#### 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 AMERIND OIL COMPANY,
LTD., FOR COMPULSORY POOLING,
LEA COUNTY, NEW MEXICO

APPLICATION OF YATES PETROLEUM
CORPORATION FOR COMPULSORY POOLING AND
A NONSTANDARD PRORATION UNIT,
LEA COUNTY, NEW MEXICO

(Consolidated)

#### REPORTER'S TRANSCRIPT OF PROCEEDINGS

#### **EXAMINER HEARING**

ORIGINAL

BEFORE: MICHAEL E. STOGNER, Hearing Examiner

April 3rd, 1997

Santa Fe, New Mexico

This matter came on for hearing before the New Mexico Oil Conservation Division, MICHAEL E. STOGNER, Hearing Examiner, on Thursday, April 3rd, 1997, at the New Mexico Energy, Minerals and Natural Resources Department, Porter Hall, 2040 South Pacheco, Santa Fe, New Mexico, Steven T. Brenner, Certified Court Reporter No. 7 for the State of New Mexico.

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### EXHIBITS

Yates			Identified	Admitte	ed
:	Exhibit	1	8	1	.2
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:	Exhibit	3	10	1	.2
1	Exhibit	4	11	1	.2
]	Exhibit	5	23	3	1
1	Exhibit	6	27	3	1
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Amerind			Identified	Admitte	ed.
]	Exhibit	1	49	6	8
]	Exhibit	2	55	6	8
1	Exhibit	3	61	6	8
]	Exhibit	4	62	6	8
I	Exhibit	5	67	6	8

Exhibit 6

\* \* \*

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#### APPEARANCES

#### FOR THE DIVISION:

RAND L. CARROLL Attorney at Law Legal Counsel to the Division 2040 South Pacheco Santa Fe, New Mexico 87505

#### FOR YATES PETROLEUM CORPORATION:

CAMPBELL, CARR, BERGE and SHERIDAN, P.A. Suite 1 - 110 N. Guadalupe P.O. Box 2208
Santa Fe, New Mexico 87504-2208
By: WILLIAM F. CARR

#### FOR AMERIND OIL COMPANY:

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 1:55 p.m.: EXAMINER STOGNER: This hearing will come to 3 4 order. At this time I will call -- I will consolidate 5 and call both Cases 11,753 and 11,739. 6 7 MR. CARROLL: Application of Amerind Oil Company, Ltd., for compulsory pooling, Lea County, New Mexico, and 8 Application of Yates Petroleum Corporation for compulsory 9 pooling and a nonstandard proration unit, Lea County, New 10 11 Mexico. 12 EXAMINER STOGNER: Call for appearances. 13 MR. CARR: May it please the Examiner, my name is William F. Carr with the Santa Fe law firm Campbell, Carr, 14 15 Berge and Sheridan. 16 We represent Yates Petroleum Corporation in this 17 matter, and I have two witnesses. EXAMINER STOGNER: Additional appearances? 18 MR. KELLAHIN: Mr. Examiner, I'm Tom Kellahin of 19 the Santa Fe law firm of Kellahin and Kellahin, appearing 20 21 on behalf of Amerind Oil Company, and I have one witness. 22 EXAMINER STOGNER: Any other appearances? Will all witnesses please stand to be sworn at 23 this time? 24 (Thereupon, the witnesses were sworn.) 25

1	EXAMINER STOGNER: Are there any need for opening					
2	remarks at this time?					
3	MR. CARR: No.					
4	MR. KELLAHIN: I don't think so.					
5	EXAMINER STOGNER: Who would like to start?					
6	MR. CARR: I will, Mr. Stogner, with your					
7	permission?					
8	EXAMINER STOGNER: Mr. Kellahin?					
9	MR. KELLAHIN: That's all right.					
10	EXAMINER STOGNER: Mr. Carr, you may proceed.					
11	ROBERT BULLOCK,					
12	the witness herein, after having been first duly sworn upon					
13	his oath, was examined and testified as follows:					
14	EXAMINATION					
15	5 BY MR. CARR:					
16	Q. Would you state your name for the record, please?					
17	A. Robert Bullock.					
18	Q. Mr. Bullock, where do you reside?					
19	A. Hope, New Mexico.					
20	Q. By whom are you employed?					
21	A. Yates Petroleum Corporation.					
22	Q. What is your current position with Yates?					
23	A. A landman.					
24	Q. Have you previously testified before this					
25	Division?					

A. Yes, sir.

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- Q. At the time of that testimony were your credentials as an expert in petroleum land matters accepted and made a matter of record?
  - A. Yes, sir.
- Q. Are you familiar with the Application filed in each of these consolidated cases?
  - A. Yes, I am.
- Q. And are you familiar with the status of the lands in the subject area?
- A. Yes, sir.
- MR. CARR: Are the witness's qualifications acceptable?
- 14 EXAMINER STOGNER: Any objection?
- 15 MR. KELLAHIN: No objection.
- 16 EXAMINER STOGNER: So qualified.
- Q. (By Mr. Carr) Mr. Bullock, would you briefly state what Yates seeks with this Application?
  - A. Yates would like an order pooling all the mineral interests from to the surface to the base of the Strawn formation underlying Lots 8 and 9 of the irregular Section 2, Township 16 South, Range 35 East, for a nonstandard 80-acre oil spacing and proration unit.
    - Q. Is this in the West Lovington-Strawn Pool?
    - A. Yes, sir.

- Q. And you're proposing to dedicate this to a well that Yates will operate in Lot 8; is that right?
  - A. That is correct.
  - Q. And who is the owner of the interest in Lot 8?
  - A. The four Yates companies.
- Q. Have you prepared exhibits for presentation in this case?
  - A. Yes, sir.

- Q. Would you refer to what has been marked for identification as Yates Exhibit Number 1, identify it and review it, please?
- A. This is a land map showing Section 2. We've attempted to show the owners of the working interest in the entire section, and we've highlighted the two Yates wells we call our Field APK State Number 1 and Number 2 wells. We've outlined those in green.

The proration that stands up to the right, Lots 8 and 9, are what is being discussed in this matter today.

The other proration unit to the west there, being Lots 10 and 15, is a well that is currently being drilled by Yates, just as a reference.

- Q. Can you go to Exhibit Number 2 and identify that?
- A. Exhibit Number 2 is the approved APD for the well in question today, which is called -- which Yates calls its Field APK State Com Number 2 well, which is dedicating Lots

## 8 and 9 to the drilling of this well.

- Q. And this was approved back in January of this year, correct?
  - A. That is correct.

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- Q. What is the primary objective in the well?
- A. The Strawn formation.
- Q. And what is the status of the ownership in the proposed nonstandard spacing or proration unit?
- A. 50 percent of it is committed, that being the Yates companies.

And then 50 percent of the interest is uncommitted; that interest belongs to Amerind Oil Company, Ltd.

- Q. Are you the only two interest owners in the proposed spacing unit?
  - A. Yes, sir.
- Q. And what percentage of the acreage has been voluntarily committed to the Yates proposal?
  - A. 50 percent.
  - Q. So we stand 50-50?
- 21 A. Yes, sir, that's correct.
  - Q. Let's go to Exhibit Number 3. Exhibit Number 3 is a package of correspondence. I'd like you first to turn to the AFE, the long page in that material, the first long page.

Could you review the totals for the Examiner, as reflected on the Yates AFE?

A. The dryhole total for the drilling of this well is \$577,900.

The completed well costs are \$1,005,500.

- Q. Are these costs in line with what is charged by other operators in the area?
  - A. We believe they are.

- Q. Have you had other operators voluntarily commit under similar AFEs to join with Yates in the drilling of wells in this area?
- A. Yes, sir, UMC Petroleum Corporation executed an AFE, a like AFE, with similar amounts on the drilling of our Field APK State Number 1 well.
- Q. And these costs actually reflect what, based on Yates's experience, are going to be the costs associated with drilling the well, testing it, as Yates would propose to drill and test the well; is that right?
  - A. Yes, sir.
- Q. Could you now go to the Exhibit 3 as a whole and simply review for the Examiner Yates's efforts to obtain voluntary participation in the well?
- A. Okay. The first letter there is dated January
  7th, and that letter transmitted the AFE to Amerind Oil
  Company with a notation there on the bottom that we would

1 submit our operating agreement in the near future, that 2 letter, and we sent that on January 7th. And then we follow up on January 10, submitting 3 the operating agreements to Amerind. 4 5 0. Have you also been in communication by telephone with Amerind? 6 7 Α. Yes, sir, we have. At this time, have you made a good-faith effort 8 Q. to reach voluntary agreement? 9 Yes, sir. 10 Α. And you've been unable to do that? 11 Q. That's correct. 12 Α. At the time of the January 7th, 1997, letter to 13 Q. Amerind, Amerind had already proposed the drilling of a 14 well on this spacing unit, had they not? 15 16 Α. That's correct. That proposal was, in fact, sent to you as part 17 Q. of a well package that included an additional well? 18 They wanted to pool Lots 8 and 9 and Lots 7 19 Α. and 10 and make it a two-well package. That was the 20 21 proposal that they submitted to us. And your proposal was only for the one well which 22 ο. is the subject of today's hearing? 23

Is Exhibit Number 4 a copy of an affidavit

Yes, sir.

Α.

Q.

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1 confirming that notice of this hearing and Application have been provided to Amerind in accordance with OCD rules and 2 3 regulations? 4 Α. Yes. Could you -- Does Yates propose to call a 5 Q. 6 geological witness to explain the risk associated with the 7 proposed well and the reasons that Yates believes the well should be located in Lot 9? 8 Yes, sir, we do. 9 Α. I mean Lot 8. 10 Q. Lot 8. 11 Α. Were Yates Exhibits 1 through 4 prepared by you 12 0. or compiled at your direction? 13 A. Yes, sir. 14 MR. CARR: At this time, Mr. Stogner, I would 15 move the admission into evidence of Yates Petroleum 16 Exhibits 1 through 4. 17 EXAMINER STOGNER: Any objections? 18 MR. KELLAHIN: No objection. 19 EXAMINER STOGNER: Exhibits 1 through 4 will be 20 admitted into evidence at this time. 21 MR. CARR: That concludes my direct examination 22 of Mr. Bullock. 23 EXAMINER STOGNER: Thank you, Mr. Carr. 24 Mr. Kellahin, your witness. 25

#### 1 CROSS-EXAMINATION 2 BY MR. KELLAHIN: 3 0. Mr. Bullock, let's use Exhibit 1 as a reference map, sir. 4 5 Α. Okay. Am I correct in remembering last summer, Mr. 6 Q. Bullock, that Yates Petroleum filed a request for a 7 8 nonstandard proration unit consisting of Lots 10 and 11 in irregular Section 2? 9 10 Yes, sir, we did. A. And in response to that Application, Amerind 11 Q. filed an objection, did they not? 12 They did. 13 Α. And as a result of the objection, the Examiner 14 Q. denied the administrative application of Yates and did not 15 16 allow you to consolidate 11 and 10 together; is that 17 correct? 18 Α. That's correct, yes. At that time, there was activity in the section. 19 20 Am I correct in remembering that up in the northeast, in Lot 1, that Amerind had a Strawn well there? I think it 21 was unsuccessful or substantially unsuccessful, but that 22 was a Strawn well up there in Lot 1; is that not true? 23 I believe that's correct, yes. 24 Α.

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And then Lots 3 and 4 were consolidated

for Amerind's Mobil State Number 1 well up there in 3; is that not true?

- A. I believe that's the case, yes.
- Q. Okay. And then I think 6 and 5 had been consolidated for the Gallagher State 2, also by Amerind; is that not true?
  - A. I believe that's correct.
- Q. Other than those, were there any other Strawn oil wells in the section at that time?
  - A. Not at that time.
- Q. Since then we've -- a number of wells have been added to the section; is that not true?
- 13 A. Yes, sir.

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- Q. Following the protest by Mr. Leibrock on behalf
  of Amerind, there was still available for Yates and Amerind
  Lots 7, 8, 9 and 10; is that not true?
- 17 A. Yes.
- Q. And those tracts were shared in such a way that
  Yates controlled 8, Yates controlled 10, Amerind controlled
  and 7, right?
  - A. Yes, sir.
    - Q. Okay. Am I correct in remembering that Mr.

      Leibrock was the first operator that proposed to you on a phone call in October 23rd of 1996 that you and he get together on behalf of your respective companies and

consider either consolidating those four tracts on a standup or a laydown basis? Am I correct in remembering that?

- A. I believe that's correct, yes.
- Q. Then on November 6th, Mr. Leibrock sent you his proposal, which included consolidating Tracts 8 and 9 for one well, with the well located on 9, and then a consolidation of Tracts 7 and 10 as another 80-acre spacing unit; is that not true?
- A. No, that's not -- That's not the way I remember it.
  - Q. Okay.

A. Maybe he has information that could be wrong, but I thought that at that point in time he didn't know whether he wanted to stand them up or lay them down, in that letter of November 6th.

He said we could -- After evaluating the seismic that was being shot at that time, then, after that seismic had been evaluated, it would be decided whether the spacing units would be laid down or stood up.

- Q. Okay, and that was still a matter of discussion at that time?
  - A. Yes, sir.
- Q. I believe the plat attached to his November letter showed a suggestion of consolidating 8 and 9 for

consideration?

- A. There has been a lot of things bantered around. That was one that was being considered, yes.
- Q. Okay. Yates and Amerind did not come to a voluntary agreement about how to consolidate any of these four tracts in any combination; is that not true?
  - A. That's correct.
- Q. In January I believe Mr. Leibrock had filed an original force pooling case, asking for the consolidations of 8 and 9, and 7 and 10; is that not true? Two different force pooling cases, each standing up those four tracts, as I've described.
- A. I would have to refer to my information. I don't have it right in front of me. I couldn't tell you.
- Q. There was prior force pooling efforts by Amerind with regards to standing up the two spacing units for those four tracts?
- A. Again, I'd have to go back to the information. I don't have it right here in front of me.
- Q. Okay. Do you recall the February 6th Examiner hearing before Examiner Stogner, and the motion filed by Yates to have the force-pooling case involving 7 and 10 dismissed because in December of that year Yates had reached had reached a voluntary agreement with UMC where 10 and 15 had been consolidated?

- A. 10 and 15 have been consolidated.
- Q. All right. And as a result of those consolidations, then, Amerind dismissed or withdrew its two pooling cases, if I'm not mistaken?
  - A. (Nods)

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- Q. All right. The consolidation of 10 and 15 was for the purposes of drilling the Field APK State 1 well in 10?
- 9 A. Yes, sir.
- 10 Q. What's the current status of that well?
- 11 A. I'll defer that question to Mr. Hayes.
- 12 Q. Drilling has commenced on that well --
- 13 A. Yes, sir, drilling --
- Q. -- and it's at some state of drilling --
- 15 A. Yes, sir.
- 16 | Q. -- or completion?
- 17 A. Yes.
  - Q. In addition, am I correct in remembering that UMC consolidated Lot 16 with the immediate 40-acre tract to the south of 16 for purposes of drilling a well in Lot 16?
- 21 A. That's correct.
- 22 Q. Do you know the status of that well?
- 23 A. It's been drilled.
  - Q. You're not a participant in that well?
- A. No, sir, we're not.

Q. When you described to Mr. Carr the AFE comparison that you -- of the AFE that you had presented in your exhibit package -- it's a completed well cost over a million dollars? --Α. Yes. -- at the time that that was prepared, had you Q. received Mr. Leibrock's AFE on behalf of Amerind for his well, showing a completed total well cost of \$725,000? Α. Yes. Are you aware of that? Q. Yes, sir. Α. Did you obtain any explanation from your 0. technical people as to the difference between his \$725,000 and your million-dollar well? I think Mr. Hayes is prepared to speak to those differences. Am I correct in remembering your response to Mr. Carr that Mr. Leibrock, on behalf of Amerind, was the first working interest owner in 8 and 9 to propose the consolidation of those tracts in a voluntary spacing unit? Α. He was. Okay. And that occurred back in November of ο. 1996? Α. Yes.

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Q.

Okay.

At this point Yates is unwilling to have

the well located in Lot 9; you're still advancing the 1 2 proposition that it should be located in 8? 3 A. Yes, sir. Is there any material difference between you and 4 Q. 5 Amerind with regards to the overhead rates proposed by either company? 6 7 Α. It appears we're very close on the --8 Q. So that's not an issue of difference between you? He's just a little bit higher. 9 Α. Okay. 10 Q. I don't think it's a significant --11 Α. And I think both companies have exchanged 12 Q. operating agreements. Is there any substantial difference 13 in the terms and conditions of the operating agreements? 14 15 Α. No. MR. KELLAHIN: Okay. Thank you, Mr. Examiner. 16 17 EXAMINER STOGNER: Thank you, Mr. Kellahin. Mr. Carr, any redirect? 18 19 MR. CARR: No redirect. EXAMINATION 20 BY EXAMINER STOGNER: 21 When I look at Exhibit Number 1, help me with the 22 Q. There are several well indications. 23 nomenclature here. Is that -- existing Strawn wells the solid red ones? 24 25 No, those -- I'm not sure what those wells are, Α.

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and I'll defer that to Mr. Hayes.
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                Okay.
          Q.
                They're not Strawn wells, I don't believe.
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          Α.
                                                              I'11
     let him answer that.
 4
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          Q.
                Okay.
                       The proration unit there, or the green
 6
     area shaded -- not shaded but outlined in green that takes
 7
     in Lot 10 and 15, that well has been drilled or is being
     drilled?
 8
 9
                It's being drilled.
          Α.
                Being drilled.
10
          Q.
                Refer to Exhibit Number 2.
11
                                            This is the APD,
     application to drill. When was this filed?
12
13
          Α.
                It looks like January 17th.
                Okay. Now, is this --
14
          Q.
                January 23.
15
          A.
                Okay. Is this the proposed location for this
16
          Q.
17
     well?
                Yes, sir. Yeah, that has not changed.
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          A.
                Well, that's what I was getting at up there.
19
          Q.
                                                                You
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     had it at 2390 from the north --
                Okay, yeah, that's 640.
21
          Α.
22
          Q.
                It's 640?
                           Yeah, 640 east.
23
          Α.
                640 east.
               And that's what it shows on the C-102?
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          Q.
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               Yeah, 640 is correct.
          Α.
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Now, the proposed operating agreement, that is a 1 Q. 2 part of Exhibit 4; is that correct? I mean 3? Yes, sir. 3 Α. Okay. Now, where are the overhead charges in 4 Q. this operating agreement? 5 They're on page 3 of that COPAS. 6 Α. There we are. You're proposing \$5400 while 7 Q. drilling and --8 9 Α. -- \$540. 10 Q. -- \$540 while producing? 11 Yes, that's correct. Α. 12 Now, it looks like that's been whited out and 0. 13 marked over. That's what it appears in my exhibit. Yeah, that's what we're using, the rates we're 14 Α. using for this depth of well. 15 I can't tell you why it's been whited out. 16 17 was not higher than that. But that's what went out on the January 10th --Q. 18 19 A. Yes. -- over the letterhead? 20 Q. Yes, sir. 21 A. Okay. And that's what you're asking for today? 22 Q. 23 Α. Yes, sir. 24 Q. Okay. Is all of Section 2 a state --25 Α. Yes.

1	Q state acreage?			
2	A. Yes.			
3	Q. So the royalty interest is the state of New			
4	Mexico; is that correct?			
5	A. (Nods)			
6	Q. Has the Yates well been staked and has there been			
7	any work at this time on the surface for the preparation of			
8	a drill pad?			
9	A. No, staked and permitted only.			
10	EXAMINER STOGNER: Okay. Any other questions?			
11	MR. KELLAHIN: No, sir.			
12	MR. CARR: No further questions.			
13	EXAMINER STOGNER: You may be excused.			
14	MR. CARR: At this time we call Mike Hayes.			
15	MICHAEL HAYES,			
16	the witness herein, after having been first duly sworn upon			
17	his oath, was examined and testified as follows:			
18	DIRECT EXAMINATION			
19	BY MR. CARR:			
20	Q. Would you state your name for the record, please?			
21	A. Michael Hayes.			
22	Q. Where do you reside?			
23	A. Artesia, New Mexico.			
24	Q. By whom are you employed?			
25	A. Yates Petroleum Corporation.			

Mr. Hayes, what is your position with Yates? 1 0. I'm a geologist. 2 A. Have you previously testified before this 3 Q. Division? 4 5 Α. Yes, I have. At the time of that testimony, were your 6 Q. 7 credentials as an expert in petroleum geology accepted and made a matter of record? 8 9 Α. Yes, they were. Q. Are you familiar with the Applications filed in 10 each of these cases on behalf of Amerind and Yates? 11 12 Α. Yes, I am. Have you made a geological study of the area 13 Q. which is the subject of these Applications? 14 Yes, I have. 15 A. And are you prepared to present the results of 16 Q. that study at this time to Mr. Stogner? 17 MR. CARR: Are the witness's qualifications 18 acceptable? 19 Any objections? 20 EXAMINER STOGNER: 21 MR. KELLAHIN: No objection. 22 **EXAMINER STOGNER:** So accepted. Mr. Hayes, let's go to what has 23 Q. (By Mr. Carr) been marked as Yates Petroleum Corporation Exhibit Number 24 Would you identify this and review it for Mr. Stogner? 25

A. This is an isopach map of the Strawn mound interval. On an upcoming cross-section I'll kind of identify exactly what the -- referring to as a mound interval.

This is a contour map of that interval on 10-foot contours. As you can see, I've stopped the contours going off to the south and west direction. There really isn't a lot of control there.

The -- Getting back to one of your other questions, the solid red well markers are producers from various horizons. The ones with the outer circles on them are Strawn penetrations. The other ones are basically Wolfcamp completions.

And at the time this map was prepared there were three wells that were -- logs that were available and -- were available for mapping. It's the West State up in the northeast corner, the Mobil State in -- I guess that's Lot 3 -- and then the Gallagher State Number 2 in Lot 6.

- Q. Have you utilized other information in constructing your maps?
- A. I've also used seismic information as part of this. It's based primarily on subsurface data from the logs. But seismic is definitely a factor in preparing this map.
  - Q. Is this seismic that was acquired jointly by you,

Amerind and others, but covered by a confidentiality agreement?

- A. Yes, it is covered by a confidentiality agreement.
  - Q. What does this exhibit actually show?
- A. What I'm showing here is the thickness of that interval. Yates's opinion and my opinion is that the Strawn productive interval, your best chances of encountering that productive pay is where the interval is thickest. That's one of the criteria that we use to try and identify locations.

As this map shows, you can see that there's going to be approximately a hundred feet or a little greater than that in Lot 8 where we're proposing drilling the APK State Number 2, and you can see there's basically a thicker trend running somewhat in a northwest-southeast direction, through the northeast portion of this irregular section.

- Q. Why is Yates proposing this particular nonstandard spacing unit?
- A. Well, we think -- Why these particular two tracts -- ?
  - Q. As opposed to turning it, maybe, and extending it across into Section 7?
- A. Our opinion is that Lots 8 and 9 are the
  preferred lots to put in there. They look better -- Better

opportunity in those two lots than to say, let's put it in 7 or something like that.

- Q. And what you're doing is, you're basically locating this substantially north of the UMC well that has recently been drilled and completed in Lot 16; is that right?
  - A. That's correct.

- Q. Based on the information available to you -- I mean, we are obviously developing on a nonstandard unit; is that correct?
  - A. That's correct.
- Q. If it got to a point where nonstandard units were not allowed by the Division, would it be possible to justify drilling this well on a 40-acre nonstandard unit?
- A. I think Yates would certainly consider that option, yes.
- Q. Are there other, shallower formations in the area that could be potentially productive?
- A. Yes, as you can see from the production -- or just the map of the producing wells in the area, substantial Wolfcamp potential in the area.
  - Q. Is there also a potential, perhaps, in the Abo?
  - A. I would certainly say so, yes.
- Q. If you wound up developing this acreage on a -in a shallower horizon that is spaced on, say, 40-acre

spacing, the 40 acres to be dedicated to your proposed well
in Section 8 would be 100-percent Yates-owned; isn't that
right?

A. In lot 8, yes.

- Q. And conversely, if it were on the Amerind tract i a shallower horizon, it would be 100-percent Amerind?
  - A. That's correct.
- Q. When we look at the wells, the Strawn wells in the area, how many have been commercial successes?
- A. From the three that are completed, which would include the three that I spoke of, basically two of the three wells appear to be commercial at this time. The Mobil State and the Gallagher State look like they're going to be pretty good wells. They're all fairly recent. And the West is obviously a -- It looks like a dry hole in the Strawn.
- Q. Do you have any information on the Townsend Number 1?
- A. Yes, I do. I have some log information that was provided to me in confidence, and I've chosen not to show it on these maps.
- Q. Let's go to your Exhibit Number 6. Can you identify and review that, please?
- A. That is a Strawn structure map on a marker that again will be identified on the cross-section coming up.

Basically, it's a -- Again, there's little control in here from a subsurface standpoint that actually Strawn penetrations -- I've got the three data points that I referred to.

And in addition to that, we're also working with the seismic data that we had available to us when we put this map together.

Q. What does this exhibit show you?

A. A couple things. First of all there's, you notice, the 25-foot contour interval. It's a fairly subtle structural picture. We feel that again it indicates, like the isopach map, that the structural highs are indicative of Strawn buildups and can be used as an indicator of perhaps better Strawn potential.

This map shows that we believe that there's a Strawn high relative to some other surrounding area, basically running between Section 8 and 10. It doesn't intercept the northwest quarter of 9. And because of that, we feel that there's a better possibility for Strawn porosity development, based on the structure top there. In fact, there may even be an enclosure in the Strawn there.

- Q. Both your isopach and your structure map suggest that the better location is in Lot 8; is that fair to say?
- A. The isopach map, the structure map and, in fact, our seismic data does too.

Q. Let's go now to -- And there's a trace on the Exhibit Number 6 for the subsequent cross-section? Yes. Α. Let's go to that at this time. Q. Α. Basically A-A' runs from the southwest to northeast. Would you review the information on this cross-Q. section for Mr. Stogner? This cross-section is just a two-well crosssection I put together, principally to show kind of what the Strawn interval looks like in this area, and what horizon I was using for mapping on. The Strawn top is shown there on the two-well cross-section, the datum that are referred to as the Strawn marker, and that's what my structure map is upon. And then the interval from the datum to the Strawn top is the isopach thickness of the mound interval, if you will. Again -- Then I've got the Atoka marker on there too. Another thing I'd like to show is that you can see that the actual perforated interval in the Amerind Gallagher State Number 2 is just that smaller interval there I've colored in red with the perforations. Are you prepared to make a recommendation to Mr. Q.

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Stogner concerning the risk penalty that should be assessed

Amerind if they do not voluntarily join in the well and 1 Yates is designated operator of the property? 2 3 Α. Yes, I am. And what is that? 4 Q. 5 A. 200 percent. And upon what do you base that recommendation? 6 Q. 7 This play, even with 3-D seismic data in here, Α. has substantial risk to it. As you can see, even with our 8 opposing operator, they've had 3-D in here too and have 9 10 drilled dry holes. It's -- There's still substantial risk involved 11 12 in drilling these wells. 13 Q. Do you believe there's a chance you could drill a well at this location that wouldn't be a commercial 14 success? 15 16 Α. Absolutely. And what were the administrative and overhead 17 0. 18 costs, again, that should be --I believe, as they are stated, as I just saw, 19 A. they were \$5400 during drilling and \$540 --20 21 And does Yates recommend that these figures be 0. 22 incorporated into the order which results from this hearing? 23 Α. Yes, it does.

Does Yates seek to be designated operator of the

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Q.

proposed well? 1 2 Α. Yes, we do. When Yates goes out and drills a well in this 3 0. area, what sort of cementing program do they run on the 4 well, or to what extent do they cement the casing in place? 5 My understanding is that typically what we do is, 6 Α. we -- on our production string, which is typically 5-1/2-7 inch casing here, we cement -- try and cement back into the 8 intermediate casing string to cover the whole interval 9 that's exposed. 10 In your opinion, will granting this Application 11 0. be in the best interest of conservation, the prevention of 12 13 waste and the protection of correlative rights? 14 Α. Yes. 15 Were Exhibits 6 through -- 5 through 7 prepared Q. 16 by you? Yes, they were. 17 Α. MR. CARR: At this time, Mr. Stogner, we would 18 move the admission into evidence of Yates Petroleum 19 20 Corporation Exhibits 5 through 7. EXAMINER STOGNER: Any objection? 21 No objection. 22 MR. KELLAHIN: Exhibits 5 through 7 will be 23 EXAMINER STOGNER: admitted into evidence at this time. 24

That concludes my presentation of this

MR. CARR:

witness. 1 2 Thank you, Mr. Carr. EXAMINER STOGNER: Mr. Kellahin? 3 CROSS-EXAMINATION 4 BY MR. KELLAHIN: 5 Mr. Hayes, your degree is in geology, sir? 6 0. That's correct. 7 A. 8 Q. And your experience for Yates is as a geologist? 9 Α. That's correct. 10 Q. You're not involved, then, with the drilling 11 department in designing well programs or pricing out the cost of drilling and completing wells? 12 We make recommendations, but that -- no, that is 13 not my area of responsibility, no. 14 In terms of analyzing the geology, what is the Q. 15 period of your involvement? When did you first start 16 looking at this specific Strawn opportunity in Section 2? 17 I took over this area of responsibility Α. 18 approximately -- don't hold me to this -- something around 19 mid-February, in that range, maybe. 20 Q. Of this year? 21 22 Of this year, yes. Α. 23 Q. Does your experience and expertise include evaluating seismic data, or do you rely on a geophysicist 24 to make those evaluations? 25

- A. We do use a geophysicist in those evaluations, that's on staff, but that's certainly something that's kind of a team effort, as far as picking locations, making recommendations on potential depositional models and that type of thing, but we do have a professional geophysicist on staff.
  - Q. The three-dimensional seismic data that's available for Section 2 is proprietary between Yates and Amerind; am I correct in understanding that?
  - A. Actually, there's other parties in there. It is proprietary, and Amerind and us are parties to that, but it also includes UMC and, I think, some -- several other companies.
  - Q. And that was going to be my next question: UMC had access to that information?
    - A. Yes, they did.

- Q. And the vintage of this information is what? Fall of 1996?
- A. That's correct, I believe it came into our shop
  -- don't hold me to this -- October, November range,
  something like that.
  - Q. All right. And in December and January you and others with Yates were analyzing that information?
    - A. That's correct.
      - Q. Okay. The Amerind well in Lot 16 was not

commenced until sometime in January or February? 1 You mean UMC's well? A. 2 I'm sorry, the UMC well in 16. 3 Q. Yeah, that sounds about the right time frame, 4 somewhere around -- I think it was drilling basically 5 6 through February. 7 Do you -- Yates has consolidated Lot 10 and 15 0. with UMC? 8 9 Α. Yes. As a result of that consolidation, did it afford 10 Q. you the opportunity to have access to the data being 11 generated for the well drilled in 16? 12 Excuse me, could you repeat that, please? 13 A. 14 0. You said you were given an opportunity to 15 look at the log of the UMC well in 16? 16 A. That's correct. And it was done in confidence? 17 0. 18 A. Yes. And was that done because you had made a 19 Q. commitment of Lot 10 to consolidate it with 15? 20 In fact, I just got my hands on that log 21 Α. about ten to fifteen days ago, because we had a pipe-22 setting decision to be made in Lot 10, and I requested that 23 information from them to help me with my evaluation on 24 25 setting pipe in Section -- or Lot 10.

1 You simply went out and sought the information Q. from UMC? 2 Yes, I did. 3 Α. And under what conditions did they let you look 4 Q. at that log? 5 Well, it was explained to me that they considered 6 Α. 7 it a tight hole and did not want to reveal that 8 information. Q. Okay. Have you utilized the top and the bottom 9 of the Strawn mound interval that you've shown on the 10 cross-section for the log of that well to make the isopach, 11 Exhibit Number 5? 12 No, this map was prepared prior to receiving that 13 Α. log data. 14 Without telling me the quantity -- I don't want 15 Q. you to disclose the proprietary nature of the disclosure to 16 you, but would it materially change the location of your 17 contour map as displayed on 5? 18 19 It does not precisely match. Α. Okay, is there a substantial difference? 20 Q. 21 I would not consider it substantial, no. Α. There is a data point that's not shown on your 22 Q. Exhibit Number 5, Mr. Hayes. Is there not a Gillespie well 23 in adjoining Section 1, the State D, which is east of 24 Amerind's Lot 9? 25

A. That's correct.

- Q. In fact, that's the well Mr. Gillespie drilled in, I think, September and October that triggered the interest in what UMC, Yates and Amerind are attempting to do in Section 2?
  - A. That's my understanding, yes.
- Q. Okay. What are the log values on that well that we could place on your contour map in order to finish the curves on the contour line?
- A. I'm not certain. I don't recall off the top of my head what those contour numbers are. I do know that that lot was not released until approximately March 20th or so at the OCD, and so that log was not available at the time I prepared the map, and I don't honestly know what that number is at this time.
- Q. Okay, so we have two data points that are now available in some fashion that may alter your interpretation on Exhibit 5?
- A. In fact, there's actually three data points that are --
- Q. Well, that's -- the third one I was about to ask
  you about.
  - A. That's our well.
- Q. On 10. What's the status of the well, the Field APK State Well in 10?

- A. We set pipe on that approximately Friday night or Saturday of last week.
  - Q. All right. So you have logs on that?
  - A. Yes, we do.

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- Q. And what is the thickness on the Strawn mound for the equivalent interval we're trying to identify?
  - A. It's approximately 100 feet.
- Q. So we're going to have to shift the 100-foot contour line, or at least expand it to move the APK State well so that it's at the contour line rather than being thinner than the 100-foot line?
- 12 A. That's correct.
  - Q. Okay. Would you continue -- If you honored that data point, would you continue to honor the same distance in the curvature of the contour lines between the 100-foot line and the 90-foot line?
    - A. In which direction? You mean just --
- 18 Q. Across.
- 19 A. -- uniformly around it or --
- 20 Q. Yeah.
- 21 A. I would not, no.
- Q. Okay. If you honor that data point, you're going to have to expand the area of Lot 9 that's included within the 100-foot contour line, are you not?
- A. I would do that, yes.

Q. Okay. And as you do that, it begins to appear that Lot 8 is going to be comparable in terms of thickness value to Lot 9?

- A. Yes. In fact, that's kind of what I'm showing already on the isopach map.
- Q. So if you do that, Mr. Hayes, then there is no way on thickness you can distinguish the priority between Lot 8 over Lot 9?
- A. That's correct, on just that criteria alone, that's correct.
- Q. All right. When you look at the seismic data, are you looking at that data to help define Strawn structure so that you can locate the well at the highest point of the Strawn mound? Is that the strategy?
- A. That is one of the strategies, but that's certainly not the only criteria.
- Q. Okay, is the other criteria to draw some relationship between the seismic profile interval identified on the seismic work and analyze that to see if you can make an analogy in a log, a conventional log, and so attempt to identify not only structure but thickness of the mound?
- A. Yes, absolutely. And in fact, we go a step further. Rather than just identifying thickness or structure, in fact, we're trying to see if we can't, in

fact identify porosity if we can.

- Q. Okay, and that's the next step?
- A. Yes. And in fact, you don't necessarily need a log; you're just trying to find an analog between seismic signature from a producer to, say, a dry hole or something like that, try and develop a pattern.
- Q. Okay. The seismic data was not available to help us make those analogs -- Let me say it the other way around.

The existing well data from which you could construct an analog with the seismic information would have been the existing three Strawn wells in Lots 1, 3 and 6?

- A. That's correct.
- Q. Plus the Gillespie well in the adjoining section?
- A. Yes, we knew it was a producer; we didn't know the values of the isopach thickness or those other log characteristics. We knew it was a producing well, yes.
- Q. Does the 3-D seismic work cover a sufficient area that it would include the Gillespie well in Section 2?
  - A. It does -- It doesn't cover it completely, but yet, it gives an indication.
- Q. Is it extensive enough to include the UMC location in Lot 16?
  - A. Yes, it is.
    - Q. Has the structure map, Exhibit Number 6, changed

as a result of the data point found by the Yates well in 2 10?

- A. Yes, it has changed slightly.
- Q. All right. So this structure map, like the isopach, was prepared before we had the new data points that we're discussing now?
- A. That's correct.

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- Q. All right. Mr. Hayes, when we look at 10, how would the structure map change in relation to the log information on structure for the Yates well in 10?
- 11 A. That well came in approximately 20 feet high to 12 that map.
  - Q. Okay. So to re-draw the contour line, I'm going to have to take the 550-foot contour and extend it so that it -- so that the Yates well in 10 is included within that contour?
- 17 A. That's correct.
- Q. And I'm going to have to do it by an additional
  19 | 25 feet --
- 20 A. About 20.
- 21 Q. -- give or take?
- 22 A. Yeah, right.
- Q. About 20 feet, okay.
- What happens to the structural position of the
- 25 | UMC well in 16 as we look at this map?

- That I'm not familiar -- I don't recall. Α. 1 So we haven't checked to know that? 2 0. 3 No, I don't recall. Α. What happens to your contour line on structure 4 Q. 5 when you incorporate the Gillespie well data for that well in --Again, I'm not familiar. Α. 8 Q. So you didn't take that well into consideration? 9 No. Α. Okay. If we take just the one data point that 10 Q. you have looked at, the Yates well in 10, will that change 11 the structural position of the 550-foot contour line and 12 13 expand it so it includes more of Lot 9? In that case it wouldn't be as necessary, 14 Α. 15 perhaps, as it was with the isopach. The difference between the lowest structural 16 Q. 17 point within 8 and 9 is this minus 7575 line, right? Α. Yes. 18 And the highest point on structure within those 19 Q. two lots is what number, sir? 20 7550 or above. Actually, it was implied that 21 Α. there's something above that. 22 23 All right, sir. We're dealing with 25 feet? Q.
  - MR. KELLAHIN: Okay. Thank you, Mr. Examiner.

That's correct.

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MR. CARR: I have no further questions of Mr. 1 2 Hayes. 3 EXAMINATION BY EXAMINER STOGNER: 4 Mr. Hayes, whenever I -- Well, refer to any of 5 Q. 6 the maps. And our location is 2390 from the north line; is that correct? 7 8 Α. I believe that's correct, yes. 9 Is that an unorthodox location in this instance? ο. It's the field 10 It's not an unorthodox location. Α. 11 rules of the West Lovington-Strawn field. 12 Okay. And that's -- How does that do that with Q. 13 it being 2390? Essentially, the field rules are that they have 14 Α. to be, I believe, 330 off of a lease line and/or a lease --15 16 yeah, lease line or, in this case, I believe, a lot, and 17 1020 feet apart from a producing well, a minimum of 1020 feet from another producer in the field. 18 Q. Well, I guess what I'm trying to get at, 2310 19 20 usually fits that bill, but this is 2390. It's based on the seismic data. 21 Α. 22 No, it's based on quarter-quarter section lines. Q. Oh, the -- I'm saying that our location is 23 Α. influenced by the seismic data. 24 25 Q. Yes. 2310 is usually a -- How big is Lot 1? How

1 many acres? 2 Α. I do not know. Then why is 2390 a standard location? Whenever 3 0. you take 2620, which is a quarter mile -- I mean a half 4 mile, and you divide that in two, that's 1320? 5 6 Α. Uh-huh. So how does 2390 fit into that? Isn't that 50 7 0. 8 feet unorthodox? Do you know what I'm talking about? 9 A. You kind of have lost me a bit, but I think I know where you're going. I think you're just saying that 10 you think that it's an unorthodox location, based on --11 You tell me why it's not. 12 Q. MR. CARR: Mr. Stogner, it is an unorthodox 13 location. It's too close. 14 EXAMINER STOGNER: Yes, and you didn't ask for 15 16 it. MR. CARR: No, we didn't. We missed that. 17 EXAMINER STOGNER: I believe I denied an 18 19 application -- dismissed -- Mr. Carr? I believe I 20 dismissed an application --21 MR. CARR: Yes, I think you --EXAMINER STOGNER: -- at one time because 22 somebody had missed something in this particular area. 23 MR. CARR: Unless we --24 25 EXAMINER STOGNER: Now, Lot 1 is a bigger one --

You know, Mr. Stogner, I've been just 1 MR. CARR: 2 advised that they believe that Lot 1 is a bigger lot, but I'm not prepared to tell you that right now. I certainly 3 can check it quickly for you. 4 But based on this number, you're right. 5 EXAMINER STOGNER: Uh-huh. 6 MR. CARR: The standard distances, it would be 7 unorthodox. You'd have to check --8 EXAMINER STOGNER: You realize the danger in 9 10 this. All Mr. Kellahin has to do is object to this case, 11 and I've already set some sort of precedent so I could 12 dismiss yours real quick because you didn't ask for a nonstandard. 13 If it is nonstandard, that's right. 14 MR. CARR: EXAMINER STOGNER: You didn't even ask for the 15 16 nonstandard proration unit in the call of this case either. 17 MR. CARR: No, I did; they did not. The call of the case for Yates is nonstandard proration unit. 18 The 19 Amerind case --EXAMINER STOGNER: Amerind does not. 20 MR. CARR: -- does not call that --21 22 EXAMINER STOGNER: Okay. 23 MR. CARR: -- because this case, frankly, was filed, Mr. Stogner, at the same time the earlier dismissal 24 25 was entered, and it was filed because the other case was

1 not nonstandard, and we wanted to be sure there was a 2 complete Application before you. And I have a plat, the survey plat, that shows, 3 4 in fact, that Lot 1 is not a 40-acre lot, that it contains 5 50.78 acres. And so I can -- I'm not good at the numbers, Mr. 6 7 Stogner, but I can check that to confirm that, in fact, we are at a standard location, because that's what we believe 8 we are. 9 EXAMINER STOGNER: Okay. Well, if it is not --10 11 MR. CARR: Yes, and --EXAMINER STOGNER: -- then it will --12 13 MR. CARR: I understand that. EXAMINER STOGNER: You don't have any objection 14 to it being moved to a standard location a few feet? 15 MR. CARR: No, we would not. We would move it to 16 a standard location because it was our intent to be 17 18 standard. And it does say -- I've got the acreage numbers 19 on that irregular row of lots on the top, and Lot 1 is 20 50.78. 21 EXAMINER STOGNER: Okay, then that probably 22 23 accounts for it. 24 MR. CARR: Yes, sir. MR. KELLAHIN: Mr. Examiner, we have checked 25

that, and Mr. Leibrock will testify that that is a 50-acre 1 2 tract 1, and this well under those circumstances would be 3 standard. Okay, so an unorthodox EXAMINER STOGNER: location is not an issue in this instance. 5 6 But normally it would be in this sort of case, would it not? 7 MR. KELLAHIN: We've learned that the hard way, 8 Mr. Examiner. 9 In addition, my Application --10 MR. CARR: I would point out -- I would point 11 that as to the nonstandard spacing unit, that it isn't in 12 13 the head of the ad, but it is in the text of the ad, and I believe it was in the Application that was filed. 14 MR. KELLAHIN: Yes, Mr. Examiner, it was in our 15 Application, and it is in the text of the ad. 16 (By Examiner Stogner) You had mentioned in your 17 Q. testimony that developing this tract on 40-acre spacing, 18 Yates would not have a problem on it; is that correct? 19 That opinion has been expressed to me by 20 Α. management at Yates Petroleum, yes. 21 EXAMINER STOGNER: Okay. Any other questions? 22 MR. KELLAHIN: One follow-up question, Mr. 23 Examiner. 24 25 FURTHER EXAMINATION

## 1 BY MR. KELLAHIN: Are you aware of what results UMC achieved with 2 0. 3 their well in 16, the one where you looked at the log? They've perforated, and they're producing. 4 5 Do you know what kind of rates they achieved? Q. 6 My understanding is, it's in the range of perhaps Α. 7 30 or 40 barrels a day, is my understanding. 8 And your well is not yet completed, so we don't 9 have an initial potential? It has not been perforated. 10 Α. MR. KELLAHIN: Okay. Thank you, Mr. Examiner. 11 12 FURTHER EXAMINATION 13 BY EXAMINER STOGNER: 14 But Yates is aware and you are aware that that 0. would carry an acreage factor of .5 in the allowable? 15 I'm not familiar with the details. 16 Α. I'm just 17 expressing what's been expressed to me. MR. CARR: Mr. Stogner, I've been party to 18 19 conversations. They clearly understand that. 20 EXAMINER STOGNER: Okay, no other questions. 21 MR. CARR: And that concludes our presentation. 22 EXAMINER STOGNER: Thank you, Mr. Carr. Mr. Kellahin? 23 Thank you, Mr. Examiner. 24 MR. KELLAHIN: We call Mr. Bob Leibrock. 25

# ROBERT C. LEIBROCK,

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. Leibrock, for the record would you please state your name and occupation?
- A. My name is Robert C. Leibrock. I'm a general partner of Amerind Oil Company and a petroleum engineer.
- Q. On prior occasions you've testified before the Division Examiner and qualified as an expert in petroleum engineering, and in addition have testified as general partner on behalf of Amerind Oil Company?
  - A. Yes.
- Q. In addition, have you been involved with analyzing, reviewing not only the conventional geology available in this area, but the 3-D seismic information that your company participated with Yates and others to achieve?
  - A. Yes, I have.
- Q. As a result of that information and your acreage position in the regular section, do you recommendations, opinions and conclusions for the Examiner about how to develop your tracts within irregular Section 2?
  - A. Yes.

MR. KELLAHIN: We tender Mr. Leibrock as an expert witness.

EXAMINER STOGNER: Mr. Leibrock is so qualified if there's no objection.

- Q. (By Mr. Kellahin) Let's take a few minutes, Mr. Leibrock, and look at Exhibit 1 and us it as a reference map for a moment.
  - A. Okay.

- Q. In the fall of 1996, were you the first operator in irregular 2 to approach other interest owners about consolidating some of these tracts and their interests to further explore for Strawn oil production in Section 2?
- A. I believe we were. We were trying to follow the drilling of the Gillespie D8 well just across our lease line in Section 1, and as soon as we found in early October, maybe late September, that this was going to be completed, we immediately started working to try to get a well drilled in Lot 9. In fact, we went ahead and staked a location there in the center of Lot 9.
- Q. Let's talk about the chronology. You've got three wells in Section 2. You've got a well in Lot 1, Lot 3 and Lot?
  - A. Yes.
- Q. Were all those Strawn wells in existence before Mr. Gillespie drilled his well, the State D, over there in

# irregular Section 1?

A. Yes.

- Q. So you had that information?
- A. Right.
  - Q. How old are those wells?
- A. The first well, the West State, was drilled in early 1994 as a Strawn dry hole and completed in the Townsend Permo-Upper Penn field.

Then a year later in May of 1995, the Mobil State well was completed as a Strawn well in Lot 3. Then a year after that, being about April of 1996, the Gallagher State well was completed in the Strawn in Lot 6.

- Q. When Gillespie's well was drilled and completed in irregular 1, did you have available to your pressure information off of the Gillespie well?
  - A. Not immediately, but we do now.
- Q. About when did you obtain information from the Gillespie well that caused you as an engineer to be concerned that you might have some communication between the Gillespie well and your Gallagher State Number 2 well in Lot 6?
- A. Just from observation of the performance of the well and wellhead pressures, we suspected early on, after completion of that well, that it was probably in communication with our two wells.

Was there a time reference here? Q. 1 2 That would have been in October of last year. We Α. did not receive the bottomhole pressure data until last 3 4 month. As a result of that preliminary information, did 5 you initiate proposals with Yates in an effort to try to 6 consolidate tracts in irregular Section 2 so that you could 7 have 80-acre spacing units to drill additional wells in 8 this reservoir? Yes, I did. I first contacted Yates, being Mr. 10 Α. 11 Bullock, on October 23rd, as I believe he testified. At this time, what rules were you subject to in 12 0. this section for Strawn oil production? 13 Α. The field rules of the West Lovington-Straw 14 15 field. It's now called something else, I think? 16 Q. Big Dog South now. 17 A. It's Big Dog South now? 18 Q. That's right. 19 A. The basic rules have stayed the same --20 Q. Yes. 21 Α. -- the occurrence of --22 Q. 23 Α. As they pertain to us, yes --24 Q. Okay.

-- in this field.

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- Q. Mr. Hayes expressed an opinion on behalf of Yates's management that they would accept 40-acre development of the pool. Do you share that same conclusion?
- A. Based upon recent developments, we do not, and I can show you why on the cross-section with the well logs, as partial support of that.
- Q. What happens if this pool resorts to 40-acre Strawn oil development?
- A. We feel strongly that that would result in overdrilling of the reservoir. In fact, we think the long-established 80-acre spacing is well supported. That's the logical arrangement.
- Q. Let's look at Exhibit 1 and subdivide it into its tracts in terms of what operator controlled what tracts.
  - A. Okay.

- 17 Q. It's got a color code on here. Describe that for 18 us.
  - A. Right, as you can see on the key, Amerind controls the green acreage, Yates the red, and UMC the yellow.
  - Q. All right. At the time that you had information about Gillespie's well, you had available to you for possible consolidation Lots 7, 8, 9 and 10, provided you could get the agreement of Yates?

A. That's correct.

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- Q. Why did you select that initial number of tracts for possible consolidation, as opposed to some other consolidation arrangement?
- A. As you can see, 7, 8, 9 and 10 form a checkerboard arrangement, which seemed to be the logical way to develop that acreage.
  - Q. Would that not exclude, then, Lot 1?
- A. No, that would leave Lots 1 and 2 available for a proration unit.
- Q. All right. Lot 1 is an irregular size; it's in excess of 40 acres?
- A. Yes, it's about 50.
- Q. Lot 2 doesn't have a dedication to it?
- 15 A. That's correct.
  - Q. How would you solve the issue of Lot 7 currently, because the consolidation of 10 and 15, with the Division's approval, of 8 and 9 appears to leave Lot 7 as the odd tract out?
    - A. Under that arrangement, that would be correct.
  - Q. All right. When we look at the stippled area in green, is Lot 7 and Lot 9 the same base state lease?
- 23 A. Yes.
- Q. With the same interest owners?
- 25 A. Yes.

- Q. So consolidation of 9 and 8 at least allows the same interest owners to share in the production of that well?
  - A. Yes.

- Q. What do you plan to do with 7 --
- A. We don't --
- Q. -- if the drilling of the well in 9 with the consolidated Tract 8 is successful?
- A. I don't think we can say with certainty there,
  but we'd leave open the possibility of combining Lots 2 and
  7, and that would leave Lot 1, which has already been
  tested in the Strawn.
- Q. And 2 and 7 would involve the same interest owners anyway, right?
  - A. That's right, yes.
- Q. Let's go back to our discussions about your efforts to consolidate the tracts. Give us a short summary of your chronology. Let's start in October when you first contacted Mr. Bullock on behalf of Yates. What were you trying to do?
- A. Well, as I said, we were trying to get ready to consolidate these in some fashion. We both knew that the seismic work was in progress at that time, and it would be premature to actually go ahead and locate a well on any of those lots at that time.

My main purpose, as I told him, was that we needed to be getting ready to drill because of the drainage there from the new Gillespie well.

- Q. All right. What's your recollection of the receptiveness of Yates to a consolidation of the tracts in some fashion?
- A. He -- Mr. Bullock said that he agreed that we needed to work together on this matter.
- Q. Let's turn to Exhibit Number 2. It's a letter purportedly over your signature to Yates Petroleum Corporation, dated November 6th.
  - A. Yes, it is over my signature.
  - Q. What's the purpose of this?
- A. This is in follow-up on the same thing, that we wanted to go ahead and be prepared to mutually determine a location as soon as the seismic data were available.

And as I say here, at that time it probably was premature to decide exactly how to arrange the proration units.

- Q. The proposal here, though, is to locate the well on Lot 9?
  - A. Yes.

- Q. Did you include for Yates's benefit an itemized AFE of the costs of this proposed --
- A. Yes, I did.

How do the anticipated costs of this well -- Have 1 Q. 2 they changed between the time you proposed these costs to 3 Yates and now? They've gone up slightly. They're about \$450,000 A. 4 5 now to casingpoint and about \$750,000 completed pumping well cost. 6 And how does this estimate compare to the actual 7 Q. 8 cost of wells that you've drilled and completed to this 9 depth in this area? 10 Α. It's very similar, n fact, based on the other three wells we drilled in this section. 11 How do you respond to Yates's AFE that they 12 Q. suggest the well should cost more than a million dollars 13 when completed? 14 Well, I think that is a significant difference, 15 Α. and I have a hard time accepting that. 16 You're prepared and fully able to drill it, based 17 Q. 18 upon this AFE? 19 Α. I sure am. Is that difference substantial to you, and is it 20 Q. meaningful? 21 To me it's very meaningful as a small operator. 22 Α. 23 Attached to the letter of Mr. Bullock of November Q. 6th was the AFE, and then there's a proposed acreage 24

dedication plat?

1 Α. Yes. After that, what's your next correspondence to 2 Q. Mr. Bullock? 3 Okay, the next one here is January 3rd of this 4 A. 5 year. I have one of December 24th --6 Q. Let's see, I'm sorry. 7 Α. -- Mr. Leibrock. It should be the fourth page 8 0. 9 down. Right, this is to submit the proposal for two 10 wells, the one at issue here being the AY Com Number 1 in 11 Lot 9. 12 By December 24th, then, you have analyzed and 13 Q. satisfied yourself about interpretation of the 3-D seismic 14 information? 15 In fact, we had done so several weeks 16 Yes. earlier, but I had been waiting upon Yates to respond. 17 And in what way did they respond to you? 18 Q. 19 Α. They said -- Mr. Bullock said -- this was in -about the 18th of December -- that they were evaluating it 20 and would get back with us shortly. 21 Okay. How did you analyze the 3-D seismic 22 Q. information, what conclusions did you reach, and why did 23

you express the opinion that the 3-D seismic information

confirms the suitability of your Strawn location in Lot 9,

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58 as opposed to what Yates now suggests to be the preferred location in 8? Okay, we -- similarly, I think, to the way they do, we use a geophysicist but also use geological engineering data available to try to honor all of the available data, to pick any location, including this one. Q. Summarize for us why you think Lot 9 is the preferable location. As I say, I believe the 3-D -- and I might just add parenthetically here that our other two existing wells, the Mobil State and the Gallagher State, were actually drilled on 2-D, not 3-D, data. So we believe that 2-D data plays a role also. 3-D also is very helpful, I think. As I'll show on the cross-section in a minute, in Lot 16, UMC drilled the well

at a location which appeared very favorable seismically but it had very little porosity development.

So I think it's pretty clear from that example alone that 3-D is not the whole answer.

- You're referring to the recently drilled UMC well Q. in Lot 16?
  - Α. Right.

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- What's your information on the productivity in Q. that well?
  - Similar to what Yates said, 35 to 40 barrels a Α.

1 day, pumping. To continue answering --2 3 Q. Yeah. -- your previous question, though, on how we 4 selected the location of Lot 9, as I've already said, 5 proximity to the Gillespie well was one key factor. 6 7 We've found since then that, as we suspected, the bottomhole pressure data in that State D8 well, the 8 Gillespie well, the DST pressure confirms that it was down 9 10 substantially below the original pressure. So it had to be in communication with some other 11 Strawn production. We think the only reasonable conclusion 12 is that it had to be in communication with our two wells in 13 Section 2. 14 So we believe that these bottomhole pressure data 15 16 are far more authoritative than any seismic interpretation. On December 24th, then, you are specifically 17 Q. proposing to Yates the consolidation of 8 and 9 --18 19 Α. Yes. -- and again sending them an AFE and a proposed 20 Q. acreage dedication plat? 21 Yes. 22 Α. All right. What occurred after that, Mr. 23 0. Leibrock? 24 Well, let's see in -- Early this year Yates sent 25 Α.

out their AFE, and we also found out, I guess -- let's see, about mid-January, that Yates and UMC had decided to pool Lots 10 and 15.

- Q. The next letter in chronology in Exhibit package 2 is your January 3rd transmittal of an operating agreement?
  - A. Yes.

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- Q. Any substantial difference in the terms and conditions of the printed form operating agreement?
  - A. No.
- Q. And what are you recommending to the Examiner for some overhead rates?
- A. \$5500 per month drilling rate and \$550 per month operating.
  - Q. And what's the basis for that recommendation?
  - A. That's identical to our two existing wells.
  - Q. In January, then, you're also sending correspondence, not only to Yates Petroleum Corporation but to Yates Drilling Company, Abo Petroleum and MYCO Industries?
- 21 A. Yes.
  - Q. Did you become aware that they may have or did have an interest in the spacing unit, in addition to Yates Petroleum Corporation?
  - A. Yes.

In terms of dealing with these various companies, 1 Q. 2 have you been dealing with Mr. Bullock? 3 Α. Yes. But at this point, there's simply a disagreement 4 0. 5 with you about where to look at the well and who gets to 6 operate it? That's right. 7 Α. Okay. And then on -- By transmittal, the last 8 Q. 9 two pages of Exhibit 2 is the January 7th letter from Yates 10 proposing the well back to you? 11 Α. Yes. Okay. Let's turn for a moment and look at 12 Q. 13 Exhibit Number 3. What is this. Would you identify and describe it? 14 15 These are printouts of our Mobil State and Α. 16 Gallagher State wells showing actual completed flowing well 17 costs of less than \$650,000 each. Is there a particular strategy of completion or 18 0. drilling or stimulation that you utilize as an operator in 19 order to achieve your best opportunity for a Strawn oil 20 well in this pool? 21 Nothing unusual. 22 Α. 23 Q. Okay. Just try to follow good practice. And in terms 24 Α.

of the cementing proposal recommended by Yates, we do not

disagree with that, but we don't think it's a significant cost difference.

- Q. That wouldn't explain the \$250,000 difference?
- A. No, not at all. It might be a \$5000 or \$10,000 difference.
- Q. Okay. Let's turn to Exhibit 4. This is your structural cross-section. All right, give us a minute to unfold this, Mr. Leibrock.

All right, we've got the two Amerind wells, plus another one in 32. You've got the Gillespie well in irregular 1, and you have the UMC well, Townsend State 1.

A. Uh-huh.

- Q. All right. One way or the other, either A or A', walk us through the cross-section.
- A. Okay, starting on the north or the left end, the Gillespie Baer Number 2 is the northernmost well in the reservoir, then our two wells which we've been referring to, Mobil State and Gallagher State, the Yates well which was just drilled, and then our proposed location, the State AY Com Number 1, the Gillespie D8, which I would point out, in spite of the long perforated interval, there's really only five or six feet of pay there in the bottom, shaded green, and then finally the UMC well in Lot 16, which on this cross-section has by far the greatest upper Strawn thickness, has essentially no net pay, two or three feet.

3-D seismic was not the definitive tool to use in 1 Q. deciding if you're going to get a producing well out of the 2 Strawn, is it? 3 4 Α. That's right, it was definitive in identifying a 5 thick Strawn section, but not net pay. So even with the 3-D seismic information, there's 0. 6 still substantial risk involved? 7 Α. Definitely. 8 Do you have a recommendation for a risk factor 9 Q. penalty to the Examiner on issuance of the pooling order? 10 11 Α. Yes, sir, we believe the 200-percent factor is 12 reasonable. Take me back and describe for me how this exhibit 13 0. 14 helps you illustrate your preference to have the well located in 9, as opposed to 8. 15 This -- As I noted a moment ago, we had 16 Okav. already staked the location of 9, and I believe subsequent 17 developments have affirmed that as being the best location. 18 And I'll reiterate primarily what I said a moment 19 ago about the bottomhole pressure information as being far 20 21 more reliable and definitive than any seismic data can possibly be, since it's a direct measurement of the 22 reservoir. 23 And the pressure measured on DST in the State D 24

Number 8 was 3644 pounds. That would have been in late

September of last year.

At that same -- approximately the same time, we ran shut-in bottomhole pressure buildup tests in the Mobil State and Gallagher State. The pressures were found to be about 1550 and 2200 pounds, respectively.

So we believe that the only reasonable conclusion that can be drawn is that the Gillespie well in -Gillespie D8 well had to be in communication with our two wells. Therefore, there has to be a permeability path between the two wells.

- Q. If they weren't in communication with the Gillespie well, what would the pressure range have been?
- A. It would have been on the order of 4500 pounds, the same as the original pressure in our Mobil State.
- Q. And the only logical source point where the Gillespie well would have been pressure-depleted were one or both of your wells?
  - A. Yes.
- Q. All right, let's skip Exhibit 5, which is the certificate of mailing, and look at Exhibit 6.
  - A. Okay.
- Q. You prepared the cross-section, and you also prepared Exhibit 6?
  - A. Yes.
    - Q. Let's talk about the time at which Exhibit 6 was

prepared. This is not a new exhibit, is it?

- A. That's right, this was prepared in late January of this year.
  - Q. So it was prepared before the recent information?
  - A. Right.

- Q. Let's talk about this interpretation and then have you describe for me why it is so risky to drill in this area, even with the available data.
- A. Okay. Well, as you can see, the -- two wells have been drilled since then. The location, I might add, in 15 is an abandoned location.

The well in Lot 16, the Townsend State by UMC, as I said, has by far the highest net thickness, but very little porosity development. I don't have data yet on the Yates well in Lot 10 beyond what we just said.

- Q. Do you have a copy of Mr. Hayes's isopach?
- A. Yes.
- Q. All right. You're essentially isopaching the same gross Strawn interval, are you not?
- A. That's right, we're apparently taking slightly different tops, but you can see the character is very similar between the two isopachs.
- Q. If I remember right, both he and you, in relation to these two maps, is using the about same data, which is now out of date but at least it was the same data set?

A. Very similar.

- Q. And yet your interpretation is substantially different than his?
- A. Well, as to Lot 9, we believe that the subsurface data available then and now tends to indicate the likelihood of greater thickness in 9 than in 8.
- Q. Has the seismic information caused you to change your mind, then, about the preference of 9 over 8 in terms of well location?
  - A. No, not at all.
- Q. Any of the new well data available to you cause you to change your mind?
  - A. No.
- Q. You disagree with Mr. Hayes on behalf of Yates, then?
- A. Yes, and that's the whole essence of the case, I think.
  - Q. Summarize for us the technical differences in why you prefer Lot 9 as opposed to 8.
  - A. Well, as I say, I think the technical differences can be summarized primarily with the bottomhole data, bottomhole pressure data, which I believe are far more important and meaningful than any seismic data.

Certainly the subsurface data here are important, but I believe what this shows is that -- whether you're

using a structure map or an isopach map, is that there's

very little, if any, relationship between either structure

or net thickness and virtually no relationship between net

and gross pay, as you hope to find -- Oftentimes, as Mr.

Gray [sic] said, you look for that relationship, but it

does not exist here.

- Q. Are you satisfied the South Dog Pool is separated from the Gillespie Unit and the West Lovington-Strawn Pool up in 33?
- A. Yes, we are, and also representatives of Gillespie-Crow confirmed that they feel the same.
- Q. So there's no doubt among you and the other operators in this South Big Dog-Strawn Pool that you constitute a separate source of supply from the West Lovington Strawn Pool?
  - A. I believe that's correct.

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- Q. Any doubt in your mind about the continued appropriateness of 80-acre oil spacing in here?
  - A. No, I think that's definitely the way to go.
- MR. KELLAHIN: Mr. Examiner, that concludes my examination of Mr. Leibrock.

We move the introduction of his exhibits, including the certificate of mailing, which is 5.

The exhibit package, then, includes Exhibits 1 through 6.

1 EXAMINER STOGNER: Any objections? No objection. 2 MR. CARR: Exhibits 1 through 6 will be 3 EXAMINER STOGNER: admitted into evidence. 4 5 Thank you, Mr. Kellahin. Mr. Carr, your witness? 7 CROSS-EXAMINATION 8 BY MR. CARR: Mr. Leibrock, let's stay with Exhibit 6 for a 9 Q. 10 minute. A. Okay. 11 If I understood your testimony, you indicated you 12 13 felt the State D well in Section 1, in fact, had experienced drainage from the Gallagher State Number 2; is 14 that what you said? 15 What I meant to say was that I believe that Lot 9 16 and any of the adjoining lots would have experienced 17 drainage from the Gillespie well. 18 And the Gillespie well is the State D well? 19 Q. 20 Α. Yes. Are you seeing any potential for drainage from 21 Q. the wells up in the West Lovington-Strawn area? 22 talking about in the northern portion of irregular Section 23 24 1? No, we don't believe that's --25 Α.

- Q. Is there --
- A. -- likely.

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- Q. I'm sorry, go ahead.
  - A. That's all.
  - Q. Is there any data that would support the separation of those two?
  - A. Well, I believe, as both Mr. Gray's and my isopach shows, although he didn't include the unit area, I believe the subsurface data, as well as the bottomhole pressure data, support separation.
  - Q. If we look at Exhibit Number 6, in deciding to locate your proposed well in Lot 9, did you have seismic information available to you at that time?
  - A. Yes.
- Q. And so you utilized that in constructing this interpretation?
  - A. Right, I did, although primarily this is just honoring the subsurface data.
- Q. If we -- Did you integrate seismic, though, into your interpretation?
  - A. Well, in an informal way, right, which I believe is similar to what he did.
- Q. Did you pick the location before you put the seismic into the equation?
  - A. We picked the location before we had the seismic

- data. But as I pointed out, I think, at every opportunity
  with Mr. Bullock, we realized that until we had the seismic
  that we couldn't decide for sure. But we believe the
  seismic data and subsequent well data since then confirms
  that location.
  - Q. So you'd picked the location, then you did this interpretation with the seismic integrated?
    - A. Well, that's right, as far as that goes.
  - Q. And then it just happened to show that your well was right in the center of the interpretation of the best structural position, that you had already picked?
- A. Well, in this case it did just happen to show that. But...
- Q. If we look at the location of the UMC Townsend
  well in 16 --
- 16 A. Uh-huh.

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- Q. -- we follow it around, we look at the proposed location of Yates in Lot 8 --
- 19 A. Uh-huh.
- 20 Q. -- based on this interpretation, they would be 21 roughly comparable, would they not?
- 22 A. Relatively.
  - Q. Now, when we go back and review the development of this area, if I understand your testimony, the first proposal for developing this area was combining Lots 1 and

That was an 80-acre unit that you proposed; is that 1 2. 2 right? I don't believe we ever actually proposed that. 3 Α. I believe that was just in the context of a possible unit. 4 5 Okay, what about 3 and 4? That was the second --Q. That is an existing unit. 6 Α. 7 Q. -- unit put together? 8 Α. Right. 9 And --Q. Back to your first question, when we drilled the 10 Α. West State 1 and 2, was the proposed unit. 11 All right. So if we go all the way through this 12 Q. 13 we have the 1 and 2 --Right. 14 Α. 15 -- then we have the 3 and 4 --Q. Right. 16 Α. -- the next effort was the 5 and 6 --17 Q. Right. 18 A. 19 Q. -- and then we got into the situation where 20 initially you were proposing two wells to include 7, 8, 9 21 and 10 --Yes. 22 Α. -- is that right? 23 Q. 24 A. Yes. And then in January of this year, you filed 25 Q.

pooling applications, one to pool 7 and 10, the other to 1 pool 8 and 9 --2 3 Α. Right. Q. -- correct? 5 Α. Yes. And Yates objected because they were putting 6 Q. 7 together 10 and 15? 8 Α. Right. And your application to dismiss the Yates 9 Q. 10 proposal was denied because that acreage wasn't available 11 to you; isn't that right? 12 Α. Would you say that again? I'm sorry. 13 I mean, you were unable -- I'll restate the Q. question. You were unable to go forward with 7 and 10 14 because 10 wasn't available? 15 16 A. That's right. 17 Q. And so that was dismissed? Right. 18 A. You also at that time, then, voluntarily 19 Q. dismissed 8 and 9, did you not? 20 Yes, at that time, although we --21 Α. So at that point in time, February the 5th, there 22 Q. was no pooling application for any of this acreage? 23 Right, because at that point we needed to re-24 Α. evaluate the whole situation. 25

- And then you re-evaluated the situation, and you Q. were aware that UMC's well in 16 was also in a nonstandard unit and was going to have to come back to this Division for approval; isn't that right? Α.
  - That's what we found out in February 6th.
  - And didn't you propose then to pool 9 and 16? Q.
  - Yes, we did. Α.

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- And so what you were doing at that time is, you Q. were proposing to combine and force pool your interest in Section 9 into the drilling UMC well in 16; isn't that correct?
- Α. Right, we proposed that because we thought that that was the best way at that time to incorporate Lot 9 into a producing unit.
- And you were, in essence, pooling into an Q. existing well?
  - Α. Right.
- And that existing well is at a location that is Q. comparable to the location that Yates is proposing to drill in 8; isn't that right??
  - Α. The 16.
- The location in 16 that you were at that time Q. interested in pooling yourself into is comparable to the location that Yates is now proposing in 8; isn't that right?

- A. Well, in what respect, may I ask?
- Q. Well, I mean, earlier in discussing Exhibit 6, I
  asked you, if we looked at the UMC Townsend on this
  exhibit, wasn't it basically a comparable location on this
  interpretation as the proposed location in the Yates Tract
  8, and I think you said yes.
  - A. Oh, as far as this isopach map?
- 8 Q. Yes, sir.
  - A. Yeah, based on that --
- 10 Q. Okay.

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- 11 A. -- data at that time, right.
- Q. At that time, when you filed that, obviously you felt that was a satisfactory way to develop the acreage; isn't that true?
  - A. Well, we felt like under the circumstances that might be all we could do. We still wanted to drill in Lot 9 then, but didn't see a way to do it.
  - Q. And you voluntarily dismissed that application, did you not?
  - A. We dismissed it, but with the idea that we might very well come back and reopen it, which we did.
    - Q. And you -- But you haven't done that, have you?
- 23 A. We haven't what?
- Q. Reopened that?
- 25 A. Well, I believe that's the -- Are you referring

to 8 and 9?

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- Q. No, I'm talking about 9 and 16.
- A. No, I was referring to 8 and 9. No, we have not reopened 9 and 16.
  - Q. And you did have a pooling application to pool into the UMC well?
    - A. Right.
      - Q. And then you did dismiss that?
  - A. Right.
  - Q. And you dismissed it, did you not, because the completion rig had been on the location a very long time?
    - A. Well, that was part of it, yes.
- Q. And so at the time that you had an application pending to pool 9 and 16, is it your position that you were still pursuing or proposing a location in 9?
  - A. Well, we weren't explicitly pursuing it. That was still our preference.
  - Q. And so what you did then is, you dismissed your Application of pooling the UMC well and then refiled for 8 and 9?
    - A. That's correct.
    - Q. When did you file that Application? Do you know?
- A. Let's see, I think that's already been submitted.

  Our letter on January 3rd to Yates was proposing that.
  - Q. But when did you file an application to actually

pool this acreage? Was it after you dismissed the application to pool into the UMC --

A. I believe that's right.

- Q. And at that time there was already a Yates pooling application pending?
  - A. I'm not sure of the timing on that.
- Q. Okay. In your negotiations with Mr. Bullock, did you not at one time offer to drill a well at the Yates location if, in fact, they would let you operate this 80-acre tract?
- A. I don't know if that was actually an offer, but that was one of the things that we talked about.
- Q. All right. When you drill a well out here, can you tell me what you estimate its producing life to be?
  - A. Oh, in a general sense, five to ten years.
- Q. You don't anticipate being able to utilize one of these wellbores for longer than that period of time?
  - A. Oh, possibly.
- Q. When you look at drilling the well that you're proposing in Lot 9, would you consider also testing or perhaps later using it for a Wolfcamp or an Abo well?
- A. Probably not very strongly at all, because I think all of the data available shows that the Townsend Permo-Upper Penn reservoir in this area is highly depleted. The best evidence of that in the immediate area may be our

West State well in Lot 1, which is about a 10-barrel-a-day producer and we don't -- One of those is plenty for us in this section.

Now, as for the Abo, I don't think there's any direct support for that.

- Q. You don't see any potential or any reason to anticipate production in either Wolfcamp or Abo?
- A. No, I mean, it's always good practice to allow for unexpected things, but to date there's not very much support for that.
- Q. When we look at the AFEs and the differences that you've talked about, one of the differences between your proposal and Yates is the drilling rate; is that not true?
  - A. Well, about \$100 a month.
- Q. But the actual footage drilling cost of drilling the well in the AFE, isn't that one of the differences you've got --
  - A. I think that's one of the main differences.
  - Q. You have in your AFE a \$19.30-per-foot --
- A. Uh-huh.
- 21 Q. -- cost?
- 22 A. Okay.

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- Q. Do you have a contract whereby you could drill a well at that rate at this time?
  - A. I believe so, because we're drilling a well in

Section 3 for about that rate. 1 And do you have the right to use that same rig at 2 this location? 3 4 Α. I believe so. I cannot answer that question with absolute certainty, but I believe -- Even if there's some 5 escalation in the footage rate, it's not going to 6 7 materially change --You'll still be less? 8 Q. Yeah, I'll still be far less than the Yates AFE. 9 Α. When you've got day work down, you've got four 10 Q. 11 days at \$4900 a day? Α. Right. 12 13 Q. Doesn't the amount of day work actually involved depend on how much testing you're going to do on that well? 14 Oh, sure. 15 Α. And if you were intending to do test additional 16 zones or do additional work, that would go up, right? 17 Yeah, definitely, although again, that would be 18 material. 19 And as I said, we would not test the Wolfcamp, 20 21 so... And that's why you only allow for one drill stem 22 test, where Yates has allowed on their AFE for probably 23 three or four drill stem --24

Yeah, we don't agree with that at all.

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Α.

1 Q. In terms of cementing, you're not going to be 2 cementing from total depth back to the intermediate? The AFE, I think, is a little bit vague on that. 3 Α. On ours we don't specify all the details. 4 5 But as I said a moment ago, we don't disagree with their proposal to cement back to intermediate; that's 6 7 not a bad practice at all. We just haven't made the final 8 determination on what to do. 9 When you've 800 sacks on the intermediate string, Q. is that adequate to do that? 10 Probably not. 11 Α. When we talk about the AFE, we're talking about 12 Q. an estimate, correct? 13 14 Yes. Α. And if you need to run an additional drill stem 15 0. test because you're surprised in the Wolfcamp, you do that 16 and you actually bill actual costs --17 18 Α. That's right ---- in the final analysis. 19 Ο. -- and the total cost of doing that would be 20 Α. 21 under \$10,000. That's all I have, thank you. 22 MR. CARR: Okay. EXAMINER STOGNER: Thank you, Mr. Carr. 23 Mr. Kellahin, any redirect? 24 25 MR. KELLAHIN: No, sir.

## 1 **EXAMINATION** 2 BY EXAMINER STOGNER: 3 Q. I want to make sure I've got my maps straight, so 4 please indulge me a little bit here. 5 I'm referring now to your Exhibit Number 6. 6 Where are the present wells either producing or drilling into this small pod, as we call the -- what? the South Big 7 8 Dog-Strawn now? 9 Α. Yes, sir. 10 Q. Okay. In Section 2 --11 Α. Right. 12 -- now, let me go with Lot 1. Q. 13 Okay. Α. Now, that was the deeper test, but it did 14 Q. 15 penetrate the Strawn; is that correct? Α. That's correct. 16 Did it test the Strawn? 17 Q. 18 It tested tight and thin in the Strawn. A. 19 Okay. Now, if I go back to the west, how about Q. the Amerind Number 1 in Lot 3? 20 21 Yeah, the Mobil State 1 is a good Strawn well. Α. That's a good Strawn well, so that's producing? 22 0. 23 A. Right. 24 Q. Okay, nothing in 4? 25 Right. Α.

Nothing in 5? Q. 1 2 A. Right. Six, how about that Gallagher State Number --3 Q. Gallagher State is a good Strawn well. 4 A. 5 Q. Good Strawn well, okay. Seven is empty? 6 Α. Right. 7 Q. Of course, 8 is empty --8 A. Yes. -- as is 9? 9 Q. 10 Right. Α. And Section 10? 11 Q. 12 Ten is the new Yates field, APK. Α. Okay. And 11 and 12 are empty? 13 Q. That's right. Everything else is empty except 14 Α. 16. 15 16 Q. 616 [sic]. Now, you said you were proposed -- opposed, I 17 18 should say -- to 40-acre development --A. Yes, sir. 19 -- as Yates had suggested, perhaps? 20 21 Α. Right. And is it because of pressure communication that 22 you're seeing? 23 That's part of it. Also, I think the cross-24 25 section supports that.

If you'll compare the green shading on the east end, green shading representing net pay, compared to the three wells on the other end, you can see that there's a marked difference, so that the UMC and Gillespie wells have added very little pore volume, at least in those two locations, to the reservoir.

And the Mobil State and Gallagher State have made quite a bit of oil, but both are in pretty rapid decline, and we just believe in general 80-acre normal spacing is the proper spacing in this area.

- Q. The remainder of your acreage up there in the northern tier -- that's Lot 1, 2 and 7?
  - A. Yes, sir.

- Q. How does Amerind propose to develop that?
- A. I think final determination on that would rest on the outcome of Yates' well in 10 as well as our proposed well in 9. But certainly I think formation of a unit with 2 and 7 would be something we would want to look at strongly.
- Q. The location as you're proposing in Unit Number 9
  -- Lot Number 9, I should say --
  - A. Right.
- Q. -- wouldn't that serve to promote this pressure contact with those other wells? I mean, you're immediately offsetting three tracts, one to the --

A. Right.

- Q. -- south, east and west.
- A. You mean, should we try to find a separate reservoir or --
- Q. No, in this particular reservoir, wouldn't the placement of this up in the Yates quarter-quarter section in 8 more widely develop or at least separate the pattern, as opposed to what you're proposing?
- A. From that standpoint, it would. But we think in view of the risk that's apparent from the Lot 16 well, that the prudent thing is to drill where we think we have all the best data, and that's still Lot 9.

And I'm referring primarily to bottomhole pressure data. The logical path would seem to be between Lot 6 and the Gillespie D8 well.

- Q. Well, with that line of thinking, then, if you were to develop Lot 9, would you then skip Lot 7 and go up to Lot 2, there again to re-establish that development, the 80-acre, the prudent 80-acre development that you're talking about?
  - A. You mean Lot 2 as opposed to Lot 7?
- Q. Yeah.
- A. That's possible. I think, in view of the remaining uncertainties in here at the moment, it's pretty hard to say 2 over 7, or vice-versa.

I might add one thing here. These wells, with the possible exception of the UMC well, tend to have good permeabilities. The Gillespie D8 is a good example of that because it only has a few feet of pay, yet it's made 45,000 barrels of oil in a short period of time.

So I think the good permeability in the area in general supports the idea of efficient drainage, and thereby the fewest number of wells possible is the most efficient way to produce this reservoir.

- Q. Over in Section 1, the State D Number --
- A. -- 8.

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- 12 Q. -- 8, is that?
- 13 A. Yes, sir.
- Q. -- now, that's producing from this reservoir, isn't it?
  - A. Yes, sir, we believe so.
    - Q. What would have been the ideal way to develop this pod, if you'd had this information before any wells were drilled? What would have been the ideal placement and development of this pod, and with what number of wells? This is hypothetical, of course.
    - A. Yeah. Again, are you assuming also common ownership --
- 24 O. Yes.
- 25 A. -- joint operator?

- Q. Common ownership.
- A. You know, really it wouldn't be too much of a stretch to say that one well would efficiently drain this reservoir. As a practical matter, I think two or three probably are the -- two or three certainly would.
- Q. Now, Amerind drilled the well in Unit 3 and 6, right?
- 8 A. Yes, sir.

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- Q. And that's how you prepared your cost summaries?
- 10 A. Right, those are actual costs.
- Q. Up there in Section 32, how about that Baer well?

  Is that a producer in the Strawn?
  - A. The Number 1 or 2?
- 14 Q. Both of them.
  - A. The Number 1 is an older well. It's made less than 25,000 barrels. The Number 2 was drilled -- It was the second well in this reservoir. It was drilled after our Mobil State Number 1 in Lot 3. It's on the far left end of the cross-section. It's made over 100,000 barrels.
    - Q. And is it still producing?
- 21 A. It's making about 30 barrels a day.
- 22 EXAMINER STOGNER: Any other questions of this
- 23 | witness?
- 24 MR. CARR: No questions.
- 25 MR. KELLAHIN: No, sir.

EXAMINER STOGNER: Closing remarks? 1 MR. CARR: Yes, sir. 2 3 MR. KELLAHIN: Yes, sir. EXAMINER STOGNER: Let's see, I let you go first 4 with your testimony. I'll let you go first again, and then 5 6 have -- let Mr. Kellahin follow up. 7 MR. CARR: Thank you, Mr. Stogner. Here we are again with opposing pooling cases, 8 and the issue really is, in this case, who's going to 9 10 operate. The location of the well is the other issue 11 you're going to have to resolve. I guess one will follow 12 the other. 13 Amerind has come in with about its fourth or 14 fifth proposal for the development of this particular block 15 within Section 1. We wanted to do a two-well package, we 16 wanted to do standups, they were dismissed, then we wanted 17 to pool into the UMC well, then we decided -- I quess 18 abandoned our location in 9, we didn't want to do that 19 20 anymore. 21 Then we decided the well to the south was taking 22 a heck of a long time to complete so we'd get back out of 23 that and come back and repropose a standup unit comprised of 8 and 9 and put our well in 9. 24

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Yates, on the other hand, has had one proposal

for the development of this acreage before you: an 80-acre tract comprised of 8 and 9 with our well in 8.

Our well location was picked based on well control and seismic. We picked our location after we saw the seismic. We didn't conveniently have seismic after the fact confirm a location previously selected.

We have an AFE before you that we stand on. We think it's correct. We think it accurately reflects what it will cost to drill a well and to do a better job.

When we see the actual costs of the wells in 3 and 6, you need to note from the exhibits presented that those are flowing wells, the wells we're talking about are pumping. Right there is \$60,000 to \$100,000.

We look at the drilling rates, we can pick up another substantial chunk. The number of days it requires to test and the amount of testing that will be done, that will affect it as well. The amount of cement we're going to put in the well, that will affect it as well, and our costs are higher because we do a better job. And we will do a better job if we operate the property.

And when we look at the locations and the proposals, Yates would go forward with a 50-percent allowable factor on a 40-acre unit. But Amerind doesn't like that, because the current proposal from Amerind is to develop on 80s.

But if you look at this section -- and this section, admittedly, is becoming a nightmare for everyone - - there is a well in 10, on the offsetting 40, they want to put one in 9, they're going to consider 2 and 7. They might put one in 7 if the well in 10 and 9 are good wells. We're moving toward 40-acre development, in fact.

What we submit to you is, we stand before you with a realistic AFE. I don't know how you say who's here first when the proposal has changed and been abandoned and been restructured by Amerind every time we've turned around. But we believe we stand before you with the best way to develop the reservoir. We'd go on 40s, but what we're proposing is, in fact, 80-acre spacing. And we believe that we stand before you with a record in our proposal that warrants approving our Application and denying the Application of Amerind.

EXAMINER STOGNER: Thank you, Mr. Carr.

Mr. Kellahin?

MR. KELLAHIN: Mr. Examiner, Amerind is before you, very frustrated in its efforts to develop its tract. There was not an operator out here in January that recognized what a standard spacing unit was supposed to be. You told us in February of how to develop this irregular tract.

And I guess this is probably a classic example,

if you wanted one and were an advocate of statutory unitization for exploration purposes, and if you were to espouse that position so that you as a regulator had the statutory authority to have the best solution, and could we do it over, the best solution would be as you suspected and as Mr. Leibrock testified: One well would have done the whole thing.

Isn't it too bad that we now have a competition going on in here where we're really drilling too many wells? It's a disappointment for all of us, and there's simply no solution for us unless there's a statutory change.

The best we can do is what tried to do here. We recognize that there is substantial drainage capacity of these wells, and so we adopt 80-acre spacing.

But because of the incredible risk involved in deciding where to drill, we by regulation undercut the integrity of 80-acre spacing by allowing all the operators to drill either 40-acre tract.

And you can see what everybody in the room can see, as you've perceived: We have de facto 40-acre spacing. There is just nothing you can do about the fact that they're all in the same little pod, cozying up together with too many wells.

We can't do anything about it now except to

recognize that it's unfortunate we have authority to fix this.

However, I think Amerind deserves the credit and needs to be rewarded for the fact that in October of 1996 it was attempting to develop at least in an organized way a solution for Tracts 7, 8, 9 and 10. They proposed a standup or a laydown to Yates. Yates ignored them. We filed the force pooling application.

And just before we get to hearing, we find out that Yates went out and took Tract 10 and put it with 15, with UMC, and we see Yates and UMC beating up on Amerind. Every time Amerind turns around, UMC and Yates have figured a way to checkmate them.

We said, All right, we've learned our lesson in trying to form a nonstandard proration unit; we didn't do it right because no one had tried to form a standard one.

We said, All right, UMC, you're drilling a well; let's form a standard unit with 9 and 16. We offered to participate. They should have taken our money. We were going to write them a check; they didn't want us in there. We tried to force pool, and they still didn't want us in it.

And then we recognized that it was not a decent well and that we were going to contribute potential reserves in 19 that wouldn't be developed because they had

such a poor well in 16.

So we've come back before you and asked you to help us find a way to put our tract into production.

If you'll notice the configuration of the green stippled area, it is Amerind's responsibility for accounting for Lot 7 that's the odd tract out, and Mr. Leibrock has a solution for that tract. He is prepared to commit it with 2 so that 2 and 7 are consolidated and so the interest owners would share in the development of the pool. We believe that that's an appropriate potential solution.

We would ask that you finally let him do what he has sought to do for more than six months, and that is to approve his spacing unit and to utilize the best available data. He's shown you how risky it is.

Mr. Carr would suggest that he developed his location first and then got the data to explained it later. That is simply not true.

He used the geologic information available, picked Lot 9, and even Mr. Hayes's own interpretation helps support 9. You know, he'd like to you 8 is better, but I've got him to admit on cross-examination that had he used current data his isopach would be different, it would substantially increase his reservoir pore volume in 9, they're equivalent in terms of his own work.

We think it's now Amerind's turn. You ought to grant their Application. Their AFE is substantially less. Let's let them have their turn. Let's see how well they can do. Thank you, Mr. Examiner. EXAMINER STOGNER: Thank you. Well, I'll let you two get together and pick a time frame on a rough draft order. And with that, let's -- If there's nothing further in consolidated Cases 11,753 and 11,739, these matters will be taken under advisement. (Thereupon, these proceedings were concluded at 3:42 p.m.) 

## 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 April 11th, 1997.

STEVEN T. BRENNER

CCR No. 7

My commission expires: October 14, 1998

I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case Nos. 11753 and 11739

Examiner

Oil Conservation Division