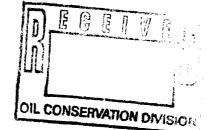
### STATE OF NEW MEXICO

# 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. 11,117



# ORIGINAL

## REPORTER'S TRANSCRIPT OF PROCEEDINGS

### EXAMINER HEARING

BEFORE: JIM MORROW, Hearing Examiner

October 13th, 1994

Santa Fe, New Mexico

This matter came on for hearing before the Oil
Conservation Division on Thursday, October 13th, 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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# EXHIBITS

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# APPEARANCES

FOR THE APPLICANT:

KELLAHIN & KELLAHIN
117 N. Guadalupe
P.O. Box 2265
Santa Fe, New Mexico 87504-2265
By: W. THOMAS KELLAHIN

\* \* \*

WHEREUPON, the following proceedings were had at 1 2 11:39 a.m.: EXAMINER MORROW: At this time we'll call Case 3 4 11,117, which is the Application of Meridian Oil, Inc., for compulsory pooling, San Juan County, New Mexico. 5 6 Call for appearances. 7 MR. KELLAHIN: Mr. Examiner, I'm Tom Kellahin of 8 the Santa Fe law firm of Kellahin and Kellahin, appearing on behalf of the Applicant. 9 Mr. Price is one of my witnesses. He's already 10 11 sworn and under oath. The other witness is the production engineer. Leonard, would you stand and be sworn? 12 (Thereupon, Mr. Biemer was sworn.) 13 14 DEAN PRICE, 15 the witness herein, after having been first duly sworn upon his oath, was examined and testified as follows: 16 17 DIRECT EXAMINATION BY MR. KELLAHIN: 18 19 Q. Mr. Price, when we look at the case for the Lodewick Number 1 well --20 21 Α. Yes. -- what was your activity as a petroleum landman 22 Q. 23 for your company concerning this case? Α. To notify the partners that we were going to 24 recomplete this well in the -- and to put out to the 25

- working interest partners an operating agreement,
  negotiated -- an operating agreement amongst them so that
  we could jointly drill this well -Q. All right, let's turn to a display in the exhibit
- A. Yes.

book --

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- Q. -- that will show the Examiner the section, the well location and the other well information adjoining the properties. Where would we find that?
- A. Exhibit 2, there's a plat showing the leasehold,

  nine sections surrounding the Section 18, where the

  Lodewick Number 1 well is located.
- Q. All right, let's look in Section 18 specifically.

  What kind of well is that currently?
  - A. It currently is a Pictured Cliffs well. It was drilled a number of years ago.
- Q. As an existing PC well, what is the spacing unit that's dedicated to the well?
- 19 A. 160 acres.
- Q. The northwest quarter of the section?
- 21 A. Exactly.
- Q. All right. What does your company propose to do with the wellbore?
- A. Well, we propose to recomplete the well in the
  Pictured Cliffs and to come uphole in the wellbore and to

complete in the Fruitland Coal at the same time, and then commingle the production.

- Q. Have you proposed -- Let me look at the PC. The PC and the 160, is that an ownership that's controlled 100 percent by Meridian Oil, Inc.?
- A. Yes, we've got -- in Exhibit -- On the second page, behind the nine-section plat, we have a plat of the sections indicating ownership of the leasehold within Section 18, and the northwest quarter is owned 100 percent by El Paso Production Company.
  - Q. Okay. As you move to the southwest quarter --
- 12 A. Yes.

- Q. -- which is the opposite 160 that you want to put into the spacing unit so that the Fruitland Coal gas would have a spacing unit --
- A. Yes.
- Q. -- when you move to the southwest quarter, what interests, other than Meridian Oil, Inc., are involved?
- A. Amoco and -- Amoco Production Company and Conoco,
  Inc., own on a 50-50 basis the southwest quarter.
- Q. Have you proposed to Conoco and Amoco the utilization of this existing wellbore for the purpose that you just described?
- A. Yes, we have.
  - Q. When did you formally make that proposal to those

two companies?

- A. As shown on Exhibit 3, there was a letter simultaneously written to them February 23rd, 1994.
- Q. Did you advise those two companies of the estimated cost of doing the recompletion and the commingling to the two zones?
- A. Yes, there was included with that letter an AFE, an authorization for expenditure, which indicated the cost of all operations.
- Q. And what was that estimated cost that you provided to them in terms of total dollars?
- 12 A. \$227,200.
- Q. In response to that proposal by you, what if anything did Conoco and Amoco tell you?
  - A. Conoco was -- immediately signed indicating -- sent back a signed AFE and sent back their letter of intent to participate.

And Amoco indicated that they wanted to participate. However, we could not agree on a joint operating agreement.

- Q. All right. Let's talk about where you were with your negotiations with them. As of today, very -- right now --
- 24 A. Yes.
  - Q. -- did Amoco raise any objection as to the costs

1 of the recompletion? 2 Α. No. Did they raise any objection to the procedure 3 Q. itself? 4 5 A. No. 6 Q. Did they raise any objection to Meridian doing 7 the work? 8 A. No. Did they raise any objection as to the overhead Q. rates? 10 No. 11 Α. Did they raise any objection as to the risk 12 Q. factor penalties for subsequent work? 13 Α. No. 14 They were willing to commit to all those things 15 Q. except for what, sir? 16 They want to include in the operating agreement 17 an article, non- -- preferential right to purchase. 18 19 Q. Which simply means what? That if Meridian were to sell its interest in 20 21 this well, that we would have to offer it to Amoco after we had obtained a buyer for that property. They would have 22 23 the preferential right to purchase that. All right. And your company elected not to 24 Q. 25 accept that requested change?

1 A. Yes.

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- Q. And therefore Amoco has not yet elected to participate?
  - A. That's correct.
- Q. In order to do the work, do you now need compulsory pooling of Amoco's interest?
  - A. Yes.
  - Q. And that interest is 50 percent of the southwest quarter?
- 10 A. Yes.
- Q. Or 25 percent of the coal gas in that spacing unit?
- 13 A. Yes.
- Q. All right. Part of the request by your company is to commingle production between the PC and the Fruitland Coal?
- 17 A. Yes.
- Q. What's the status of that approval? Has that
  been submitted for approval to commingle production in this
  well?
- 21 A. That's already been given in a prior order.
- Q. All right, that's already been accomplished?
- 23 A. Yes.
- Q. Do you happen to have the reference by which that was done? And if you don't, we'll supply it to the

1 Examiner. 2 Α. We'll supply it. It should be here. MR. KELLAHIN: I think it's stated in the 3 advertisement, Mr. Examiner. 4 Yes, it is. THE WITNESS: 5 MR. KELLAHIN: It's Order Number R-10,090, which 6 previously approved the commingling of these two pools 7 within this wellbore, using these same spacing units. 8 (By Mr. Kellahin) You have shown us in the 9 Q. 10 display book your communications with Amoco and Conoco and the submittal of the joint operating agreement and the AFE 11 to both those companies? 12 13 Α. Yes. 14 MR. KELLAHIN: All right, sir. That concludes my 15 examination, then, of Mr. Price. We would move the introduction of the exhibits 16 which are contained behind Exhibit Tabs 1, 2 and 3. 17 EXAMINER MORROW: 1, 2 and 3 are admitted. 18 Let's see, I don't believe I have any questions. 19 EXAMINATION 20 BY EXAMINER MORROW: 21 You still expect that Amoco will participate? 22 0. I don't know. I don't think so. 23 Α. Q. I guess that's the reason you're here. 24 We've tried to have discussions at higher levels 25 Α.

1 in the corporation concerning this one matter, and it just seems to be a matter --2 Is that something new in these agreements, or is 3 4 it something you've come across before? It's a standard provision. We use the 1982 --5 Α. No, I mean the right -- preferential right to 6 Q. 7 purchase. Is that something that you hadn't come across before, or is that a fairly common request from Amoco? 8 I believe it's a new policy that they're 9 Α. 10 requesting it. It's been the standard in the operating 11 agreements, and normally, as a normal procedure, most 12 companies strike it. 1.3 Q. Try to do it? They try to strike, omit that provision. 14 Α. Oh, I see. It's in there, and you had removed 15 Q. it --16 17 Α. Yes. -- and they wanted to leave it in there? 18 Q. Most companies strike it. 19 Α. Yeah. EXAMINER MORROW: Okay, thank you. 20 MR. KELLAHIN: I neglected to ask Mr. Price the 21 overhead rates for inclusion in the pooling order. 22 FURTHER EXAMINATION 23 24 BY MR. KELLAHIN: 25 Q. What overhead rates did Conoco agree to be

applied to this well? 1 2 They were the standard rates that we have between Amoco and Conoco and Meridian of \$4000 for a drilling well 3 rate and \$433.34 for a producing well rate. 4 Is it your practice under this agreement to 5 Q. 6 escalate those rates on an annual basis pursuant to the 7 COPAS instructions? Α. Yes. 8 And would you request the Examiner to do so in 9 0. the pooling order entered in this case? 10 11 Α. Yes. 12 MR. KELLAHIN: I have no further questions, then, Mr. Examiner. 13 FURTHER EXAMINATION 14 BY EXAMINER MORROW: 15 I'll ask you about those overhead rates. 16 Q. 17 You indicated Amoco didn't have any objection to 18 the overhead rates? 19 Α. No. 20 Q. Are those --21 Α. Those are rates ---- consistent with Ernst & Young, or do you know? 22 Q. 23 Α. Yes, those are. Those are in between the rates -- they're within -- For a gas well drilled to this depth, 24 according to the 1993 Ernst & Young survey, they're right 25

in line with that. They're under the median cited, the 1 amount cited there. 2 And that's what everybody uses in the coal seam? 3 Yes, and -- Well, this is the rate that --4 Α. 5 earlier that Amoco and Meridian had agreed upon to use, utilize --6 7 Q. Okay. 8 Α. -- in other agreements. 9 EXAMINER MORROW: Thank you. LEONARD J. BIEMER, JR., 10 the witness herein, after having been first duly sworn upon 11 his oath, was examined and testified as follows: 12 DIRECT EXAMINATION 13 BY MR. KELLAHIN: 14 All right, sir, would you please state your name 15 Q. and occupation? 16 17 Leonard John Biemer, Jr. I'm a senior staff production engineer. 18 19 Q. Mr. Biemer, on prior occasions have you testified 20 before the Division as an engineer? Α. No. 21 Summarize for us your education. 22 Q. A. I graduated from the University of Texas with a 23 degree in petroleum engineering in 1981. 24 I went to work for El Paso Exploration in 25

September of 1981, and I've worked there ever since. I was
a drilling engineer for about a year. I was in production
for three years. I went back to drilling for another year,
and then I went into joint interests. I was in joint
interests for about -- joint interests and acquisitions,
for five and a half years. And I just recently went back
into production engineering.

So for all 13 years I've been in Farmington.

- Q. As part of your current duties as a production engineer, have you reviewed the AFE that Mr. Price submitted to Amoco to do the recompletion work on the Lodewick well?
  - A. Yes, I have.

- Q. In addition, have you generally reviewed the risk involved in undertaking this procedure and to obtain success out of the coal gas reservoir?
  - A. Yes, I have.

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

20 EXAMINER MORROW: All right, we accept his qualifications.

Q. (By Mr. Kellahin) Let's turn to the AFE first of all. If you'll look in the exhibit book, find Exhibit Tab

Number 3, and if you'll look just past the letter by

Meridian, you're going to find some AFEs. Among those is

an itemized schedule of costs. Do you find those, sir?

A. No.

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Q. Not in your book? Well, they're in this book.

All right, on the Lodewick well there is the cover letter. And then you go to the authority for expenditure, and it breaks out gross well data, and it gives us a workover completion cost and then a construction facility cost and then a total number of \$227,000. Do you find that?

- A. Yes, sir.
- Q. All right. Break out for me the components of that cost. Is there an exhibit that shows how you get to that number?
  - A. This breakout here? It's under the completion cost. These costs are basically in line with what we do. One of the major costs here you see is fracture and stimulating.
- Q. All right, let's do that first, then. Of the \$227,000, that is subdivided into --
- A. -- into completion and facilities.
- Q. All right, let's take the completion first, the \$107,900 number.
- 23 | A. Yes, sir.
- Q. If we look at the next page after that, all of that is individually itemized, is it not?

A. Yes, sir, it is.

- Q. Go through that with us in a summary fashion and show us what engineering conclusions you have about whether or not that is reasonable.
- A. Yes, these are costs that we just incur on a dayto-day basis when we do this type of work, the cost to move
  the rig in and out, day work for our completion rigs, the
  cost of fluids, water, gas for tanks, casing hole services,
  any type of stimulant -- or casing work we may have to do,
  the fracture stimulation and overhead.

Down at the bottom you'll see tubing costs and other tangible equipment associated with the completion part of this work.

- Q. For a coal gas well in this location, is it common to fracture-stimulate that well?
  - A. Yes, sir, it is.
- Q. And is the level of cost anticipated for that activity fair and reasonable?
  - A. Yes, sir, very much.
  - Q. In this instance, is Meridian asking to be reimbursed or compensated in any fashion by Amoco for the value of the existing wellbore?
  - A. No, sir, we are not.
  - Q. What is your assessment of the anticipated costs for doing the project, the \$227,000? Is that fair and

#### reasonable?

- A. Yes, sir, it is.
- Q. Let's turn to the component of risk. The Examiner has authorized in the pooling provisions to allow Meridian to recover cost plus as much as two more times, a 200-percent maximum penalty?
  - A. Yes, sir.
- Q. Within that range, do you have an engineering opinion as to what that level of percentage should be? What's the risk that you would recommend?
- A. We have a high risk on the mechanical part. This well was drilled in 1953 as a PC well. Thus, the mechanical part of going in there and fracture-stimulating, and the casing being in good shape is relatively high, 70 percent. There's a high-risk factor as to the mechanical part.
- Q. When you add the total risks involved and the maximum allowed by the Examiner, which is a 200-percent number, what would you assess to be a fair percentage for the total risk involved in the recompletion?
- A. The total risk, if you include the reservoir and mechanical and all that, I would say it's in the 65 percent, much better than 50 percent.
- Q. I'm not communicating with you. If the maximum number he can give you is 200 percent --

1 Α. -- I would go for 200 percent --2 All right. Q. 3 Α. -- yes. When you describe 200 percent as the maximum, 4 Q. give us the reasons you've reached that level of risk. 5 You've got a mechanical risk. 6 Mechanical risk is our biggest factor, being that 7 Α. 8 the well was drilled in 1953 and the casing is relatively 9 old. 10 So of the 200 percent, 75 percent of that is --Q. 11 am I making sense? -- is mechanical. Α. 12 No, sir. You said 75 percent; 75 percent of 13 Q. 14 what? MR. PRICE: He's saying you have a 75-percent 15 risk that it would be a failure. 16 THE WITNESS: Right, so you have --17 (By Mr. Kellahin) All right, let me try again. 18 Q. The maximum is 200 percent. You've said it's a 19 20 200-percent risk, right? 21 Α. Right. 22 O. In addition to the mechanical risk, there's a risk in the reservoir? 23 24 Α. Right. 25 Okay. Describe for me if there is a display here Q.

1 that helps you illustrate for me what is the risk to you, apart from the mechanical risk, of not achieving commercial 2 3 production out of the coal gas. Α. There's a depletion, being that the coal is 4 5 sitting right on top of the Pictured Cliffs. 6 All right. Let's look at the locator map behind Q. 7 Exhibit Tab Number 2, where we look at the Lodewick well. 8 Describe for us what offsetting wells pose a 9 potential for having your location depleted. 10 Α. Just the well immediately to the east, the Number 11 2 well, the Lodewick 2. There's a PC well there. As is 12 just the original well, the Lodewick 1 could have depleted it too. 13 14 Q. Other than mechanical risk and the risk of reservoir depletion by existing wells, is there any other 15 component to your conclusion about the risk factor penalty? 16 17 Α. No. All right. When you add those two together, what 18 Q. level of risk, using his schedule of risk, do you recommend 19 20 being applied in this case? 21 Α. 200 percent. 22 MR. KELLAHIN: That concludes my examination of 23 Mr. Biemer, Mr. Examiner. 2.4 We would, for purposes of the record, move the

introduction of the information shown behind Exhibit Tabs

There's some geologic information in there 1 4, 5 and 6. simply for reference purposes. We have chosen not to 2 specifically address those. They were here in the event 3 that Amoco chose to appear and oppose, and they have not 5 done so. EXAMINER MORROW: All right, those exhibits are 6 admitted into the record. 7 8 EXAMINATION BY EXAMINER MORROW: 9 10 On the depletion risk, Mr. Biemer, that depletion Q. would have come, you're saying, from completions in other 11 intervals; is that correct? 12 13 Α. Right. And it looks like there's a Fruitland Well Number 14 Q. 5 up there in Section 7 to the north, is, I guess, about 15 the only one that's real close. 16 But I believe you cited the -- Was it your Number 17 4 there, that is a Dakota well that you thought might 18 have --19 Oh, the Number 2 well? That PC well there could 20 have drained the coal too. 21 Which one is that, now? 22 Q. Α. They're in the northeast of Section 18. 23 Oh, okay. So those -- Those sometimes aren't 24 Q. cemented off well enough to prevent drainage out of the 25

coal; is that right?

- A. When you frac a well, the frac height can go up and down. You can either have -- in both directions. And you can frac into the Fruitland Coal and be producing the Fruitland Coal along with the original PC well.
- Q. Okay. Do you remember what the risk factor normally is assigned in the -- It seems like there was less than 200, has kind of been the Division policy or Division -- Fruitland Coal risk --
  - A. It's 156.
  - Q. 156, is that what it is?
- MR. KELLAHIN: Mr. Examiner, and that was the risk assigned for a new drill.
  - THE WITNESS: That's right.
  - MR. KELLAHIN: And the reason it got to be 156 is sort of an oddity, but years ago John Caldwell and I presented a pooling case for Meridian in which the Division asked us to give them all the potential coal gas risk components.

And it was his testimony that you can almost always find the coal reservoir, and it will always be productive to some extent, but you had to quantify how much production you would achieve.

So the Division chose to reduce the 200 percent by a component which removed the risk for the fact that

sometimes you don't get the reservoir. 1 EXAMINER MORROW: Yeah. 2 MR. KELLAHIN: And that's how we got 156. 3 EXAMINER MORROW: 4 Okay. (By Examiner Morrow) Well, let me ask this 5 Q. 6 question, Mr. Biemer. If you go in there and start your 7 recompletion and get your perforation made, do you do an evaluation before you spend your money on a frac job, 8 or --9 10 We'll have to test the casing first off the bat. 11 And if the casing fails, we'll have to try to squeeze-12 cement it to where the casing will hold pressure. 13 Q. Yes, sir. If we test all that and we keep finding that we 14 15 have casing failures, even though we try to cement it off, 16 at some point then we will abandon operation. 17 Q. Okay. 18 I mean, we have to have casing integrity before 19 we do any of this. How about reservoir evaluation? Would you do any 20 0. 21 reservoir evaluation to see if you had been drained before 22 you --No, sir. 23 Α. 24 Q. -- before you frac'd it, or could you tell? 25 Would there be any way you could tell?

1	A. No, sir.
2	Q. Perforating and getting pressure buildup wouldn't
3	tell you nothing, I guess, in the coal seam; is that
4	correct?
5	A. You need to fracture-stimulate the well to see
6	what kind of gas it's going to produce.
7	EXAMINER MORROW: Okay. Thank you, Mr. Biemer.
8	Appreciate your testimony.
9	We're on We'll close this now?
10	MR. KELLAHIN: We're all done with that one, if
11	you're ready.
12	EXAMINER MORROW: Case 11,117 will be taken under
13	advisement.
L4	(Thereupon, these proceedings were concluded at
15	12:05 p.m.)
L6	* * *
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#### CERTIFICATE OF REPORTER

STATE (	OF N	1EM	MEX	CICO	)	
					)	SS
COUNTY	OF	SAN	ITA	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 October 16th, 1994.

STEVEN T. BRENNER CCR No. 7

My commission expires: October 14, 1998

I do hereby certify the few largering is a complete the few largerings in the brane has according to the brane has according to the few largerings in the brane has according to the few largerings in the brane has according to the few largerings in the brane has a few largerings