

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 YATES PETROLEUM )  
CORPORATION FOR COMPULSORY POOLING AND )  
AN UNORTHODOX OIL WELL LOCATION, CHAVES )  
COUNTY, NEW MEXICO )

CASE NO. 13,123

ORIGINAL

REPORTER'S TRANSCRIPT OF PROCEEDINGS

EXAMINER HEARING

BEFORE: WILLIAM V. JONES, JR., Hearing Examiner

August 7th, 2003

Santa Fe, New Mexico

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Oil Conservation Division

This matter came on for hearing before the New Mexico Oil Conservation Division, WILLIAM V. JONES, JR., Hearing Examiner, on Thursday, August 7th, 2003, at the New Mexico Energy, Minerals and Natural Resources Department, 1220 South Saint Francis Drive, Room 102, Santa Fe, New Mexico, Steven T. Brenner, Certified Court Reporter No. 7 for the State of New Mexico.

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August 7th, 2003  
Examiner Hearing  
CASE NO. 13,123

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## A P P E A R A N C E S

## FOR THE DIVISION:

DAVID K. BROOKS, JR.  
Assistant General Counsel  
Energy, Minerals and Natural Resources Department  
1220 South St. Francis Drive  
Santa Fe, New Mexico 87505

## FOR THE APPLICANT:

HOLLAND & HART, L.L.P., and CAMPBELL & CARR  
110 N. Guadalupe, Suite 1  
P.O. Box 2208  
Santa Fe, New Mexico 87504-2208  
By: WILLIAM F. CARR

\* \* \*

## ALSO PRESENT:

GAIL MacQUESTEN  
Deputy General Counsel  
Energy, Minerals and Natural Resources Department  
1220 South St. Francis Drive  
Santa Fe, New Mexico 87505

\* \* \*

1 WHEREUPON, the following proceedings were had at  
2 8:24 a.m.:

3 EXAMINER JONES: Okay, with that, I guess we're  
4 ready to call Case -- on page 2, at the end of page 2,  
5 we've got Case 13,123, which is Application of Yates  
6 Petroleum Corporation for compulsory pooling and an  
7 unorthodox oil well location in Chaves County, New Mexico.

8 Call for appearances in this case.

9 MR. CARR: May it please the Examiner, my name is  
10 William F. Carr with the Santa Fe office of Holland and  
11 Hart, L.L.P. We represent Yates Petroleum Corporation in  
12 this matter, and I have three witnesses.

13 EXAMINER JONES: Any other appearances?

14 If there are no other appearances, will the  
15 witnesses please stand to be sworn?

16 (Thereupon, the witnesses were sworn.)

17 EXAMINER JONES: Okay, go ahead, Mr. Carr.

18 MR. CARR: Thank you, Mr. Jones.

19 CHARLES E. MORAN,  
20 the witness herein, after having been first duly sworn upon  
21 his oath, was examined and testified as follows:

22 DIRECT EXAMINATION

23 BY MR. CARR:

24 Q. Would you state your full name for the record,  
25 please?

1 A. My name is Charles Moran.

2 Q. Mr. Moran, where do you reside?

3 A. In Artesia, New Mexico.

4 Q. By whom are you employed?

5 A. Yates Petroleum Corporation.

6 Q. And what is your current position with Yates  
7 Petroleum Corporation?

8 A. I'm a landman.

9 Q. Have you previously testified before the Oil  
10 Conservation Division?

11 A. Yes, I have.

12 Q. At the time of that testimony, were your  
13 credentials as an expert in petroleum land matters accepted  
14 and made a matter of record?

15 A. Yes, they were.

16 Q. Are you familiar with the Application filed in  
17 this case on behalf of Yates Petroleum Corporation?

18 A. Yes, I am.

19 Q. And are you familiar with the status of the lands  
20 in the area which is the subject of this case?

21 A. Yes, I am.

22 MR. CARR: Are Mr. Moran's qualifications  
23 acceptable?

24 EXAMINER JONES: They're acceptable.

25 Q. (By Mr. Carr) Would you briefly summarize what

1 it is that Yates seeks with this Application?

2 A. Yates Petroleum Corporation is seeking an order  
3 pooling the minerals that are unleased from the surface to  
4 the Precambrian formation under Section 6 of Township 10  
5 South, Range 25 East, in the west-half basis for all  
6 formations on a 320-acre spacing unit, in the northwest  
7 quarter for all formations developed on a 160-acre basis,  
8 and in the northeast northwest for all formations developed  
9 on a 40-acre spacing.

10 We intend to dedicate this to our well called the  
11 Delhagen "BAJ" Com Number 1 well, and the well will be  
12 located 990 feet from the north line and 1330 feet from the  
13 west line in Unit C of Section 6.

14 Q. This location is a standard location for  
15 formations developed on 320-acre spacing and 160-acre  
16 spacing; is that correct?

17 A. Yes, it is. It is only unorthodox for the 40-  
18 acre spacing encroaching upon the interior boundaries of  
19 the leases.

20 Q. And the 40-acre spacing in it is no better than  
21 the secondary --

22 A. Yeah, yeah, it's possible San Andres formation.  
23 We don't think we're going to get much there. Our primary  
24 objective out here is the Wolfcamp, with our backup zone  
25 being the Pecos Slope-Abo.

1 Q. But in any event, just in case you happen to  
2 encounter --

3 A. If --

4 Q. -- something on 40 --

5 A. -- if we find something, that's what we'd like to  
6 address at this point.

7 Q. Let's go to what has been marked for  
8 identification as Yates Exhibit Number 1. Would you  
9 identify that and review it, please?

10 A. Yates Exhibit 1 is a land plat centered around  
11 Section 6 of Township 10 South, 25 East, Eddy County, New  
12 Mexico, with the green outline being the proposed spacing  
13 unit for a 320-acre spacing unit, with the red dot  
14 indicating where we believe the well will be.

15 Q. This is obviously an irregular unit?

16 A. Yes, it is an irregular unit.

17 Q. Can you give us the actual acreage for 320s, 160s  
18 and 40-acre units?

19 A. For the 320-acre spacing unit it will be 317.28  
20 acres, for a northwest quarter it will be 158.39 acres, and  
21 for a 40-acre spacing it will be 40.07 acres.

22 Q. You've indicated the primary objective in the  
23 well is the Wolfcamp?

24 A. Yes.

25 Q. You intend to drill beyond the Wolfcamp, all the



1 way to the basement?

2 A. Yes, we're planning to drill deep and explore all  
3 formations down to the Precambrian formation. In this area  
4 we don't believe that we will -- our best shot is probably  
5 going to be the Wolfcamp, with the backup being the Abo.  
6 But with the drilling rig out there, we just intend to  
7 drill it down to the Precambrian.

8 Q. What interests are subject to pooling here today?

9 A. The interests subject to pooling today are the  
10 estate of Jimmie Walker, Billy Joe McCain [sic] and his  
11 wife Bonnie R. McCain, and First Roswell Company. First  
12 Roswell has indicated late yesterday that -- or early  
13 yesterday morning, that they intended to participate in the  
14 drilling of the well.

15 Q. Have you received the signed documents at this  
16 time?

17 A. I've received a faxed copy of the AFE, anticipate  
18 upon returning having a signed AFE and operating agreement  
19 from them.

20 Q. Is it your request that they not be dismissed  
21 from the Application until those documents are received?

22 A. Correct.

23 Q. And will we advise the Division as soon as the  
24 original documents are in hand?

25 A. Yes.

1           Q.    Are all the other interests in the spacing unit  
2 either Yates or Yates-related entities?

3           A.    Yes.

4           Q.    Would you summarize the efforts that you have  
5 made to locate and obtain the voluntary participation of  
6 those interests that are subject to pooling?

7           A.    I have been working on getting the ownership of  
8 this spacing unit set up for drilling for about a year and  
9 a half. Due to lease expiration coming up in the near  
10 future, I seriously began working on it in the month of  
11 June this year and was able to lease most everybody that  
12 remained unleased in June, except for the interest we  
13 credit to Jimmie Walker, because we found by talking to his  
14 brothers and sisters that he's been deceased, and we have  
15 learned that he had one child who is also deceased. And he  
16 had three children that we've been unable to find.

17                   And I have had two people work on it from my  
18 office, I hired a third party outside to see if they could  
19 locate him, and at this point we've just not been able to  
20 find anybody yet.

21           Q.    And you've checked the county records?

22           A.    We've checked the county records, and the title  
23 stops back with Jimmie Walker, which I've called the  
24 grandfather.

25           Q.    And you've been able to contact other family

1 members, and they've been unable --

2 A. Yes --

3 Q. -- to help you?

4 A. -- yes, we've been able to obtain affidavits of  
5 heirship for the -- Jimmie Walker had seven -- I believe it  
6 was seven siblings, and the title was stuck back at their  
7 parents' level. We've been able to obtain an affidavit to  
8 determine that Jimmie Walker's interest is the only thing  
9 we don't have leased by affidavit, based off of the  
10 affidavit ownership.

11 Q. How will Yates handle the share of the proceeds  
12 attributable to the Jimmie Walker interest?

13 A. We will -- intend to suspend the revenue until we  
14 can get it located, and hopefully we'll try to find the  
15 people and get them leased, but until then, under the  
16 order, we will suspend the money and escrow it  
17 appropriately.

18 Q. You will escrow it in Chaves County, New Mexico?

19 A. I'm not sure it will be Chaves or Eddy -- I  
20 mean --

21 Q. Where is the --

22 A. -- Chaves --

23 Q. Where is --

24 A. -- it was Chaves.

25 Q. I'm sorry. The well was in Eddy County?

1 A. No, no, the well is in Chaves County.

2 Q. All right, you will --

3 A. Yes.

4 Q. -- escrow the funds in the county where the  
5 property --

6 A. Yes.

7 Q. -- is located, as required?

8 A. Yes.

9 Q. Okay. What's the status of the McCains in the --  
10 First of all, how large an interest does Mr. Walker hold?

11 A. Mr. Walker's interest is a twelfth, under  
12 approximately 80 acres, and that would be divided up into  
13 36 if the three children bear out.

14 It's an interesting story. Mr. Walker -- I'll  
15 call him Senior, for confusion purposes -- apparently was  
16 never married, and Jimmie Walker, Jr., was his one son, and  
17 the three children just have disappeared.

18 Q. What about the McCain interest?

19 A. The McCain interest appears to be based off of  
20 people making conveyances that they didn't understand. I  
21 have contacted the McCains and spoken to them, and they  
22 have claimed that they don't own any minerals and that the  
23 people that they bought the surface from should own the  
24 minerals. Those people I have under lease at this time,  
25 and I think that's just going to take a corrective document

1 to have them convey back the minerals to the people that I  
2 have under lease.

3 Q. But to assure that all interests are committed to  
4 the well, they need to be pooled?

5 A. They need to be pooled.

6 Q. Could you identify what's been marked as Yates  
7 Exhibit 2?

8 A. Yates Exhibit 2 is the letter from the McCains  
9 where they responded to my lease offer to lease their  
10 minerals, indicating that they did not own the interest,  
11 and that is their response to my offer. There was my  
12 proposed lease and lease terms.

13 Q. Would you identify Yates Exhibit Number 3,  
14 please?

15 A. Yates Exhibit Number 3 is the proposed authority  
16 for expenditure for the Delhagen "BAJ" Com Number 1 well,  
17 showing a dryhole cost of \$339,000 and a completed cost of  
18 \$605,800.

19 Q. Are these costs consistent with costs incurred by  
20 Yates for similar wells recently drilled in the area?

21 A. Yes, they are.

22 Q. Would you identify Exhibit Number 4?

23 A. Exhibit Number 4 is the accounting procedure that  
24 I attached to the proposed operating agreement that we are  
25 using for this well.

1           Q.    This is the JOA of that well, govern the Roswell  
2 Company interests?

3           A.    Yes.

4           Q.    Does this form provide for periodic adjustments  
5 of overhead and administrative charges?

6           A.    Yes, it does.

7           Q.    Does Yates request that any order resulting from  
8 this hearing also authorize adjustments in accordance with  
9 the procedures set forth in this COPAS form?

10          A.    Yes.

11          Q.    Have you made an estimate of the overhead and  
12 administrative costs to be included while drilling the well  
13 and also while producing it if, in fact, it is successful?

14          A.    We have done that based off of what is contained  
15 in the COPAS agreement for a well of this depth. We  
16 believe that operating costs during drilling will be \$4000  
17 and monthly overhead being \$400 to start with.

18          Q.    And these costs have been accepted by the Roswell  
19 Company?

20          A.    Yes, they have.

21          Q.    Do you recommend these figures be incorporated  
22 into the order that results from this hearing?

23          A.    Yes.

24          Q.    And Yates seeks to be designated operator of this  
25 well?

1 A. Yes.

2 Q. Is Exhibit Number 5 an affidavit confirming that  
3 notice of this hearing has been provided in accordance with  
4 the Rules of the Oil Conservation Division?

5 A. Yes, it is.

6 Q. And we have the green cards attached from  
7 everyone except Mr. Walker?

8 A. Correct.

9 Q. And since he's deceased, maybe that's why --

10 A. Yeah, we just don't know where to find him.

11 Q. All right. Were Exhibits 1 through 5 prepared by  
12 you?

13 A. Yes.

14 MR. CARR: At this time, Mr. Jones, we move the  
15 admission into evidence of Yates Exhibits 1 through 5.

16 EXAMINER JONES: Exhibits 1 through 5 are  
17 admitted into evidence.

18 MR. CARR: And that concludes my examination of  
19 Mr. Moran.

20 EXAMINATION

21 BY EXAMINER JONES:

22 Q. So Mr. Moran, there is no -- there is unsigned  
23 royalty interests that are -- they're unleased royalty  
24 interests?

25 A. Unleased mineral interests.

1           Q.    Unleased mineral interests, okay.  They're also  
2 unsigned.

3                   And so there is no other category of interests  
4 that are not signed?

5           A.    The only -- First Roswell has voluntarily agreed  
6 to participate and indicated to me they will.

7                   The only interest that I can't account -- The two  
8 interests that I can't account for are the McCain interest,  
9 which I believe is a title mistake on their part that needs  
10 to be rectified, but I -- you know, to protect myself I  
11 need to go ahead and force pool that interest.  And then  
12 the unleased mineral interest of the Jimmie Walker heirs  
13 that -- I just don't know where -- I can't find anybody.

14                   I obtained a copy of the notice from the  
15 newspaper of the obituary for Jimmie Walker, Jr., and I'm  
16 chasing the heirs out in California.  I've gone through the  
17 telephone directory that we have at the office, which is a  
18 computerized directory that allows us to look up names and  
19 numbers across the United States.  We've looked on the  
20 Internet.

21                   I've had other people do this work, and we've  
22 just not been able to establish contact or locate them.

23           Q.    Okay.  Actually, the unorthodox location for the  
24 oil, in case it turns out to be a 40-acre oil, it's going  
25 to be what, 10 foot too close to -- It's supposed to be 330



1 from each --

2 A. From the line.

3 Q. -- from the line, and it's going to be actually  
4 10 foot from the line; is that right?

5 A. From the centerline, right.

6 Q. From the centerline. And is that location -- I  
7 guess we'll talk to the geologist later, but --

8 A. Our primary objective out there is the Wolfcamp  
9 formation, with a strong backup possibility in the Pecos  
10 Slope-Abo --

11 Q. Okay.

12 A. -- with that location being legal for both of  
13 those formations --

14 Q. Right.

15 A. -- and those being the primary objectives. The  
16 oil is a -- you know, secondary location. But while we're  
17 taking care of all our potential problems, we thought we'd  
18 take of that one --

19 Q. Yeah.

20 A. -- if it ever came to be.

21 Q. Okay, so the location was picked based on primary  
22 and secondary objectives, and you're requesting that the  
23 40-acre oil be approved for unorthodox at this time --

24 A. Yes.

25 Q. -- on the order?

1                   Okay, do I have the well name right on this?

2       Delhagen "BAJ" Com --

3           A.     -- Com Number 1.

4           Q.     -- Number 1?

5           A.     Yes.

6           Q.     Okay. No API yet?

7           A.     Yes.

8           Q.     And it will be Unit C? Is that not a lot number  
9       or anything like that?

10          A.     It is actually Lot 3.

11          Q.     Okay, Lot 3.

12                 So I think I have it straight on the category of  
13       compulsory we've got. You have unleased mineral interests  
14       and you have some other interests that you couldn't find,  
15       in addition?

16          A.     Well, all the minerals I would categorize -- that  
17       I'm force pooling -- as unleased.

18          Q.     Unleased, okay.

19          A.     The McCain interest, I don't think -- I  
20       technically probably have that leased by the people that  
21       mistaken committed the minerals, and a corrected document  
22       needs to be done by the McCains to convey the minerals back  
23       to the people that I have under lease.

24          Q.     Okay.

25          A.     The legal description is about a four-acre tract

1 out of the area, and all they were intended to convey was  
2 the surface, but inadvertently they conveyed the minerals,  
3 and I haven't had time to convince those people that they  
4 need to convey the minerals back. And at this point, based  
5 on the title opinions we have, they are credited with that  
6 interest.

7 Q. Okay. They seem to argue with you on that a  
8 little bit here.

9 A. Well, they don't claim to own it.

10 Q. Yeah. Well, you're bringing up some good news, I  
11 guess.

12 And as far as the notice, the notices for the  
13 unorthodox oil, it's internal to the communitized -- the  
14 potentially communitized --

15 A. Well, if it goes to 40-acre spacing, it would  
16 only -- the north half of the northwest is all the same fee  
17 acreage ownership.

18 EXAMINER JONES: Okay, good deal. That's great.

19 Mr. Brooks, do you have any additional questions?

20 MR. BROOKS: No, I think not at the moment. Go  
21 ahead.

22 EXAMINER JONES: Okay, I think, Mr. Moran, that's  
23 all I have right now. Thanks very much.

24 MR. CARR: May it please the Examiner, at this  
25 time we call Tim Miller.

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

4                                    DIRECT EXAMINATION

5    BY MR. CARR:

6            Q.    Would you state your full name for the record,  
7    please?

8            A.    My name is Tim Miller.

9            Q.    Where do you reside?

10          A.    I reside in Carlsbad, New Mexico.

11          Q.    By whom are you employed?

12          A.    I'm employed by Yates Petroleum Corporation.

13          Q.    And what is your position with Yates?

14          A.    I'm a geologist with Yates Petroleum.

15          Q.    Mr. Miller, have you previously testified before  
16    this Division and had your credentials as an expert in  
17    petroleum geology accepted and made a matter of record?

18          A.    Yes, they were.

19          Q.    Are you familiar with the Application filed on  
20    behalf of Yates Petroleum Corporation in this case?

21          A.    Yes, I am.

22          Q.    Have you made a geological study of the area  
23    that's involved in this Application?

24          A.    Yes, I have.

25                MR. CARR:    Are the witness's qualifications

1 acceptable?

2 EXAMINER JONES: They're acceptable.

3 Q. (By Mr. Carr) Mr. Miller, the primary objective  
4 in the well is the Wolfcamp?

5 A. Yes.

6 Q. The secondary is the Abo?

7 A. Yes, it is.

8 Q. Have you prepared exhibits and maps for both of  
9 those intervals?

10 A. Yes, I have.

11 Q. Let's first go to the isopach maps on the Abo  
12 sands. Would you go to what has been marked as Yates  
13 Exhibit Number 6 and review that for Mr. Jones?

14 A. Okay, Yates Exhibit Number 6 is a net porosity  
15 isopach map of what we call in house the "A" interval sand  
16 of the Abo sand in the Pecos Slope. What you're looking at  
17 is greater than or equal to a 9-percent neutron density  
18 crossover curve on the neutron density log of the "A" sand  
19 interval, and basically what you're looking at is -- if you  
20 can think of this as a stream channel in the "A" interval  
21 running northwest to southeast. And as you can see, our  
22 Delhagen well is in the northwest quarter of Section 6,  
23 down there in 10 South, 25 East.

24 And this -- The contour interval on this net  
25 porosity map is five feet, and for this "A" interval in the

1 Abo sand, which is the highest interval in the Abo section,  
2 it looks like we could encounter in the "A" interval  
3 somewhere between 5 and 10 feet of net porosity sand.

4 Q. Let's go to Exhibit Number 7.

5 A. Okay, Exhibit Number 7 is -- again all these  
6 porosity maps, as far as the Abo sands go, all have a  
7 cutoff of 9-percent neutron density crossover, greater than  
8 or equal to. This is of the next sand interval down, which  
9 we designate the Abo "B" sand, and once again it is  
10 generally the same trend as you just saw on the "A"  
11 interval, northwest to southeast. Once again, the contour  
12 interval is five feet. And as you can see here for this  
13 "B" sand interval we are projecting that we will have  
14 somewhere around 15 feet of net producing sand in this  
15 well.

16 Q. Let's go to the "C" sand, Exhibit Number 8.

17 A. Exhibit Number 8 is the neutron density crossover  
18 of the "C" sand interval, and once again it's on the  
19 general trend. The Abo sands, whether you're looking at  
20 "A", "B" and "C", basically mirror one another as far as  
21 trending which direction they would be flowing when the  
22 stream was active. Once again, northwest to southeast.

23 In this proposed -- in the proposed location for  
24 the Delhagen, we think this is probably the best sand out  
25 of the three. We will encounter with the proposed location

1 somewhere in the interval of around 20-feet-plus for the  
2 Abo "C" sand.

3 Q. So the proposed location and the best Abo sand is  
4 in the thickest part of the sand as you have mapped it?

5 A. Yes.

6 Q. All right, let's go now and look at the primary  
7 objective, the Wolfcamp. Go to Exhibit Number 9 and review  
8 the Wolfcamp "A" sand.

9 A. Okay, the Wolfcamp "A" sand, once again this is a  
10 net porosity map -- or a gross porosity of -- gross isopach  
11 of a Wolfcamp "A" sand interval greater than or equal to 9  
12 percent, the same cutoff we used as in the above exhibits  
13 in the Abo sands.

14 Once again, the Wolfcamp has a general trend --  
15 or the Wolfcamp sands have a general trend from northwest  
16 to southeast. These are not as wide an interval as the Abo  
17 sands. These trends seem to be narrower. It's a little  
18 hard to see, but down there in the -- where the proposed  
19 Delhagen is, again, this is a little smaller contour  
20 interval, two feet, we figure we can have in the Wolfcamp  
21 "A" around 8 feet of net porosity sand.

22 Q. Let's go to the Wolfcamp "B", Exhibit 10.

23 A. Exhibit 10 for the Wolfcamp "B" sand, same thing,  
24 neutron density crossover greater than or equal to 9  
25 percent. We figure we would encounter somewhere around 8

1 feet sand. Once again, this is a two-foot contour  
2 interval, where the Delhagen is proposed.

3 Q. And the Wolfcamp "C".

4 A. Wolfcamp "C", once again gross isopach 9 percent  
5 greater than or equal to, neutron density crossover. The  
6 way the Delhagen is positioned for this sand, we figure we  
7 will encounter somewhere around 8 feet of net porosity for  
8 this sand to be productive.

9 Q. And in the Wolfcamp, this location basically  
10 enables you to place the well in each of the horizons close  
11 to the thickest portion of the sand as mapped?

12 A. Yes, it does.

13 Q. Let's go now to the cross-section, Exhibit Number  
14 12. Would you review this and explain what it shows?

15 A. Probably if you refer to your -- the last exhibit  
16 I presented on Exhibit Number 11, this gives you the --  
17 where the cross-section is following, basically from  
18 northwest to southeast, starting up on the north at A and  
19 ending down in the southeast in Section 7 on the Yates  
20 Petroleum Adell well, which is A', and basically running  
21 northwest to southeast generally.

22 What I am trying to show with this cross-section,  
23 this is a stratigraphic cross-section hung on top of the  
24 Abo, which you can see on top of the neutron -- These are  
25 all neutron density porosity logs, and this is hung on top



1 of the Abo.

2 And what this does, what I've tried to show to  
3 the OCD here at this hearing, is the productive sands in  
4 the three Abo sand intervals "A", "B" and "C", and the four  
5 wells that have penetrated down to the basement/Precambrian  
6 would be the second well on the cross-section, Summers Com  
7 Number 2, the Harvest Number 2, the Harvest Number 4 and  
8 the Harvest Number 3.

9 And the Wolfcamp sands are colored down towards  
10 the bottom of the cross-section, give you an idea how --  
11 where the productive different intervals are on the cross-  
12 section where we have perforated. And then I have  
13 production information down at the bottom of the cross-  
14 section, cumulative production on the wells.

15 As you can see if we start up on the left-hand  
16 side of the cross-section with the first well, which is the  
17 Mesa Petroleum Karen Number Fed, Federal Number 1, that  
18 well was drilled only -- in the 1980s, only into the Abo.  
19 It is producing what you see colored in yellow, and the red  
20 over there is the crossover on the neutron density curves.  
21 And basically, if we move towards the next well, the Yates  
22 Petroleum Summers, the same thing, you can see the Abo "A"  
23 interval, "B" interval and "C" interval, and these perfs  
24 are marked as producing out of an "A" sand, the "B" sands  
25 and "C" sands.

1           Same thing with the Harvest 2, gives you an idea  
2 where the Abo sands are productive in the -- basically here  
3 in the "B" and the "C". In the Harvest 4 they're  
4 productive in the "A", "B" and "C", and in the Harvest 3  
5 they're productive in the "A", "B" and "C" intervals.

6           And then the cross-section runs through our  
7 Delhagen proposed well and where we figure as -- referring  
8 back to the different neutron density maps, where we might  
9 acquire some of these sands.

10           And these Abo sands come and go. Here they look  
11 like some of them carry through the area. A lot of times  
12 the Abo sands, you could drill two wells in a 160 and not  
13 necessarily encounter the same sand that's in an existing  
14 producing well, because these sands are thought to be in a  
15 delta system, so basically -- generally kind of meandering  
16 stream system.

17           Then the last well on the cross-section was the  
18 Yates Petroleum Adell Well Number 1, Federal Number 1. It  
19 was just drilled to the Abo section, and it is producing,  
20 even though the perfs are not -- you can see some of the  
21 perfs marked that weren't colored too well, basically down  
22 in the "B" section, just about 3700. Then there's another  
23 -- perfs that are marked just above 3800. Basically this  
24 thing is producing out of the "B" and "C" interval.

25           Now, if we focus on the Yates Summers Number 2,

1 Harvest 2, Harvest 4 and the Harvest 3, the four wells that  
2 are in the center of the cross-section, if you look on down  
3 at the bottom of the cross-section you see the top of the  
4 Wolfcamp over on the Harvest 4 and the Harvest 3, there are  
5 some sands in the upper part of the Wolfcamp that are  
6 colored in yellow, and the neutron density crossover is  
7 colored in red, giving you some gas effect. These wells  
8 have not been perforated in these intervals yet.

9 If you move further down the cross-sections,  
10 looking at those four wells, you see where we have broken  
11 down the Wolfcamp "A" sand, the Wolfcamp "B" sand and the  
12 Wolfcamp "C" sand, and we have perfs marked and -- that are  
13 colored in red, and then the sand intervals are colored in  
14 yellow, and the gas -- the natural gas effect, which is the  
15 neutron density crossover, are colored in red. And then  
16 the perfs are also colored in red.

17 So you see these sands in the Summers 2, the  
18 Wolfcamp "A", "B" and "C", are producing -- all three are  
19 producing in the Summers 2.

20 In the Harvest 2, this is just -- it is perf'd  
21 out of the -- basically the Wolfcamp "B", but -- and then  
22 there is a lower sand that I really don't have any  
23 designation to it, where we have perfs. These perfs are  
24 waiting to be added to the production. And the reason why  
25 that is, this well initially produced so strong out of the

1 Abo we couldn't get back in the hole to try to remove the  
2 retrievable plug and open up the Wolfcamp sand. So when we  
3 think that time is reasonable we'll probably add these  
4 sands to the production of this well.

5 Then in the Harvest 4 you can see the sand that  
6 is producing, which has perfs, is the Wolfcamp "B" sand,  
7 and that's probably one of the best Wolfcamp sands out here  
8 so far that we have discovered.

9 And then the last deep well, which is the Harvest  
10 3, right now is producing, the perfs are in the Wolfcamp  
11 "C" sand.

12 And moving on down the cross-section, just to  
13 familiarize with the different formations out here, we do  
14 have remnants of the Cisco formation, and in some areas out  
15 here we think we might be able to penetrate what some  
16 people would say is Silurian-Devonian dolomite or other  
17 people might say is Ordovician dolomite. It's not marked  
18 on these logs. There's still kind of a question whether we  
19 actually will encounter it out there or not.

20 And then the last formation marked on the cross-  
21 sections is the Precambrian, or what a lot of people call  
22 basement, which could be anywhere from Granite Wash to  
23 granite to rock which is either a diorite or, slash,  
24 gabbro-type rock. Basically when we're drilling into the  
25 Precambrian, most of the mudloggers out there just

1 designate everything that they see -- something looks like  
2 a granite or Granite Wash or similar, they'll just say  
3 basement/Granite Wash on the mudlogs.

4           So basically what I'm trying to show from this  
5 cross-section as the proposed location in the Delhagen  
6 well, which is proposed to go down to 4955 and penetrate  
7 about 150 feet into the basement Precambrian, we hope to  
8 encounter -- the principal objective, at least right now,  
9 what is productive on the deep horizons, is the Wolfcamp  
10 "A", "B" and "C" sands, and then we have backup in the Abo  
11 "A", "B" and "C" intervals.

12           Possibly we -- We drill it to basement just  
13 because drilling out here is relatively shallow for the  
14 basement, and there's always a possibility you could --  
15 might pick up production in the Cisco limes, and possibly  
16 you might be able to pick up production in Precambrian  
17 basement Granite Wash. So we feel that we need to test  
18 everything, since this is a shallow drilling out here, to  
19 maximize all potentials of all formations.

20           Q. Mr. Miller, your mapping of the six sands --  
21 three in the Wolfcamp, three in the Abo -- have controlled  
22 your decision as to where to locate this well?

23           A. Yes, it has.

24           Q. And it's your interpretation of the Wolfcamp and  
25 the Abo that result in the proposed well being at an

1 unorthodox location if, in fact, you found anything on 40-  
2 acre spacing?

3 A. Yes, it is.

4 Q. Will Yates also call a witness to discuss the  
5 risk associated with this prospect?

6 A. Yes, we will.

7 Q. Were Exhibits 6 through 12 prepared by you?

8 A. Yes, they were.

9 MR. CARR: At this time we would move the  
10 admission into evidence of Yates Exhibits 6 through 12.

11 EXAMINER JONES: 6 through 12 will be admitted  
12 into evidence.

13 MR. CARR: And that concludes my examination of  
14 Mr. Miller.

15 EXAMINATION

16 BY EXAMINER JONES:

17 Q. Mr. Miller, how did you come up with a 9-percent  
18 cutoff on this?

19 A. We -- Back in 1996 I was assigned to study the  
20 Abo, Pecos Slope-Abo. And of course Yates Petroleum has  
21 been drilling wells up there since the early 1980s, and we  
22 were trying to figure out a way maybe to better enhance  
23 locations, especially in drilling a second one on the 160,  
24 on the other 80 acres.

25 So to try to see if we can hit the sands, have a

1 better sand to produce out of, we decided let's try to use  
2 a 9-percent porosity cutoff on the neutron density to see  
3 if that would work better than just mapping gross  
4 thicknesses of sands. Because on some of the Abos -- there  
5 might be an example here -- basically -- let's see if I can  
6 find one.

7 If you look at the first well on the cross-  
8 section, the Mesa Karen Fed Number 1, if you look down in  
9 the Abo "B" sand interval just below 3600 feet, the gamma-  
10 ray is about 4 feet thick. That is an Abo sand, but -- You  
11 can see the dashed line and the solid line off to the  
12 right. They do not cross one another, so there's probably  
13 no, you know, natural gas in that rock.

14 If you would just map this as a gross sand you  
15 would say there's -- well, yes, I have maybe a 4-foot sand,  
16 but basically there's no natural gas in it.

17 So we figured that 9 percent was a good cutoff  
18 basis to have a thick sand and to ensure us that we'd have  
19 good porosity and maybe good crossover on the neutron  
20 density.

21 Q. So you're -- basically you found some crossover  
22 at 9 percent?

23 A. Yeah, there's -- through the main part of the Abo  
24 sands -- Well, an example would be the Summers Number 2.  
25 Just at the top of the Abo "B" sand you see off to the

1 right the crossover that's colored there and the solid blue  
2 line that kind of just parts in halfway, that is the 10-  
3 percent porosity line on this neutron density. And of  
4 course our cutoff is, you know, 9 percent, which would be  
5 just to the right of that. Each of those increments are  
6 two percentage points.

7 So you can see just eyeballing it, if you just  
8 take an average between the solid line on the left and the  
9 dashed line on the right, this is about 10-percent porosity  
10 through that. So that obviously would be a very good sand,  
11 and this well's done very well.

12 Q. Okay. And you run your logs on sand matrix  
13 across this?

14 A. No, limestone matrix.

15 Q. Oh, you do?

16 A. We do. We do because of what we encounter,  
17 because once you get below -- in the upper part, in the San  
18 Andres -- The San Andres is made out of dolomites and  
19 limestones, and then you have the Yeso formation, which has  
20 a lot of gypsum, anhydrite, and you can have some dolomite  
21 in them. And then once you get into the Wolfcamp you have  
22 mainly carbonates with some sandstones in them. Cisco is  
23 mainly limestones. And say we would encounter maybe the  
24 Silurian-Devonian/Ordovician dolomites, of course that's  
25 carbonate. So we run them all on limestone matrix out



1 here.

2 Q. Okay. Your drilling is not too bad to drill down  
3 into that Precambrian?

4 A. No, and out here, like I said, the basement is  
5 relatively shallow, down about -- we figure we'll encounter  
6 it -- Even though the projected TD is 4955, we'll probably  
7 encounter it somewhere around 4800 feet.

8 Q. Okay.

9 A. The further east you move, the deeper you go.  
10 Ten miles away, you can hit basement maybe not till 6000  
11 feet. So this is just shallower, more economic over here.

12 Q. Well, I hope you have lots of luck on that.

13 A. Well, we hope so too.

14 EXAMINER JONES: Okay, that's all of my  
15 questions.

16 MR. BROOKS: I have no questions.

17 EXAMINER JONES: Thanks a lot, Mr. Miller.

18 THE WITNESS: Thank you.

19 MR. CARR: Mr. Examiner, at this time we'd call  
20 David Boneau.

21 And we understand we're in a transition with  
22 having to prove risk, but we wanted to be sure that we left  
23 no stone unturned.

24 MR. BROOKS: Well, as far as I'm aware, the new  
25 rule has not yet become effective.

1 MR. CARR: That was my understanding as well, and  
2 so we made Dr. Boneau drive in the middle of the night from  
3 Farmington to be here.

4 MR. BROOKS: Well, Dr. Boneau will probably get  
5 fewer trips to Santa Fe in the future.

6 DR. BONEAU: That's a real change.

7 EXAMINER JONES: Oh, no, we need him up here.

8 MR. BROOKS: Oh, I'm sure he will come from time  
9 to time. After all, compulsory pooling is not the only  
10 thing we have with Yates.

11 DAVID F. BONEAU,  
12 the witness herein, after having been first duly sworn upon  
13 his oath, was examined and testified as follows:

14 DIRECT EXAMINATION

15 BY MR. CARR:

16 Q. Would you state your name for the record, please?

17 A. David Francis Boneau.

18 Q. And Dr. Boneau, where do you reside?

19 A. Artesia, New Mexico.

20 Q. And by whom are you employed?

21 A. Yates Petroleum Corporation.

22 Q. Have you previously testified before this  
23 Division and had your credentials as an expert petroleum  
24 engineer accepted and made a matter of record?

25 A. Yes, I have done that.

1 Q. Are you familiar with the Application filed in  
2 this case on behalf of Yates?

3 A. Yes, I am.

4 Q. Have you made an engineering study of the area  
5 and the wells involved in this Application?

6 A. Yes, sir.

7 Q. And are you prepared to share the results of that  
8 work with Mr. Jones?

9 A. Very much so, yes.

10 Q. And Mr. Brooks?

11 A. (No response)

12 MR. CARR: Are the witness's qualifications  
13 acceptable?

14 EXAMINER JONES: They are.

15 Q. (By Mr. Carr) Dr. Boneau, would you first go to  
16 what has been marked as Yates Petroleum Corporation Exhibit  
17 13 and use this exhibit to basically review what you're  
18 going to present as we go through your testimony?

19 A. Yes, I'd like to try to do that. I'm here, I  
20 think, to show that there's enough risk involved here to  
21 justify the 200-percent penalty, and I think you'll agree.

22 I've looked at a 25-section area with the  
23 Delhagen section in the middle of that, in the center of  
24 that, and there have been -- as has been discussed by the  
25 geologist and et cetera, there have been three targets in

1 the drilling that's been going on in the past.

2 The San Andres is real shallow, less than a  
3 thousand feet, and you'll see that that's not performed  
4 very well.

5 The second target, the main target, really, in  
6 the area, has been the Pecos Slope-Abo at about 3500 feet  
7 or so, and there's some good producers and some bad  
8 producers in the Abo.

9 And then the third target has been a recent  
10 target in the last few years, what I call basement or as --  
11 these deeper zones, Wolfcamp, and they go down to 4500 or  
12 5000 feet. We're talking deep wells, but we're not talking  
13 real deep here, as you get the picture.

14 And then on the middle of this exhibit I've tried  
15 to summarize what you're going to hear. But the drilling  
16 results have been for the San Andres 16 wells, there's been  
17 one commercial well out of 16 wells drilled, and I think  
18 that that's very unlikely that we're going to end up with a  
19 San Andres well here.

20 For the Pecos Slope-Abo, there have been 18 wells  
21 drilled to test the Abo. So drilled through the Abo, but  
22 not counting the deep ones, and you need about .4 BCF to  
23 have a commercial well, and eight out of those 18 wells  
24 look commercial to me, and they're 15 years old and so the  
25 story is pretty much told. So about half of the Abo wells

1 have been commercial, and those half are probably good  
2 enough to carry the poorer ones, but you have about half a  
3 chance of getting a commercial Abo well.

4 And then the drilling to the basement -- Mr.  
5 Miller showed you the four wells that have been drilled to  
6 the basement, the Summers and Harvest 2, 3 and 4 -- you're  
7 looking for basement Silurian, various Penn sands,  
8 Wolfcamp. Anyway, those are the targets. So far in those  
9 four wells we have what I consider three mediocre Wolfcamp  
10 producers. And maybe Tim doesn't like me to call them  
11 mediocre, but we'll look at the numbers. And really, we've  
12 found nothing in the Penn or in the basement rock.

13 So in my opinion, I'm going to say those deeper  
14 zones are unproven at the stage of having just four wells.  
15 So I'm going to say the San Andres really is almost no  
16 target, the deep zones are still very -- maybe early in the  
17 game but unproven, and you have about a half a chance for a  
18 good Abo well. That's what I'm going to tell you.

19 Q. Let's go to Exhibit 14. Would you identify and  
20 review that?

21 A. Exhibit 14 is the map showing those 25 sections I  
22 referred to. I just thought you needed a fairly big area  
23 here because the Bitter Lake Wildlife Refuge is off to the  
24 east, and so there's quite a big area that doesn't have any  
25 wells in it. Anyway, this is 25 sections around the

1 Delhagen location. The red dot shows that location. The  
2 yellow indicates Yates-operated leases in the area.

3 Q. Let's go to Exhibit 15. Would you explain what  
4 this shows?

5 A. Okay, now I have like two pages talking about San  
6 Andres and a couple pages talking about Abo, so -- well,  
7 that's not exactly true.

8 15 is a list of all the wells drilled in those 25  
9 sections, and there are 38 of them, and they're going to  
10 break down into San Andres, Abo and those basement things.  
11 And I think the best thing to do is just maybe keep this  
12 for backup and go on and look at the groups in their turn.

13 So Exhibit 16 are the wells drilled to the San  
14 Andres. And they're also -- You know, they're mixed in  
15 with that Exhibit 15, but I think taken in chunks is a lot  
16 better way to look at them. So Exhibit 16, if I can go to  
17 that --

18 Q. Yes.

19 A. -- Exhibit 16 and 17 cover the San Andres.  
20 Exhibit 16 are the 16 wells drilled to the San Andres, you  
21 know, their API numbers, locations, spud dates, stuff like  
22 that, and their IPs, out on the right-hand side, their  
23 initial potentials. About half of them were drilled and  
24 abandoned. In the third column from the right you see the  
25 initial potential in barrels of oil per day, and there are

1 a 36, a 45, a 48, a 34. Four of the wells looked decent  
2 starting out, and you'll see in a minute how those turned  
3 out. But -- A lot of drilled and abandoned wells, but a  
4 few wells that did merit testing.

5 And then on Exhibit 17, the left-hand side is  
6 sort of the same, but the right-hand side talks about the  
7 production from those various wells, and there's lots of  
8 blanks, because a lot of them were just drilled and  
9 abandoned. And in the far right-hand column I've marked in  
10 yellow the -- you know, the good well.

11 And so the Cannon Number 1 well, number 14  
12 towards the bottom, that tested 48 barrels a day, it has  
13 cum'd 10,447 barrels of oil. It's a 1960 well, so it's a  
14 really long time. It is still producing .2 barrels a day,  
15 which is what, 5 barrels a month? It's going to make  
16 11,000 barrels or something, and that actually is a  
17 commercial well at 1000 feet, but it doesn't have Saudi  
18 Arabia shaking in its boots.

19 And the other wells are, you know, 1000, 2000, a  
20 well made 6000 barrels. Maybe that's commercial, maybe  
21 not. But it's a pretty sad story overall, maybe one or  
22 maybe two commercial wells out of the group. So...

23 Q. All right, let's go to the Abo --

24 A. The San Andres is kind of -- you know, probably  
25 not really in the picture.

1           Q.   All right, let's look at the Abo.  Let's go to  
2 Exhibits 18 and 19.

3           A.   So Exhibits 18 and 19 are the same kind of  
4 exhibits for the Pecos Slope-Abo, and these wells were  
5 mostly drilled in the early 1980s.  So there are 18 wells  
6 drilled, what I call, to test the Abo.  So they went to the  
7 base of the Abo but did not go down to these Wolfcamp, et  
8 cetera, locations.  Out of the 18 there's only one that was  
9 drilled and abandoned.  And if you notice real close, the  
10 last one, number 18, had an IP of 10 MCF a day, which was  
11 never produced and essentially drilled and abandoned.

12                   But 16 of the 18 wells produced from the Abo, so  
13 finding an Abo well is a relatively high chance, it's just  
14 whether they produce a lot or a little.

15                   In Exhibit 19, it's a similar kind of exhibit but  
16 it has production out to the right-hand side.  And like I  
17 said, these wells are 15 or so years old, and so their  
18 production -- their trends are pretty well set.  You could  
19 put numbers on them or I could put numbers on them, and  
20 we'd get very close to the same kind of number.

21                   And again I have marked in yellow the good wells,  
22 the wells over .4 BCF, and there's eight of them.  And  
23 there are some wells that are, you know, relatively poor.  
24 You know, one well has made .002 BCF, and the Erma has made  
25 20,000, those kind of numbers.  Those are just dog wells



1 from the start.

2 But the other wells that I call noneconomic --  
3 made .2 BCF, one has made .1 BCF, .3 BCF -- they produce  
4 some, and you get part of your money back. Those really  
5 are not commercial wells. But overall the picture is, half  
6 a chance of getting a pretty good solid, commercial oil Abo  
7 well, and some of them are -- three of them are 1 BCF  
8 wells. 1 BCF wells, you make money, you make quite a lot  
9 of money. So...

10 Q. Would you identify what has been marked Exhibit  
11 20?

12 A. Exhibit 20, which I don't intend to have you look  
13 at, really, is a set of production curves for those Abo  
14 wells with the forecasts, and it's kind of backup material.  
15 If you want to talk about it, we can. But like I say,  
16 these wells have 10 or 15 years of production and their  
17 trends are quite well set.

18 So if that's okay, I think it would be fine to go  
19 on.

20 Q. All right, let's --

21 A. If you want to talk about it you'll ask, I bet.

22 Q. Let's go ahead and let's move to the four deep  
23 wells, and I'd ask you to review the information on  
24 Exhibits 21 and 22.

25 A. Okay, Exhibit 21 is in a format we've not seen

1 before. It's my idea of a summary of the zones tested in  
2 those four wells drilled to the basement, and it kind of  
3 complements what Mr. Miller talked about from the cross-  
4 section.

5 But what I've listed on the left-hand side,  
6 essentially from bottom to top, are the targets. The  
7 Silurian would be the deepest target. The Penn, which  
8 includes Cisco and Strawn, the next target. Wolfcamp is  
9 the target just below the Abo, and then the Abo is listed  
10 as the backup target. And anyway, those are the targets.

11 And across from left to right I've written --  
12 there's information on the Harvest 2, the Harvest 3, the  
13 Harvest 4 and the Summers Number 2. So I think it's worth  
14 just going through this relatively briefly but relatively  
15 in detail.

16 So under Harvest Number 2, the basement has  
17 nothing to test. The Penn -- Actually, we tested it, we  
18 tested two zones at 4536 to -43 and 4602 to -27, acid-  
19 frac'd them, you know, made a thorough test. It flowed 39  
20 MCF a day, which we considered not worth trying to produce.  
21 We tried another zone at 4698 to 4710, acidized that, 30  
22 MCF a day and abandoned, so -- But we tried the Penn in  
23 that well and were not able to produce it. In the Harvest  
24 2, then, we perforated the Wolfcamp and tried to produce  
25 that, and it did not produce. And we abandoned and went to

1 the Abo, and the Harvest Number 2 is completed in the Abo.  
2 This is the earliest of these wells in the year 2000, so  
3 it's been producing from the Abo for a couple years.

4 So that story is, the deep didn't pan out, and  
5 we're back to the Abo.

6 The Harvest Number 3, we tested the basement up  
7 there at the top, perforated two separate zones, swabbed  
8 water -- it was just plain wet -- abandoned that. We  
9 tested the Penn, abandoned that. We completed a zone in  
10 the Wolfcamp at 4568 to 4560, and it IP'd for 456 MCF a  
11 day. It was completed. And then we went up to the Abo and  
12 completed that, and the Harvest Number 3 is producing  
13 commingled from the Wolfcamp and the Abo. And in a minute  
14 I'll tell you that the Abo is the better producer and that  
15 the Wolfcamp is not as strong.

16 Going on to the Harvest 4, there's nothing to  
17 test in the basement, nothing really to test in the Strawn.  
18 We completed a zone in the Wolfcamp with the fairly decent  
19 potential of 980 MCF a day and then also completed in the  
20 Abo, and that well is commingled. And we'll see a little  
21 of the production of that. And again the story is, the Abo  
22 is pretty good and the Wolfcamp is not as good.

23 The Summers Number 2, we perforated a deep zone,  
24 flowed 17 MCF a day, and we abandoned that and nothing in  
25 the Penn, and completed a zone in the Abo -- completed a

1 zone in the Wolfcamp and then completed a zone in the Abo.  
2 And like Mr. Miller said, the Abo has been doing well  
3 enough that we are only producing that and have not  
4 actually been able or have not gone back to produce the  
5 Wolfcamp. So I don't know if -- That Wolfcamp may be  
6 better than what I'm telling you.

7 But in all, this exhibit details that we've  
8 actually tried the various components of this -- of the  
9 deep, and it's a mediocre picture so far, is, I think, what  
10 you'll agree, and we've ended up with some pretty good Abo  
11 wells here.

12 So -- I guess I've got another exhibit to show  
13 more details of that, but the Abo performance in these four  
14 wells maybe enhances the overall Abo picture a little that  
15 I told you, but you're still at about half a chance of a  
16 good Abo, and I think an unproven chance at the deep, is  
17 what I'm --

18 Q. All right, so what does Exhibit 22 show?

19 A. Exhibit Number 2 --

20 Q. 22.

21 A. Exhibit Number 22 -- thank you, sir -- is the  
22 same kind of exhibit I had for the San Andres and for the  
23 Abo. Since there's a small number of wells they're both  
24 stuck on one piece of paper. But the top half of the  
25 exhibit shows basically locations and all, and then to the

1 right-hand side it shows the IP in the Wolfcamp and the  
2 Abo. So there's four wells, but there's seven lines  
3 because three of them have been in two zones. Hopefully  
4 you can figure that out.

5 The real information is in the bottom half of the  
6 exhibit where we talk about producing rates and cumulatives  
7 and my estimates of ultimates. And some of these wells  
8 have not produced very long, and so my estimates could be  
9 higher or lower, but they give you the right picture, I  
10 think.

11 So the Summers Number 2 has not been able to  
12 produce in the Wolfcamp, and so its Wolfcamp performance is  
13 basically unknown. It tested about half a million a day.  
14 I'm assuming it will be decent but not fantastic.

15 But in the Abo, the Summers has made 200 million.  
16 It's making over a million a day, and I think it's going to  
17 make a BCF or more, so a strong Abo well.

18 The Harvest Number 2 has produced from the Abo  
19 only for about two and a half or three years, so its story  
20 is probably pretty believable. It's made .8 BCF and it's  
21 going to make a BCF. A good strong Abo well.

22 The Harvest 3 has been producing from both the  
23 Wolfcamp and the Abo. The Wolfcamp has made 59 million,  
24 it's making 115 MCF a day. I think it's going to make .1  
25 BCF. Not enough to pay out the well, but enough to get

1 some money back. And the Abo has made almost .3 BCF and is  
2 making 500 a day. It's another BCF Abo well. So Abo good,  
3 Wolfcamp not so good is, I think, the story.

4 And on Harvest 4, same story again. The Wolfcamp  
5 has made 20 million, it's making 40 MCF a day, it's just  
6 not that strong. But the Abo is making over a million a  
7 day, and I've got it as almost a BCF well when it comes to  
8 it.

9 So what little data there is on those deep wells,  
10 to me, say, we found nothing in the basement, nothing in  
11 the Penn. The word I use, mediocre Wolfcamp. And then the  
12 backup zones, we've lucked out and got good Abo wells in  
13 them. So keep it up, Yates.

14 Q. Would you explain what is Exhibit 23?

15 A. Exhibit 23 again are production curves with  
16 forecasts for those four deep wells, the seven zones in  
17 those four deep wells, and you see that -- other than the  
18 Harvest 2 that has two-plus years of data, you're talking  
19 about six months of data or two months of data. But it  
20 shows you in detail the forecasts that I've made, and if  
21 you want to talk about them, we can.

22 Q. Dr. Boneau, is it your recommendation that the  
23 full 200-percent risk charge be assessed against any  
24 interest not voluntarily committed to this well?

25 A. Yes, that's my recommendation.

1 Q. In your opinion, will granting this Application  
2 be in the best interests of conservation, the prevention of  
3 waste and the protection of correlative rights?

4 A. Yes, it will.

5 Q. How soon does Yates propose to spud the Delhagen?

6 A. Approximately a month.

7 Q. Were Exhibits 13 through 23 prepared by you?

8 A. Yes, they were.

9 MR. CARR: Mr. Examiner, we move the admission  
10 into evidence of Yates Petroleum Corporation Exhibits 13  
11 through 23.

12 EXAMINER JONES: 13 through 23 will be admitted  
13 into evidence.

14 MR. CARR: That concludes my examination of Dr.  
15 Boneau.

16 EXAMINATION

17 BY EXAMINER JONES:

18 Q. Dr. Boneau, I could probably ask a whole bunch of  
19 questions, but as far as which ones are my business or more  
20 pertinent to what we're trying to do here, I --

21 A. They're all your business.

22 Q. Well, in your opinion, all of the different  
23 completion costs in all these different zones and the  
24 factoring in of the drilling costs and completion costs and  
25 the risk associated with the well, it's -- you're not

1 preventing -- you're not causing waste by drilling the  
2 well? That's what I was coming around to ask.

3 A. No, we're doing good things by drilling these  
4 wells.

5 Q. Good things by drilling the wells, okay.

6 A. You realize that we've drilled 50 or 80 or  
7 something of these a little further north and found some  
8 good things in the basement, in the Silurian, in the Penn,  
9 yes, and so 10 miles away we have found good things in  
10 these deep zones. And so this is the very southern end of  
11 the Abo, and it actually was developed 1982, rather than  
12 1980. It was kind of the end of the Abo development, a  
13 little bit.

14 And this -- I don't know, in my mind it's the  
15 same kind of thing. We've found good deep stuff, and now  
16 we're -- maybe there's some good deep stuff down in the  
17 southern end too, and that's the looking we're doing. And  
18 it would be nice if we would find the same kind of things  
19 we've found 10 miles away, but we really haven't so far.

20 Q. Well, maybe these marginal wells can point you  
21 and Tim to the better wells and you can head in that  
22 direction.

23 Did you look at the AFE for the drilling wells?

24 A. Yes.

25 Q. Do you agree with the costs on the AFE?



1 A. It's going to cost us that to do it, yes.

2 Q. And the other Yates companies have all signed off  
3 on the AFE?

4 A. Oh, yes, they're ready for more fun.

5 Q. Okay. And just a couple of quick questions.

6 Have you done any sidewall cores in these zones, or cores,  
7 any other cores?

8 MR. CARR: Not these?

9 EXAMINER JONES: Okay.

10 THE WITNESS: Not in this area --

11 EXAMINER JONES: Okay.

12 THE WITNESS: -- no.

13 Q. (By Examiner Jones) And does the pressure data  
14 you encounter help point you toward better wells or  
15 indicate that a well will be good or not?

16 A. Well, the pressure data -- we're concerned about  
17 pressure data in the Abo so we don't have drainage within  
18 the Abo, and these have been at virgin pressure. We're not  
19 much concerned with pressure in the other zones, because we  
20 don't think there's any way they could have been drained.  
21 And so there is pressure there, there's just not much  
22 porosity or much extent to the zones that we've found so  
23 far.

24 Q. Are they pretty much normally pressured?

25 A. They're a little bit subnormal pressure.

1 Q. Okay.

2 A. The Abo is -- The average pressure in the Abo is  
3 1125 pounds, based on 1000 wells, and at 4000 feet or 3500  
4 feet that's more like a .25 gradient instead of water,  
5 would be a .33 gradient. Anyway, a little bit  
6 underpressured is what it looks like.

7 EXAMINER JONES: Okay, that's all of my  
8 questions.

9 David?

10 MR. BROOKS: I have no questions.

11 EXAMINER JONES: Okay, thank you very much, Mr.  
12 Boneau.

13 MR. CARR: And concludes our presentation in this  
14 case.

15 EXAMINER JONES: With that, Case 13,123 will be  
16 taken under advisement.

17 (Thereupon, these proceedings were concluded at  
18 9:28 a.m.)

19 \* \* \*

20  
21 I do hereby certify that the foregoing is  
22 a complete record of the proceedings in  
23 the Examiner hearing of Case No. \_\_\_\_\_,  
24 heard by me on \_\_\_\_\_ 19\_\_\_\_.

25 \_\_\_\_\_, Examiner  
Oil Conservation Division

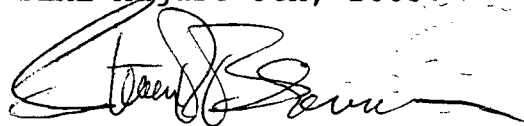
## CERTIFICATE OF REPORTER

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

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

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

WITNESS MY HAND AND SEAL August 8th, 2003.



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STEVEN T. BRENNER  
CCR No. 7

My commission expires: October 16th, 2006