Cliffs wells?

A. Yes.

Q. Okay. Were they both producing at the same time?

A. No.

Q. So one of them would have been abandoned or plugged before the other?

A. That's correct. One of the wells was abandoned and a replacement well was added to that.

Q. But in your analysis, you identified the production from both the initial well and then the replacement well?

A. Yes.

Q. With these the green circles?

A. That's correct.

Q. So in areas where we might see two Pictured Cliffs wells depicted in the spacing unit, that does not mean that they are both currently producing?

A. That's correct.

Q. All right. Okay. Now, with that in mind, then let's move on to the analysis here. Let's go on to Exhibit Number 6. We see that same Pictured Cliffs net sand map that Mr. Pippin discussed?

A. That's correct.

Q. And we have a nice star there to orient us

where we are within that net sand?

A. Yes.

Q. And was this an area where the net sand indicated that this was a candidate for a recompletion?

A. Yes.

Q. So we had the data on Exhibit Number 5. And I don't think we mentioned this. On Exhibit Number 5 where we see the white areas, in your opinion, is that where -- are those areas that have not been produced by the existing wells?

A. That's correct. The white space indicates areas that would likely have not produced the gas in place.

Q. Okay. And are those areas, in your opinion -- where you have the red circle around it, are those areas where, in your opinion, there are additional reserves that will not be produced by the existing wells?

A. That's correct.

Q. Okay. So we have that data?

A. (Indicating.)

Q. Then did you conduct a separate analysis of this particular spacing unit in this particular section?

A. Yes.

Q. Okay. Is that reflected on Hilcorp Exhibit Number 7 in this particular case?

A. Yes.

Q. All right. And explain to us what you did with Exhibit Number 7?

A. Okay. Exhibit Number 7 is a table reflecting gas-in-place calculations and recovery factor calculations. The table from left to right by column is the "Reference Area"; the volumetric -- volumetrically calculated original gas in place for that reference area; that same volumetrically calculated original gas in place on a section basis; cumulative production to date and the associated recovery factor; remaining gas in place from original gas in place less produced; and finally, estimated ultimate recovery and associated recovery factor.

Q. All right. Now, if I -- I like using my fingers. If I keep my thumb on this exhibit and I flip back to Exhibit 5, so we're looking at both of them at the same time --

A. Okay.

Q. -- you note on here your analysis of the quarter section, right?

A. Yes.

Q. What quarter section are you referencing?

A. That's the northwest quarter section of Section 23.

Q. Okay. And your analysis indicates what with respect to the recovery under that quarter section?

A. It reflects that that quarter section has produced .9 Bcf and 74 percent recovery factor to date.

Q. Okay. And what recovery factor would you expect to occur if we didn't recomplete?

A. 85 percent.

Q. Okay. And do you believe that you can increase that recovery factor with the recompletion of this additional well?

A. We do.

Q. All right. Now, when you say you analyzed the section here, what section are you talking about?

A. That is Section 23.

Q. Okay. And in your opinion, will this well assist in producing reserves from Section 23 that would otherwise not be recovered from the existing wells?

A. That's correct.

Q. All right. Okay. Then let's go on to another example. Let's go to Case 16223. This would involve a different pool, right, the Aztec-Pictured Cliffs Gas Pool?

A. Correct.

Q. And, again, I look at Exhibit Number 1. This is one of those circumstances where we had a nonstandard

or irregular spacing unit committed by a commission order?

A. Yes.

Q. And in this case, I think the order reflects that this was a 205.08-acre spacing unit?

A. Yes.

Q. Not 160?

A. Correct.

Q. And you seek to add, in this case, two additional Pictured Cliffs wells to this larger spacing unit?

A. Yes.

Q. All right. Then if I keep my finger here and I go to Exhibit Number 5, you see we have two pages in Exhibit 5, correct?

A. Yes.

Q. All right. And what's the differentiation here?

A. So page 1 of Exhibit 5, the red circle indicating the reference well, is centered on the Reid 22M well in the west half of Section 8.

Q. Okay. So if I look at Exhibit 1, I see that area outlined in green?

A. Yes.

Q. And if I look at Exhibit 5, I see what looks

almost like a half section of the acreage?

A. Right.

Q. And you've circled the Reid 22M well that you seek to recomplete?

A. Yes.

Q. Do you show also in here the existing well?

A. Yes.

Q. And how is that shown on Exhibit Number 5?

A. It's indicated by a green bubble, reflective of cumulative production to date, on the southernmost edge of that spacing unit.

Q. And the record reflects that that existing well is closer than if it was at a nonstandard location, right?

A. Yes.

Q. All right. Then you've got a second page of Exhibit 5?

A. Yes. The second page of Exhibit 5 is the same map this time with the red circle centered on the Jackson Com 1E in the eastern half of this spacing unit.

Q. And for this particular spacing unit, you show a relatively large undeveloped area, correct?

A. That's correct.

Q. In your opinion, are these two additional wells necessary to develop the undeveloped acreage in

Section -- in that spacing unit comprised of Section 8?

A. They are. Yes, they are.

Q. And in addition to that analysis, did you also do a similar analysis that we saw previously in Exhibit 7?

A. Yes.

Q. But before we get there, just so we follow along here, Exhibit 6 is that same PC net sand map?

A. That's correct.

Q. And have you identified where we're at on that?

A. Yes. In this instance, the red star indicates the spacing unit as a whole that both wells are within.

Q. Okay. And then we get to your Exhibit 7?

A. Yes.

Q. All right. Now, you did approach it the same way, right?

A. Yes.

Q. The one interesting thing I saw on here is that your second bullet point and your analysis of the quarter section indicates zero percent recovery?

A. That's correct.

Q. So keep your finger on here and go to the bubble map --

A. Uh-huh.

Q. -- and explain to us why you have zero.

A. So the reason we put zero is to allocate volumes back to this and look for open space. We treated the west half of this spacing unit as a separate, effectively, quarter-quarter [sic] section. So it's indicated as a quarter section, but it's affectively the west of half of the spacing unit where there is no existing well.

Q. And so based on your analysis, has the existing well -- or will the existing well recover any of the reserves in the west half of this irregular spacing unit?

A. It will not.

Q. Then you have a second page on Exhibit Number 7.

A. Yes. So the second page in Exhibit Number 7 is focused on the Jackson Com 1E well. Which is on the east half of the spacing unit. And then in this instance, the quarter section reflects the east half of the spacing unit where the existing well does reside and we have thus allocated the cumulative production to date to that effective quarter section.

Q. And your analysis shows what about that quarter section of the irregular spacing unit?

A. It shows that the existing well has currently recovered 53 percent of the original gas in place.

Q. And at best, what do you anticipate that that existing well will reflect?

A. 73 percent.

Q. So in your opinion, will the additional proposed well in the east half of this irregular section recover reserves that otherwise would not be recovered?

A. That's correct.

Q. Now, when I look at this on a section basis, the data is the same --

A. Yes.

Q. Because what are you treating as a section?

A. So the section basis is effectively the spacing unit. It's just -- it's not a full 640 acres. It's just the spacing unit itself. So it's effectively what that section would be allocated to. So along those lines, you see the volumetric gas in place is 2.7 Bcf, but the section equivalent, which would be at a 640-acre basis, is two times that amount. And so based on that, we're showing that the spacing unit as a whole has not fully and will not fully drain the original gas in place.

Q. Or flipped around, you have the existing well in the spacing unit that will not --

A. Yes. Yes.

Q. Will not what?

A. Will not drain the original gas in place for this spacing unit.

Q. Okay. So in your opinion, both of these wells are necessary to produce reserves that would otherwise not be recovered?

A. That's correct.

Q. And do you really know at this point to what extent you are going to produce those reserves?

A. At this point, no.

Q. So that's why this project -- end up producing, right?

A. That's correct.

Q. Now, if we look at the Zachry wells, we see the same analysis; is that correct?

A. That's correct.

Q. So let's skip over that one and let's do -- go through one of the cases involving the San Juan unit wells, 29-7 Unit wells. Okay?

A. Okay.

Q. Let's look at one we haven't looked at yet, Case 16225. So if I go to the tab for Case 16225, to get us oriented under Exhibit 1 there, we see the drill block that's at issue here?

(Examiner Brooks exits the room, 11:43 a.m.)

A. Yes.

Q. And you were here for the testimony where the drill block in the unit is 320 and it's comprised of two spacing units for density purposes?

A. That's correct.

Q. Okay. And in this case, we seek to recomplete which well here?

A. The San Juan 29-7 Unit 92B on the western portion of the drill block.

Q. Okay. Then if I keep my finger here and I go to Exhibit 5 of this case, do I see Section 16?

A. Yes.

Q. And have you identified that same well that you seek to recomplete?

A. Yes, the red circle centered on the 92B.

Q. Okay. And you provide some details for that particular proposed recompletion on the right-hand side?

A. Yes.

Q. And you show that it is some distance away from any current producers?

A. That's correct.

Q. And is it located in what would appear to be -- going to be a nonstandard location for this particular spacing unit?

A. Yes.

Q. And this is within the 29-7 Unit?

A. Yes.

Q. Now, if I go to Exhibit 6, we are oriented to the PC net sand?

A. Yes.

Q. Where is the star on this exhibit?

A. The star is in the northeast portion of the map in an area with high net sand in the Pictured Cliffs.

Q. Okay. Now, when I go to Exhibit 7, you see the same type of analysis that you already talked about, right?

A. Yes.

Q. And just cutting to the chase, in this particular area where this well is located, what does it show with respect to the recovery around that well from the existing wells?

A. Viewing the existing wells at a quarter section and section basis, we're estimating that to date they've recovered roughly 35 percent, and the estimate ultimate recovery of the existing wells will only recover 55 percent of the original gas in place.

Q. And if you looked at it on a much larger basis, would you see similar numbers?

A. Yes, that's correct.

Q. So in your opinion, the existing wells will

only recover -- recover roughly half of the reserves around that proposed recompletion?

A. That's correct.

Q. And in your opinion, is that proposed recompletion necessary to recover the reserves that will otherwise not be recovered by the existing well?

A. Yes.

Q. Now, do the remaining cases containing similar exhibits?

A. They do.

Q. They do. Okay.

And if we went through each of one of these, would your analysis and testimony be the same?

A. Yes.

Q. In your opinion, Mr. Osborn, will the proposed recompletions in each case recover additional gas in place that will not be otherwise be recovered by existing wells?

A. They will.

Q. And in your opinion, will these proposed recompletions adversely impact reservoir energy or otherwise prevent the efficient recovery of gas from these -- from this reservoir?

A. No, they will not.

Q. And in your opinion, will it merely accelerate

production, or will these recompletions produce additional reserves?

A. Additional reserves.

Q. Finally, in your opinion, Mr. Osborn, will the granting of the applications for each of these consolidated cases prevent waste and serve the interest of conservation?

A. It will.

MR. FELDEWERT: Mr. Examiner, I would move the admission of Hilcorp Exhibits 5 through 7 in each of these consolidated cases.

EXAMINER McMILLAN: Okay. Exhibits 5 through 7 in Cases 16222 through 16227 may now be accepted as part of the record.

(Hilcorp Energy Company Exhibit Numbers 5 through 7 are offered and admitted into evidence.)

MR. FELDEWERT: That concludes my examination of this witness.

CROSS-EXAMINATION

BY EXAMINER McMILLAN:

Q. So you came here for some Mesaverde wells, right?

A. Yes, that's correct.

Q. And what has been -- how has that worked? Have

you added the reserves?

A. We have.

Q. Have they met the expectations?

A. They have. They've actually exceeded in most cases.

Q. So as a base time, they've met your reserves?

A. Yes.

Q. And in terms of engineering, do you expect the same results?

A. Yes.

Q. Okay. I don't really have any other questions.

MR. FELDEWERT: Okay. So, Mr. Examiner, that concludes our presentation.

We would like Cases -- you probably need to write this down.

EXAMINER McMILLAN: Hold on. Let me make sure I have everything done right.

MR. FELDEWERT: We would like Cases 16222, 16223 and 16227 to be taken under advisement.

EXAMINER McMILLAN: Okay. Let me go through this. Case 16222, Case --

MR. FELDEWERT: 16223.

EXAMINER McMILLAN: -- 16223 --

MR. FELDEWERT: And 16227.

EXAMINER McMILLAN: -- and 16227 shall be

taken under advisement.

MR. FELDEWERT: And we would ask that the remaining cases, 16224, 16225 and 16226, be continued to the July 12th docket so we can address the notice and advertisement issue.

EXAMINER McMILLAN: Okay. Case 16224, Case 16225, Case 16226 shall be continued to July the 12th.

MR. FELDEWERT: Thank you.

EXAMINER McMILLAN: Thank you.

THE WITNESS: Thank you.

EXAMINER McMILLAN: That concludes the docket.

Thank you very much.

(Case Numbers 16222 through 16227 conclude, 11:49 a.m.)

STATE OF NEW MEXICO

COUNTY OF BERNALILLO

CERTIFICATE OF COURT REPORTER

I, MARY C. HANKINS, Certified Court Reporter, New Mexico Certified Court Reporter No. 20, and Registered Professional Reporter, 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 that were reduced to printed form by me to the best of my ability.

I FURTHER CERTIFY that the Reporter's Record of the proceedings truly and accurately reflects the exhibits, if any, offered by the respective parties.

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 in the final disposition of this case.

DATED THIS 17th day of July 2018.

MARY C. HANKINS, CCR, RPR
Certified Court Reporter
New Mexico CCR No. 20
Date of CCR Expiration: 12/31/2018
Paul Baca Professional Court Reporters