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 MERIDIAN OIL, INC.

CASE NO. 11,047

ORIGINAL

REPORTER'S TRANSCRIPT OF PROCEEDINGS

EXAMINER HEARING

BEFORE: MICHAEL E. STOGNER, Hearing Examiner

August 4, 1994

Santa Fe, New Mexico

This matter came on for hearing before the Oil Conservation Division on Thursday, August 4, 1994, at Morgan Hall, State Land Office Building, 310 Old Santa Fe Trail, Santa Fe, New Mexico, before Steven T. Brenner, Certified Court Reporter No. 7 for the State of New Mexico.

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I N D E X

August 4, 1994
Examiner Hearing
CASE NO. 11,047

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E X H I B I T S

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A P P E A R A N C E S

FOR THE DIVISION:

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By: WILLIAM F. CARR

* * *

WHEREUPON, the following proceedings were had at 9:11 a.m.:

EXAMINER STOGNER: At this time we'll call Case Number 11,047.

MR. CARROLL: Application of Meridian Oil, Inc., for an unorthodox coal gas well location, San Juan County, New Mexico.

EXAMINER STOGNER: 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, and I have three witnesses to be sworn.

MR. CARR: May it please the Examiner, my name is William F. Carr with the Santa Fe law firm, Campbell, Carr, Berge and Sheridan. I would like to enter my appearance in this case for Amoco Production Company.

I do not intend to call a witness.

EXAMINER STOGNER: Any other appearances?

Will the three witnesses please stand to be sworn, everybody?

(Thereupon, the witnesses were sworn.)

EXAMINER STOGNER: Mr. Kellahin?

MR. KELLAHIN: Thank you, Mr. Examiner.

Mr. Examiner, my first witness is Mr. Dean Price. Mr. Price is a petroleum landman with Meridian. He resides

in Farmington, New Mexico.

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

A. My name is David Dean Price. I'm --

Q. Where are you employed, sir, and in what capacity?

A. I'm employed at Meridian Oil, and I'm a petroleum landman.

Q. All right, sir, and you reside in Farmington?

A. Yes, I do.

Q. On previous occasions have you qualified before the Division as a petroleum landman?

A. No.

Q. Summarize for us your employment experience as a petroleum landman.

A. I've been employed as a petroleum landman for various oil and gas firms since 1977.

Q. What do you currently do for Meridian?

A. I work in the land department as a senior landman.

Q. Meridian has recently reorganized its technical staff and its land department so that there is a team that's in charge of a particular area; is that not true, Mr. Price?

A. Yes, that's true.

Q. With regards to the subject matter of this case, the Jillson -- I'm sorry, the Johnson Pressure Observation Well, who are the members of your team?

A. I'm the newest member to the team. Presently, today it's Keith Swainson and Jay Close, and they'll be here presenting today.

Q. Mr. Close is a geologist, and he's worked with you on this project, and Mr. Swainson is the petroleum engineer?

A. Yes, sir.

Q. All right. We're asking the permission of the Division to drill a coal gas well at an unorthodox location?

A. Yes.

Q. And what is your understanding of the purpose for that well?

A. It's in order to conduct a study of the Fruitland Coal formation.

A. Part of this is a pressure interference study to be conducted among the coal gas wells in this area, with

the Johnson well being first used as a production well and then an observation well?

A. Yes, that's true.

Q. Do you have a -- Describe for us quickly how the exhibit book is organized.

A. It's organized by a number of exhibits, indicating the notices that we sent out under Exhibit 1.

Q. All right. Let's turn behind Exhibit 2. Exhibit 2 is simply a locator map?

A. Yes, the first page on Exhibit 2 is a locator map of the Fruitland Coal.

Q. Okay. And then behind that first page in Exhibit 2 is another locator map, if you will?

A. Yes, the second page behind Exhibit 2 is a land plat with all of the Fruitland Coal and Pictured Cliff wells in the four-section study area.

Q. All right. Within what we've described as a study area, this four-section --

A. Yes.

Q. -- have you as a landman or others under your direction and control determined the ownership of all the wells in that area?

A. Yes.

Q. Do you know or do you have available to you the interest owners that would participate in that production?

A. Yes.

MR. KELLAHIN: At this time, Mr. Examiner, we would tender Mr. Price as an expert petroleum landman.

EXAMINER STOGNER: Mr. Price is so qualified.

Q. (By Mr. Kellahin) Let's start first, Mr. Price, with the well location.

The Johnson "POW" Number 1 Well, in section 21, am I correct in remembering that footage location is 340 feet from the east line and 240 feet from the south line?

A. Yes.

Q. And then that would be an unorthodox well location for a coal gas well?

A. Yes it would.

Q. All right. Let's look at this map, and show us, first of all, how to find the approximate location of the coal gas wells within the project area.

A. On the second page, the coal gas wells are indicated on the map in dark green with a triangle overlaying them, and as so indicated there are eight on the map.

Q. All right, you're looking at the third page behind Exhibit Number 2?

A. Yes -- Well, yes, both the second and third page indicate the Fruitland Coal wells by the same symbol. On page 3 of the second exhibit, there are just the Fruitland

Coal wells identified on page 3.

Q. All right. Let's go back to that first display that we've been looking at. In addition to the coal gas wells, there are other gas-well symbols?

A. Yes.

Q. To what formation do those gas-well symbols apply?

A. This is indicated to the Pictured Cliffs and the Fruitland Coal well -- Fruitland Coal formation, excuse me.

Q. What is your understanding from the technical people as to what will happen with the existing Pictured Cliff wells and the Fruitland Coal gas wells during the project period?

A. We intend to shut in the Pictured Cliff wells in the four-section area and to shut in all of the Fruitland Coal formation wells, with the exception of the four closest wells to the proposed Johnson Number 1 well.

Q. All right. If that's the concept, then, how many of those wells does Meridian control by being the operator?

A. Meridian is the operator of 17 of the Pictured Cliff wells and all eight of the Fruitland Coal wells.

Q. Okay. Is there any other operator, then, for any of the PC wells?

A. Yes, Amoco is the operator of one of the Pictured Cliff wells.

Q. Show us where that well is located.

A. That well is located in the northwest quarter of Section 22.

Q. That's the Gordon A Number 1?

A. That's the Gordon A Number 1, yes.

Q. Okay. Have you been in contact with Amoco to discuss with them their consent and concurrence to have the well they operate, that PC well --

A. Yes.

Q. -- shut in, in coordination with the project test?

A. Yes.

Q. All right. Where do we stand on that issue?

A. We are continuing to seek their cooperation in having that well shut in during the test.

Q. To participate as a well in the test?

A. That's correct.

Q. All right. When we look at the land ownership, the oil and gas mineral ownership, I mean --

A. Yes.

Q. -- are we dealing with state, federal or fee?

A. We're dealing with 100-percent federal, federal interest.

Q. That's true for the entire four-section project area?

A. Yes.

Q. Within that project area, are you dealing with federal oil and gas leases that have the same base royalty rate?

A. Yes.

Q. If the offsetting coal gas wells are shut in for a period of time during the well test or the interference test --

A. Uh-huh.

Q. -- what is your plan as the landman to make sure that the correlative rights of those adjoining owners are not impaired?

A. Our plan is to have the proceeds of the sale from the Johnson well, we'll distribute one-eighth of the production, which is the royalty share, to the minerals land management.

Q. All right. What will happen with the remaining seven-eighths of production?

A. The remaining seven-eighths production will be distributed to the overriding royalty interest owners in the remaining eight producing units, Fruitland Coal units --

Q. The remaining seven?

A. Seven-eighths, yes.

Q. The Johnson pressure observation well is on its

own coal gas spacing unit?

A. Yes.

Q. And those interest owners will get an eighth?

A. Yes.

Q. The remaining seven coal gas spacing units, each will take an eighth?

A. Yes.

Q. And Meridian will waive any income for production from that well during the test period?

A. Yes.

Q. All right. In your opinion as a landman, is that fair and equitable to all the interest owners?

A. We believe so, yes.

Q. Have you caused notification of that plan to be sent to all the overriding royalty interest owners that might be affected in the project area?

A. Yes, we have.

Q. Okay. Let's turn to a list. Perhaps in your exhibit book, Mr. Price, you have the certificate of mailing?

A. Yes.

Q. Do you have a copy of that before you?

A. Right here.

Q. I believe it's in the back of the Examiner's hearing book.

Is that a certificate that you've attested to, Mr. Price?

A. Yes, it is.

Q. If you'll turn behind the cover sheet, identify for us what you intended to represent with the next three pages.

A. These were the interest owners listed who are owners who have any interest owners within the four-section area.

Q. All right. Apart from your discussions with Amoco, have you received any objections from any of the overriding royalty owners that are going to share in production from the Johnson well?

A. No, we have received no complaints.

Q. All right, sir. Turn now to the next exhibit, behind Exhibit Number 2. It's the last page under that tab. Are you with me?

A. Yes.

Q. Okay. What is the significance of this last page? It's got the shading in the east half of the section.

A. This plat, land plat, shows the spacing unit, proposed spacing unit, for the Johnson Number 1 Well in the east half of Section 21, and it also indicates the ownerships of the surrounding interest owners, working

interest owners, outside the proposed production unit.

Q. All right. When we look at the east half of 21, there is an existing coal gas well on that spacing unit in the southeast quarter?

A. Yes.

Q. Do you know as a landman what the engineers propose to do with regards to that well?

A. During the testing period, I understand that they will put pressure bombs in that well and the other surrounding wells to monitor the production from the Johnson well.

Q. So while there will be two coal gas wells in that 160, they're not going to be produced concurrently?

A. Yes, correct, there will be no production from the present well.

Q. Okay. Exhibit 1 is simply the Application and the attachments to the Application; is that not true, Mr. Price?

A. Yes.

Q. Behind Exhibit Tab 1 there's a green sheet. Do you find the green sheet?

A. Yes.

Q. And then behind the green sheet is a letter --

A. Yes.

Q. -- addressed to the Department of the Interior?

A. Yes.

Q. It's over your signature. Is that your letter?

A. Yes, sir.

Q. What was the purpose of the letter?

A. To make sure that we provided notice to the Bureau of Land Management.

We wanted to have a meeting with them prior to the hearing to discuss what we would be presenting here today, and so that they knew -- they were aware of our case.

Q. All right, sir, and did that meeting take place?

A. Yes, it did.

Q. And did you obtain subsequently the consent and the waiver of the appropriate officer of the BLM to the project?

A. Of notice, yes.

Q. Of the notice?

A. Yes, sir.

MR. KELLAHIN: All right, sir.

Mr. Examiner, that concludes my examination of Mr. Price.

We move the introduction of his Exhibits 1 and 2.

EXAMINER STOGNER: Are there any objections?

Exhibits 1 and 2 will be admitted into evidence.

Mr. Carr, do you have any questions?

CROSS-EXAMINATION

BY MR. CARR:

Q. Mr. Price, if I understand your testimony, you indicated that you're negotiating with them and hope for their cooperation for the test?

A. Yes, sir.

Q. That's a matter of private negotiation?

A. Yes.

Q. You're not asking this Division to order that Amoco or any other operator shut in a well?

A. That's correct.

MR. CARR: Thank you.

EXAMINATION

BY EXAMINER STOGNER:

Q. I'm going to refer to Exhibit Number 2, Mr. Price, and make sure I understand what is going on here.

The map -- I'm referring to page 2 of Exhibit 2 -- is the project area in which Amoco has proposed; is that correct?

A. Meridian.

Q. I'm sorry, Meridian?

A. Yes, sir, no problem.

Q. Excuse me. Amoco's name is all over the thing here. It's confusing.

And there are in existence, as you understand,

eight proration units for eight coal gas wells?

A. Yes, sir, within the four sections currently. They're not identified, the proration units are not identified, but the wells are identified on the map.

Q. But the proration units are a matter of the record and the files; is that correct?

A. Yes, sir.

Q. When I look down to the extreme southwest corner, the Number 2 Well, coal gas well, do you recognize that well symbol, or what is your understanding of that well?

A. In which section?

Q. In Section 28.

A. Section 28?

Q. Yes.

A. Southwest?

Q. In the southwest corner.

A. That appears to me to be a Fruitland Coal well that is also completed in the Pictured Cliffs.

EXAMINER STOGNER: Okay. Mr. Kellahin, I will ask your technical witnesses, is that a plugged and abandoned well, but we can get to that later.

MR. KELLAHIN: No, sir, very quickly, it was a PC well that's recompleted to the coal. It is now a coal well.

EXAMINER STOGNER: Okay, it looks like the stars

extend out of the green --

MR. KELLAHIN: And that's internal to Meridian so that they know that's what that well means.

EXAMINER STOGNER: Okay, because the Number 1 Well up in the northwest corner of Section 27 has that, and that's what threw me.

THE WITNESS: Producing Fruitland Coal.

Q. (By Examiner Stogner) Okay. So they're all producing, as you understand?

A. Yes.

Q. And it is my understanding that the production from this well, just from this well, will be divvied out, one-eighth through the existing eight proration unit; is that correct?

A. One-eighth production -- or one-eighth of the proceeds.

Q. One-eighth of the proceeds.

A. Which is equal to what the normal base royalty would be given to the minerals management.

And under -- so -- And the balance, the seven-eighths, will be distributed in their proportionate share to each of the proration units, Fruitland Coal proration units.

Q. Now, normally what would happen to that seven-eighths?

A. Normally, under that seven-eighths, it would only be distributed to -- the seven-eighths would be distributed within the producing unit.

So in other words, we're expanding outside the producing unit and distributing that seven-eights to all of the overriding royalty owners within the four-section block, because there are no other wells producing within the four-section block.

See, currently there are eight wells producing from the Fruitland Coal, and each one of the royalty owners, which is the minerals management under each one of these wells, is receiving their one-eighth, and then the seven-eights are being distributed to each of the overriding royalty owners, plus we're taking our share of the proceeds.

So in other words, it could be a benefit to the overriding royalties. Depending upon the amount of production that comes from the Johnson well, it could be significant to the overriding royalty owners.

Q. So the one-eighth that is distributed to, say, the proration unit that includes that Gordon well in Section 22 --

A. Yes.

Q. -- would then be distributed as if it was production coming off of that well?

A. Off of the Johnson.

Q. Yes, sir.

A. Yes. So in other words, everyone is receiving a share of the production from the well that is producing within the four sections. And this is only during the testing period.

Q. Well, that's mighty big of Meridian.

A. Well, I think the information is important.

Q. Okay. And so does the others, you hope, that participate?

A. Yes.

EXAMINER STOGNER: Just wanted to make sure I got it right here.

Okay, I don't have any other questions of this witness.

THE WITNESS: Thank you.

(Off the record)

MR. KELLAHIN: We'd like to call Mr. Close at this time, Mr. Examiner.

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. Mr. Close, for the record would you please state

your name and occupation, sir?

A. My name is Jay Close. I'm a petroleum geologist for Meridian Oil in Farmington, New Mexico.

Q. Mr. Close, on prior occasions have you testified in that capacity and qualified as an expert witness before the Division?

A. Yes, sir, I have.

Q. Describe for us in a summary fashion what your responsibility is as a geologist for this project.

A. I provide the geologic support for this project in the form of well-log interpretations, understanding the geologic properties of the various formations of interest, and something of the geometry of said rock units within the test area.

Q. Are you the geologist in Meridian that has been personally responsible for the geology for this particular Application?

A. Yes, sir.

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

EXAMINER STOGNER: Mr. Close is so qualified, if there are no objections.

MR. CARR: No.

EXAMINER STOGNER: Thank you, Mr. Carr.

Q. (By Mr. Kellahin) Mr. Close, let's find a

display that will help us illustrate what you're trying to do, and perhaps -- You choose, but find us a picture of the area that we can look at to describe the project.

A. I would refer you to the Fruitland Coal and Pictured Cliffs map that Mr. Price was discussing --

Q. All right, that is the one --

A. -- in previous testimony.

Q. Let's start -- Do you have the area locator map? Is that what you've got?

A. Yes, we can start with that.

Q. All right. Let's start there. Let's look behind Exhibit Tab Number 2, Mr. Close and let's start with the first display.

(Off the record)

EXAMINER STOGNER: I'm sorry, Mr. Kellahin, go ahead.

Q. (By Mr. Kellahin) The purpose of your Application, Mr. Close, is to obtain Division approval for an unorthodox coal gas well location?

A. Yes, sir.

Q. That's identified already as the Johnson "POW" Number 1?

A. Yes, sir.

Q. Let's look at the coal pressure gradient map, if you will, the first display behind Exhibit Tab Number 2,

and have you describe that for us.

A. The coal reservoir study location, you're looking at -- in Township 27 North, Range 10 West, we have delineated there in block form the four-section area that Mr. Price discussed with you earlier. We are in the so-called underpressured Fruitland Coal envelope, as versus the overpressured envelope.

Wells in the overpressured envelope, they originally had a pressure that was greater than .433 pounds per foot, and those wells outside of that envelope have a pressure that is significantly lower than that 0.433-p.s.i.-per-foot gradient.

Q. Why have you and Mr. Swainson chosen this particular four-section area for the project?

A. We feel this is a location that is set up such that we can get successful results to better understand reservoir dynamics in one area of the Fruitland Coal underpressured envelope.

Q. And as a practical matter, you had control of all the Fruitland Coal gas wells in this area?

A. Yes, sir.

Q. And it was common federal oil and gas leases?

A. Yes, sir.

Q. And it looked to be reasonably convenient to execute the plan?

A. Yes, sir.

Q. Let's look at the next display. What is the basis for locating the proposed Johnson Well at the close proximity to the southeast quarter -- corner of Section 21?

A. If you look at the four surrounding Fruitland Coal wells, the Johnson 2 in the southeast of 21, the Gordon 5 in the southwest of 22, the Rowley B 1 in the northwest of 27 and the McAdams 500 in the northeast of Section 28, you will notice the Johnson Number 1 "POW" well is located approximately equidistant between those wells. From the technical standpoint, that makes it a lot more easy for us to understand and interpret the reservoir data we plan to collect.

Q. You're going to run a pressure interference test, are you not?

A. Yes, sir.

Q. Describe for us in a general way what is the procedure for the test and the length of the test.

A. What we will do, we will drill and then run casing and perforate across the various coal intervals in the Johnson Number 1 "POW", have the offset Fruitland Coal wells that I've described to you -- they will be shut in. Pressure gauges will be located across each of the coal intervals, in this case informally termed the basal coal interval, and the upper coal interval.

We will then produce the Johnson Number 1 "POW" well and monitor pressures in both the basal and upper coal interval.

Q. What's the purpose of using the Johnson well initially as a producing well and the four closest coal gas wells as observation wells?

A. Again, from the technical perspective it's a lot easier for us to know that production is coming from only one location, and then at an equidistant point between the offset wells it's easier for us to interpret the pressure interference data that we've just described.

Q. Do you have an approximation at this point in time as to how long you would produce the Johnson Well before you flip it and it becomes the observation well?

A. Our guess is approximately six months pump.

Q. What's the purpose of shutting in the next pattern out of coal gas wells?

A. What we are trying to do is minimize or rid ourselves of any potential pressure transients to the interference test pattern location we have described.

Q. What's the basis for also shutting in the Pictured Cliff wells?

A. In this case, we are only producing from the Fruitland Coal -- In this case we are trying to minimize any potential vertical influence that there may be on the

test.

Q. If that occurrence exists in this area, then you could control the influence of any Pictured Cliff withdrawals that might influence your pressure study?

A. That is correct.

Q. Okay. Let's look at the geology now. If you'll turn to Exhibit Tab Number 4, let's look at the first display. Would you identify that display?

A. This is the structure map on the base of the basal Fruitland Coal interval in this portion of the San Juan Basin.

Q. How is that structure map useful to you?

A. This map is useful in that it shows us -- you can see the contour intervals there, in feet above sea level -- that there is very gentle structure dipping north and northeast into the San Juan Basin.

We do not see or detect, based upon this map, significant structure otherwise than very gentle dip into the San Juan Basin.

Q. All right, sir, let's turn that page and look at the next display behind Exhibit 4. Identify that.

A. This is the net thickness map for the Pictured Cliffs Sandstone interval. The contour interval here is 10 feet. And the same four-section area that you observed on the previous map is also delineated on this map.

Q. When you look at the Pictured Cliffs Sandstone interval, describe for me what that interval is.

A. It is the sandstone that is underlying the Fruitland Coal formation in this area of the San Juan Basin.

Q. All right, sir. How is this useful to you as a geologist with regards to this case?

A. We are trying to get an idea in three dimensions as to the geometry of the Fruitland Coal and Pictured Cliffs Sandstone in the reservoir test area.

Q. And what do you conclude?

A. We conclude that the thicknesses vary from 8 to approximately 44 feet of net sandstone thickness in this area.

Q. And to what use do you make that conclusion?

A. We have interpreted the thickness based upon log interpretations, and again we're trying to understand, in this case, for example, the depositional control that the coal has been exerted -- or rather the -- how the coal was laid down in response to the system, the Pictured Cliffs sandstone shoreline system.

Q. All right, sir. Let's turn to the next display, if you'll continue behind the same tab number and look at the next display. Identify that for me.

A. This is the net coal isolith map for the

Fruitland formation in the same study area, and you can see the four sections delineated as such in the previous maps.

Q. What does it mean when you identify this as the net coal isolith map?

A. We're getting an idea here as to the net thickness that has been penetrated by existing wellbores in this area, how much coal do we have as an aggregate thickness?

Q. Quantify for me "net". What does that mean?

A. "Net" meaning the potential for fluids to be emitted from those coals into a wellbore.

Q. Is there a cutoff value of some kind that causes you to create a net map that's different from, say, a gross map?

A. There are -- In this case, we believe that all the coals are productive, so a net and gross coal thickness map would be the same.

Q. All right. Again, tell us to what purpose you applied this as a geologist for this study.

A. Again, we're trying to get an idea as to the geometry of rocks in the study area, how thick are they as a function of areal map location?

Q. All right, sir. Turn now to the last display behind the exhibit tab and identify what we're looking at there.

A. You are looking at a rose diagram for the Meridian Oil Huerfanito Number 79 M, and these are oriented cores taken from that well.

It's located approximately eight miles east southeast of the proposed Johnson "POW" Number 1 Well, and you are looking at two main orientations of natural fractures in that particular oriented core interval.

The primary or the so-called face-cleat system is oriented approximately northeast, and the secondary or the butt-cleat system is oriented approximately perpendicular to that in a northwesterly fashion.

Q. How is a cleat orientation display for the Huerfanito well relevant to you in the Johnson well some eight miles away?

A. We believe that the natural fracture orientations in this area of the Basin are consistent, on a reasonable scale, and the interference test pattern, the Johnson Number 1 and the offset wells, are oriented along the natural fracture systems, the face- and the butt-cleat systems.

Q. Why do you want to know that for purposes of the study?

A. It's very important to us to know what the primary and secondary permeability orientations are in the subsurface prior to and during interpretation of the test

data.

Q. All right. Let's turn now to the log information. If you'll look behind Exhibit Tab Number 5, identify for us what we're looking at.

A. You are looking at the geophysical logs for the four Fruitland Coal wells in the proposed interference test pattern location.

Q. For what purpose do you use these logs in this case?

A. We are getting at here the depths and the thicknesses of the coal intervals that will be tested during the interference program.

Q. In each of these four wells, are we dealing with the same coal intervals?

A. To our knowledge, yes, you are.

Q. And do they appear to you as a geologist to be correlative from well to well?

A. Yes, sir.

Q. All right. Let's turn now to the information behind Exhibit Tab Number 6. Would you identify that first display?

A. We're looking at the Fruitland Coal reservoir study map in which we have given you an indication as to where two cross-sections are located through the proposed interference test location.

Q. What's the purpose of having you construct two cross-sections in this map?

A. We're trying to get an idea as to the third dimension, if you will, of the coal geometry as we know it in the subsurface.

Q. Having done that work and constructed those cross-sections, what did you conclude?

A. We conclude, I conclude, that the coals indeed are the same from interval to interval, and from well to well they are indeed continuous.

Q. Why do you want to know that?

A. We want to have positive response in the offset well locations, and we need physical continuity to be able to observe that pressure response in the offset wells.

Q. As a geologist, have you been able to formulate an opinion on whether or not geologically this project is feasible?

A. Yes, sir, I have.

Q. And what is your conclusion?

A. We believe that the project is indeed feasible.

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

We move the introduction of his exhibits. They are contained behind Exhibit Tabs 4, 5 and 6.

MR. CARR: No objection.

EXAMINER STOGNER: Exhibits 4, 5 and 6 will be admitted into evidence.

Thank you, Mr. Kellahin.

Mr. Carr, your witness.

MR. CARR: No questions, Mr. Stogner.

EXAMINATION

BY EXAMINER STOGNER:

Q. Mr. Close, how long have these wells been producing? They're -- I'm going to call the ones in the -- closest to ground zero, the four closest wells to your proposed pressure observation?

A. These wells have been producing -- the oldest one, I believe, was completed and the first delivery was in late 1989.

Q. And the others?

A. August of 1993 was when the McAdams 500 was logged, and so therefore the completion had to be after that date.

The Gordon 5, I believe, was completed in late 1990.

And the Johnson Number 2 the same, it was completed and first delivered in late 1990.

Q. Is it Meridian's intent, or you as a geologist, to essentially see if there's been any environmental change, environmental change to the geology after moving

this gas and essentially depleting -- how would you say? -- pressure off of the cleats and the coal? Is that part of this study you as a geologist --

A. Yes, we are very interested in the reservoir dynamics. How the gas is produced, is what we're after.

Q. And you propose on this "POW" well to do the same kind of -- What did you call this? A rose chart, Exhibit 4, on the Huerfano [*sic*] 79 M Well?

A. Yes, sir.

Q. Now, has this same cleat -- Whatever you do to map this, has it been run on any of the eight wells in the project area?

A. No, sir, it has not.

Q. What does this entail? What kind of a tool or a mechanism does this entail to get this rose chart?

A. What you have, you have a core barrel system, and right above the -- in this case, the core bit, you have the core barrel in this case was approximately 30 feet in length. Above that you will have, typically in this day and age, electronic equipment to measure the orientations of the core as it is being drilled.

And those data are stored during the coring process, downloaded, correlated to the actual rock material that is split out of the core barrel, to determine what their orientations are as a function of depth in this case.

Q. What is the proposed depth interval to be cored?

A. We will be coring the coal intervals we have denoted as the -- informally as the basal and upper Fruitland Coal intervals, such as is indicated on the cross-sections.

Q. How about the matrix in between?

A. We do not plan to core that material.

Q. So you will drill down to the various -- or in this case, the first coal, core, and then continue on down with conventional drilling?

A. Yes, sir, and then core the basal coal interval at that final drilling stage.

Q. I see, in most cases, five or four coal intervals, one very thin -- If you look at the first two logs, there's a very thin one down there in the basal. Is that one going to be cored also?

A. Yes, sir, we plan to do that.

Q. So you'll essentially have a complete map for each interval, or is this an ever-changing with depth, this rose-type configuration that you come up with?

A. We believe, based upon the geologic framework, that it will be very consistent as a function of depth through all intervals.

Q. Is this the first such project that Meridian has done in this area?

A. Yes, sir, it is.

Q. When I say "this area", the Basin Fruitland Coal Basin.

A. To my knowledge, yes, sir, it is.

EXAMINER STOGNER: I have no other questions of the geologist at this time, Mr. Kellahin.

MR. KELLAHIN: Thank you, Mr. Examiner.

KEITH SWAINSON,

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

DIRECT EXAMINATION

BY MR. KELLAHIN:

Q. For the record, sir, would you please state your name and occupation?

A. My name is Keith Andre Swainson. I'm a petroleum engineer for Meridian Oil.

Q. And where do you reside, sir?

A. Farmington, New Mexico.

Q. Mr. Swainson, have you testified as a petroleum engineer, reservoir engineer, before the Division on prior occasions?

A. I have not.

Q. Summarize for us your education.

A. I received a bachelor of science in mechanical engineering from Texas A&M University in 1991.

Since that time I've been performing various petroleum engineering duties for Meridian Oil in Farmington.

I'm also --

Q. As part -- Go ahead.

A. -- an associate member of the Society of Petroleum Engineers.

Q. Are you part of the area team with Mr. Close and Mr. Price within which the Johnson "POW" Number 1 Well is located?

A. Yes, I am.

Q. As part of your preparation for this project, did you review and study the technical information presented to the Division when they adopted the Coal Gas spacing rules for the Basin?

A. Yes, I have.

Q. As part of that process, did you look at the technical information presented at the last hearing in which those rules were made permanent?

A. Yes, I have. We've incorporated them into the study.

Q. In addition, have you made a detailed study of the individual wells within your project area?

A. That's going to be part of the study as well, but we have studied up front.

Q. Are you the engineering employee of Meridian that's directly responsible for the engineering aspects of this project?

A. Yes, I am.

MR. KELLAHIN: We tender Mr. Swainson as an expert reservoir engineer.

EXAMINER STOGNER: Any objections?

MR. CARR: No objection.

EXAMINER STOGNER: Mr. Swainson is so qualified.

Q. (By Mr. Kellahin) From an engineering perspective, summarize for us the project.

A. I'd like to refer you to the first page of Exhibit Number 2 and stress that in the underpressured envelope we do not have much reservoir characterization data, and we definitely do not have much of this interference testing.

Due to that, we've chosen this location out of the conveniences that have been expressed.

But the purpose of this is to gain an understanding of the underpressured Fruitland Coal, to gain some key reservoir parameters that can be used in reservoir simulation, and then refine our reserve totals of the Fruitland Coal in this area.

Q. Why are you unable to utilize conventional engineering information and calculations methodologies?

A. The Fruitland Coal doesn't react as a conventional reservoir, due to the diffusion process, and therefore conventional equations and reserve analyses just simply won't work.

The committee, the Fruitland Coal Committee, basically concluded that the only way to truly try to quantify those is to use reservoir simulation.

Q. Let's turn to the next display after the pressure gradient map. Simply because we've used it twice now, let's use that as the locator and have you describe for us the plan.

A. Okay. The plan is -- I'd like to possibly go over some of the reasons why we chose this specific site. You've heard several of them. I'd like to go over a few again, I'd reiterate them.

First, the location is in the underpressured envelope where we have very minimal data.

And second, this area, as Jay Close mentioned, we do have a substantial amount of production history of the Fruitland Coal in this area. All of the wells, all of the eight wells are producing, which helps out in the simulation, as well, being the operator, we have not only just the production data, but how the wells have been produced, which will help benefit while trying to simulate the reservoir. So with the base of production history that

will help in the history matching of the reservoir.

The second reason is, we do have four wells that are in extreme close proximity to each other, which will surround the Johnson "POW" Number 1. The benefit to that is simply the fact that they are so close, that minimizes the time for the test.

If you try doing it at any other spacing, not only will your numbers become a little more risky simply because of the error associated with the pressure drop that you're going to see is going to increase with the increase in distance from the "POW", but also the time span of the delaying production.

We're trying to minimize -- Basically, the situation dealing with the royalties, we're trying to minimize that time as well as take care of it.

Q. Why this location? Why the unorthodox location?

A. The unorthodox location, if we simply used existing wells and tried doing it, one, you wouldn't have an equidistance, which Jay Close mentioned.

But two, it, as I said, expands the time of the project, which economically would make it prohibitive.

Q. All right, sir. If you drill this well at the location you've proposed, what then will you do?

A. This is a two-stage portion. As we've stated, this is simply a project to gather some reservoir

characterization data.

The first step is, we are going to perform pressure transient tests on the four offset wells. As we do that, we'll gain seam coal, effective permeabilities and net thicknesses for the two wells, the Johnson Number 5 and the McAdams 500.

We'll determine estimated frac half length. We'll also try to determine an estimated near-wellbore formation damage.

As we put in the pressure equipment, we'll then be able to gain coal seam reservoir pressures, which is a key factor in the gas -- or, I guess, in the gas content of the coals.

We will then drill the "POW" well, and upon drilling it we will core it as Jay mentioned, and we will gain, which is under Exhibit 3 --

Q. Let's look at your checklist. Let's turn to Exhibit 3, and if you'll look at that summary table, let's see how you're going to obtain this type of information.

A. During the coring operations, this is basically a checklist of the type of information we're going to be able to obtain from the various tests of the core. These are key parameters. They're going to be necessary for any kind of a reservoir simulation, and -- That's under Exhibit 3. That is basically the checklist in which we are going to

gain this information from the coring.

Q. All right, sir. Then what happens?

A. After we've gained as many parameters as we can, there still will be several unknowns, and that's why choosing this location with a large number -- or a large amount of production history will benefit us.

We'll then input these parameters into a simulator and sensitize for the unknowns with existing production, as well as from the pressure response we view from the test.

After that point, we can then basically assume that our model is correct and model what the Fruitland Coal is doing out there.

At this time, we don't have the data to even really input into a reservoir simulator.

Q. At this point, what's your best guess of the test period?

A. As I stated earlier, simply because normal equations won't work, you can't really make an estimate unless you use a simulator, and we're lacking the information to use a simulator at this point. We'll be able to give that estimate right after the coring analysis is complete.

But as a ballpark guess, we're just simply saying about six months.

Q. You'll produce the new well for a period of time, shutting in the others, and using the immediate coal gas wells as observation wells for the pressure interference study?

A. Yes.

Q. Within the east half of Section 21, there is an existing coal gas well?

A. That is correct.

Q. How will you handle your relationship between that well and the new well?

A. The Johnson Number 2 will be shut in during the test and will simply be used as a pressure observation well during the test.

Once the test is completed, all of -- every well will be turned back to production, and the Johnson Number 1 will then be used as an ongoing pressure observation well in which simulations can further be done.

Q. Do you have an opinion, Mr. Swainson, whether approval of this Application will be in the best interests of conservation, the prevention of waste and the protection of correlative rights?

A. Yes, I do.

Q. And what is your opinion?

A. My opinion is that it is in the best interests of conservation --

Q. And will it provide a practical, feasible way for Meridian to obtain reservoir data that it is unable to obtain currently in any other manner?

A. Under the guidelines from the coal bed methane committee, this is the only way to obtain this type of information.

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

We move the introduction of his Exhibit Number 3.

MR. CARR: No objection, and no questions.

EXAMINER STOGNER: Exhibit Number 3 will be admitted into evidence at this time.

I have no questions of this witness.

Are there any questions of Mr. Swainson? If not, he may be excused.

Let's take a 15-minute recess.

(Off the record)

MR. KELLAHIN: Excuse me, Mr. Examiner. Mr. Spencer, do you have any comments?

MR. DWANE SPENCER: No.

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

EXAMINER STOGNER: We're in recess.

(Thereupon, a recess was taken at 10:05 a.m.)

(The following proceedings had at 10:37 a.m.)

EXAMINER STOGNER: Hearing will come to order,

back in Case 11,047.

Mr. Kellahin, do you have anything further in this particular case?

MR. KELLAHIN: No, sir. We request that you take this case under advisement.

EXAMINER STOGNER: Okay, nothing further needs to be added?

MR. KELLAHIN: In our opinion it does not, Mr. Examiner. Thank you very much.

EXAMINER STOGNER: Mr. Kellahin, if you'll provide me a rough draft order in this matter, I would appreciate it.

MR. KELLAHIN: It would be our pleasure.

EXAMINER STOGNER: With that, this case will be taken under advisement.

(Thereupon, these proceedings were concluded at 10:38 a.m.)

* * *

I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case No. 11047, heard by me on 14 August 1994.

Examiner
Oil Conservation Division

CERTIFICATE OF REPORTER

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

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

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

WITNESS MY HAND AND SEAL August 8, 1994.

STEVEN T. BRENNER
CCR No. 7

My commission expires: October 14, 1994

CASE 11038: **(Continued from July 21, 1994, Examiner Hearing.)**

Application of Meridian Oil Inc. for downhole commingling, Rio Arriba County, New Mexico. Applicant, in the above-styled cause, seeks exceptions from Division General Rule 303(C) to establish on an area-wide basis authorization for downhole commingling of Dakota, Mesaverde and Gallup gas production in the wellbores of existing or future wells drilled anywhere within Sections 26 through 30, 33, 34 and S/2 of 35 in Township 26 North, Range 6 West, said production being portions of the Basin-Dakota Pool, the Blanco Mesaverde Pool and Undesignated Gallup production. The center of said area is located approximately 4 miles southeast of El Paso Natural Gas Company Largo Station, New Mexico.

CASE 11039: **(Continued from July 21, 1994, Examiner Hearing.)**

Application of Meridian Oil Inc. for downhole commingling and an unorthodox coal gas well location, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks approval to downhole commingle Aztec-Pictured Cliffs Pool and Basin-Fruitland Coal Gas Pool production within the wellbore of its existing Fifield Well No. 2, located 1650 feet from the South line and 1090 feet from the East line (Unit I) Section 5, Township 29 North, Range 11 West. Said well is considered to be an "off-pattern" unorthodox coal gas well location and is to be dedicated to a 305.92-acre gas spacing unit for the Basin-Fruitland Coal Gas Pool comprising Lots 1 and 2, the S/2 NE/4 and SE/4 (E/2 equivalent) of said Section 5. Said well is located approximately 3.5 miles north northwest of Bloomfield, New Mexico.

CASE 11042: **(Continued from July 21, 1994, Examiner Hearing.)**

Application of Meridian Oil Inc. for salt water disposal, Rio Arriba County, New Mexico. Applicant, in the above-styled cause, seeks authority to drill its Jillison Federal SWD Well No. 1 in the SE/4 NW/4 (Unit F) of Section 8, Township 24 North, Range 3 West, for the purpose of disposing produced salt water into the Entrada formation through perforations from approximately 8441 feet to 8683 feet. Said location is approximately 6 miles west-northwest of Lindrith, New Mexico.

CASE 11048: **Application of Bass Enterprises Production Co. for compulsory pooling, Eddy County, New Mexico.** Applicant, in the above-styled cause, seeks an order pooling all mineral interests from the top of the Wolfcamp formation to the base of the Morrow formation underlying the S/2 of Section 30, Township 23 South, Range 30 East, forming a standard 320-acre gas spacing and proration unit for any and all formations and/or pools developed on 320-acre spacing within said vertical extent. Said unit is to be dedicated to a well to be drilled and completed at a standard gas well location thereon. Also to be considered will be the cost of drilling and completing said well and the allocation of the cost thereof as well as actual operating costs and charges for supervision, designation of applicant as the operator of the well and a charge for risk involved in drilling and completing said well. Said unit is located approximately 6.0 miles northwest of Poker Lake.

CASE 10996: **(Continued from July 7, 1994, Examiner Hearing.)**

Application of Anadarko Petroleum Corporation for compulsory pooling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Morrow formation underlying the W/2 of Section 22, Township 18 South, Range 32 East, forming a standard 320-acre gas spacing and proration unit. Said unit is to be dedicated to its existing Querecho Plains Unit Well No. 1 which was drilled at a standard gas well location 1980 feet from the South and West lines (Unit K) of said Section 22. Also to be considered will be the valuation of the existing wellbore and the cost of recompleting said well and the allocation of the cost thereof as well as actual operating costs and charges for supervision, designation of applicant as the operator of the well and a charge for risk involved in recompleting said well. Said unit is located approximately 8 miles south-southwest from Maljamar, New Mexico.

CASE 11002: **(Continued from July 7, 1994, Examiner Hearing.)**

Application of West Largo Corporation for compulsory pooling, Sandoval County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Rusty-Chacra Pool underlying the SW/4 of Section 4, Township 21 North, Range 6 West, forming a standard 160-acre gas spacing and proration unit for said pool. Said unit is to be dedicated to a well to be drilled at a standard gas well location thereon. Also to be considered will be the cost of drilling and completing said well and the allocation of the cost thereof as well as actual operating costs and charges for supervision, designation of applicant as the operator of the well and a charge for risk involved in drilling and completing said well. Said unit is located approximately 9 miles south of Counselor, New Mexico.

DOCKET: EXAMINER HEARING - THURSDAY - AUGUST 4, 1994
8:15 A.M. - MORGAN HALL, STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO

Dockets Nos. 24-94 and 25-94 are tentatively set for August 18, 1994 and September 1, 1994. Applications for hearing must be filed at least 23 days in advance of hearing date. The following cases will be heard by an Examiner:

CASE 9253: (Reopened)

In the matter of Case No. 9253 being reopened pursuant to the provisions of Division Order No. R-8546, which order created the Santo Nino-Bone Spring Pool in Eddy County, New Mexico, and promulgated Temporary Special Rules and Regulations, including a provision for 80-acre spacing and proration units and designated well locations. All operators in said pool may appear and show cause why the Santo Nino-Bone Spring Pool should not be developed on 40-acre spacing units.

CASE 10976: (Continued from July 7, 1994, Examiner Hearing.)

Application of Harvey E. Yates Company for compulsory pooling, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests from the surface to the base of the Morrow formation underlying the E/2 of Section 32, Township 17 South, Range 31 East, forming a standard 320-acre gas spacing and proration unit for any and all formations and/or pools developed on 320-acre spacing within said vertical extent. Said unit is to be dedicated to a well to be drilled at a standard gas well location thereon. Also to be considered will be the cost of drilling and completing said well and the allocation of the cost thereof as well as actual operating costs and charges for supervision, designation of applicant as the operator of the well and a charge for risk involved in drilling and completing said well. Said unit is located approximately 1.5 miles southwest of the junction of U.S. Highway 82 and State Road 529.

CASE 11013: (Continued from July 7, 1994, Examiner Hearing)

Application of Baber Well Servicing Company for an unorthodox oil well location, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for its NM "BZ" State NCT-5 Well No. 5 drilled at an unorthodox oil well location 40 feet from the North line and 750 feet from the West line (Unit D) of Section 29, Township 21 South, Range 35 East, as an infill well on an existing 40-acre standard oil proration unit in the North San Simon-Yates Associated Pool, which is currently dedicated to the Pronghorn Management Corporation NM "BZ" State NCT-5 Well No. 1 located at a standard oil well location 660 feet from the North and West lines of said Section 29. Said unit is located approximately 8.5 miles west-southwest of Oil Center, New Mexico. FURTHER, a single operator for the subject 40-acre unit shall be designated by the applicant at the time of the hearing.

CASE 11046: Application of Primero Operating, Inc. for an unorthodox oil well location, Chaves County, New Mexico. Applicant, in the above-styled cause, seeks approval of an unorthodox oil well location for its Hi-Way State Well No. 1 which is currently being drilled at an unorthodox oil well location 2417 feet from the South line and 2245 feet from the East line (Unit J) of Section 36, Township 10 South, Range 27 East, to test the Devonian formation. The NW/4 SE/4 of said Section 36 is to be dedicated to said well forming a standard 40-acre oil spacing and proration unit. Said unit is located approximately 11 miles northeast of Bottomless Lake State Park, New Mexico.

CASE 11003: (Continued from July 21, 1994, Examiner Hearing.)

Application of Hal J. Rasmussen Operating, Inc. for a pressure maintenance project, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to institute a pressure maintenance project on its Farnsworth A Lease in Section 13, Township 26 South, Range 36 East, by the injection of water into the Seven Rivers formation, Scarborough Yates-Seven Rivers Pool, through its Farnsworth A Wells No. 1 and 2 located in Units A and P, respectively, of said Section 13. Said project is located approximately 4 miles south-southwest of Jal, New Mexico.

CASE 11047: Application of Meridian Oil Inc. for an unorthodox coal gas well location, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks approval to drill its Johnson "POW" Well No. 1 at an unorthodox coal gas well location 240 feet from the South line and 340 feet from the East line (Unit P) of Section 21, Township 27 North, Range 10 West, NMPM, in the Basin-Fruitland Coal Gas Pool. The E/2 of Section 21 is to be simultaneously dedicated to the above-described well and to the existing Johnson Well No. 2 located 1625 feet from the South line and 1090 feet from the East line (Unit I), for the purpose of conducting a reservoir study within the Basin-Fruitland Coal Gas Pool. Said well is located approximately 11 miles southeast of Bloomfield, New Mexico.

CASE 11049: **Application of Matador Petroleum Corporation for compulsory pooling, Chaves County, New Mexico.** Applicant, in the above-styled cause, seeks an order pooling all mineral interests from the top of the Wolfcamp formation to the base of the Morrow formation underlying the W/2 of Section 29, Township 15 South, Range 30 East, forming a standard 320-acre gas spacing and proration unit for any and all formations and/or pools developed on 320-acre spacing within said vertical extent, which presently includes but is not necessarily limited to the Little Lucky Lake-Morrow Gas Pool. Said unit is to be dedicated to the existing Paloma Resources, Inc.'s Peery Federal Well No. 3 located at an unorthodox gas well location 1820 feet from the South line and 2140 feet from the West line (Unit K) of said Section 29. Also to be considered will be the costs of participation in said well and the allocation of the costs and income thereof as well as actual operating costs and charges for supervision and designation of applicant as the operator of the well. Said unit is located approximately 11.5 miles north by east of Loco Hills, New Mexico.

CASE 11050: **Application of EnRe Corporation for a high angle/horizontal directional drilling project, a non-standard oil proration unit, unorthodox well location, a special project allowable, and special operating rules therefor, Rio Arriba County, New Mexico.** Applicant, in the above-styled cause, seeks authority to institute a high angle/horizontal directional drilling project in the Mancos formation, Boulder-Mancos Oil Pool underlying the W/2 and the W/2 E/2 of Section 22, Township 28 North, Range 1 West, NMPM, thereby forming a 480-acre non-standard oil proration unit. The applicant proposes to commence drilling its Cedar Canyon "22G" Well No. 1 from an unorthodox surface location 1650 feet from the North line and 2020 feet from the East line (Unit G) of Section 22, kick off from the vertical in a southwesterly direction building angle so as to penetrate the Mancos formation at a true vertical depth of approximately 6722 feet and continue drilling laterally a distance of approximately 2400 feet. Applicant further seeks the adoption of special operating provisions and rules within the project area including the designation of a prescribed area limiting the horizontal extent of said wellbore such that it cannot be located closer than 330 feet from the outer boundary of the project area, and for a special project allowable equal to the standard oil allowable times the number of 80-acre proration units traversed by the wellbore. Said project area is located approximately 3 miles west of Burford Lake.

CASE 10991: **(Continued from July 7, 1994, Examiner Hearing.)**

Application of Yates Petroleum Corporation for compulsory pooling, Chaves County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests from the surface to the base of the Abo formation, underlying the SE/4 of Section 20, Township 6 South, Range 26 East, forming a standard 160-acre gas spacing and proration unit for any and all formations and/or pools developed on 160-acre spacing within said vertical extent, which presently includes but is not necessarily limited to the Pecos Slope Abo Gas Pool. Said unit is to be dedicated to a well to be drilled at a standard gas well location thereon. Also to be considered will be the cost of drilling and completing said well and the allocation of the cost thereof as well as actual operating costs and charges for supervision, designation of applicant as the operator of the well and a charge for risk involved in drilling and completing said well. Said unit is located approximately 15 miles west-northwest of Elkins, New Mexico.

CASE 10444: **(Continued from July 7, 1994, Examiner Hearing.)**

In the matter of Case No. 10444 being reopened pursuant to the provisions of Order No. R-9696 which order promulgated special rules and regulations for the Hobbs-Lower Blinebry Pool including a provision for 80-acre spacing units. Operators in the subject pool should be prepared to appear and show cause why the temporary special pool rules for the Hobbs-Lower Blinebry Pool should not be rescinded and said pool not be developed on 40-acre spacing units and why both the upper and lower Blinebry pools formed by this order should not be rejoined and redesignated the Hobbs-Blinebry Pool.

CASE 11051: **Application of Amoco Production Company for a high angle/horizontal directional drilling pilot project and special operating rules therefor, San Juan County, New Mexico.** Applicant, in the above-styled cause, seeks authority to institute a high angle/horizontal directional drilling pilot project in the Blanco-Mesaverde Gas Pool on an existing 320-acre gas spacing and proration unit comprising the E/2 of Section 26, Township 30 North, Range 8 West, NMPM, which is currently dedicated to its Gartner "A" Well Nos. 8 and 8A located respectively in Units A and P. The applicant proposes to re-enter its Gartner "A" Well No. 8, located at a standard gas well location 990 feet from the North and East lines of Section 26, kick off from the vertical, build a medium radius curve, and drill laterally an undetermined distance. The applicant further proposes to keep the horizontal displacement of said well's producing interval within the allowed 790 foot setback requirement from the outer boundary of the spacing unit. Said project area is located approximately 2 miles southwest of Navajo Dam.

CASE 11052: **Application of Amoco Production Company for a high angle/horizontal directional drilling pilot project and special operating rules therefor, San Juan County, New Mexico.** Applicant, in the above-styled cause, seeks authority to institute a high angle/horizontal directional drilling pilot project in the Blanco-Mesaverde Gas Pool on an existing 320-acre gas spacing and proration unit comprising the S/2 of Section 9, Township 30 North, Range 8 West, NMPM, which is currently dedicated to its Moore Well Nos. 5 and 5A located respectively in Units N and O. The applicant proposes to re-enter its Moore Well No. 5, located at a standard gas well location 990 feet from the South line and 1805 feet from the West line of Section 9, kick off from the vertical, build a medium radius curve, and drill laterally an undetermined distance. The applicant further proposes to keep the horizontal displacement of said well's producing interval within the allowed 790 foot setback requirement from the outer boundary of the spacing unit. Said project area is located approximately 3 miles northwest of Navajo Dam.

CASE 11053: **Application of Amoco Production Company for a high angle/horizontal directional drilling pilot project and special operating rules therefor, San Juan County, New Mexico.** Applicant, in the above-styled cause, seeks authority to institute a high angle/horizontal directional drilling pilot project in the Blanco-Mesaverde Gas Pool on an existing 320-acre gas spacing and proration unit comprising the E/2 of Section 29, Township 31 North, Range 8 West, NMPM, which is currently dedicated to its Kernaghan "B" Well Nos. 3 and 3A located respectively in Units B and O. The applicant proposes to re-enter its Kernaghan "B" Well No. 3A, located at a standard gas well location 980 feet from the South line and 1480 feet from the East line of Section 29, kick off from the vertical, build a medium radius curve, and drill laterally an undetermined distance. The applicant further proposes to keep the horizontal displacement of said well's producing interval within the allowed 790 foot setback requirement from the outer boundary of the spacing unit. Said project area is located approximately 6 miles northwest of Navajo Dam.

CASE 11054: **Application of Amoco Production Company for a high angle/horizontal directional drilling pilot project and special operating rules therefor, San Juan County, New Mexico.** Applicant, in the above-styled cause, seeks authority to institute a high angle/horizontal directional drilling pilot project in the Blanco-Mesaverde Gas Pool on an existing 320-acre gas spacing and proration unit comprising the E/2 of Section 6, Township 30 North, Range 8 West, NMPM, which is currently dedicated to its Florence "H" Well Nos. 37 and 37A located respectively in Units H and J. The applicant proposes to drill vertically its Florence "H" Well No. 37R as a replacement well for the Florence "H" Well No. 37 at a yet to be determined location in the SE/4 of Section 6 no closer than 790 feet from the outer boundary of the project area, kick off from the vertical, build a medium radius curve, and drill laterally an undetermined distance. The applicant further proposes to keep the horizontal displacement of said well's producing interval within the allowed 790 foot setback requirement from the outer boundary of the spacing unit. Said project area is located approximately 5 miles northwest of Navajo Dam.

CASE 11055: **Application of Amoco Production Company for a high angle/horizontal directional drilling pilot project and special operating rules therefor, San Juan County, New Mexico.** Applicant, in the above-styled cause, seeks authority to institute a high angle/horizontal directional drilling pilot project in the Blanco-Mesaverde Gas Pool on an existing 320-acre gas spacing and proration unit comprising the W/2 of Section 34, Township 30 North, Range 8 West, NMPM, which is currently dedicated to its Thompson "LS" Well Nos. 2 and 2A located respectively in Units M and D. The applicant proposes to drill vertically its Thompson "LS" Well No. 2R as a replacement well for the Thompson "LS" Well No. 2 at a yet to be determined location in the SW/4 of Section 34 no closer than 790 feet from the outer boundary of the project area, kick off from the vertical, build a medium radius curve, and drill laterally an undetermined distance. The applicant further proposes to keep the horizontal displacement of said well's producing interval within the allowed 790 foot setback requirement from the outer boundary of the spacing unit. Said project area is located approximately 4 miles southwest of Navajo Dam.

CASE 11056: **Application of Amoco Production Company for a high angle/horizontal directional drilling pilot project and special operating rules therefor, San Juan County, New Mexico.** Applicant, in the above-styled cause, seeks authority to institute a high angle/horizontal directional drilling pilot project in the Blanco-Mesaverde Gas Pool on an existing 320-acre gas spacing and proration unit comprising the E/2 of Section 19, Township 30 North, Range 8 West, NMPM, which is currently dedicated to its Lindsey A "LS" Well No. 1 located in Unit H. The applicant proposes to drill vertically its Lindsey A " "LS" Well No. 1A from a standard surface location 790 feet from the South line and 1000 feet from the East line (Unit P) of Section 19, kick off from the vertical, build a medium radius curve, and drill laterally an undetermined distance. The applicant further proposes to keep the horizontal displacement of said well's producing interval within the allowed 790 foot setback requirement from the outer boundary of the spacing unit. Said project area is located approximately 4 miles southwest of Navajo Dam.

CASE 11057: **Application of Mallon Oil Company for compulsory pooling, Lea County, New Mexico.** Applicant, in the above-styled cause, seeks an order pooling all mineral interests from the surface to the base of the Delaware formation underlying the SW/4 NW/4 of Section 27, Township 19 South, Range 34 East, forming a standard 40-acre oil spacing and proration unit for any and all formations and/or pools developed on 40-acre spacing within said vertical extent. Said unit is to be dedicated to its Mallon "27" Federal Well No. 3 to be drilled and completed at a standard oil well location thereon. Also to be considered will be the cost of drilling and completing said well and the allocation of the cost thereof as well as actual operating costs and charges for supervision, designation of applicant as the operator of the well and a charge for risk involved in drilling and completing said well. Said unit is located approximately 8 miles east of Laguna Tonto, New Mexico.

CASE 11058: **Application of Mallon Oil Company for compulsory pooling, Lea County, New Mexico.** Applicant, in the above-styled cause, seeks an order pooling all mineral interests from the surface to the base of the Delaware formation underlying the SE/4 SW/4 of Section 27, Township 19 South, Range 34 East, forming a standard 40-acre oil spacing and proration unit for any and all formations and/or pools developed on 40-acre spacing within said vertical extent. Said unit is to be dedicated to its Mallon "27" Federal Well No. 1 to be drilled and completed at a standard oil well location thereon. Also to be considered will be the cost of drilling and completing said well and the allocation of the cost thereof as well as actual operating costs and charges for supervision, designation of applicant as the operator of the well and a charge for risk involved in drilling and completing said well. Said unit is located approximately 8 miles east of Laguna Tonto, New Mexico.

CASE 11059: **Application of Mallon Oil Company for compulsory pooling, Lea County, New Mexico.** Applicant, in the above-styled cause, seeks an order pooling all mineral interests from the surface to the base of the Delaware formation underlying the SE/4 SE/4 of Section 27, Township 19 South, Range 34 East, forming a standard 40-acre oil spacing and proration unit for any and all formations and/or pools developed on 40-acre spacing within said vertical extent, which presently includes but is not necessarily limited to the Undesignated Northeast Lea-Delaware Pool. Said unit is to be dedicated to its Mallon "27" Federal Well No. 2 to be drilled and completed at a standard oil well location thereon. Also to be considered will be the cost of drilling and completing said well and the allocation of the cost thereof as well as actual operating costs and charges for supervision, designation of applicant as the operator of the well and a charge for risk involved in drilling and completing said well. Said unit is located approximately 8 miles east of Laguna Tonto, New Mexico.

CASE 11060: **Application of Mallon Oil Company for compulsory pooling, Lea County, New Mexico.** Applicant, in the above-styled cause, seeks an order pooling all mineral interests from the surface to the base of the Delaware formation underlying the SW/4 NW/4 of Section 34, Township 19 South, Range 34 East, forming a standard 40-acre oil spacing and proration unit for any and all formations and/or pools developed on 40-acre spacing within said vertical extent. Said unit is to be dedicated to its Mallon "34" Federal Well No. 5 to be drilled and completed at a standard oil well location thereon. Also to be considered will be the cost of drilling and completing said well and the allocation of the cost thereof as well as actual operating costs and charges for supervision, designation of applicant as the operator of the well and a charge for risk involved in drilling and completing said well. Said unit is located approximately 8 miles east of Laguna Tonto, New Mexico.

CASE 11061: **Application of Mallon Oil Company for compulsory pooling, Lea County, New Mexico.** Applicant, in the above-styled cause, seeks an order pooling all mineral interests from the surface to the base of the Delaware formation underlying the NE/4 NE/4 of Section 34, Township 19 South, Range 34 East, forming a standard 40-acre oil spacing and proration unit for any and all formations and/or pools developed on 40-acre spacing within said vertical extent, which presently includes but is not necessarily limited to the Undesignated Northeast Lea-Delaware Pool. Said unit is to be dedicated to its Mallon "34" Federal Well No. 2 to be drilled and completed at a standard oil well location thereon. Also to be considered will be the cost of drilling and completing said well and the allocation of the cost thereof as well as actual operating costs and charges for supervision, designation of applicant as the operator of the well and a charge for risk involved in drilling and completing said well. Said unit is located approximately 8 miles east of Laguna Tonto, New Mexico.

CASE 11062: **Application of Mallon Oil Company for compulsory pooling, Lea County, New Mexico.** Applicant, in the above-styled cause, seeks an order pooling all mineral interests from the surface to the base of the Delaware formation underlying the NE/4 SE/4 of Section 34, Township 19 South, Range 34 East, forming a standard 40-acre oil spacing and proration unit for any and all formations and/or pools developed on 40-acre spacing within said vertical extent, which presently includes but is not necessarily limited to the Undesignated Northeast Lea-Delaware Pool. Said unit is to be dedicated to its Mallon "34" Federal Well No. 3 to be drilled and completed at a standard oil well location thereon. Also to be considered will be the cost of drilling and completing said well and the allocation of the cost thereof as well as actual operating costs and charges for supervision, designation of applicant as the operator of the well and a charge for risk involved in drilling and completing said well. Said unit is located approximately 8 miles east of Laguna Tonto, New Mexico.

CASE 11063: **Application of Mallon Oil Company for compulsory pooling, Lea County, New Mexico.** Applicant, in the above-styled cause, seeks an order pooling all mineral interests from the surface to the base of the Delaware formation underlying the NW/4 NW/4 of Section 34, Township 19 South, Range 34 East, forming a standard 40-acre oil spacing and proration unit for any and all formations and/or pools developed on 40-acre spacing within said vertical extent. Said unit is to be dedicated to its Mallon "34" Federal Well No. 1 to be drilled and completed at a standard oil well location thereon. Also to be considered will be the cost of drilling and completing said well and the allocation of the cost thereof as well as actual operating costs and charges for supervision, designation of applicant as the operator of the well and a charge for risk involved in drilling and completing said well. Said unit is located approximately 8 miles east of Laguna Tonto, New Mexico.

CASE 11064: **Application of Mallon Oil Company for compulsory pooling, Lea County, New Mexico.** Applicant, in the above-styled cause, seeks an order pooling all mineral interests from the surface to the base of the Delaware formation underlying the SE/4 NW/4 of Section 34, Township 19 South, Range 34 East, forming a standard 40-acre oil spacing and proration unit for any and all formations and/or pools developed on 40-acre spacing within said vertical extent, which presently includes but is not necessarily limited to the Undesignated Northeast Lea-Delaware Pool. Said unit is to be dedicated to its Mallon "34" Federal Well No. 4 to be drilled and completed at a standard oil well location thereon. Also to be considered will be the cost of drilling and completing said well and the allocation of the cost thereof as well as actual operating costs and charges for supervision, designation of applicant as the operator of the well and a charge for risk involved in drilling and completing said well. Said unit is located approximately 8 miles east of Laguna Tonto, New Mexico.

CASE 11065: **Application of Mallon Oil Company for compulsory pooling, Lea County, New Mexico.** Applicant, in the above-styled cause, seeks an order pooling all mineral interests from the surface to the base of the Delaware formation underlying the NE/4 NW/4 of Section 34, Township 19 South, Range 34 East, forming a standard 40-acre oil spacing and proration unit for any and all formations and/or pools developed on 40-acre spacing within said vertical extent. Said unit is to be dedicated to its Mallon "34" Federal Well No. 6 to be drilled and completed at a standard oil well location thereon. Also to be considered will be the cost of drilling and completing said well and the allocation of the cost thereof as well as actual operating costs and charges for supervision, designation of applicant as the operator of the well and a charge for risk involved in drilling and completing said well. Said unit is located approximately 8 miles east of Laguna Tonto, New Mexico.

CASE 11021: **(Continued from July 21, 1994, Examiner Hearing.)**

Application of Mewbourne Oil Company for compulsory pooling, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests from the surface to the base of the Morrow formation underlying the E/2 of Section 22, Township 20 South, Range 25 East, forming a standard 320-acre gas spacing and proration unit for any and all formations and/or pools developed on 320-acre spacing within said vertical extent, which presently includes but is not necessarily limited to the Undesignated Cemetery-Morrow Gas Pool or the Undesignated West Bubbling Springs-Morrow Gas Pool. Said unit is to be dedicated to a well to be drilled at a standard gas well location thereon. Also to be considered will be the cost of drilling and completing said well and the allocation of the cost thereof as well as actual operating costs and charges for supervision, designation of applicant as the operator of the well and a charge for risk involved in drilling and completing said well. Said unit is located approximately 5 miles south of Lakewood, New Mexico.

CASE 11037: **(Continued from July 21, 1994, Examiner Hearing.)**

Application of Yates Energy Corporation for an unorthodox gas well location and non-standard gas proration unit, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks authorization to drill a well at an unorthodox gas well location 1680 feet from the South line and 330 feet from the West line (Lot 5-Unit L) of Irregular Section 12, Township 22 South, Range 25 East, to test the Undesignated Revelation Morrow Gas Pool. Lots 4, 5, 6 and 7 and the SE/4 (S/2 equivalent) of said Section 12 is to be dedicated to said well to form a non-standard 332.74-acre gas spacing and proration unit. Said unit is located approximately 7 miles west of Carlsbad, New Mexico.

CASE 11043: **(Continued from July 21, 1994, Examiner Hearing.)**

Application of J. K. Edwards Associates, Inc. for salt water disposal, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks authority to utilize its Bengal "A" Well No. 1, located 1980 feet from the South and West lines (Unit K) of Section 1, Township 26 North, Range 12 West, to dispose of produced salt water into the Gallegos-Gallup Associated Pool through the perforated interval from approximately 4993 feet to 5174 feet. Said well is located approximately 16.5 miles southeast by east of Farmington, New Mexico.

DOCKET: COMMISSION HEARING - THURSDAY - AUGUST 11, 1994
9:00 A.M. - MORGAN HALL, STATE LAND OFFICE BUILDING, SANTA FE, NEW MEXICO
The Land Commissioner's designee for this hearing will be Jami Bailey

CASE 10955: (De Novo)

Application of Consolidated Oil & Gas Inc. to amend Division Order No. R-9033, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks to amend Division Order No. R-9033 which designated Richmond Petroleum Inc. as operator and compulsory pooled Lots 1 and 2, the S/2 NE/4 and the SE/4 (E/2 equivalent) of Section 9, Township 32 North, Range 6 West, for the drilling of the Federal 32-6-9 Well No. 1 at an unorthodox coal gas well location (see also Division Administrative Order NSL-2720) 510 feet from the North line and 210 feet from the East line (Unit A) of said Section 9 in the Basin-Fruitland Coal Gas Pool and forming a 279.40-acre gas spacing and proration unit. These amendments are to include the substitution of the applicant as operator, to provide a supplemental election to participate, to add additional parties, to revise the various reporting dates in this order and to otherwise reissue and renew the subject order including the recovery of both actual and future costs of drilling and completing the said well including a charge for the risk involved. Said unit is bounded to the north by the State of Colorado at Mile Post No. 243. Upon application of Edmund T. Anderson, IV, this case will be heard De Novo pursuant to the provisions of Rule 1220.

CASE 10956: (De Novo)

Application of Consolidated Oil & Gas Inc. to amend Division Order No. R-9178, San Juan and Rio Arriba Counties, New Mexico. Applicant, in the above-styled cause, seeks to amend Division Order No. R-9178 which designated Richmond Petroleum Inc. as operator and compulsory pooled Lots 1 through 4 and the S/2 N/2 (N/2 equivalent) of irregular Section 11, Township 32 North, Range 6 West, for the drilling of the Miller "11" Well No. 1 at an unorthodox coal gas well location 1132 feet from the North line and 760 feet from the West line (Unit E) of said Section 11, in the Basin-Fruitland Coal Gas Pool and forming a 232.80-acre non-standard gas spacing and proration unit. These amendments are to include the substitution of the applicant as operator, to provide a supplemental election to participate, to add additional parties, to revise the various reporting dates in this order and to otherwise reissue and renew the subject order including the recovery of both actual and future costs of drilling and completing the said well including a charge for the risk involved. Said unit is bounded to the North by the State of Colorado for one-half mile of either side of Astronomical Monument No. 8 located on the New Mexico/Colorado stateline. Upon application of James J. Rubow, this case will be heard De Novo pursuant to the provisions of Rule 1220.

CASE 10957: (De Novo)

Application of Consolidated Oil & Gas Inc. to amend Division Order No. R-9179, San Juan and Rio Arriba Counties, New Mexico. Applicant, in the above-styled cause, seeks to amend Division Order No. R-9179 which designated Richmond Petroleum Inc. as operator and compulsory pooled the S/2 of Section 11, Township 32 North, Range 6 West, for the drilling of the Carnes "11" Well No. 1 at an unorthodox coal gas well location 1800 feet from the South line and 230 feet from the West line (Unit L) of said Section 11 in the Basin-Fruitland Coal Gas Pool and forming a standard 320-acre gas spacing and proration unit. These amendments are to include the substitution of the applicant as operator, to provide a supplemental election to participate, to add additional parties, to revise the various reporting dates in this order and to otherwise reissue and renew the subject order including the recovery of both actual and future costs of drilling and completing the said well including a charge for the risk involved. Said unit is located approximately 1/2 mile south of Astronomical Monument No. 8 located on the Colorado/New Mexico stateline. Upon application of James J. Rubow and Edmund T. Anderson, IV, this case will be heard De Novo pursuant to the provisions of Rule 1220.

CASE 10960: (De Novo)

Application of Mewbourne Oil Company for approval of a waterflood project and qualification for the recovered oil tax rate, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval to institute a waterflood project in its proposed Querecho Plains-Queen Associated Sand Unit Area (being the subject of Case No. 10959) located in portions of Sections 21 through 23 and Sections 26 through 28, Township 18 South, Range 32 East, by the injection of water into the Querecho Plains-Queen Associated Pool through 10 injection wells located within the unit area. Applicant further seeks authority to inject into said pool at a surface injection pressure in excess of the Division established standard of 0.2 psi per foot of depth. Applicant further seeks to qualify this project as an "Enhanced Oil Recovery Project" pursuant to the "Enhanced Oil Recovery Act" (Laws of 1992, Chapter 38, Sections 1 through 5). This project is located approximately 8 miles south of Maljamar, New Mexico. Upon the application of Mewbourne Oil Company, this case will be heard De Novo pursuant to the provisions of Rule 1220.