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:	)	CASE NOS. 11,090
	)	11,091
APPLICATION OF MERIDIAN OIL, INC./SOUTHLAND ROYALTY COMPANY	)	11,092 (Consolidated)

REPORTER'S TRANSCRIPT OF PROCEEDINGS

EXAMINER HEARING

BEFORE: MICHAEL E. STOGNER, Hearing Examiner

NOV 28

September 15th, 1994

Santa Fe, New Mexico

This matter came on for hearing before the Oil Conservation Division on Thursday, September 15th, 1994, at Morgan Hall, State Land Office Building, 310 Old Santa Fe Trail, Santa Fe, New Mexico, before Deborah O'Bine, RPR, Certified Court Reporter No. 63, for the State of New Mexico.

ORIGINAL

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I N D E X

September 15th, 1994
Examiner Hearing
CASE NOS. 11,090, 11,091, 11,092 (Consolidated)

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E X H I B I T S

	Identified	Admitted
Exhibit 1	8	16
Exhibit 2	8	16
Exhibit 3	14, 18, 22, 23	16
Exhibit 4	19, 23	27
Exhibit 5	20	27
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* * *

A P P E A R A N C E S

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By: W. THOMAS KELLAHIN

* * *

EXAMINER STOGNER: Call next case, No. 11,090, which is the Application of Meridian Oil, Inc., for downhole commingling and an unorthodox coal gas well location.

At this time I'll call for appearances.

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

We would request for purposes of testimony that you consolidate this case with cases 11,091 and 11,092.

EXAMINER STOGNER: Just for the record, 11,091 and 11,092 are Southland Royalty. Just for the record, could you give me a little lowdown on their connection?

MR. KELLAHIN: Mr. Examiner, I never get it right.

EXAMINER STOGNER: Okay, well, we'll make that a part of the record.

MR. KELLAHIN: Yes, sir.

EXAMINER STOGNER: With that, I will call Cases 11,091, 11,092, which are both Application of Southland Royalty Company for at least downhole commingling, and one of them is for an unorthodox coal gas well location, and they're both in San Juan County, New Mexico.

Other than Mr. Kellahin and Meridian/Southland Royalty, are there any other appearances?

There being none, Mr. Kellahin?

MR. KELLAHIN: Mr. Examiner, I have three witnesses to present to you. I have an engineering witness, a geologic witness, and a landman.

Those same individuals work in one case for Meridian Oil Company, and in the other they're acting as agents for Southland Royalty. I never quite understand the relationship, but one is a sister company of the other, I believe.

In any event, the same individuals are involved in both cases.

The reason we are here for the downhole commingling is that the ownership is different in the coal gas spacing units, which will be added to the Picture Cliff spacing units.

Each of the three wells is an existing PC well, substantially depleted, with two of those wells requiring casing leak repairs. And rather than abandon those wells, they want to work them over again and add Fruitland Coal in that wellbore.

By doing so, two of those wells, the Hudson "J" 2 and the Harmon "A" 2, are going to add coal spacing units for which the wellbore is in the wrong quarter section. So they'll be off-pattern.

In addition, at the Hudson "J" 2 that existing PC

well is closer to the side boundaries of the spacing unit than permitted by the footage locations. I wanted to mention it's 330 from the east line, and that would be closer than normally allowed under the coal gas rules.

But the principal reason for the commingling is ownership difference, brings us to hearing. We need to add in the coal gas zone, and in two instances that makes it off-pattern.

With that introduction, I'd like to call Mr. Dean price. Mr. Price is a landman.

EXAMINER STOGNER: And that wasn't testimony?

MR. KELLAHIN: No, sir, that's --

EXAMINER STOGNER: Okay, I -- Thank you, Mr. --

MR. KELLAHIN: We can take it as --

EXAMINER STOGNER: No, I -- Thank you, Mr. Kellahin.

DAVID DEAN PRICE,

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

DIRECT EXAMINATION

BY MR. KELLAHIN:

Q. All right. Mr. Price, would you state your name for the record?

A. David Dean Price.

Q. And where do you reside, and what is it that you

do?

A. I reside in Farmington, New Mexico. I am a senior landman for Meridian Oil Company.

Q. For each of these three cases, have you made an investigation of the ownership?

A. Yes, I have.

Q. In addition, have you made an investigation of the offset interest owners to which notice is required?

A. Yes, I have.

Q. Have you on past occasions testified as a landman before the Division?

A. Yes.

Q. And based upon your search, have you identified, and can you represent to the Division that you've attempted to comply with all the notice requirements for these cases?

A. Yes.

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

EXAMINER STOGNER: Mr. Price is so qualified.

MR. KELLAHIN: Mr. Price, let's take the first hearing book.

Mr. Examiner, they're all organized in the same fashion, and we'll start with 11,090, and that's the Hudson "J" Number 2 Harmon. Is it -- Did I get them --

EXAMINER STOGNER: You did.

MR. KELLAHIN: Yes, sir, I'm sorry, this is the Harmon well, 11,090, it's the Harmon case.

Q. (By Mr. Kellahin) Let's turn past the Application and look at the information behind Exhibit Tab Number 2. At that point in the exhibit book would you tell us what we're seeing?

A. We're looking at an offset operator/owner plat. The first page is an indication of who the offset owners would be for the Pictured Cliffs formation, and those owners are listed at the bottom of the page and indicated so on the plat.

Q. What kind of well is the Harmon "A" No. 2 well?

A. It's currently a Pictured -- it's a well completed in the Pictured Cliffs formation.

Q. Do you happen to know the Pictured Cliff pool to which it's designated?

A. Yes. It's the northwest quarter of Section 2.

Q. And what is the pool name for that pool?

A. The Kircher --

Q. I think this is the West Kutz, is it?

A. Yes, the West Kutz Pictured Cliffs pool, excuse me.

Q. Have you caused notification to be sent to the parties shown on this exhibit as offset operator?

A. Yes, I have.

Q. Have you received any objection?

A. None.

Q. All right. Let's turn to the next plat behind that exhibit tab. What are we seeing here?

A. That also is an offset operator/owner plat for the proposed Fruitland Coal spacing unit.

Q. Sir, and have you caused notification to be sent to all those individuals or parties?

A. Yes, I have.

Q. And with what result?

A. No objections.

Q. Did you send your notification at least 20 days prior to today's hearing date?

A. Yes.

Q. And what kind of notice did you send them? What did they receive?

A. They received a copy of the Application and they received a copy of the offset ownership plats and a copy of the nine-section plat indicating the location of the proposed proration units and also one that indicated the Pictured Cliffs proration unit currently.

Q. How were those transmitted to them?

A. By mail.

Q. And what type of mail?

A. Certified, return-receipt-requested mail.

Q. In addition to the offset operators for each of those spacing units, did you also notify the owners that are entitled to share in production from each of those two spacing units?

A. Yes, we did.

Q. How did you go about identifying those interest owners?

A. Through a title check, title search.

Q. Did you satisfy yourself that you had a complete list of all those owners?

A. Yes.

Q. And so you went ahead and notified all those in the same fashion?

A. Yes.

Q. By certified mail, return receipt?

A. Yes.

Q. Did they also receive a copy of the Application?

A. Yes, they did.

Q. Okay. And did you send that more than 20 days prior to today's hearing?

A. Yes.

Q. When we turn past the second plat, it says "interest owners". What is that intended to represent?

A. That's a list of the interest owners within the proposed spacing unit for both the Pictured Cliffs and the

proposed Fruitland Coal proration unit.

It also indicates the type of interest on the right-hand column that they own.

Q. It doesn't specifically show Meridian Oil Company with an interest?

A. No. That's understood.

Q. All right. So we're not talking about El Paso Production company?

A. That's a subsidiary of Meridian Oil Inc., and that is -- that would also be our working interest, indicated there.

Q. Okay. Other than Meridian Oil Inc.'s interest, you've identified all the other interest owners, regardless of whether it's PC or Fruitland Coal gas?

A. Yes.

Q. Any objection from any of those parties to the commingling?

A. None.

Q. Did you receive any objection from any of the offsets as to the off-pattern location of this wellbore in utilizing it as a coal gas well?

A. No objection. We received an inquiry from Louis Dreyfus Natural Gas Holdings Company, and they were in agreement with our decision.

Q. Okay. Let's look behind the table of ownership,

and there's another plat. What is this supposed to represent?

A. This is a land plat that indicates the leasehold ownership and the sections which surround the Harmon "A" 2 proration unit.

It indicates, shows the various oil and gas wells that are completed or drilled within those nine sections and also indicates the current Pictured Cliffs proration unit and also indicates the proposed Fruitland coal proration unit.

Q. All right, sir. And behind the display that's the locator information, what have you then included?

A. The copies of the return receipts back from the interest owners that we've received. They're all there.

Q. All right, sir. For each of the exhibit books, have you gone through the same process?

A. Yes, the exact same process.

Q. So that in each exhibit book we will find a plat that will identify the offsetting operators for both PC and Fruitland coal gas?

A. Yes.

Q. In addition, there will be a table showing us the owners, which is a combination of all owners for both pools?

A. Yes.

Q. And then there will be copies of the green cards showing verification of the receipt of that information?

A. Yes.

Q. All right. Without going through all that detail, let's go to the next exhibit book, which is 11,091, and that's for the Cooper case --

A. Yes.

Q. -- Cooper well?

Let's find the locator map, and I think if you'll look behind Exhibit Number 3 --

A. Yes.

Q. -- you'll find that locator map.

For benefit of the Examiner, show us the location of the proposed Cooper Number 5 well on that display.

A. It's located in the northeast corner of lot 7, which would be the southwest southwest quarter of Section 6.

Q. And that's an existing Pictured Cliff well?

A. An existing Pictured Cliff well, yes.

Q. Okay. You propose to continue the southwest quarter as the spacing unit in that well?

A. Yes.

Q. And you would add, then, the Fruitland Coal gas?

A. Yes.

Q. What would that spacing be?

A. We would propose it to be the west half of Section 6.

Q. This well and the Hudson well in Case 11,092 are operated by Southland Royalty Company?

A. Yes.

Q. For the record, identify for us the relationship between Meridian and Southland Royalty Company.

A. Southland Royalty Corporation is a subsidiary of Meridian Oil, Inc.

Q. And it's listed in the OCD records and files as the designated operator for those two wells?

A. Yes, it is.

Q. Okay. And you worked for both companies or in your capacity as agent for both companies?

A. I'm employed by Meridian Oil, Inc., yes. But I work, like you say, as an agent for Southland Royalty.

Q. Do you believe you have properly located and identified all interest owners for the Cooper well that would share in that production?

A. Yes.

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

A. No.

Q. All right, let's turn finally to Exhibit Book 11,092. If you'll turn behind Exhibit Tab No. 3, let's

look at that locator map for the Hudson "J" Number 2 well.

A. Yes.

Q. Have you found that?

A. Yes.

Q. Show us the location of the Hudson "J" Number 2 well.

A. It's located within the northeast quarter of the southeast southeast quarter of Section 34.

Q. That's an existing PC well?

A. Yes, it is.

Q. And what's your information on its spacing unit?

A. It's located within the 790-foot setback. So it's an off-pattern location.

Q. All right, It's going to be off-pattern as to coal gas?

A. Yes, as to coal gas.

Q. With regards to the Pictured Cliffs?

A. It's fine.

Q. It's a standard well location?

A. Standard well location.

Q. And your belief is it's dedicated to the southeast quarter of 34?

A. Southeast quarter of 34.

Q. The proposed spacing unit for the coal gas would be what, sir?

A. Would be the east half of Section 34.

Q. Have you received any objection from any of the parties offsetting this well for which you have sent notice?

A. No.

MR. KELLAHIN: That concludes my examination of Mr. Price, Mr. Examiner.

We would move the introduction in each case of Exhibits 1 through 3.

EXAMINER STOGNER: Exhibits 1 through 3 will be admitted into evidence.

EXAMINATION

BY EXAMINER STOGNER:

Q. Mr. Price, roughly, do you know if these wells are all about the same age as far as the Pictured Cliffs production?

A. Yes, they are.

Q. In essence, is it the overriding royalty interest that is the --

A. Yes. That's the variance in interest ownership, is the overriding royalty interest. When you include the additional acreage into the proposed Fruitland Coal proration unit, then you have the change in ownership. Essentially, you pick up additional overriding royalty and royalty interests.

EXAMINER STOGNER: I have no other questions, Mr. Kellahin.

You may be excused.

MR. KELLAHIN: Thank you, Mr. Examiner.

At this time we'd call Mr. Jay Close.

JAY CLOSE,

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

DIRECT EXAMINATION

BY MR. KELLAHIN:

Q. Would you please state your name and occupation?

A. My name is Jay close, and I work as a petroleum geologist for Meridian Oil in Farmington, New Mexico.

Q. On past occasions, Mr. Close, have you testified before the Division as a petroleum geologist?

A. Yes, sir, I have.

Q. Are each of these wells involved in your area of responsibility as a geologist?

A. Yes, sir, they are.

Q. And as part of your duties, have you made a study of the geologic facts and circumstances surrounding each of these cases?

A. Yes, I have.

MR. KELLAHIN: We tender Mr. Close as an expert petroleum geologist.

EXAMINER STOGNER: Mr. Close is so qualified.

Q. (By Mr. Kellahin) Let's stay in order, if you will, and take Exhibit Book 11,090, and let's find the locator map. Let's start with Exhibit 3 again.

And for the Harmon well, tell us what you were trying to accomplish.

A. What we were trying to do is capitalize on an opportunity that would otherwise be lost. We are trying to produce what we believe are very lucrative resources in the Fruitland Coal formation that would otherwise be lost if these wells were plugged and abandoned.

Q. In what way do you accomplish that by utilizing this existing wellbore, which is a PC well?

A. This makes very good economic sense for us to utilize an existing wellbore, recomplete Fruitland Coal gas resources, and then commingle those two formations to obtain an economic wellbore and production string.

Q. What's the current status of the Harmon "A" Number 2 well?

A. I believe it is on at this point, it is a so-called demand well or inactive well for which remediation has to be performed.

Q. What does that mean?

A. If you do not perform remediation, the well would have to be abandoned.

Q. What type of remediation has been required for this well?

A. I believe that in this case there has been a casing failure in this well and that if it would not be repaired, then it would have to be abandoned.

Q. This well is off-pattern because it's in the wrong 160 acres within the section for a coal gas well. Is that a problem in properly locating wells in this section for coal gas production?

A. We do not believe so.

Q. Utilizing this wellbore then as a coal gas wellbore to be commingled with remaining PC is an efficient way to extract those hydrocarbons?

A. Yes, it certainly is.

Q. Let's turn to the geologic information contained behind Exhibit Number 4 and describe for us the first illustration.

A. What I have shown here in Exhibit 4 is a geophysical log of the Fruitland Coal and the Pictured Cliffs units in a closely offsetting well.

If you'll notice to the left below the log header, I've indicated the location of the Harmon "A" 2 well, and by comparison of that location information and the location data on the log header just above -- in this case, the Federal 2 W Number 1 E well -- we then believe

that the geophysical log traces that we see to the right on that page are representative of what the Pictured Cliffs and Fruitland Coal formation will appear to us like in the subsurface with respect to depth and thickness in this particular instance.

Q. How is that information utilized for you in this case?

A. We need to know -- The geometry is really what a geologist is concerned with in this kind of situation, as to what depth, how much coal thickness we have, how much resources in that coal, and get an idea then as to the economic viability of the production of said resources.

And based upon these interpretations, we think there is a significant resource in those coals that would not otherwise be captured.

Q. Do you draw any conclusions from the structure map that follows the log information?

A. The purpose of the structure map is to demonstrate that this is an area of very gentle dip in the San Juan Basin, in this case, very gentle towards the north and northeast, and we don't believe that there are any sealing faults in the area that would cause a problem to produce Fruitland Coal resources in that 320-acre area.

Q. Let's look behind Exhibit Tab Number 5. Describe for us what we're looking at here.

A. You have two sets of maps. The first one is a Fruitland Coal, Fruitland Formation Net Coal map.

The map that is prepared and exhibited behind that is a Pictured Cliff sandstone net pay thickness map.

Again, this gives us very strong indication based upon the presence, in this case particularly the coal thickness, that there is significant opportunity to produce resources that would otherwise be lost.

Q. Why have you selected to use this PC well in Section 2, as opposed to any other existing PC well in the section by which then to add the coal gas?

A. Again, because of the issues previously stated, this well, I believe, does have problems associated with it, and that is the key reason for selection of this location.

Q. Do you have information about potential remaining Pictured Cliff gas reserves to be produced out of this wellbore if it hadn't had a casing failure?

A. Yes. I believe that we do indeed have that, and Mr. Daves would be the person that could quantify that.

Q. Okay. One of the concerns, then, is if you have to abandon this well, you would leave behind the remaining PC production that you might achieve?

A. That is correct.

Q. And because you would then have to fix this well,

it's an opportunity to add the coal gas to it and derive the benefit of producing any recoverable gas out of that pool?

A. That is correct.

Q. Have you found that opportunity to exist in any of the other wells that are before the Examiner today? Do we have that occurrence in any of these other cases?

A. In which we have the opportunity to capture resources that would otherwise be lost?

Q. Yes, sir.

A. That is correct. We have identified two other said wells at this time.

Q. Let's turn to 11,091 which is the Cooper well, if you'll look behind Exhibit Tab No. 3. Summarize for us why the Cooper Number 5 well represents that opportunity

A. Again, in this situation, we have the issue wherein if we do not go and recomplete to the Fruitland coal formation, that is a resource that would be lost in addition to the Pictured Cliffs resources that would also be lost if this wellbore was indeed abandoned, very similar if not the same to the previous discussion.

Q. Why have you chosen to utilize the Cooper Number 5 in this section, as opposed to any other PC well in that section?

A. Again, Mr. Daves can correct me if I'm wrong, but

I believe that this well does have so-called regulatory issues associated with it, and that action has to be taken one way or the other. And our belief is that we can successfully recomplete and produce the resources that would otherwise be lost.

Q. Behind Exhibit Tab Number 4, what do we find in this exhibit?

A. As we observed in the previous set of exhibits, we again have a geophysical log. In this case it is for the Cooper Number 5 well.

And we've indicated on this the depths and thicknesses of various coal units in relationship to the Pictured Cliffs sandstone, and we again observe that there is a very significant coal thickness or development, if you will. And therefore a resource, gas resource, thereby would be present in those coals that would otherwise be lost.

Q. All right, sir, let's turn to 11,092. And if you'll turn behind Exhibit Tab Number 3, let's talk about the Hudson "J" Number 2 well.

What's the geologic significance or reasons that you have recommended the Hudson "J" Number 2 well be used as the wellbore by which you downhole commingle Fruitland coal gas with PC?

A. Looking at this location map -- and if I may also

refer yet again to Exhibit 4, the Hudson "J" Number 2 log would be located to your left, the nearest offset log to your right, the McGrath "C" Number 1 well, we see a very significant basal coal, so to speak, development several feet above the uppermost Pictured Cliffs sandstone.

And we think that there is a significant resource in that there that is commercially producible in this wellbore, that would otherwise be lost.

Q. We are in an off-pattern location with this PC well when we add the coal to it. Why have you chosen this PC well, as opposed to any other Pictured Cliff well in the section?

A. We think, again, given the convenience as well as the development of that basal coal being our main target in this situation, we find it very attractive.

There are a number of wells that have the appearance like this log, signaturewise, that we find to be very commercial, very economic for us, capturing the resource, in this case, the Fruitland Coal gas, as well as the Pictured Cliffs.

Q. When we look at the areas involved in each of these three cases, there are some scattered examples of existing Fruitland Coal gas wells, I believe, on the maps.

If you look at the Hudson example, there are some coal gas well symbols shown on that display. For example,

if you look up in Section 28, Hallwood's got a coal gas well. Do you see that?

A. Yes, I do.

Q. Describe for us what portion of the Basin-Fruitland Coal gas pool that we're in for the Hudson "J" Number 2 well.

A. In terms of geologic characteristics?

Q. Yes, sir.

A. We are in an area where, looking at Exhibit 4, you have a basal coal, if you will, in this case located between 1800 and 1900 feet, and you have stringers above that, again, the main target being that basal coal in this Basin-Fruitland Coal Pool that many operators, such as Meridian Oil, has found to be a very viable natural gas resource target.

Q. Are we in the underpressured area or the overpressured area?

A. You are well inside what is called the underpressured envelope of the Fruitland Coal.

Q. Topographically, where are we in the Basin?

A. You are in an area where there is gentle topography, rolling hills, et cetera, not that much development of canyons or topography similar to that in the eastern portion or central portion of the Basin.

Q. No, I meant in relationship to the outcrop,

there's a river shown through 28?

A. Yes.

Q. Doesn't the coal outcrop to the west of here?

A. It does outcrop some distance to the west of here, that is correct.

Q. Are we in an area where Meridian would drill a straight-up coal gas well as a single completion, as opposed to trying to find existing PC wells by which we could add coal gas production to that?

A. We believe, based upon our economics, that it is not viable as a stand-alone or so-called stand-up Fruitland Coal target.

And if we do indeed commingle the two formations, it does then change to an economic completion and production string.

Q. Is that characteristic of all three of these wells?

A. Yes, sir, it is.

Q. In each instance, then, it would be very difficult to obtain approval to obtain approval to drill a straight-up Fruitland Coal gas well by yourself?

A. That is correct.

MR. KELLAHIN: That concludes my examination of Mr. Close, Mr. Examiner.

We would move the introduction of his Exhibits 4

and 5 in each of the exhibit books.

EXAMINER STOGNER: Exhibits 4 and 5 will be admitted into evidence at this time.

And I have no questions.

MR. KELLAHIN: All right, sir. At this time we call Mr. Scott Daves.

SCOTT DAVES,

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

DIRECT EXAMINATION

BY MR. KELLAHIN:

Q. Would you please state your name and name and occupation?

A. My name is Scott Daves. I am a production engineer with Meridian Oil in Farmington, New Mexico.

Q. On prior occasions, Mr. Daves, have you testified as a production engineer before the Division?

A. Yes, I have.

Q. And in fact, have you testified on similar kinds of cases where we've asked this Examiner to approve downhole commingling of wells that included the Fruitland Coal gas?

A. Yes, I have.

Q. Have you made a study based upon your expertise and experience of these three wells?

A. Yes, I have.

Q. And base upon that engineering study, do you now have engineering recommendations about the feasibility of commingling production in each of these wells?

A. Yes, I do.

MR. KELLAHIN: We tender Mr. Daves as an expert production engineer.

EXAMINER STOGNER: Mr. Daves is so qualified.

Q. (By Mr. Kellahin) Give us a quick summary of what you and the other members of your team are trying to accomplish with a downhole commingling program for which this represents three examples.

A. What we have done is identified typically inactive Pictured Cliff wellbores drill in the early Fifties, late Forties, that may or may not now have casing failures. We deem them at their present status as uneconomic to produce any longer, given the current set of circumstances that we operate under.

So what we've done is looked uphole, to uphole potential, and identified the Fruitland Coal as the most obvious choice as an uphole potential candidate.

At that point we determined that the best choice was to capture the remaining Pictured Cliff reserves and also capture the Fruitland Coal reserves that are in place in that wellbore and in that drill block.

Q. For each of the sections, do each of these wells represent the best opportunity to accomplish that objective?

A. Yes, they do.

Q. Let's start with the Case Book for 11,090, and look at Exhibit Number 3, which is the locator map and have you describe for us, for the Harmon "A" 2 well, why as production engineer you find this well to be suitable to accomplish the objective of getting the remaining PC plus adding the Fruitland Coal for the spacing units as you Pope to configure them.

A. Yes. Basically, with the Harmon "A" 2, as we have identified it to date, it is an inactive Pictured Cliff wellbore, completed in the early Fifties, and it has a casing failure.

Q. Did you make your decisions about this well and any of the other wells based upon the difference in ownership between the spacing units?

A. No.

Q. You didn't go about selecting one that had an advantage or a disadvantage to any kind of interested owner, did you?

A. No.

Q. You were looking at ways to maximize remaining production that might be recoverable?

A. That's correct.

Q. Let's look, then, at Exhibit Number 6, which is your proposed allocation formula --

A. Yes.

Q. -- to recognize that you have some small difference in ownership between the PC and the Fruitland Coal.

A. Uh-huh.

Q. How do you propose to equitably allocate that production so that each group of owners receive their fair and appropriate share of that production?

A. Essentially what we have done here is determined a derivation as to how to allocate Fruitland Coal production from the total production, minus what we have identified as Pictured Cliffs production.

And the fundamental principles that we've used here are material balance to establish the Pictured Cliffs remaining reserve, and then we've identified an initial production rate for the Pictured Cliffs and then calculated a decline from that, and that will be the Pictured Cliff allocation.

Total production minus that allocated Pictured Cliff production will equal the Fruitland Coal production.

Q. Describe for me, then, how you would propose the Examiner write the order by which you implement this

allocation formula?

A. I guess I don't quite understand your question.

Q. What do you want the ordered to say if he writes you one approving the commingling in terms of the allocation process?

A. That the remaining reserves of the Pictured Cliffs and the initial rate would start at an initial rate of that that is shown there, 912 MCF. It will decline at approximately .33 percent per month until an abandonment, and then that will be the allocated Pictured Cliff production per month.

The total production minus that allocated production would equal the Fruitland Coal production per month.

This is exactly how we've done previous cases.

Q. So we're pegging the PC production because that's a known decline, if you will?

A. That's correct.

Q. We've got sufficient production data by which you can forecast future production?

A. That's correct.

Q. And you have an accurate and reliable way to allocate that production on a monthly basis?

A. That's correct.

Q. And anything above that goes to the coal gas?

A. That's correct.

Q. If you were an interest owner in either of those spacing units, would this formula be acceptable to you if you were to share in that production?

A. I would prefer a formula based on these types of principles.

Q. Okay. For purposes of the mechanics of it, if the Examiner were to take Exhibit Number 6 and append that to his approval, will that accomplish in your opinion the necessary authority by which you can implement the method?

A. Yes, I do.

Q. Okay. Let's look at the Exhibit Book 11,091. Again let's look behind Exhibit Tab Number 3 to the locator, and specifically as to the Cooper 5 describe for us why you and your team have selected this well as the PC candidate by which to add the Fruitland Coal gas.

A. This well previously has been an inactive Pictured Cliff producing well, initially completed in the early Fifties.

It was deemed temporarily abandoned by the operator of the pipeline that gathers the gas -- and that's Jim Molare [phonetic] -- because of low production volumes.

So what Meridian has completed is a study evaluating our best alternatives as to how to eliminate the temporary abandonment and what we've identified as

Fruitland Coal potential uphole and slight remaining Pictured Cliff reserves in the existing formation.

Q. Is this the best candidate for utilizing an existing PC well by which to add, then, the Fruitland Coal gas within this section?

A. Yes.

Q. Let's turn to the allocation formula behind Exhibit Tab Number 6. Have you applied the same method to the Cooper 5 as you did to the Harmon case?

A. Yes, I have.

Q. Okay. With what result in the calculation?

A. From the material balance remaining reserves, we identified -- and the initial rate -- that we would have a monthly decline of approximately .43 percent per month.

And that way, from that decline, you could allocate the Pictured Cliff production per month from that wellbore.

Q. All right, sir, let's turn to the last exhibit book. If you look at 11,092, turn to Tab 3, let's describe for the Examiner your conclusions about why you and the team have picked the Hudson "J" Number 2 well as the PC candidate by which to add the Fruitland Coal gas?

A. There again, this well we identified as an inactive wellbore.

We determined that it had been abandoned by the

gas gathering company as a marginal producer and essentially has not produced since that time that it was temporarily abandoned.

We suspicion that there is a casing failure in this wellbore so that will need to be repaired.

We at that point identified it as probably the most suitable candidate in the drill block that we've identified and propose it as a Fruitland Coal recompletion/Pictured Cliffs commingle.

Q. Again, why this wellbore, as opposed to some other PC wellbore in the section?

A. I believe -- This map confirms it, but the wellbores, the other alternatives that we might have, are either plugged and abandoned or are producing.

Q. And, finally, let's turn to the allocation formula for the Hudson "J" Number 2 well, located behind Exhibit Tab Number 6.

Again, the method is the same?

A. Yes.

Q. The number that changes is found lower towards the bottom portion of the allocation formula?

A. That's correct.

Q. And the result of the calculation shows what number goes into the specifics for this well?

A. That's correct.

Q. Same method, same conclusions about this well as you had for the other two?

A. That's correct.

Q. In your opinion, these are fair and appropriate allocations by which the interest owners entitled to share in production from either zone receive their fair and equitable share?

A. That's correct.

Q. In the absence of approval, in your opinion are there recoverable gas reserves from either or both zones that might not otherwise not be produced?

A. I would say that the most likely alternative here, given the casing failure potential, that the only real alternative we would have would be to plug and abandon these wells.

Q. And to do so would cause waste in that there would be additional gas reserves that you might otherwise recover?

A. That's correct.

MR. KELLAHIN: That concludes my examination of Mr. Daves.

We move the introduction of Exhibit 6 in each of the cases.

EXAMINER STOGNER: Exhibit 6 will be admitted into evidence at this time.

EXAMINATION

BY EXAMINER STOGNER:

Q. Mr. Daves, in each instance you've come up with a decline curve. Is this available on a chart basis or -- ?

A. Yes.

EXAMINER STOGNER: Mr. Kellahin, I think we ought to supplement Tab 6 with the actual curve.

MR. KELLAHIN: We'll be happy to do that. I apologize for not remembering to put it in here, but we'll get you curves on each of the wells.

EXAMINER STOGNER: And that way it's made part of the record.

With the way the last ones have somewhat been issued, we've gone back to the record in the case to substantiate anything, and I see more of that in the future with more and more like these.

So with that, I'd like to substantiate this page, at least with your decline curve.

And you might want to throw some figures in there too, if you have them. Anything to substantiate the figures that you have calculated out.

MR. KELLAHIN: All right, sir, we'd be happy to do that.

EXAMINER STOGNER: Okay. And that's all I have.

MR. KELLAHIN: All right, sir. Thank you.

EXAMINER STOGNER: Anything further on any of these three cases?

I'm going to hold the record open until I get that information, Mr. Kellahin.

MR. KELLAHIN: All right, sir.

* * *

CERTIFICATE OF REPORTER

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

I, Deborah O'Bine, Certified Court Reporter and Notary Public, HEREBY CERTIFY that the foregoing transcript of proceedings before the Oil Conservation Division was reported by me; that my notes were transcribed under my supervision; and that the foregoing is a true and accurate record of the proceedings.

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

Deborah O'Bine

DEBORAH O'BINE
CCR No. 63

I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case Nos. 11090, 91, 92 heard by me on 15 Sept. 1994.

, Examiner
Oil Conservation Division