STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO

12 October 1988

EXAMINER HEARING

IN THE MATTER OF:

Application of Meridian Oil, Inc. for a horizontal directional drilling pilot project and special operating rules therefor, Rio Arriba County, New Mexico, and — CASE 9498

Application of Meridian Oil, Inc. for a horizontal directional drilling pilot project and special operating rules therefor, San Juan County, New Mexico. — 9499

BEFORE: David R. Catanach, Examiner

TRANSCRIPT OF HEARING

A P P E A R A N C E S

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I N D E X

E X H I B I T S

MR. CATANACH: Call next Case 9498.

MR. STOVALL: Application of Meridian Oil, Inc., for horizontal directional drilling pilot project and special operating rules therefor, Rio Arriba County, New Mexico.

MR. CATANACH: Are there appearances in this case?

MR. KELLAHIN: Mr. Examiner, I'm Tom Kellahin of the Santa Fe law firm of Kellahin, Kellahin & Aubrey.

I'm appearing on behalf of the applicant and I have four witnesses to be sworn.

MR. CATANACH: Any other appearances?

Will the witnesses please stand and be sworn in?

(Witnesses sworn.)

MR. KELLAHIN: Mr. Examiner we would like for hearing purposes to consolidate the testimony of this case with the following case, which is 9499.

The testimony is similar and the witnesses are the same for each case.

MR. CATANACH: At this time we'll call Case 9499.

MR. STOVALL: Application of Meridian Oil, Inc., for a horizontal directional drilling pilot project and special operating rules therefore, San Juan County, New Mexico.

MR. KELLAHIN: Mr. Examiner, the exhibit book is organized where Exhibit A is the geologic montage, which we have put on the wall. There is an extra copy of that display in the exhibit book.

Exhibit B is the balance of the exhibit book. There are exhibit pages in Exhibit B numbered 1 through 49, and those exhibits refer to the reservoir engineering witness' testimony, the drilling engineer witness' testimony, and the landman's testimony about ownership and notices.

The exhibits are separated so that you can look behind the tab for the Sunray Well and find all the relevant exhibits for that application and if you'll look behind the tab for the 32-5 Well, you'll find all the exhibits that refer to that well.

Exhibit A is a montage that refers to both the wells plus other additional information.

The first witness is a geologic witness for Meridian, Mr. Dana Craney.

DANA L. CRANEY,

being called as a witness and being duly sworn upon his oath, testified as follows, to-wit:

DIRECT EXAMINATION

BY MR. KELLAHIN:

Q Mr. Craney, would you please state your name and occupation?

A My name is Dana L. Craney. My occupation is Senior Staff Geologist for Meridian Oil, Inc.

Q Mr. Craney, as a geologist did you previously testify before the Examiner in a hearing held earlier this year upon Meridian's application to increase the vertical limits for the Cedar Hills coal production?

A Yes, sir, I did.

Q And did you also testify before Examiner Catanach in the July hearing called by the Division to consider the adoption of special rules and regulations for the Basin coal gas production in the San Juan Basin?

A Yes, that is correct.

Q Pursuant to your employment, have you further made a geologic study of the geologic information that surrounds the two applications by Meridian to drill horizontal wells in the Fruitland coal formations?

A I have.

Q Pursuant to that study have you caused to be prepared Exhibit A?

A Yes, sir.

MR. KELLAHIN: At this time, Mr. Examiner, we tender Mr. Craney as an expert geologist.

MR. CATANACH: He is so qualified.

Q Mr. Craney, if you'll take a pointer, sir, and go to the display on the wall,

Before you discuss the details of your display, simply take a moment and identify the information on the display and show us how to read the information .

A Okay. This is a montage consisting of a net coal isopach. This isopach map is from a publication by Kelso (sic) and others published in 1988. The publication was prepared for GRI.

In addition we have four type logs. The type log for the Fruitland Basal Pool is the Cedar Hill type log. They type logs for the two proposed horizontal wells and the well for the San Juan 404 High Angle Well in the 30-6 Unit.

The -- the montage will be used to discuss the regional relationships of our horizontal well pilot project.

Q What is the source of the information that shows the coal thickness or the coal isopach display on the -- on the map?

A Okay. The source of the information is a publication by Kelso, and others, in 1988. It was a publication made for gas researching.

Q Is that information utilized by you and other geologists before the Examiner in the July hearing with regards to the special rules for --

A Yes, sir, it was. This is the same isopach map that we used (not clearly understood>)

Q Last year the Division approved for Meridian the drilling of a horizontal or high angle well in the San Juan Basin. Can you identify that well for us?

A Yes, sir. The San Juan 30-6 No. 404 Well, located in the northeast of 23, 30 and 7. On the isopach map the 30 and 6 unit is this orange denoted there.

Q Would you describe generally some of the background for Mr. Catanach about the geology for the San Juan 30 and 6 Unit 404 Well?

A Okay, sir. The -- the geology of the -- of the 404 Well consists of a target zone, which -- Meridian target -- would be about two-thirds of the coal in the Fruitland formation existed in the lower portion of the 404 Well in 30 and 6 Unit.

The 404 was used as a high angle well to test this type of technology. The wellbore intercepted the top of this coal in the target zone and extends down laterally across approximately 38 to 40 feet of coal and it TD'd at the bottom of the basal coal.

Q That was a pilot project by Meridian to drill in the Fruitland Coal formation a horizontal well, was it not?

A Yes.

Q What were you attempting to do with that well that you could not accomplish with a conventional well?

A With a high angle well, or a horizontal well, we're attempting to extend the borehole laterally through the formation to increase the surface area exposure to the wellbore and to increase or optimize their chances of intercepting (unclear) fractures

Q And has that well been drilled and completed at this time?

A Yes, sir, the well was drilled; it is an operation and production success and that will be discussed in detail in a few minutes.

Q Let's go now to the San Juan 32-5 Well and have you describe why Meridian seeks to drill that well as an additional pilot project.

A Okay. The -- the reason why Meridian has chosen two other locations to -- for our pilot project is the fact that the way that the coals are deposited in the coastal environment behind the retreating Pictured Cliff shoreline, we have a variety of situations which have occurred.

We have anywhere from thin. couple inch thick coals to coals over 20 feet thick.

We have different amounts of impurities in the coal from the streams that have flowed through the swamps.

We have increased coal maturation to the north due to overburden and thermal maturation, so that we have different trends of coal that behave differently, would behave differently when we try to produce this.

Meridian will be actively drilling in these areas. We were actively drilling in this area, so to test the technology of a horizontal well, we -- we can't drill in the same type of trend that's producing so prolifically from our vertical wellbores in the 30 and 6 Unit. We have to try other trends where Meridian owns some property.

The obvious difference on the well logs is the fact that the lower portion of the 404 Well shows about 40 feet of coal in 7 zones; whereas, in the 32-5 Unit

we see that we're not going after the basal coal, we're going after an upper coal which is better developed than the basal and we're looking at one single coalbed to -- to stay horizontal in during the extensive lateral, and this coalbed is approximately 25 feet.

So the wireline logs shows an obvious difference between these two trends, and as I gave you a brief geological description how as you go across the basin you'll see different geological trends from just the geological history of the Fruitland coal.

Q Contrast that, now to the Sunray Well.

A To contrast the 32-5 Well to the Sunray, we see that in the Sunray we have a very thick basal coal now developed which we're going -- which we're proposing to drill horizontally in.

This coal is approximately 19 feet thick in the Sunray Well and, as you see, we're going to -- we're dealing with the basal coal now instead of this upper coal.

These basal coals would not be the same pool between the two, would not be laterally continued over that -- that distance.

Q Other than the well that Meridian has drilled in the San Juan 30 and 6 Unit, plus these two other proposed permits, are there any other permitted horizontal wells in the basin area?

A Yes, sir. Horizontal recovery permitted two wells in Sections 20 and 28 of 32, 5, and these wells permitted for directional drilling approximately three miles from our proposed 32-5 No. 100 Well.

Q Has that company drilled either of those wells yet?

A No, sir, they have not.

Q In summary, Mr. Craney, what do you attempt to learn from implementing both of the drilling of these wells from a geologic perspective?

A From a -- well, from a geological perspective, again we're just -- we want to learn the technological advantages of trying to stay in the coal zone while we're drilling vertically. We wish to learn the degree of fracturing that we can drill laterally through, and the horizontal technology will help us to determine the viability of this type of drilling technique in different geological regimes.

Q And the well you drilled in the 30 and 6 unit does to provide you a sufficient basis of information upon which to determine whether or not you'll have further horizontal wells in the basin area.

A No, sir, a single data point would not accomplish that.

MR. KELLAHIN: That concludes

my examination of Mr. Craney.

We would move the introduction of Exhibit A.

MR. CATANACH: Exhibit A will be admitted into evidence.

I have no questions of this witness.

MR. STOVALL: I don't know if Mr. Craney is the witness to answer the question or not. You can maybe advise me at the end of it.

CROSS EXAMINATION

BY MR. STOVALL:

Q You were present at the -- the proposed Fruitland coal rules hearing in Farmington and you testified, and in those hearings part of the Committee witnesses suggested, part of what they suggested, was provisions for horizontal drilling, is that correct?

A Yes, sir.

Q Are the proposed locations and techniques being used consistent with what was proposed by the -- I realize no rule has yet been entered in that case. What I'd like to know, are these -- what you're proposing -- is it consistent with what was suggested for rules for horizontal drilling in that case?

A I can answer, but, yes, they are, and yes, it will be discussed in some detail further on in this case.

MR. STOGNER: I have nothing further.

MR. KELLAHIN: Mr. Examiner, we'll call Mr. Craig McCracken. Mr. McCracken is a reservoir engineer and he wants to discuss with you the results of the San Juan 36 Unit 404 Well, plus the reservoir information on the two wells that are the subject of these two applications.

CRAIG A. McCRACKEN,

being called as a witness and being duly sworn upon his oath, testified as follows, to-wit:

DIRECT EXAMINATION

BY MR. KELLAHIN:

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

A My name is Craig A. McCracken. I'm a Senior Reservoir Engineer with Meridian Oil Corporation in Farmington, New Mexico.

Q Mr. McCracken, have you previously testified before the Division as a reservoir engineer?

A No, I have not.

Q Would you take a moment and describe for the Examiner when and where you obtained your engineering degree?

A I obtained my degree June, 1981, from the Pennsylvania State University.

Q Subsequent to graduation in '81 would you summarize for us what has been your employment experience as a reservoir engineer?

A Up until December of 1985 I was employed in the Drilling Engineering Department. Since then I've been employed in the Reservoir Engineering Department with Meridian in Farmington, and for the last three years I have been a licensed Professional Engineer in the State of New Mexico.

Q Among your duties as a reservoir engineer for your company, have you been assigned the principal task of studying either one or both of the wells that are the subject of these applications?

A Yes, I have, both wells.

Q Which of these wells was your principal duty?

A The 32 and 5 Unit No. 100.

Q And you've also studied the information on the Sunray Well?

A Yes, sir, I have.

Q And you've also studied the drilling, completion, and production information from the 404 Well.

A Yes, I have.

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

MR. CATANACH: He is so qualified.

Q Mr. McCracken, let's take a moment, sir, and have you start with the exhibit booklet which is marked B, and turning to page number 1, let's talk about the well that was drilled on last year's horizontal order. It's the 404 Well?

A Yes.

Q Would you summarize for the Examiner, first, in a horizontal perspective, what was allowed to occur by the Division and then what you in fact did when you drilled the well in terms of direction.

A Exhibit Number One shows a surface location plat with the 90 degree window that was permitted for the No. 404, and the dashed line represents the actual horizontal extent of the well the way it was drilled.

Q Let me have you turn now to page 2 and show us a from a vertical perspective what occurred with the drilling of the 404 Well.

A The 404 was first drilled vertically through the coal seam and then plugged back.

What Exhibit Two represents is a vertical cross section of the way the well was actually drilled. As you can see, it is a highly deviated well as opposed to a true horizontal well.

Q More, there'll be more detail gone into later as to why the well was drilled the way it was.

Q The next witness is a drilling engineer that actually conducted the drilling of the well and proposes to supervise the drilling of the other two wells?

A That is correct.

Q Turn to page 3 now, Mr. McCracken, and identify and describe the information on that exhibit page.

A Exhibit Number Three, and perhaps I should go back to Exhibit Number Two, Exhibit Number Two was presented during the original hearing to permit the highly deviated well.

Exhibit Number Three is a description of the actual conditions and the way the well was actually drilled and casing was actually set. Again, more detail will be gone into by our drilling engineer later.

Q Have you made a study of the production information that's available on the 404 Well, Mr. McCracken?

A Yes, I have.

Q And is that information shown on page 4?

A Yes, it is.

Q Would you review with Mr. Catanach the information on page 4 and describe for us what you conclude as a reservoir engineer based upon this information?

A On Exhibit Four there is a production curve showing the weekly rates that the 404 has made since being completed in December of 1987. The red curve represents the gas production. The blue curve represents the water production and the black curve represents the water cut in barrels per MMCF of gas.

What this shows is that the production from this well has steadily increased since it was first produced, which is fairly typical of a coal well, and what I conclude from this curve is that it is too early to tell when or what the peak rate on this well might be. As compared to other Fruitland coal wells in the 30 and 6 unit, this well makes approximately 2.5 to 2.6-million cubic feet a day. The average for the area is somewhat under 2.0 MMCF per day, so we can conclude from that that this well, productionwise, is a better well generally than wells in the area.

Q With that basis of information, Mr. McCracken, have you then studied to determine whether or

not Meridian ought to drill further horizontal pilot projects in the basin?

A Yes, I have.

Q Let me direct your attention now, sir, to the Sunray Well.

Page 5 is the first display for that well?

A Yes, it is.

Q Let's take a moment and have you describe horizontally what you propose to do with the drilling of that well?

A Exhibit Number Five shows the surface plat of Section 11, Township 30 North, Range 10 West. We propose to drill the well in the southwest quarter 660 from the south line, 270 feet from the west line for a surface location of said Section 11.

This is an unorthodox location which has previously been approved.

What we propose to do is to permit approximately a 30 degree window with the bottom hole location, as the exhibit shows, being within the orthodox location box in order to protect the correlative rights of the interest owners.

Q What is the significance of the dashed line running from the point where you commence drilling at

the surface location and running towards the northeast? See the dashed line?

A Yes, sir.

Q What's the purpose of that line?

A The dashed line represents the orientation of the well the way we would like to go in order to maximize the horizontal distance of the well while still staying within an orthodox location box as specified by the red squares.

Q What is the purpose, then, of the cross hatched area on each side of the dashed line?

A We would like to have the horizontal borehole permitted within this range.

Q For what purpose, Mr. McCracken?

A In order that if any deviation were encountered on either side of the way we would like to go, we would have approval to have some leeway on either side of the wellbore.

Q It will give you the flexibility, then, to follow within that approved area and not have to come back for further approval.

A That is correct.

Q Have you had an opportunity, Mr. McCracken, to review the prior order the Division entered for the 404 Well, which was Order No. R-8526? Have you

seen that?

A Yes, I have.

Q Have you proposed actual language that Mr. Catanach might utilize in the drafting of a similar type order for the Sunray Well?

A Yes, I have.

Q And where would he find that language?

A Exhibit Number Six.

Q What have you done with page 6 of Exhibit B?

A What we have done is specified the surface location as it is specified on the plat, Exhibit Number Five, specified the bottom hole locations represented by the wellbore ending at various points within the orthodox location box.

As you can see, if we went for an arc on this well, as far as approval, an arc may take us outside of that orthodox location box. We would like to stay in it, so depending on how close we're able to stay to our proposal of going right for the corner of the northeast orthodox location box, if we're deviated from that a few degrees from either side the well would be shorter to stay within that box.

The coordinates at the bottom of the application represent those end points which are drawn on

the plat, Exhibit Five.

Q All right. Does that conclude your presentation on the Sunray Well?

A Yes, it does.

Q Let's turn now to the tab on the 32 and 5 Well commencing at page 36.

A What page 36 shows is the same type of surface location plat. We have proposed this well to have a surface location of 1765 feet from the south line and 1485 feet from the west line of Section 23, Township 32 North, Range 6 West.

This is an orthodox surface location, and what the dashed line represents is that we propose to drill this well directly south with a radius of 1600 feet. The arc on either side, 30 degrees on either side, representing a total of 60 degrees, is again the window that we would like to have approved so that if we deviate slightly from the due south direction, we can -- we won't have to get another approval.

And again on page 37 we have styled an order which verbally expresses what is shown in the plat on page 36.

Q In summary, Mr. McCracken, what do you as a reservoir engineer seek to accomplish with the approval and drilling of these two horizontal wellbores?

A Mainly we seek to get a better areal extent of the basin and see in a couple areas that we have shown previously are geologically significantly different than our 404 Well to allow us to evaluate the horizontal drilling technique in general.

MR. KELLAHIN: That concludes my examination of Mr. McCracken, Mr. Catanach.

CROSS EXAMINATION

BY MR. CATANACH:

Q Mr. McCracken, neither of these wells have been drilled yet, is that correct?

A That's correct.

Q You say the Sunray already has an approved unorthodox location?

A To the best of my knowledge, yes, it does.

Q Can you get that number for me?

A Certainly.

Q On the Sunray Well, explain to me why you couldn't go with the arc again? You wanted to --

A Because of we go with an arc and go with the longest distance, which is represented by the line, the dashed line going from the surface location to the northeast corner of that box, an arc would take us outside

the orthodox location box and we're concerned with the protection of correlative rights.

Q That would be an orthodox bottom hole location under -- under the current rules.

A To the best of my knowledge, yes.

Q Neither of these wells are -- they're not in the Cedar Hill Pool, are they?

A No, they are not. I believe that they would be in undesignated pools.

Q Do you know what Meridian intends to do if the rules for the Fruitland Pool are -- say, go to 320-acre spacing, do you know what acreage you will dedicate to the two wells at this point?

A I believe our land department witness is prepared to testify on that.

Offhand, I don't know.

Q The coordinates that you -- that you have on page six, those are just the coordinates of the two outer lines, is that correct?

A That's correct.

MR. CATANACH: I think that's all I have at this time.

The witness may be excused.

MR. KELLAHIN: Mr. Catanach, our next witness is the drilling engineer for Meridian.

His name is Patrick Bent.

PATRICK BENT,

being called as a witness and being duly sworn upon his oath, testified as follows, to-wit:

DIRECT EXAMINATION

BY MR. KELLAHIN:

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

A My name is Patrick Bent. I'm the Regional Drilling Engineer for Meridian Oil in Farmington, New Mexico.

Q Mr. Bent, have you previously testified before the Oil Conservation Division?

A No, I have not.

Q Would you summarize for Mr. Catanach what has been your educational background?

A Yes, sir. I graduated from the University of Wyoming in 1980 with a degree in petroleum engineering, Since then I have been employed with Meridian Oil, previously El Paso Exploration, in the Drilling Department for the last eight years.

Q Were you involved in the drilling of the 404 Well?

A Yes, I was. I was the Project Engineer.

Q And have you reviewed the orders and the transcripts and the testimony from that case?

A Yes, I have.

Q And have you prepared a drilling program for the Sunray Well and the 32 and 5 Well?

A Project engineers under my direct supervision have.

Q And you have reviewed those drilling programs?

A Yes, I have.

MR. KELLAHIN: We tender Mr. Bent as an expert drilling engineer.

MR. CATANACH; He is so qualified.

Q Let me direct your attention, sir, to page number seven.

Well, let's go back. Let's talk about the 404 Well, bring him up to date with where we are with that. Let's start with Exhibit Three.

A Page number three is a cross-sectional of the actual wellbore on the 36 Unit No. 404.

Q Let's take a moment and remind Mr. Catanach of what the Division authorized Meridian to do for the drilling of that well and then what you, in fact, did

do.

A The Division authorized the drilling of a high angle Fruitland coal well within a 90 degree arc east to south.

The direction was -- the window was given in order to allow Meridian Oil leeway in determining the optimum wellbore direction from an oriented course taken during the drilling of the vertical portion of the well.

The well was drilled vertically through the Fruitland coal, course taken in the coal, orientation determined. The well was logged, plugged back to a predetermined kickoff point. At that point we began building our curve at 12 degrees per 100 foot. We built our curve to an inclination of 83 degrees at which time we were at the top of the target zone. We ran 7-inch casing back to surface. We then drilled through the targeted Fruitland interval as seen on the montage map to a true vertical depth of 3036, giving us a lateral extension in the Fruitland coal of 557 feet.

Q What did the Commission or the Division authorize for a lateral extension?

A The (unclear) lateral extension as seen by the arc on page 1, was 1470 feet. This allowed for a

962-foot exposed coal wellbore in the targeted formation.

Q Let's turn now to the Sunray Well and contrast what you did with the 404 Well with what you propose to accomplish with the Sunray Well.

A Okay.

Q Let's start now with page 7.

A On page 7 is the proposed cross sectional of the Sunray H 201. The operational aspect is very similar. We will drill the well vertically through the Fruitland coal, log the well, plug back to a predetermined kickoff point.

We will begin building angle at 12 degrees per 100 foot; drill our radius of curvature to the top of the Fruitland formation at approximately 89 degrees inclination. We will then drill through the Fruitland formation laterally for approximately 1554 feet.

Q Have you had an opportunity to review the order in the 404 well?

A Yes, I have.

Q And do you have proposed written language that Mr. Catanach might utilize in drafting the order for the Sunray Well?

A Yes, I do, and that in on page 8.

Q What have you done on page 8?

A Verbally explained again the proposed

operational aspects.

Q And how does the operational aspects for the Sunray Well differ from the 404 Well?

A The 404 was permitted as a high angle Fruitland coal well, whereas the Sunray is considered a horizontal, a few degrees difference.

Q Let's go now to the 32-5 Well and look a the drilling program for that well, and I think that starts on page 38.

A Page 38, again, is a proposed cross sectional of the 32-5-E No. 100. Again the operational aspects are very similar. We will drill vertically through Fruitland coal, log the well, plug back to a predetermined kickoff point, build angle at 12 degrees per 100 till we reach an inclination of 89 degrees at the top of the Fruitland coal.

At that point we will drill through the Fruitland coal for a horizontal displacement in the coal seam of 1062 feet.

And again page 39 is a verbal explanation of the cross section.

Q Mr. Catanach, if he desires, can use the written narrative on 39 as the order portion of this order to approve the drilling program for the well?

A If he so desires.

Q When do you propose to commence these wells, Mr. Bent?

A We would like to begin drilling operations on the 32-5 No. 100 by November 1st due to the limitations of the Big Game Use Area, as seen on page 36.

Q 36, you're adjacent to the Navajo Lake. You're in a wildlife habitat area?

A That's correct; also a Big Game Use Area which BLM has restrictions as far as activity is concerned. We have to begin construction or drilling prior to the December 1st deadline. We would like to start drilling approximately in November 1st.

Q Do you have similar environmental constraints on the Sunray Well?

A No, there are not.

Q Is that an area that the surface is subject to winter hazards where you have access problems during the winter?

A The 32-5 Well is; the Sunray not as much.

Q And when do you propose to commence that well?

A Immediately following the 32-5 Unit No. 100.

MR. KELLAHIN: That concludes

my examination of Mr.Bent.

CROSS EXAMINATION

BY MR. CATANACH:

Q Mr. Bent, what kind of problems, if any, did Meridian have in drilling the 404 Well?

A Our only considered problem was the fact that we could not extend the wellbore in the Fruitland coal horizontally as far as we had initially planned. This was due to the unconsolidated nature of the coal as we drilled through it. We were not able to maintain our high angle approach due to the softness of the coal and we lost approximately 5 degrees inclination in a short period, which prevented us from reaching that maximum lateral extent. All efforts to regain that orientation directionally failed.

Other than that there were no operational problems.

Q You don't think you'll have the same kind of problems with the two proposed wells?

A At this time, no. Again, the Sunray Well appears to be a more consolidated coal, as does the 32-5.

MR. CATANACH: That's all I have of the witness. He may be excused.

MR. KELLAHIN: Mr. Catanach, our final witness is a landman for Meridian, Mr. David Poage.

DAVID M. POAGE,

being called as a witness and being duly sworn upon his oath, testified as follows, to-wit:

DIRECT EXAMINATION

BY MR. KELLAHIN:

Q Mr. Poage, would you please state your name and occupation?

A My name is David M. Poage and I work as a Senior Staff Landman for Meridian Oil, Inc.

Q Mr. Poage, have you previously testified as a landman before the Division?

A I have not.

Q Would you take a moment and describe what has been your educational background and employment experience?

A I graduated in 1972 from Western New Mexico University with a Bachelor's degree in marketing and graduated in 1973 with a Master of Arts degree in business administration.

Went to work thereafter in 1973 for El

Paso Natural Gas Company as a landman and have worked for El Paso Natural Gas Company and El Paso Exploration Company and now Meridian Oil.

Q Do your duties as a landman for Meridian Oil, Inc., include determining the ownership and royalty owners of the various spacing units that will be involved in the two subject wells?

A Yes.

Q And are you also familiar with the ownership of those spacing units that surround the two subject spacing units?

A Yes.

Q Let's turn to the exhibit book and let's use page 5 of the exhibit book as a reference point.

The Sunray Well is to be located in the southwest quarter of Section 11 and the initial spacing is 160 acres based upon the statewide rules for the Fruitland. Is that not true?

A That's correct.

Q What do you propose to do in the event the Division adopts 320-acre spacing for this formation?

A This particular well, if 320-acre spacing were adopted, we would still -- Meridian would still own -- have 100 percent ownership of the well.

Q Regardless of the 320 ownership --

orientation, whether it's west half or southwest -- south half, Meridian would have the 100 percent working interest owner (sic) in Section 11.

A That's correct.

Q And if we turn, then, to the 32 and 5 Well, and look at page 36, for example, what's the situation for that well?

A The situation would be identical there in that Meridian would be 100 percent owner on either 160-acre basis or 320-acre basis.

Q Let's go now to your particular involvement with the Sunray application, and I direct your attention to page number 9.

Would you identify the information on page 9?

A The exhibit on page 9 shows the spacing unit for the Sunray Well in the southwest quarter of Section 11, as well as the eight surrounding 160-acre spacing units.

The area colored in yellow is owned 100 percent by Meridian and operated by Meridian.

Q Describe what you have caused to occur when we look at the document on page 10.

A On page 10 it is just a matter of protection, we notified all of the overriding royalty interest

owners by letter of this hearing and of our intention to drill this well.

Q There is a small difference in over-riding royalty owners in the 160-acre spacing units surrounding this spacing unit, are there not?

A That is correct.

Q And so to avoid any possible conflict with those overriding royalty owners, you have notified those parties of this application.

A That is correct.

Q Have you received any objection from any of those royalty owners?

A No, sir, we have not.

Q In fact, have you received any objection from anyone?

A No, sir.

Q Included with the letter sent on page 10, then, was a copy of the application letter for hearing and the application itself?

A Yes, sir.

Q And when we turn then to page 16 what do we find there?

A On page 16 and also on -- continuing on page 17, 18, 19 and 20 are the names and addresses of the overriding royalty interest owners on the (unclear).

Q And the following pages 21 through 35 are what, sir?

A They are copies of the certified return receipts that were sent out with all these letters.

Q Okay. Let's turn to the 32 and 5 Well now, and start with page 40, if you will.

What is shown on page 40?

A Page 40 is a plat showing the present outline of this San Juan 32-5 Unit and also spotted in the southwest quarter of Section 23 is the proposed well.

Q What type of unit is this?

A This is a Federal unit.

Q And for what formations is this acreage unitized?

A For all formations.

Q The unit ownership will be the same for spacing units that surround this spacing unit?

A Yes, sir.

Q Identify for us page 41, if you will, please.

A Page 41 again is a plat showing the 160-acre tract upon which the well is to be located and the 8 surrounding 160-acre tracts.

It again in yellow, colored in yellow, shows that acreage owned 100 percent by Meridian.

Q And identify the document on page 42. What have you caused to occur here?

A Page 42 is a copy of the letter sent to all the working interest owners in the San Juan 32-5 Unit notifying them of -- of the wells proposed to be drilled and the ownership, how they were going to be borne 100 percent by Meridian.

Q And page 43?

A 43, page 43, is a list of those working interest owners.

Q And then 44.

A Page 44 is a copy of the plat of development furnished to the regulatory bodies in compliance in compliance with the terms and provisions of the unit agreement.

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

Just to check back, I believe Mr. McCracken misspoke awhile ago when he said the Sunray Well's current surface location had been approved. In fact it has not been approved.

What he was confused about is the original location for the well was a standard location and that had been approved, or was subject to approval.

We thereafter move the surface

location to accommodate the horizontal drilling for the well and so we won't have an order yet until you enter one in this case.

MR. CATANACH: Okay.

MR. KELLAHIN: We would at this time move the introduction of Exhibit B.

MR. CATANACH: Exhibit B will be admitted as evidence.

CROSS EXAMINATION

BY MR. CATANACH:

Q Mr. Poage, at this time you don't know the orientation of the 320 unit if that becomes appropriate for the pool?

A If this becomes appropriate we would anticipate that these would be west half dedications.

Q For both wells?

A Yes, sir.

Q All the drilling costs for the 32-5 Well, those are all going to be Meridian's costs?

A Initially as a drilling block -- a 100 percent drilling block owner these will be paid for by Meridian.

Q Is there a Fruitland participating area in this unit?

A None presently exists.

MR. CATANACH: I don't have any more questions.

CROSS EXAMINATION

BY MR. STOVALL:

Q Looking at the 32-5, Mr. Poage, I think it's the 32-5, the San Juan Unit on your page 41, you identify that as El Paso Natural Gas Company as operator.

What -- what is the relationship between Meridian and El Paso Natural Gas with respect to this unit and the ownership?

A Meridian and El Paso Natural Gas are affiliated companies and Meridian would be operating on behalf of El Paso Natural Gas Company, who is presently the unit operator.

Q Record -- record ownership of the interest is in El Paso Natural Gas and not in Meridian, is that correct?

A Technically it's in El Paso Production Company's name, but El Paso Natural Gas Company is designated unit operator. Meridian will just be acting on their behalf in matters of drilling, engineering and geology.

MR. CATANACH: That's all the

questions we have of the witness. He may be excused.

Is there anything further in 9498 or 9499?

MR. KELLAHIN: No, sir.

MR. CATANACH: If not, they will be taken under advisement.

(Hearing concluded.)

C E R T I F I C A T E

I, SALLY W. BOYD, C. S. R. DO HEREBY CERTIFY that the foregoing Transcript of Hearing before the Oil Conservation Division (Commission) was reported by me; that the said transcript is a full, true and correct record of the hearing, prepared by me to the best of my ability.

Sally W. Boyd CSR

I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case No. 9498, heard by me on October 12, 1988.

David R. Catanach, Examiner
Oil Conservation Division