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VIRGINIA OIL AND GAS CONSERVATION BOARD

HEARING OF DECEMBER 18, 1990

9:00 A. M.

AT THE VIRGINIA 4-H CENTER

ABINGDON, VIRGINIA

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1 December 18, 1990

2 These matters came on to be heard before the Department
3 of Mines, Minerals and Energy, Virginia Gas and Oil Board, on
4 this the 18th day of December, 1990, at the Virginia 4-H
5 Center, Abingdon, Virginia.

6
7 (ITEM ONE)

8
9 MR. WAMPLER: Good morning, my name is Benny Wampler. I'm
10 the Assistant Director of mining for the Virginia
11 Department of Mines, Minerals and Energy and I'd like to
12 introduce to you our Gas and Oil Board or rather have the
13 members introduce themselves.

14 (Members introduced.)

15 MR. WAMPLER: We published today's agenda in the newspaper
16 for general circulation and we've asked this morning for
17 those people that wish to address the Board on Item
18 Nnumber 1 of today's agenda, to give us your names.
19 I'll read those names. If they're any others that wish
20 to address the Board, please let us know so that we can
21 be aware of who wants to speak today. Hugh Fain,
22 Matthew Cartier, Chad Harding, Grant McGuire, Tom
23 Mullins, Christopher Wallace, Steve Breeding, Michael
24 Edwards. Are there any others?

25 (Others list their names.)

1 MR. WAMPLER: Thank you. First agenda of the Board upon its
2 own motion will receive comments for the proposals for
3 the establishment of field rules and drilling units for
4 the Berea Sandstone in Buchanan County. The proposal
5 shall address the designation of pool and all information
6 which needs to be address under section 45.1-361.20.
7 Those parties having an interest in this area are invited
8 to participate in the devolvement of any field rules and
9 drilling units established by the Board. Section 45.1-
10 361.20, especially under Item B, list those findings that
11 the Board specifically must make when it renders its
12 decision in this regard. I'll start from the top down.
13 Hugh Fain.

14 MR. FAIN: Thank you, Mr. Wampler. (Gives Opening Statement on
15 behalf of Cabot Oil and Gas Corporation.)

16 MR. FAIN: I'd like to call Jim Libiez. We'll use this as a
17 witness stand.

18 MR. WAMPLER: Okay.

19 MR. FAIN: First, I'd like to before we begin, I'd like for
20 Joe Tiege to hand out to each Board member our proposal.
21 This is a packet we put together. Behind the proposal
22 you'll see tabs for each exhibit that we'll be discussing
23 today. The Board members can follow along with us as we
24 display these exhibits up here and we'll go in subsequen-
25 tial order. So I think it will be pretty easy to follow

1 along.

2

3

JAMES DAVID LIBIEZ

4 a witness who, after having been duly sworn, was examined and
5 testified as follows:

6

7

DIRECT EXAMINATION

8

9 BY MR. FAIN:

10 Q. Mr. Libiez, would you tell the Board, please, what your
11 position is with Cabot?

12 A. I'm the regional exploration manager in Charleston, West
13 Virginia.

14 Q. And would you briefly tell the Board your education.

15 A. I received a bachelor of science degree in geology from
16 the Missouri School of Mines, 1963. Since that time I
17 have accumulated about 40 hours of graduate work in
18 geology and geophysics and an additional, approximately,
19 30 hours in business administrative courses.

20 Q. And would you tell the Board, please, your work ex-
21 perience since graduating from the University?

22 A. Since graduating in 1963, I've been continuously employed
23 in the petroleum industry as a geologist, both explora-
24 tion and development for Chevron Oil Company, Louisiana
25 Land and Exploration Company and Cabot Oil and Gas.

1 Q. Now, Mr. Libiez, has Cabot collected geologic data in
2 Buchanan County, Virginia?

3 A. Cabot, over about the last four years, has devoted the
4 efforts of large -- most of the efforts of two geologist
5 toward studying the geology of Buchanan County, Virginia
6 and the area immediately adjacent thereto.

7 Q. And does that data indicate that in and around the
8 Pilgrim's Knob area of Buchanan County there is a area
9 that is wholly or substantially underlain by the Berea
10 Sandstone formation?

11 A. Yes, it does.

12 Q. And does that formation consist of a common accumulation
13 of gas and oil sperate and distinct from and not in
14 communication with any other common accumulation of oil
15 and gas?

16 A. That's correct.

17 Q. Show to the Board, if you would please, our Exhibit 1.
18 Please tell the Board what this Exhibit 1 depicts.

19 A. Exhibit 1 is what Cabot recognizes as a geologic and
20 partly political field boundary that we would propose to
21 be used for the Pilgrim's Knob field area. What we're
22 looking at here is a map at a scale of 1" to 2,000 of the
23 northern part of Buchanan County. We define the field
24 boundary that we would propose to the Board as the 5'
25 net pay iso-pack contour of Berea Sandstone formation and

1 then the finally boundary, of course, being the West
2 Virginia/Virginia state line.

3 Q. Now, you said --

4 MR. WAMPLER: Excuse me.

5 MR. FAIN: Uh-huh.

6 MR. WAMPLER: Would you clarify what you mean by political --
7 partly political?

8 THE WITNESS: Well, it's just that it's a state line boundary.
9 Political subtravision of the United States.

10 MR. WAMPLER: That's fine. Go ahead.

11 Q. (Mr. Fain continues.) Now, you said this is the proposed
12 field boundary, but actually this is the proposed
13 geologic formation boundary, is that correct?

14 A. Yeah, we recognize the importance of this line, the 5'
15 iso-pack of the Berea Sandstone as being significate to
16 the accumulation of oil and gas in this area.

17 Q. Now, tell the Board why that is so and in particular
18 tell the Board about the volume metric characteristics
19 of the Berea Sandstone.

20 A. The Berea Sandstone, as many people know, is a low
21 porosity, low permeability sandstone and for the effi-
22 cient and prospective drilling of it you need it, we
23 think, a minimum of 5' of productive thickness before you
24 would consider drilling for the Berea Sandstone.

25 Q. To summarize then, is it the case then that on the

1 outside of this proposed geologic boundary area that the
2 iso-pack of the Berea Sandstone trails off to less than
3 5'?

4 A. That's correct.

5 Q. And on the inside of this proposed geologic boundary
6 area the iso-pack is 5' or greater?

7 A. That's correct.

8 Q. Okay. Would you show the Board Exhibit 2, please.
9 Would you please illustrate for the Board using this
10 Exhibit 2, the isopack thicknesses and geologic trends
11 for the Berea Sandstone throughout this formation?

12 A. Once again we're looking at that same base map at a
13 scale of 1" to 2,000 and this is a map of Cabot's
14 interpretation of the Berea Sandstone net-pay iso-pack.
15 That is the number of feet of Berea Sandstone with a
16 property greater than 6 percent and a water saturation
17 less than 60 percent. And we recognize then that this 5'
18 contour is essentially the outline then of the prospec-
19 tive part of the reservoir and that areas outside that 5'
20 contour are non-prospective and within that potentially
21 prospective.

22 Q. Is it true then that Cabot believes and proposes that
23 the Berea pool for this Pilgrims Knob area is the area
24 shown inside the 5' iso-pack?

25 A. That's what we would propose and the theory to which the

1 field rules we'll discuss here should apply.

2 Q. Point out for the Board, if you would, Pilgrims Knob.

3 A. Pilgrims Knob is located right there. Centrally in the
4 center of the area.

5 Q. Show the Board Exhibit 3, if you would.

6 Mr. Libiez, how many total acres overlay the area
7 depicted on Exhibit 1 and also here on Exhibit 3 as the
8 Berea pool?

9 A. Okay. Once again we're looking at the same face map at
10 the same scale we had previously. Within the pool
11 outline that we propose, they're approximately 32,500
12 acres.

13 Q. And Cabot is the owner of oil and gas leases covering
14 approximately how many acres overlaying the pool?

15 A. We have 11,700 acres of oil and gas leases which are
16 shown here in the yellow shading within the outline and
17 approximately 15,000 joint acres also within the outline.

18 Q. Using those figures then what is the percentage of
19 acreage of lease hold interest that Cabot maintains in
20 over this Berea pool formation?

21 A. Cabot has approximately 41 percent of the proposed field
22 then under lease.

23 Q. And again the area shaded in yellow depicts Cabot's
24 lease hold interest?

25 A. That's Cabot's lease hold interest both within and

1 exterior to the proposed field boundary.

2 Q. Okay. Show the Board Exhibit 4, if you would, please.

3 Now, what does this Exhibit depict? It depicts a lot of

4 things. There's a lot of different items on here so

5 please show the Board what the different items on this

6 Exhibit are.

7 A. Exhibit 4, of course, goes back and depicts the geologic

8 reservoir boundary that we recognize on previous Ex-

9 hibits. We have then proposed a grid of units for the

10 development of Pilgrims Knob field. This grid of units

11 which is shown by the red outlines is made up of two

12 Oakwood coal bed methane units. In fact, we've been so

13 original as to borrow the same alphanumeric identifica-

14 tion for these units. We believe that there is a great

15 advantage to the industry, to all the industries involved

16 here, because with that coincidence use of unit boun-

17 daries we can then use some of the same circuit facili-

18 ties, same drilling windows, many of the same things in

19 common for the development of our different estates.

20 Q. Show the Board what you mean by drilling windows.

21 A. Each little square right here outlined in the dash black

22 line is a drilling window that has been previously

23 approved by the Board for the development of the Oakwood

24 coal bed methane field.

25 Q. Tell the Board why it makes sense to ordinate the long

1 end of the rectangle unit on a north/south orientation.

2 A. We feel that this is the best orientation because the

3 field itself is oriented very much in a north/south

4 direction and that therefore this gives us the ability

5 then to distribute units over that geologic entity

6 probably with the greatest regularity because close to

7 mother nature here latitude/longitude in the proposed

8 grid will let us.

9 Q. Trace for the Board then, if you will, what Cabot would

10 propose as the field, actual field boundaries for the

11 area that would be covered by these field rules.

12 A. The field boundary then would be the exterior line or

13 the outside line of the exterior units and it's so

14 labeled right here all away around the field and of

15 course then the state line on the northern side.

16 MR. MASON: Maybe I'm displaying some -- I'd like to under-

17 stand. Why did you leave a large hole in there?

18 Q. (Mr. Fain continues.) Please tell the Board why the

19 large area of the north quadrant of this pool does not

20 have a grid system on it.

21 A. This area has been largely developed in the past, Mr.

22 Mason, on a lease basis. It has developed over the last

23 twenty years or so and it's essentially developed.

24 There is really very little drilling to be done up

25 there. The wells that have been drilled will probably --

1 well, I know they won't fit a grid system, they don't
2 now. So, therefore, it really would be very little
3 advantage to anybody --

4 MR. MASON: If that's the case, why don't you propose making
5 the field outline not encompass those?

6 THE WITNESS: We felt that if we wanted a geologic outline to
7 the field, some geologic reason for the field, then we
8 should follow that field boundary and then perhaps carve
9 out those areas which probably would receive little or no
10 benefit from the setting up of units in field rules since
11 their essentially developed.

12 MR. MASON: But they would affect in your proposal be subject
13 to the same field rules without a designation of grid?

14 Q. (Mr. Fain continues.) No. In fact, Mr. Libiez, does
15 Cabot's proposal suggest that existing units, either
16 created on a lease basis or, for example, these units
17 that are created statutorily here in the very center, be
18 excluded from, by these field rules?

19 A. We do propose that they be excluded from the field
20 rules, yes.

21 Q. And that the field rules not modify those existing
22 units?

23 A. That's correct.

24 Q. And, likewise, do we propose that existing wells that are
25 permitted or are already drilled not be subject to these

1 fields rules for spacing and well placement?

2 A. Yes.

3 MR. MASON: Okay.

4 Q. (Mr. Fain continues.) Now, has Cabot determined the
5 meets and bounds of this field boundary as you've traced
6 it for the Board?

7 A. We have.

8 Q. And have we supplied for the Board in the proposal the
9 meets and bounds?

10 A. We have and it's included in the proposal.

11 Q. Okay.

12 MR. HARRIS: Let me ask a question also. You said earlier
13 this is Cabot's interpretation. Now, are we talking
14 about the actually boundary there of the gas field or --
15 of course, obviously the field rules that you all are
16 proposing or the set -- you know, would be you all's
17 interpretation, but when you're referring to that are
18 there other interpretations of how this pool lays or is
19 this -- once the geology is done --

20 MR. FAIN: Uh-huh.

21 MR. HARRIS: -- that it's pretty much established where the
22 boundaries are and what --

23 Q. (Mr. Fain continues.) That's true and Cabot has shared
24 information with other developers in this area, is that
25 correct?

1 A. That's correct.

2 Q. And this is not so much Cabot's determination as what we
3 believe is the collective determination in this area of
4 where the Berea pool formation --

5 MR. HARRIS: When you say interpretation of -- I was just a
6 little confused, are you saying that you can't see it so
7 this is how you interpret the geologic data that you've
8 gotten or --

9 THE WITNESS: Perhaps the term interpretation is -- geologist
10 are very fond of using some type of waffling language and
11 perhaps I use some. We don't deal with perfect informa-
12 tion. We have a well every half an hour and we compare
13 one well to another and we make an interpretation of the
14 geology that we see between those wells and around those
15 wells. It's true and factual to the best of our ability
16 but we realize that when you drill a well next month or
17 next year, new data will be introduced and the map will
18 change in some degree. Sometimes we'll find exactly what
19 we expect, sometimes we don't.

20 MR. HARRIS: This interpretation term then is a standard
21 industry term or --

22 THE WITNESS: I think so.

23 MR. HARRIS: Okay. Thank you.

24 Q. (Mr. Fain continues.) And by the way, does Cabot
25 propose that these field boundaries, as well as the

1 unit configurations be allowed to be modified in the
2 future upon proper shelling by the, or suggested by
3 the inspector or appropriate showing by a party with
4 some economic interest in the field?

5 A. We would propose that the field rules that we propose,
6 if adopted by the Board, certainly could be modified in
7 the future with additional data makes it so apparently
8 necessary.

9 Q. Does Cabot propose a tolerance be made to units, where
10 necessary, to achieve boundary compatibility with units
11 pre-existing in the area covered by these field rules?

12 A. Yes. We realize that when -- an arbitrary good of
13 proposed units placed upon this area and around the
14 boundaries of previously drilled leases or previously
15 drilled units, there's going to be a little mismatch and
16 therefore we would recognize that a tolerance, and we
17 recommend to the Board, 25 percent or 40 acres, be given
18 to units that are in such boundary areas so that more
19 regular unit boundary suit your problem can be minimized.

20 Q. That is some units can be larger then 160 acres with a
21 tolerance of 25 percent and some could be smaller where
22 necessary?

23 A. Yes.

24 Q. Now, is that going to take care of all of the problems
25 of boundary compatibility?

1 A. Probably not because there's always a few units that you
2 can't fit into a tolerance of that nature.

3 Q. If that occurs, what does Cabot suggest happen to form a
4 unit?

5 A. That upon application, the Board could consider and
6 approve a unit is larger or smaller than the tolerance
7 or create a special unit in order to achieve an equitable
8 boundary situation between the previously drill areas and
9 the new unit areas.

10 Q. Based on Cabot's research, should that occur very often?

11 A. Not often but with something like this it's impossible
12 to plan for every situation.

13 Q. Would you show the Board Exhibit 5, please, unless
14 there's other questions about this --

15 MR. MCGLOTHLIN: Mr. Chairman.

16 MR. WAMPLER: Mr. McGlothlin.

17 MR. MCGLOTHLIN: Mine is colored. Can I assume that the
18 yellow is the --

19 MR. FAIN: Are you on Exhibit 4 or 3?

20 MR. MCGLOTHLIN: Exhibit 3. I'm sorry. Let me go back to it.
21 Is this Cabot's --

22 MR. FAIN: That's Cabot's leases, yes.

23 MR. MCGLOTHLIN: Okay. Thank you.

24 MR. FAIN: Are there other questions about Exhibit 4?

25 MR. EVANS: I've just got one quick question. How many data

1 points are we considering here for your iso-packs?

2 THE WITNESS: I think nearly every well that's been drilled in
3 the area.

4 MR. EVANS: And how many is that?

5 THE WITNESS: I haven't made that count, but it's certainly,
6 probably close to 100.

7 MR. EVANS: Okay. Thank you.

8 MR. WAMPLER: Any other questions, Members of the Board?

9 Q. (Mr. Fain continues.) Show the Board Exhibit 5, Mr.
10 Libiez? Now, what does this exhibit depict?

11 A. This exhibit shows a blow-up of 8 units as we would show
12 them for the Pilgrims Knob area which is 16 Oakwood coal
13 bed methane units.

14 Q. And explain again for the Board what the dotted blue
15 line indicates.

16 A. The dotted blue line is the drilling window previously
17 approved by the Board for the Oakwood coal bed methane
18 units.

19 Q. And, accordingly, what would Cabot propose to be the
20 minimum distance a well could be placed from unit
21 boundaries on a unit?

22 A. In accordance with the previously approved order, that
23 would be 300 feet from the closest boundary, unit
24 boundaries, the three closest.

25 Q. And what does the 2,166.8 foot arrow and line designate?

1 A. That is the distance from the farthest unit boundary
2 to the drilling windows boundary.

3 Q. Does Cabot propose a drilling pattern be employed and
4 made a part of these field rules?

5 A. We would. We would propose to the Board that alternate
6 ends of these rectangular units be used as drilling
7 windows at the alternate ends of these units, be used to
8 drill the units on this sort of pattern and what this
9 allows if each of these centers were drilled, results in
10 a 2,640 foot well spacing.

11 Q. But now in some instances you would need to be closer
12 than 2,640 feet, is that correct?

13 A. That is correct.

14 Q. What would Cabot propose to be the minimum distance
15 between wells spaced under these field rules?

16 A. The minimum distance we would propose would be 1,744.2
17 feet, a very precise number, but it is the distance from
18 the maximum legal location offset in this drilling
19 window to the center of the diagonally adjacent drilling
20 window. That way if we have a maximum offset here, we
21 can be back on pattern here and then that would not
22 affect the placement of wells for the rest of the units.

23 Q. Under this pattern then that Cabot is suggesting, would
24 a developer be permitted to drill in the southerly
25 portion of this drilling unit for example?

- 1 A. Without location exception, by commanded by the inspec-
2 tor, no. This would be his allowable area.
- 3 Q. And is that another reason why it's necessary to allow
4 Cabot, or these field rules to follow the drilling unit
5 in the Oakwood units?
- 6 A. We think by following the Oakwood coal bed methane
7 drilling pattern that certainly competing interest, if a
8 coal bed methane well can be drilled to the shallow coal
9 somewhere in here and certainly possibly so can a
10 conventional gas well. We can share surface locations,
11 roads, minimizing damage to the environment with that
12 sort of thing. Pipe line right-of-ways. We can perhaps
13 use the same coal pillar though the shallow seams and
14 just in effect of great deal of saving in way of poten-
15 tial waste and potential damage to the environment.
- 16 Q. How else would this drilling unit benefit and ease the
17 burden on the coal estate?
- 18 A. As you can see when you subtract 600 feet from the
19 narrow dimension the one proposed units, that we're left
20 with a 1,266 acre width to this. Most of the long wall
21 panels that currently are in use are less then this. So,
22 if even if a long wall panel at Pocahontas 3 seam were
23 centered right over this, there would still be a area
24 outside that where a well could be located.
- 25 Q. And that would avoid a well in a center of a long wall

1 panel --

2 A. Yes.

3 Q. -- where possible.

4 A. Where possible.

5 Q. And does overlying this grid system on the Oakwood grid
6 system and therefore, and also the successive pattern,
7 also benefit the coal estates?

8 A. Yes, it does.

9 Q. And why is that?

10 A. Well, because we interfere a minimum degree with their
11 development of their coal bed resources, both the shallow
12 seams and the deep seams.

13 A. Now, referring back to Exhibit 4 for just one second if
14 you would.

15 MR. MASON: Mr. Chairman.

16 MR. WAMPLER: Yes, Mr. Mason.

17 MR. MASON: Just to serve my memory. In this area, ap-
18 proximately, how deep is the top of this Berea formation.
19 I realize that it varies by 20 or 30 feet but --

20 THE WITNESS: Well, it's about 4,700 feet, I believe.

21 MR. MASON: So in the Pokey 3 as much, that their looking at
22 for the explores --

23 THE WITNESS: Oh, yeah. It's as much as 1,600, something like
24 that, 1,700. Depending on --

25 MR. MASON: I understand. I was just trying to get some

1 understanding of the relationship of the two.

2 THE WITNESS: We'll have an illustration that will show you

3 the generalized geological section --

4 MR. MASON: Okay.

5 THE WITNESS: -- in this area.

6 MR. WAMPLER: If you expanded to other formations, would that

7 boundary change?

8 THE WITNESS: We would not at this time.

9 MR. WAMPLER: Okay.

10 THE WITNESS: We think that the Berea is the dominate most

11 wide spread productive formation in the area and that the

12 field rules should be permitted as previously requested

13 by the Board but there are reasons why we should be able

14 to produce shallower zones though some of the same holes

15 and we'll get into that in a momoent, I think.

16 MR. WAMPLER: Okay.

17 Q. (Mr. Fain continues.) Now, I'd like to refer back to

18 Exhibit 4 to show the Board how Cabot proposes the

19 pattern be started. Obviously, you've got to start the

20 pattern somewhere and so it can be followed throughout

21 the pool and throughout the field. And how would Cabot

22 propose this pattern be kicked off?

23 A. Cabot would propose that the pattern be started where

24 we've got a coal approved location for the A-4 and our

25 A-8 locations, which fit into the grid system within the

1 drilling window.

2 Q. Uh-huh.

3 A. And these would be the areas that we would then start
4 the alternating ends of the proposed units.

5 Q. Then if a developer wanted to say develop in the northw-
6 est quadrant, he should count off the patterns so that he
7 make sure he's in the drilling window that's he's --

8 A. Yes.

9 Q. -- supposed to be in?

10 A. That's correct.

11 MR. WAMPLER: Would you explain for the Board the odd shaped
12 units there that you've not proposed to incorporate --

13 THE WITNESS: These?

14 MR. WAMPLER: Yes, those.

15 THE WITNESS: These are units that are present for either
16 previously drilled or previously permitted wells in so
17 since they're already in existence and we've gone through
18 the administrative problems and the we've gotten ap-
19 provals from all parties concern the well at that
20 location, we thought that those should remain in effect.

21 MR. WAMPLER: Treating those just as you have the exemptive
22 area?

23 THE WITNESS: Yes.

24 MR. WAMPLER: Okay.

25 THE WITNESS: We're not trying to change what's gone before

1 but we recognize that we do -- we do want to help all
2 parties concerned with what comes in the future.

3 Q. (Mr. Fain continues.) Now, Mr. Libiez, does Cabot
4 propose that the field rules specify that the Virginia
5 Gas and Oil Inspector may consider and grant locations
6 exceptions on a case by case basis?

7 A. Yes.

8 Q. For example, topography concerns by prevent a well being
9 drilled in the alternate window of a drilling unit.

10 A. That's correct.

11 Q. And if that occurs, what would Cabot suggest to be the
12 procedure to drill outside that window?

13 A. That the interested party seek a location exception,
14 proposed by the inspector, seek the location exception
15 for the drilling of a well within his unit at a nonstan-
16 dard location.

17 Q. And we've already discussed, I believe, that Cabot
18 proposes that the field rules be able to be modified in
19 the future if geologic data indicates that the pool
20 should be extended or for other reasons, is that correct?

21 A. Yes.

22 Q. Now, does Cabot suggest that these modifications be made
23 by the Board upon the recommendation of the inspector or
24 by application and proper showing by a party with an
25 economic interest in the field?

1 A. Changes to the unit should be made upon application to
2 the Board.

3 Q. Or by recommendation of the inspector?

4 A. Yes.

5 Q. I'd like for you to refer very quickly to the Exhibit
6 13, I believe we're going to skip just for one second.
7 What does this Exhibit 13 depict?

8 A. Exhibit 13 is a log within the proposed Pilgrims Knob
9 field. It's Buchanan 21314, I believe. And what we're
10 looking at here then is from the top down to here, and to
11 here and down, and to here and down. And the scale then
12 is 10" approximately per 500'.

13 Q. Could you point out for the Board the different formation
14 that are encountered in this type log?

15 A. The Berea Sandstone is here, the thickness of sandstone
16 here, thickness that --

17 Q. What's the depth there, Mr. Libiez?

18 A. And that is 4,700 and some odd feet right there. And
19 above that also found productive in a number of wells in
20 the field is the Big Lime formation. It has perhaps
21 three distinct pays that occur. The Raven Cliff Sands is
22 productive in the area. It's not productive in this
23 well, developed in this well. I think there's one maxed
24 completion in the pool.

25 Q. And there are coal formations here on the --

1 A. In the coal formations, Pocahontas 3 seam, it's here just
2 below 1,500 feet and in the shallower seams, which are
3 identified as Pocahontas 9.

4 Q. Would you explain for the Board in geologic terms that
5 we can all understand, the environments of deposition
6 and the characteristics of the various gas formations?

7 A. The Berea Sandstone is the most wide spread conventional
8 gas reservoir in the area. It is a sandstone, it is low
9 permeability, low porosity. It was probably -- it was
10 deposited in a near-shore marine environment, Regressive
11 C, and we think is probably of an off-shore bar, shallow
12 water origin. As time progressed the waters cleared.
13 Big Lime is, of course, limestone deposits -- called a
14 bioplasmic limestone which means it's made of up the
15 shells that all the little calcium fixing creatures lived
16 then. It is productive where oulights, which are small
17 pollucks and if I'm boring some members of the Board --

18 MR. EVANS: No, go ahead.

19 A. (The witness continues.) So it produces blue light
20 porosity. The Raven Cliff is deposited in an terrestrial
21 environment and where developed and productive of gas, it
22 is a channel sandstone, filling an ancient river valley.
23 Maxton is probably of the same origin but it's not very
24 well developed in the area.

25 Q. Explain for the Board, if you would, why it is that oil

- 1 and gas developers don't in this area -- don't typically
2 aim for production at the Raven Cliff, the Big Lime, for
3 example, but rather they aim for the Berea.
- 4 A. The Berea is the most wide spread and consistent in the
5 area. The Big Lime porosity zones, while they are three
6 of them, are rather irregularly developed. They're
7 often narrow and sinuous in nature and are just hard to
8 find and to hit. Although, once you find them you can
9 proceed to develop but it's something you don't look for.
10 Similar to the Raven Cliff, since it's a channel deposit,
11 is deposited in narrow sinuous sort of nature and is hard
12 to prospect for.
- 13 Q. Okay. Now, by channel deposit, that is if you were
14 looking down aerially over this acreage you mean there
15 would be like a snaky river type formation?
- 16 A. Exactly. It would look as though you were looking down
17 on a present meandering river course, the Mississippi
18 River but a much smaller river than the Mississippi
19 River, and it would look just like a snake going though
20 the country side. The porosity zone development in the
21 Big Lime would have much the same aspect, it being
22 rather narrow and sinuous.
- 23 Q. So if you happen to come upon one of those formation
24 while you're going for the Berea, you've just gotten
25 lucky, is that correct?

1 A. You feel good about it.

2 Q. But you don't aim for producing out of that?

3 A. It's very difficult to go looking for it.

4 Q. And conversely when you look down airily if you were
5 looking at the Berea formation it would almost blanket
6 the whole area?

7 A. As the previous map showed, it is the blanket deposit
8 over some 32,500 acres.

9 Q. Are there similarities in the porosity and permeability
10 characteristics of these, all these gas formations?

11 A. They all are of low porosity and relatively low per-
12 meability characteristics.

13 Q. What do you mean by porosity and permeability?

14 A. Porosity is the void space in a rock that is available
15 to contain oil and gas. Think of it as a very ridged
16 sponge but not much in it but very small holes. So that
17 all three of those formations have very restricted
18 producing capacity.

19 Q. Is it your opinion then that the drainage that would
20 occur in say the Berea formation would similarly occur
21 in these other formations? That is the same amount of
22 area would be drained by the same well?

23 A. Yes.

24 Q. So if 160 acres were drained efficiently by one well in
25 the Berea, that too would drain efficiently the Big Lime

1 and the Raven Cliff formations?

2 A. We think so.

3 Q. Where is the Devonian Shell depicted on this?

4 A. The Devonian Shell is not penetrated on this particular
5 well bore but it's located below the Berea formation.
6 There are, I believe, three wells in the field that are
7 completed from the Devonian Shell.

8 Q. Similarly, if you were able to hit the Devonian Shell,
9 you would want to produce out of that well bore, is that
10 correct?

11 A. Yes.

12 Q. And you would expect similar drainage pattern to occur
13 in the Devonian Shell as you would expect to occur in
14 the upper formations?

15 A. Yes, we would.

16 Q. Does Cabot therefore propose in it's field rules that
17 the field rules apply equally with respect to these
18 deeper and higher gas formations that a developer may
19 get lucky and hit when they're searching for the Berea?

20 A. We would.

21 Q. Would that allow the developer to commingle production
22 out of one well bore?

23 A. Yes, it will.

24 Q. If you can't do that what type of problems exists?

25 A. You would have to drill perhaps unnecessarily well to

1 develop the other reservoirs, which would be wasteful.
2 It would interfere greatly within the operations of the
3 other operators, co-operators, coal bed methane operators
4 in the area. By being able to use the one well bore to
5 produce not only the Berea but other productive forma-
6 tions, it just a very logical extension and economical
7 extension of the Berea reservoir rules.

8 Q. And therefore the payment to royalty owners, for example,
9 would be paid on the same unitization process that --

10 A. Yes.

11 Q. -- would be established by these field rules whether the
12 gas is produce from the Berea or the Big Lime or the
13 Raven Cliff?

14 A. That's correct.

15 MR. EVANS: Mr. Chairman. Has the Devonian been developed at
16 all in any of the well bores?

17 THE WITNESS: There are three wells that have been completed.
18 One is a single and two of them have been completed, I
19 believe, with another zones, I believe.

20 MR. EVANS: All three?

21 THE WITNESS: Yes, I believe they are.

22 Q. (Mr. Fain continues.) Mr. Libiez, are you familiar with
23 and have you conducted research about whether any wells
24 in this Berea pool area in the Pilgrims Knob area, are
25 currently commingling gas out of the same well bore?

1 A. Yes. There are quite a number in the northern part of
2 the field that are presently commingled from the Big Lime
3 and Berea. So what we would propose to extend for these
4 field rules is already a practice in the field.

5 MR. FAIN: Mr. Libiez, that's all the questions I have for
6 you. Thank you very much. The Board may have some
7 additional questions.

8 MR. MASON: Mr. Chairman.

9

10 CROSS-EXAMINATION

11

12 BY MR. MASON:

13 Q. What was the depth of the Devonian?

14 A. Devonian hair is going to be below the Berea, below 4,700
15 feet, down to about -- somewhere close to 6,000 would be
16 the prospective depth of it. It's a rather thick --

17 Q. Are there any other known oil and gas producing forma-
18 tions below the Devonian Shell in that area?

19 A. Not here. There are not. In fact, I don't believe
20 there are any penetrations of pre-Devonian Shell. There
21 isn't any formations here.

22 MR. FAIN: Thank you, Mr. Libiez. Mr. Chairman, I'd like to
23 call my next witness now unless there's --

24 MR. MASON: Excuse me, Mr. Chairman. Just one question.

25 MR. WAMPLER: Mr. Mason.

1 Q. (Mr. Mason continues.) You were telling us what your
2 definition of porosity but I don't think you defined
3 permeability. I'm curious as to how you can find --

4 A. Permeability is a measure of the ease of which fluids
5 both gas and liquid can flow through a rock or through a
6 porous media.

7 Q. Would it be fair to say that porosity is really reservoir
8 capacity and permeability is transportation potential?

9 A. That's a good analysis.

10 MR. MASON: Thank you.

11 THE WITNESS: Transmissive ability.

12 MR. MASON: Yes, sir.

13 MR. WAMPLER: Any other questions?

14 MR. FAIN: Thank you, Mr. Chairman. I'd like to call now Tom
15 Blake.

16

17 THOMAS BLAKE

18 a witness who, after having been duly sworn, was examined and
19 testified as follows:

20

21 DIRECT EXAMINATION

22

23 BY MR. FAIN:

24 Q. Mr. Blake, what is your current position with Cabot Oil
25 and Gas Corporation?

1 A. I'm regional engineer in Charleston, West Virginia.

2 Q. And would you please briefly tell the Board what your
3 job responsibilities are as regional engineer.

4 A. In that capacity handle production of reservoir engineer-
5 ing for the oil and gas division and a reservoir stand-
6 point determining reserves and capacities from wells,
7 from the production standpoint completion, recommenda-
8 tions, completion mechanics and also for the Cranberry
9 Pipeline Company look after design and operations for the
10 pipeline system.

11 Q. Would you tell the Board your education, please?

12 A. I have a Bachelor of Science from Penn State University
13 in 1971 and about 50 credits toward and MBA, University
14 of West Virginia.

15 Q. And tell the Board briefly please, your work experience
16 in the oil and gas industry.

17 A. The first place I worked was Columbia Gas in Charleston,
18 West Virginia and there I handled reservoirs in Ohio,
19 Pennsylvania, West Virginia, New York. From there I went
20 to Superior Oil in Louisiana, handled off shoring in the
21 water from a reservoir and production standpoint as a
22 senior reservoir engineer, senior production engineer.
23 Also, took care of properties in Mississippi and Il-
24 linois, oil properties. And then moved to Texas Oil and
25 Gas Corp in Oklahoma City. I was their production

1 manager, drilling manager, engineering manager, handling
2 properties primary in Oklahoma and Texas panhandle. And
3 then was with Gas Research Institute in Chicago, Il-
4 linois. Initial position there was project manager for
5 gas sands dealing primarily with resource characteriza-
6 tions and stimulation. And then was put over to doing
7 shell research and at the same time was looking at coal
8 bed methane from a resource evaluation standpoint and
9 stimulation, handled stimulations contracts from them
10 and the resource estimations for the Southern Appalachian
11 Basin, which was primarily concerned with a Pokey 3 seam
12 in the area in question.

13 Q. When you conducted your work with the Gas Research
14 Institute on coal bed methane stimulation, did you
15 actually have occasion to go into mines and observe the
16 stimulation?

17 A. Observe the effect of stimulation --

18 Q. Uh-huh.

19 A. -- and one field trip and Alabama.

20 Q. Now, Mr. Blake, have you conducted research and collected
21 data to determine the appropriate size of units in the
22 Pilgrims Knob gas field?

23 A. Yes, I have.

24 Q. And would you tell the Board, please, generally what
25 you've concluded from your research.

1 A. Based on the research that we did which was primarily
2 based on 28 data points where we significant amount of
3 data including production, given the reservoir charact-
4 eristics that we find and based primarily on the Berea we
5 feel like a 160 acres is an appropriate spacing.

6 Q. And this would of called for and allow the most efficient
7 and prudent drainage of the Berea pool in this Pilgrims
8 Knob area?

9 A. I feel so.

10 Q. Would you show the Board Exhibit 6, please. Tell the
11 Board, please what Exhibit 6 depicts.

12 A. Exhibit 6 is a map showing the penetrations of the Berea
13 Sandstone in the field area and beyond. The red outline
14 again, is the 5' net sand pay. It's geologic definition
15 of the field. What I've done here is taking all the
16 Berea penetrations and just drew a 160 acre square line.
17 Also included some of the other units that are already
18 approved or proposed and the point of this being other
19 operators that have been working in the area for many
20 years in the past that are technology very capable and
21 reputable, have determined -- just visually you get the
22 feeling that a 160 acres is an appropriate spacing just
23 based on practice. The reason why they do this is that
24 they realize that if you space a closer, well economics
25 become problem. If you space them wider apart, you have

1 a recovery problem. So you know it's just more of a
2 visible depiction of historical practices.

3 Q. Does this Exhibit also illustrate the appropriateness of
4 the tread of the Berea Sandstone as we've depicted on the
5 proposed geologic field boundary?

6 A. Yes, because most of the time whenever you're sighting
7 wells you're looking for the thicker and trend was
8 probably started up here and has been working this
9 direction, you know. At this point, these are the newer
10 locations. This general orientation is the orientation
11 of the thickness of the Berea.

12 Q. Now, Mr. Blake, have you prepared a production model
13 that reflects the optional size for a unit in the Berea
14 pool?

15 A. Yes, we have.

16 Q. Tell the Board what a production model is.

17 A. Okay. A production model is a -- in this practical
18 case, is a mathematical representation of what a well
19 would perform like given certain conditions. The reason
20 why we chose to look at it that way is that we wanted to
21 specify conditions that were applicable to the Berea in
22 the Pilgrims Knob field, the proposed field, and try to
23 learn what changing spacing primarily would do to the
24 production of the wells. The particular model that we're
25 using is the model developed by S. A. Holdage. We did

1 the model whenever I was working in the Devonian Shell
2 research at GRI and it's based on it's history matching
3 and production forecasting model.

4 Q. Did you help develop this model while you were at Gas
5 Research Institute?

6 A. I was the manager for Devonian Shells.

7 Q. And this production model now used widespread in the oil
8 and gas industry?

9 A. Yes. It's a commercial model that Holdage markets.

10 Q. Would you show the Board please, Exhibit 7.

11 MR. WAMPLER: Excuse me just one second. Before you leave
12 that Exhibit there. The area marked as future well
13 locations, this is the area that , I believe testimony
14 has been would be exempted from the proposed field rule,
15 those areas, and you simply shown what the 160 acres
16 spacing would be by the existing wells, is that correct?

17 THE WITNESS: Right.

18 MR. WAMPLER: For the future wells, how would the Board
19 protect correlative rights of folks in those areas if we
20 don't have any rules in those areas?

21 THE WITNESS: In new areas or pre-existing --

22 MR. WAMPLER: In that area that you've outline there and you
23 have already identified proposed future wells there.

24 THE WITNESS: Right. The proposed field rules are kind of
25 work around the existing wells.

1 MR. FAIN: If you could look at Exhibit 4, I think you will
2 see that the grid does go up into those areas.

3 MR. WAMPLER: Uh-huh. I guess I was seeing some area in what
4 appears to be some area that's not covered.

5 THE WITNESS: Like a hole there?

6 MR. WAMPLER: Yes. And those two up there to the --

7 THE WITNESS: Right there.

8 MR. WAMPLER: Yes, those two.

9 THE WITNESS: Yeah. These circles are proposed locations.

10 MR. WAMPLER: Right. And I'm saying that, as we understand
11 it, is not proposed for the field rules --

12 THE WITNESS: Yes, right.

13 MR. WAMPLER: -- as you presented and if not how would the
14 Board -- what justification for not proposing those
15 areas?

16 THE WITNESS: First of all we'd end up with a discontinuous
17 group pattern that would end up being placed in here and
18 I guess the way I envisioned it is that these, anything
19 that's not encompassed in the continuous, you know
20 outside to be future developed acreage would be subject
21 to a voluntary unit according to the rules that are
22 already in place.

23 MR. FAIN: Mr. Libiez has another thought on this if the
24 Board would like to hear from him.

25 MR. WAMPLER: Sure.

1 MR. LIBIEZ: That area was developed by Ashland on a lease
2 bases and has been done so and it's a rather large, I
3 think one owner lease and therefore we felt that correla-
4 tive rights instances since there is one operator, I
5 think one lease owner, I'm not -- my knowledge is
6 somewhat limited there, protected people there and
7 therefore there was no need for us to provide field rules
8 for an area that had already been developed on a lease
9 basis under previous statutes and accordance with the
10 rules under a previous statute.

11 MR. FAIN: There other questions about this Exhibit 6?

12 Q. (Mr. Fain continues.) Mr. Blake, Exhibit 7 though 9 are
13 what? Tell the Board briefly what they are.

14 A. Seven though 9 are going to be the source of the data
15 that I used for a model to create a forecast for what
16 production might look like.

17 Q. Okay. Let's go to Exhibit 7 then first. Now, what does
18 this Exhibit 7 depict?

19 A. Okay. Exhibit 7 is a histogram of reservoir thickness
20 and what I've done is just taken a sample of 28 wells
21 that we had good data on, production data, log data, and
22 we were interested in trying to characterize the entire
23 32000 or so acres that the proposed field rules would
24 apply to. And so I wanted to get thickness and other
25 characteristics. This particular graph deals with

1 thickness. And what I'm done, I just taken increments of
2 two percentage points of porosity and porosity being the
3 space between the sand grains that is available to
4 contain either gas or oil or water, in this case gas and
5 water, and 6 to 8, 8 to 10, you can kind of see the
6 distribution is wide. That corresponds to the iso-pack
7 map that you saw earlier because it goes all the way from
8 -- in thickness I think I saw 30 feet at the very, very
9 north all the way out to the 5 feet that you're talking
10 about. All it is is the number of wells that have
11 porosity falling in that range. The point here being
12 that the average is 14.2 percent of porosity with a
13 standard deviation of 4 which includes standard deviation
14 so you can get an idea what kind of width there is in
15 spread on a data. This particular data has a wide spread
16 and that's obvious from the iso-pack also. So I'm going
17 to use 14 percent porosity in the well. 14 feet of
18 thickness. I keep forgetting my --

19 Q. Mr. Blake, a minute ago you were discussing percentage
20 of porosity, can that also be described in terms of
21 number of feet?

22 A. Yeah. I described porosity and looked a thickness --
23 this is all thickness. Sorry, that's just plain height
24 of the reservoir. So it's 6 to 8 feet, 8 to 10 feet, and
25 it also excludes dry holes. We're just talking about

1 what's considered productive reservoir. This is going to
2 be within 5 feet up. I'm sorry. So it's 6 to 8 feet, 8
3 to 10 feet with an average of 14 feet of porosity. I'm
4 also going to use 14 feet of porosity less the 4 foot
5 standard deviation and call it 10 feet of low case just
6 to take a look at the sensitivity between what's average
7 in the field today and what might be average in the field
8 as it's future as the development takes place.

9 Q. So you'll have two depictions on your production model?

10 A. Two cases, one at 14 feet, one at 10 feet. That will be
11 the only thing I'm going to vary.

12 Q. All right. Show the Board Exhibit 8, please.

13 A. Okay. Exhibit 8 is a porosity map so, what I just said
14 applies to this. And again it's a histogram frequency
15 of wells same population. I'm talking 28 wells again.
16 6 to 9 percent porosity, 8 to 10 percent and you can see
17 the distribution of that and it does have two peaks to it
18 and indeed in this reservoir it is a binomial distribu-
19 tion. The average, however, is 11.3 percent with a
20 standard deviation at 2. So it's relatively narrow and
21 in the model I use 11 percent porosity.

22 Q. So far we've identified two characteristics in the
23 model. The thickness of the sandstone was in Exhibit 7
24 and this shows the porosity percentage --

25 A. Right.

1 Q. -- in the sandstone.

2 A. 14 feet, 11 percent porosity.

3 Q. Show the Board Exhibit 9 if you would, please.

4 A. Okay. This Exhibit is water saturation. All these
5 variables come from the well logs of 28 wells. In this
6 case of showing water saturation, classes at the bottom,
7 20 to 25 percent, 25 to 30, 30 to 35 and so on, and
8 number of wells with the frequency of these kinds of
9 water saturations. And water saturation is important
10 because in the floor space I just said you need to have
11 gas and water and so we need to know how much water is in
12 there so we know how much gas is left. So, we use 1
13 minus water saturation per volume. And water saturation
14 averages 34.87. Standard deviation is 6 and half which I
15 consider pretty narrow for that and therefore I use 35
16 percent water saturation on the model.

17 Q. So this is a third factor that will go into your produc-
18 tion model.

19 A. Right.

20 Q. Are there other factors that go into your production
21 model?

22 A. Yeah. There are a couple of other things that you have
23 to tell it and the other ones you don't have 28 wells to
24 work with. The first one that you have to tell it is it
25 gets back to the permeability that you mentioned. It's

1 the ability of the reservoir, the gas to move through the
2 reservoir rock to the well bore. It's measure in
3 millidarcies and what we did to get that is take long
4 term production history that was supplied by folks that
5 produce in the northern end of the reservoir, Ashland and
6 did history matches on the production that we saw from
7 those wells so that we could get an idea what kind of
8 permeability we had. That distribution, we had five
9 wells with pretty good history and then we had three
10 other wells that had an relatively short term history
11 from further south. The permeability distribution was
12 bi-mutual and the average on the group at the low end
13 that was the predominate group was .15 millidarcies. And
14 it's interesting because that's pretty much confirmed by
15 cores that Cabot has taken, sidewalk cores in wells in
16 McDowell and adjacent Buchanan County.

17 Q. All right. Show the Board Exhibit 10 then if you would,
18 please.

19 MR. MCGLOTHLIN: Excuse me, Mr. Chairman. Is there any
20 correlation between the water saturation and the thick-
21 ness of the Berea?

22 THE WITNESS: I haven't checked the correlation between the
23 two. There's none that I've, that have been obvious to
24 me in looking at models.

25 MR. MCGLOTHLIN: I was just wondering if the 45 percent would

1 be in the 30 to 25 to 30 or --

2 THE WITNESS: Has a lot more to do with porosity. There's
3 definitely correlation. Another thing that I ought to
4 add, the other thing I needed was skin factor and the
5 skin factor, average skin factor, that's a measure of
6 frackure improvement for the ability of the reservoir to
7 produce, was a minus 7. That was the average use for
8 this model.

9 Q. (Mr. Fain continues.) Okay. Taking those factors then,
10 you created a production model that's depicted on
11 Exhibit 10, is that correct?

12 A. Right.

13 Q. Why don't you show the Board that.

14 A. Okay. This particular -- again, what we have done is
15 taken all the, all the parameter that I've already
16 mentioned, the thickness and water saturation, porosity,
17 permeability, skin factor, all those things into account,
18 and put them into a model and based the model on a 640
19 acre square, okay. What I'm trying to do here is to show
20 what accumulative production verses time would occur and
21 I'm looking at blowing up the section of the first twenty
22 years of producing life. The thing that I need to point
23 out is that one well in a 640 acre unit or square would
24 do this, that's kind of a production life it would have.
25 The 320 is two wells in a 640. So in every case I'm

1 looking at what affect it would have on 640 acres not
2 just one well, not one 80 acre. So there's 8 of these,
3 there's 5.3 of these, 4, 160's and a 640, 3.2, 200 acre
4 wells. Okay? So I'm going to add them all up. I'm not
5 going to be concern with the fact that you have pay 8
6 wells to do this. That's another issue. What we're
7 trying to look at here is just from a practical stand-
8 point what makes since in terms of recovery. You can see
9 that the 640 and the 320 after 20 years are pretty well
10 below the recovery of the other options that we have.
11 And then the other thing that I think is notable that if
12 you look at 8, 80 acre wells, they really get the gas out
13 in a hurry and they get to a point and they really don't
14 go very much further because they run into each other and
15 they end up depleting the reservoir pretty quick. So
16 what we're suggesting in a kind of qualitatuve sense at
17 this point is, you know these -- the orange being 120 and
18 the green 160 and the whatever color that is, purple, 200
19 acre, those are essentially the same recovery after 20
20 years. So those are things that we consider reasonable
21 in terms of recovery efficiency.

22 Q. Have you refined that a little bit further in Exhibit
23 11?

24 A. Yes, we have. This particular one was done for a
25 Exhibit 10 refers to an average reservoir and an average

1 reservoir was 14 feet. So I ran another model, Exhibit
2 11 just to see what kind of production profiles that we
3 would get if we looked at a 10 foot reservoir. And I
4 call it an marginal reservoir. The graphs done all the
5 same way. I'm still referring to 8 wells to do, you know
6 on 80 acre spacing. Everything is still on 640 acre
7 bases. You'll notice that on the graph they all ended up
8 around 1,200 MCF's and now we're less and the reason for
9 that is there's just less reservoir and so there's less
10 volume. But the point that I'm trying to make here is
11 that regardless to whether it's an average reservoir or
12 marginal reservoir in terms of recovery efficiency given
13 the reservoir parameters that are consider average for
14 this field, that the same group of spacing are still
15 more practical in terms of recovery efficiency with the
16 640 and the 320 being low and the 80 acres being, you
17 know pretty much doing there job in 10 years.

18 Q. Okay.

19 MR. MCGLOTHLIN: Excuse me, Mr. Chairman I'm sorry, go
20 ahead.

21 MR. FAIN: No, I was just going to move on.

22 MR. MCGLOTHLIN: Did you do a prediction on the 5 foot to 10
23 foot level? I see most of your leases is in the 5 to 10
24 foot.

25 THE WITNESS: I didn't go below 10, huh-uh. And what I was

1 trying to do here is just look at the over all sen-
2 sitivity and what the curves would look like, profiles,
3 just to show that -- just to presume what it would look
4 like if you ran it at 5 all the curves would be the same
5 shape and would accomplish the same thing. If this is 10
6 feet and you'd looking at 5 then all these right here are
7 about 500. It would just be less lines but I didn't
8 actually run the model saying that but that's the way it
9 would turn out.

10 MR. MASON: Excuse me, Mr. Chairman just one question. Did
11 the 28 wells that you used for the basis, how are they
12 group in this field? You indicated that they were wells
13 that you had good data on --

14 THE WITNESS: Right.

15 MR. MASON: -- are they in your judgement statistically a
16 reflective of the overall field? Are they grouped in
17 one area? How are they -- the sampling would seem to be
18 so important in terms of how they're distributed in this
19 field.

20 THE WITNESS: You have 28 wells, when you look at the number of
21 penetrations in the particular area that we're talking
22 about, that's pretty good sample.

23 MR. MASON: I understand that but what I mean their distribu-
24 tion --

25 THE WITNESS: The distribution is real important and logs are

1 available throughout the field and so I use logs that
2 were distributed all over the field. So, the porosity,
3 water saturation, thickness numbers, those are you know,
4 those have a good distribution, there's no question about
5 that. The permeability number, to get really good
6 permeability number you have to have production history.
7 So obviously on the south end of the field where the
8 wells are relatively new, I can't have long production
9 histories to run a match on. And so detailed data, that
10 data that requires the matching is predominately from
11 the northern end and remember I said there were a couple
12 of short term productions, wells that I looked at.
13 There were three of those that were interpretable and
14 those were more though the south end. So I did every-
15 thing I could to try and get a distribution of the
16 south.

17 MR. MASON: I was just following up on Mr. McGlothlin's
18 question in that the northern end of the field has the
19 thickest sand formation and if these sand thickness
20 diminish do you feel like that the data that you used
21 for this model is reflected of that trend because what
22 we are talking about here is putting in these rules in
23 an area which is primarily made up of thinner thickness
24 then the area that this data, the biggest part of this
25 data came from, isn't that correct?

1 THE WITNESS: That's true.

2 MR. MASON: And what I'm looking for whether or not here in
3 your professional judgement that this data would equally
4 be valid for this southern part of this field?

5 THE WITNESS: First of all the answer just overall is yes and
6 the reason why I say that is that I said that there was a
7 bimodal distribution of permeabilities at the beginning
8 and we find two wells that had a relatively high per-
9 meability and high thickness and it was in the north.
10 And when I said I used an average permeability for wells
11 that were more grouped toward the south that I felt that
12 were more reflective of what we would be dealing with in
13 the future. I take the 1.5 millidracies as an average of
14 the lower group, which is distributed in the area that's
15 nearest to the proposed field type rules. So, you're
16 absolutely right and to try and extrapolate data that
17 might not be represented is something we try to avoid.

18 MR. MASON: I guess what I'm trying to say is it's interesting
19 to me that the conclusions arrived at by these statistics
20 mold so well into this pre-existing 80 acres spacing and
21 I'm always suspicious of statistics that support con-
22 clusions that already seem to have been there.

23 THE WITNESS: Well, the reason why it does is because -- I'm
24 going to show you something that's not exactly 160. I
25 mean --

1 MR. MASON: You understand -- you know, it's interesting to me
2 that we had this 80 acre thing and yet all this stuff
3 seems to point directly at around a 160 acre space. I'm
4 not questioning the validity of your data. I had the
5 unfortunate circumstance of having a lot of economics at
6 one point of my life and I read a lot of Commerce
7 Department studies and that create a lot of cynicism in
8 my behalf.

9 THE WITNESS: I just got done with a statistics class,
10 Advance Statistics and it scares me, too.

11 Q. (Mr. Fain continues.) You are saying that a 120 to 200
12 acres would drain accurately?

13 A. Right. See, I'm not really pinning anything down so
14 much, I'm just trying to say that there is -- there's
15 reasonable and there's unreasonable and I've really
16 given you a pretty wide area. And the fact that it's
17 been done historically that way is not just a question
18 of luck --

19 MR. MASON: I understand --

20 THE WITNESS: -- it's a question of operators really knowing.

21 MR. MASON: Yeah.

22 THE WITNESS: They have good engineering staff, too.

23 MR. MASON: I'm not necessarily questioning what you're
24 saying I just --

25 THE WITNESS: Yeah.

1 MR. MASON: -- you know, interested in the fact that there's
2 several things about it that troll me. One is that
3 you're talking about averages of sand thickness, yet if
4 you look at that map a large portion of that area in
5 which we're talking about these rules applying are by
6 terms of this map not going to be 11 foot in thickness.
7 THE WITNESS: Which is the reason why I was so interested in
8 running a 10 foot case.
9 MR. MASON: Okay.
10 THE WITNESS: I feel the need to give you a feel for how
11 sensitive this is to thickness also.
12 MR. MASON: The one thing that I'm particularly sensitive to
13 here is that if these acreage are not so large that
14 there's a lot of this gas that's not drain. You know, I
15 think that's something that we're very concerned about.
16 THE WITNESS: Would you repeat that for me?
17 MR. MASON: Well, if we adopt these spacing requirements and
18 they are by their nature of such a size that they do not
19 adequately drain of the available gas in this area. I
20 mean, obviously, I realize that's not in your interest
21 either but it certainly --
22 THE WITNESS: Well, it is in fact that's exactly where we're
23 going with this.
24 MR. MASON: Okay.
25 THE WITNESS: That's exactly where we're going with this.

1 MR. MASON: That's fine.

2 MR. FAIN: Did you have another thought, Mr. Libiez?

3 MR. LIBIEZ: Yes, for Mr. Mason. We did not use in -- Mr.
4 Blake did not use in his model anything greater than 22
5 feet. If you'll refer to the histogram it's Exhibit 7.
6 So we did not use those 30 foot thicknesses that are
7 present in the northern part of the field. So I think
8 that should allay some your fears perhaps that we've
9 used unrepresentative set of thicknesses for the field.

10 MR. MASON: I'm not stating that you have. I'm just, you
11 know trying to satisfy myself that what we're talking
12 about is going to be representative of the areas of which
13 these wells are going to be drilled.

14 THE WITNESS: Yeah, if somebody makes the economic decisions
15 to drill at 5 feet, what we're saying is that we're just
16 trying to provide the grid for them to do that. Whether
17 they do it or not is a economic decision as you say. We
18 can show that it will affectively drain the 160 acres.
19 That's our point.

20 MR. MASON: I understand.

21 THE WITNESS: Whether they do it or not is --

22 MR. WAMPLER: What happens to the production after the 20
23 years? Does it start a decline? Does it hold it's own?
24 It just stops there --

25 THE WITNESS: All these curves reach an expediential straight

1 line decline that are depending on the area being drain.
2 So the smaller ones ends up at rather high defined rates
3 and the larger spacings end up as pretty shallow. So,
4 yeah, it depends on the spacing because the wells at some
5 point are interfering with each other and that's exactly
6 what the model is trying to take into account.

7 MR. MCGLOTHLIN: What life expectancy are you looking at?

8 THE WITNESS: It depends on spacing.

9 MR. MCGLOTHLIN: Well, let's say between 160 acres, let's say
10 160 acres.

11 THE WITNESS: To answer your question though, I mean if you did
12 it at 80 acres, I'd say 10 years -- is what it says. And
13 just based on the ones that I've run where --

14 MR. MCGLOTHLIN: Excuse me now. I can see you've got a line
15 going out there for 20 years on 80 acres --

16 THE WITNESS: Yeah, but it's flat.

17 MR. MCGLOTHLIN: -- don't tell me it's going to stop producing
18 at 10 acres.

19 THE WITNESS: That's flat. This is cumulative --

20 MR. MCGLOTHLIN: But it's still producing.

21 THE WITNESS: No. As long as this line's going up, you're
22 adding production, this is accumulative recovery, and as
23 it gets to this point all the wells run into, what I used
24 a 2MCF a day limit, so they became uneconomic and at that
25 point none of them produce any.

1 MR. MCGLOTHLIN: You're telling me after ten years on 80
2 acres you're going to shut the well down.

3 THE WITNESS: Yeah, I could have stopped the line but I wanted
4 you to be able to make this comparison over here.

5 MR. MCGLOTHLIN: It's still producing but you're not accepting
6 the gas out of there? It possibly could be producing
7 after 10 years but your not accepting the gas.

8 THE WITNESS: But you couldn't afford to go to and pull a
9 chart on it, probably.

10 MR. MCGLOTHLIN: Okay. Now, on a 160 you're talking about -

11 THE WITNESS: 160, it's still -- you can see these, you know
12 the rates that their increasing and they continue on in
13 these wells to have 40, 50 year lives.

14 MR. MASON: One other question.

15 MR. WAMPLER: Mr. Mason.

16 MR. MASON: What impact on these curves, you indicated a
17 minus 7 for factor for stimulation?

18 THE WITNESS: Uh-huh.

19 MR. MASON: What impact of the type of stimulation that you
20 use and the degree and all the things that going to
21 affect those curves? I mean, wouldn't it be true that
22 the different type of stimulations that you could use,
23 the amount and kind of pressure and so forth would
24 affect the production?

25 THE WITNESS: They do.

1 MR. MASON: I mean, how was that, I'm not sure but how was
2 that taken into consideration?
3 THE WITNESS: It's in the (inaudible) factor.
4 MR. MASON: I mean, you make an assumption of some type, is
5 that correct, as to what type of stimulation is done?
6 THE WITNESS: No, I look at the well produces and it tells me
7 the effect of the stimulation.
8 MR. MASON: But that has to assume that some stimulation was
9 done, does it not?
10 THE WITNESS: I mean, actually I could test a well and not
11 even know if there was or wasn't and tell you that there
12 was and tell you how effective it was.
13 MR. MASON: I understand that but what I'm saying is that you
14 are assuming that stimulation was done, is that correct?
15 THE WITNESS: Yes.
16 MR. MASON: Okay, and you're assuming that the result of that
17 is coincident.
18 THE WITNESS: Yeah, there's a average to the effectiveness of
19 the stimulation, yes and that's why I use minus 7. I
20 seen them over minus 7, a lot of them are right around,
21 minus 6, minus 7, that's just the way they turn out.
22 MR. MASON: Thank you.
23 MR. WAMPLER: Following Mr. Mason's line of thought, is there
24 a particular line of stimulation technique that you've
25 assumed here that you believe's more effective to be used

1 in the grid?

2 THE WITNESS: No, I haven't assume a type and then fit this to
3 represent that. What I've done is taken what's actually
4 been done and, I mean I could tell you they're like 60,
5 80,000 pounds of sand, most of them are done in a foam
6 base but it's not -- I haven't done it based on my
7 choice. I did it based on what's actually been done so
8 that I could be you know, again trying to look at more of
9 the statistical average rather than say that the stimula-
10 tion could be used and you'd get this. I didn't want to
11 extrapolate any of those kinds of assumptions about
12 stimulation. I think that's an extremely effective
13 stimulation model. You also see it more in the tighter
14 formations, not in the more permeable.

15 Q. (Mr. Fain continues.) Okay. Let's move on to Exhibit 12
16 unless there's something else you'd like to tell the
17 Board about on Exhibit 11. Okay? Now what does this
18 exhibit depict?

19 A. Okay. On this exhibit, -- so far we haven't even talked
20 about any economics up to this point. All we said is
21 we're talking recovery efficiency and I hate to throw
22 economics in here but the fact is that economics ends up
23 being the reason why you do this spacing because we're
24 trying to recover the reserves and you're also trying to
25 do it without a waste of capitol and unnecessary penetra-

1 tions. And so, I bring this out and all that I'm doing
2 here is looking at net present value of the well per acre
3 drained looking for an average case, which is the 14 foot
4 case and a minimum case which is 10. And let me go ahead
5 and give you a list of the -- what I tried to do is to
6 give you a totally generic, totally normal economic case.
7 The well's \$250,000, the pipeline is \$20,000, so it's
8 obviously just to get to a gathering system. I used
9 revenue interest of a 1.25%, used a operating cost of
10 \$200 a month, used a severance tax of 3 percent. Let me
11 see what else. Oh, gas price 250 in MCF escalated at 5%
12 to 350 and then flat. And then the important thing in
13 all this is the fact that money in the future has less
14 value then it does today and so there's a discount factor
15 of 12 percent used. And that's all of them.

16 MR. MASON: What's the discount period?

17 THE WITNESS: Beg your pardon?

18 MR. MASON: What was the period of the present value?

19 THE WITNESS: The period is past 20 years for the lifehood.

20 Okay? So what I've done, I've taken the net present
21 value that you would get from the production that I
22 showed you on previous exhibits and ran it though
23 (inaudible), which is a industry excepted standard
24 economic package, and did it for different spacing, 80,
25 120, 160, 200, 320, 640 and the point of it is, when we

1 were looking at the other graphs we said that a 120, 160
2 or 200 and at looking at a 20 year recovery, they were
3 pretty much the same. And I said, you know I'm trying to
4 give you a range of things that look like they'd be worth
5 while and in this case when you throw the economics of
6 drilling like in a 120 acre case drilling 5.3 wells per
7 640 acres vs. 4 wells at 160, there's more of a capitol
8 expenditure involved in that. What I would propose is
9 that once you're on that plato, once you're up and
10 you're not on the steep incline part at the beginning at
11 the low end of the spacing, that you're pretty much
12 optimize at that point and that once you've done this
13 you're aren't taking to much risk that if things don't
14 turn out average or minimum as you've expected that you
15 could have negative economic results. And so, if you
16 look at, it's really not a very good way of doing this,
17 but if you look at the steep part, which is less then a
18 160 acres and down, that's on the steep part so you're
19 sensitivity to anything that goes wrong is very high.
20 That's why you see -- whenever you said at the beginning
21 operators tend to use a 160 acres, that's the reason
22 because if you get under that you're exposing yourself
23 to a lot of risk and it's unnecessary. So what they
24 have done is if you look at it from a 160 acres and
25 over, you're up on the plateau and you're a lot more

1 stable so your sensitivity is less no matter what kind
2 of a spacing you' esing. Of course, we also said that
3 640 and 320 from an recovering efficiency standpoint
4 were not all that acceptable. That wass what the beginn-
5 ing of the graphs that we just got done with said. So
6 now we're in this range and to get back to the fact that
7 everything doesn't always end up like that, "Gee they did
8 it right all this time, it was a 160 acres." This is a
9 160 acres and maybe a little bit over. Of course this is
10 only one model based on things that I think are relative-
11 ly characteristic. You could create another model that
12 would move this curve slightly. I've checked that too
13 and isn't very sensitive. So these are just giving you
14 an overall view of how sensitive the economics are to
15 acreage and so you do need a relatively, you need a
16 spacing at 160 or slightly more and not more than 200
17 based on the other graph. So that's what this graph
18 shows.

19 Q. You've modified that further in 12.A?

20 A. Yeah, I did. There are a couple of things that can
21 happen and Mr. Libiez already referred to it. You could
22 get the Big Lime, you could get a Raven Cliff. You could
23 get tight sand credits till the year 2002 and so, rather
24 then -- I felt like somebody would ask what that means.
25 So far everything that I have presented is based on the

1 Berea and if you add something to it, it gives you more
2 production or in this particular case around the same
3 thing, the same economic model with wells with the tight
4 sand credit. So that's equivalent to 51.7 cents till
5 the year 2002. That gives you some benefit on the early
6 years and what it's saying is the curves used to be not
7 quite as steep and they used to be moved over just
8 slightly. They were more centered around 200 and what
9 I'm suggesting here is that with the type sands credit,
10 they really line up on a 160 acres. And I'm also
11 suggesting that if you got the Big Lime and you had that
12 initial production that anything good that can happen to
13 you in this situation is going to push these curves
14 slightly to the left and that 160 acres truly is -- all
15 things considered, Berea and the other things that can
16 happen, all things considered a 160 acres is truly
17 (inaudible).

18 MR. FAIN: Does Board members have any questions about these
19 models?

20 MR. WAMPLER: 12.A had all the same considerations as 12. You
21 just factored in the sand credits.

22 THE WITNESS: It's just as an illustration.

23 Q. (Mr. Fain continues.) Okay. I'd like to move on then to
24 Exhibit 13, which we already look at once before, but
25 from a reservoir engineer point of view I'd like for you

1 to discuss this exhibit a little further.

2 A. Again, this is the geologic column based, it's called
3 what we refer to as a typed log and this is a specific
4 well and as Mr. Libiez said that we start at the surface
5 and we work down through the Pokey 3 seam in depth and
6 then this depth continues in the second line down through
7 the Mississippi and over to this side and this is the
8 bottom, Devonian Shell being below the Berea. What I
9 wanted to talk about on this particular exhibit is the
10 first of all the density curve gives you some reflection
11 of what the porosity is. And when we refer to the War
12 Creek and the Pocahontas mine as being there that's coal
13 is really not dense at all and so you get low density on
14 a density curve. Pokey 3 seam is right here at 16, 17,
15 1,800 feet. What we're interested in talking about is
16 from a co-mingling stand point and from an reservoir and
17 production standpoint, is the Raven Cliff, the Maxton and
18 the Big Lime and I'm going to refer, the Maxton was one
19 completion so I'm not going to say anything else about
20 it. It's really statistically. It's not very signifi-
21 cate. But the Raven Cliff and the Big Lime can be,
22 especially the Big Lime. The question then is how does
23 the characteristics of these reservoirs relate to the
24 Berea and the good news is the Raven Cliff pressure
25 around 400 or 500 pounds pressure. It's a lower pressure

1 reservoir, has porosities and permeabilities that are in
2 the same range as the Berea. I've not done a study on
3 the Raven Cliff in this area but I've look at it in
4 McDowell County, West Virginia and can say that it's, in
5 general, pretty similar to the Berea in spacing of 160
6 that apply to the Berea would function adequately for the
7 Raven Cliff. The one that's not so consistent, and I
8 think most people understand this, is the Big Lime
9 because like in this particular well the Big Lime
10 density doesn't even get to 2.5. To give you a feel for
11 density this 2.5 is a -- a 2.55 would be about 6 percent
12 as Jim Libiez said that would be a porosity -- so that
13 would be a relatively low porosity, relatively normal
14 from what I'm seen in the logs and we usually see a upper
15 interval and a lower interval those tend to be the best
16 and the one's in the middle tend to be the straightest,
17 relatively thin. The interesting part of it is that
18 whenever you hit a neuoretic reef right in the center
19 where it's real nice and clean and the newlights are well
20 develop, you can get some pretty good porosity and
21 permeability but over all on average that's not so much
22 the case that usually your on the edges and the per-
23 meability is a restriction. And the permeabilities that
24 I'm used to seeing, not so much from this area because
25 all these wells are commingle and I don't have specific

1 data but just experiential from McDowell County which
2 comes down into this area, suggest that these per-
3 meabilities are in line with what you'd see in the
4 Berea. And so co-mingling them and the recovery's from
5 each zone would be proper for a 160 acres. The other
6 part that I wanted to mention was that the absolute
7 importance of co-mingling. If unitization would provide
8 for different spacing between the Big Lime and Raven
9 Cliff say, then the only really good way to account for
10 that from a royalty stand point is to physically separate
11 them. If you were to put a packer in here and tubing
12 then everything on the annulus would have to flow up the
13 annulus. An annulus would be like a difference between
14 four and a half inch casing and two and three eights or
15 inch and a half tubing and it's hard for water to get
16 lifted with a low gas velocity up through an annulus, plus
17 the water has both sides of the pipe to stick to. On the
18 other side, if all that production were allowed to come
19 down inside inch and a half or two and three eights inch
20 tubing then you can develop enough gas velocity to allow
21 you to be able to remove the water. And the reason why
22 it's so important is the water interferes with the gas
23 production. And we're interested in recovery sufficiency
24 here and the way to do it is to make sure that you
25 provide the lowest possible flow of volital pressure and

1 the lowest possible abandonment pressure and to ac-
2 complish that you have to get the water out of the well.
3 And the best way to do that is to co-mingle them so that
4 you have all the gas provide a velocity to lift the water
5 from the well. So from efficiency standpoint we really
6 prefer co-mingling as well as from the royalty payment
7 standpoint.

8 MR. MASON: Excuse me. On that point, do you anticipate these
9 wells will be completed with pumps?

10 THE WITNESS: No.

11 MR. MASON: Rabbits?

12 THE WITNESS: Possibly rabbits but have not seen a great deal
13 of water production.

14 MR. MASON: Was that well completed into the Big Lime?

15 THE WITNESS: I don't know. I would have. I could answer
16 that one. Most of the wells that are completed in the
17 Berea and Big Lime are co-mingled and that occurred
18 mostly to the north. There been in the southern end,
19 there have been Big Lime pays encountered and there being
20 flowed behind the format.

21 Q. (Mr. Fain continues.) Are those the questions about
22 exhibit 13? I'd like to move on then and discuss one
23 last topic. Now, Mr. Blake, did you have a opportunity
24 to review some of the permit applications and operation
25 plans for the predominate coal bed methane developer in

1 this area, Oxy USA, Inc?

2 A. Yes, I have.

3 Q. And are you familiar then with the casing program that
4 is called for in those operations claims?

5 A. Yes.

6 Q. Would you explain using Exhibit 14 as an illustration,
7 how that casing program generally is meant to be con-
8 ducted?

9 A. The casing program for the wells that I've looked at in
10 the Pocahontas 3 coal bed methane development involves
11 setting 4 or 500 feet of protection casing over the
12 surface walls and then drilling down to your -- it's
13 stated 10 feet above the coal seam and then set produc-
14 tion casing there and then complete the Pokey 3 open hole
15 where the only thing that is there usually seven, seven
16 eighths or whatever size bit is used to penetrate the
17 coal. The only thing that's there is the coal. Stimula-
18 tion is pumped out the end of the casing and production
19 comes in though the open hole and then up into the casing
20 and tubing.

21 Q. Now, are you also familiar with vertical ventilation
22 bore holes drilled by co-operators?

23 A. Yes.

24 Q. What is the purpose of a vertical ventilation hole?

25 A. Okay. The vertical ventilation holes or VVH's are there

1 for the purpose of demethanizing a coal seam prior to the
2 actually mining the coal. And the normal way to con-
3 struct one of those is the same as this where you would
4 sit on top, sit your casing above the coal seam and then
5 complete the coal seam open hole and then there's usually
6 drilled a relatively short period of time ahead of the
7 coal operation because it's strictly in conjunction with
8 the coal mining and they're usually stimulated and then
9 the gases are vented to the atmosphere until the coal
10 mining operations comes in. As the mining takes place,
11 the area caves and then the gases released by the caving
12 of the mine behind the mining operation is vented
13 atmosphere and reduces ventilation in the requirement of
14 the mine. When it's in that condition in a caved area of
15 the coal mines it's considered -- called a gob well.

16 Q. Tell the Board the similarities between the stimulation
17 used by VVH as wells one used by coal bed methane well?

18 A. Okay. Both of them are, they're hydraulically fracked.
19 They use sand as a proffer. They're both done in open
20 hole and the intent of them is the same and that is to
21 get in connection with a cleat system and the coal to
22 enhance the productivity capacity and the availability of
23 it to demethanize the coal seam.

24 Q. Now, have you have an occasion while you were at the gas
25 research institute to go into coal mines and study the

1 effect of coal bed methane stimulation on the coal seam?

2 A. Took a field trip to Alabama to do just that to take a
3 look at what the effect of -- when coal bed methane well
4 first starting out the big concern was roof stability
5 and so mine backs proved to be the best way to invest-
6 igate that. Seeing many pictures and observed one of
7 different kinds of fractures. My personal interest in
8 it was just to know from a geometry standpoint how the
9 fracture was created so it could be simulated.

10 Q. What did you discover from your research about the
11 effect on the roof structure created by the coal bed
12 methane stimulation?

13 A. On the fracture that I observed, one's that I have seen
14 in photograph, most of them frack vertically within the
15 coal seam and then at the very top where there is usually
16 a lamination between the coal and the overlying strata it
17 tends to create a horizontal fracture and they refer to
18 them as a T-frack and the horizontal component is extreme-
19 ly thin and usually doesn't propagate very far. So the
20 predominate fracture in the coal bed methane stimulation
21 is the vertical component.

22 Q. Have you also heard testimony from Oxy personal before
23 this Board for plans for stimulating the coal bed seam?

24 A. Yes, last month there was reference to the ability to
25 frack a coal Pocahontas 3 seam without impact to the coal

1 mining operations.

2 Q. In your opinion based on your experience and research in
3 this area, is there really any difference between a
4 vertical ventilation hole in a coal bed methane well in
5 terms of the effect that they have on the coal seam?

6 A. I don't think so because if you view coal bed methane
7 well in the mechanical construction of the well if it's
8 done in a open hole, a configuration like this and the
9 stimulation being done with hydraulics and sand, the
10 fact that testimony has already been entered that it can
11 be done without impacting roof conditions and the fact
12 the coal companies use the technique themselves to
13 enhance the production capacity of the VVH well. I
14 would suggest that the wells, for all particular pur-
15 poses, are the same in terms of their impact on the coal
16 seam.

17 Q. Are you familiar with whether or not coal companies have
18 been able in the past to mine in and around vertical
19 ventilation holes?

20 A. Yes, they have because they're, as I said before,
21 they're usually positioned so that you can mine through
22 them, underneath them and convert them to a gob well
23 afterwards.

24 MR. WAMPLER: Mr. Fain, would you tell the Board the relevance
25 of this to the field rule?

1 MR. FAIN: I sure will right now because I just finished that
2 line of questioning.

3 Q. (Mr. Fain continues.) Would you also show the Board
4 what else is depicted on this Exhibit 14?

5 A. Okay. The point of this is, is a conventional gas well
6 and the configuration of a conventional gas well requires
7 that you get below the Pocohonas 3 seam and set inter-
8 mediate casing, which is normally eight and five eighths,
9 nine and five eighths, it's cemented all the way back
10 through the -- all the coal seams in the fresh water
11 intervals. In terms of it's impact on the coal seams
12 it's obviously has an impact because there's pipe in
13 cement and isolation for safety purposes found a conven-
14 tional well. When you consider, we referred to this as
15 less than 2500 feet, if you just look at this area and if
16 you just look at the Pocahontas 3 seam and look at what
17 impact there is on coal operations. If you look at it
18 from a Pocahontas 3 seam level, this well is obviously,
19 has a impact on the mining because of the pipe in the
20 cement. This well over here is open hole and stimulated
21 and there's nothing physically in the way. The other
22 side of the coin is if you look above that interval all
23 of a sudden you've got this well cased and cemented
24 though in say the work creek seam and obviously the oil
25 and gas well is still in the same situation. So,

1 there's an impact within 2,500 feet on shallow seams.
2 What we're suggesting here is that in the deeper seam in
3 a open hole configuration that the impact doesn't exist.
4 Q. Therefore, does Cabot propose a field rule that would
5 interpret the 2,500 foot veto rule so that in this
6 configuration, for example, the Pocahontas 3 seam owner
7 would not be entitled to object to a conventional gas
8 well that's placed within 2,500 feet of a coal bed
9 methane well because there's only one well that's drilled
10 and cased though the coal seam?
11 A. That's correct.
12 Q. For the upper coal seam owners they would still maintain
13 their statute, maintain their right to object because
14 they're two wells drilled and cased though the coal seam
15 within 2,500 feet?
16 A. That's right.
17 MR. WAMPLER: Let me ask you this. You're assuming that only
18 the Pokey 3 has been fracked and been stimulated for
19 production?
20 THE WITNESS: Yes.
21 MR. WAMPLER: Is that true in this analogy? Then is it also
22 true then that if you in fact frack and produce all the
23 seams above there you're asking for that 2,500 foot
24 limitation to apply?
25 THE WITNESS: No, sir.

1 MR. SWARTZ: Because there would be casing though those.

2 THE WITNESS: Because those are obviously impacted by the
3 physical presence of the well.

4 MR. WAMPLER: But if they're fracked for production --

5 THE WITNESS: It doesn't change.

6 MR. WAMPLER: I doesn't? You're suggesting that is doesn't
7 change anything?

8 THE WITNESS: No, because it physically exist.

9 Q. (Mr. Fain continues.) Is there still casing though
10 which the mining operators got to deal with?

11 A. Yeah. --

12 Q. In the upper --

13 A. If they were to do the upper seams they would perforate
14 them and stimulate them so there would be holes in the
15 casing but the casing would still be there.

16 Q. To make the example more obvious, would you presume for
17 a second that the Big Lime is a deep coal seam and
18 explain to the Board how this analogy also works as far
19 as a deeper coal seam would be concerned?

20 A. If you just thought of it in terms of physical and not
21 so much as stimulation and this occurs in some places
22 like in Alabama. You have a coal seam existing below,
23 like something like this, if that coal seam existed down
24 here and a coal bed methane project were going on up
25 here, that in terms of in this well existed less then

1 2,500 feet from this position in the coal seam, there's
2 still significant amount of distance say in this par-
3 ticular case, 2,000 feet for a particular standpoint
4 hundreds, maybe 1,000. But there's vertical displacement
5 and difference here and so, there's obviously no impact
6 of this well on this seam at that level because physical-
7 ly it's just not there. And the difference here is
8 instead of it being here in the case, the Pokey 3 is open
9 hole up here could just as well suffer the stimulation
10 issue could have been down here.

11 MR. WAMPLER: Are you doing any fracking of the conventional
12 well above the 2,500 feet?

13 THE WITNESS: Raven Cliff is the only one.

14 MR. WAMPLER: Mr. Mason.

15 MR. MASON: Are there any wells in this area that were ever
16 completed open hole without casing, surface casing?

17 THE WITNESS: Completed open hole?

18 MR. MASON: Without surfacing, well though any coal seams? It
19 seems to me that what you're making this thing turn on
20 whether or not there's casing set. In other words, I
21 don't know if it's possible, but if you read it literally
22 if you could produce a well or drill a well and complete
23 it without putting casing through a coal seam, then that
24 coal owner would not have the right to object. The whole
25 thing turns on whether or not there's casing.

1 THE WITNESS: That's true. In terms of mining and the impact
2 on mining, if there's nothing there other than a hole
3 then there's no reason why you couldn't mine right though
4 it. That's exactly right.

5 Q. (Mr. Fain continues.) Under state regulations are you
6 permitted to drill through a coal seam and produce out of
7 a say a Berea formation without casing?

8 A. No. No, you have to case it off.

9 Q. So there would be no instances where that would occur,
10 where someone would try to produce through the coal seam
11 without casing though?

12 A. Yeah. In fact, that's why I pointed out that in these
13 applications that I looked at, I was interested in what
14 happens to the fresh water seams that are more toward
15 the surface and they case them off. And you're require
16 to separate the gas bearing intervals from -- you're also
17 require to cement the gas bearing intervals from the mine
18 so, yeah, there's a lot of security in the --

19 MR. MASON: I was familiar with the regulation of the surface
20 casing and ground water but do same rules essential apply
21 to coal?

22 THE WITNESS: Oh, yes.

23 MR. MASON: The casing in seal?

24 MR. FAIN: Are there other questions of the Board of Mr.
25 Blake? Thank you. Well, ladies and gentlemen that

1 concludes our presentation. I'd like to take two
2 minutes and summarize if I may.

3 MR. FAIN: (Gives Closing Statement on behalf of Cabot.)

4 MR. WAMPLER: Thank you, Mr. Fain. The next person wishing
5 to make a presentation to the Board is Matthew Cartier,
6 come forward, please.

7 MR. CARTIER: Mr. Chairman, Board, my name is Matthew Cartier.
8 I work for Clichfield Coal Companies, Senior Mining
9 Engineer. I am a registered engineer and land surveyor
10 in Virginia and Kentucky. Basically, what I am speaking
11 here to you about is the proposed field rule, Part 2.6.
12 My background in gas wells -- part of my responsibilities
13 at Clichfield is coordinating conventional and coal bed
14 wells with several gas companies in conjunction with our
15 on going mining operations. There were several distinc-
16 tions made this morning regard the vertical ventilation
17 holes of coal bed wells, conventional wells. One thing,
18 Clichfield uses the V.V.H. holes specifically in our
19 longwall operations to degas the coal seam prior to
20 mining though it. The coal bed wells, we do not, we
21 request the gas companies not to stimulate any coal seams
22 that we are anticipating mining strictly the deeper coal
23 seams. Specifically, the Pocohonas seams. As I see, to
24 make it short, section 45.1-361-12 of the act does not
25 imply the propose field Rule 2.6. Cabot and their

1 representatives have presented more on this part, 2.6
2 this morning then I as a mining engineer am exposed to or
3 educated in. It's my responsibility is to protect our
4 coal seams, to economical exploit without hindrance.
5 Basically, that's all I have to say.

6 MR. WAMPLER: Thank you. Any questions?

7 MR. EVANS: I've got one question.

8 MR. WAMPLER: Mr. Evans.

9 MR. EVANS: Mr. Cartier, do you stimulate your degas holes?

10 MR. CARTIER: Degas holes? No, we don't.

11 MR. EVANS: No, we don't.

12 MR. CARTIER: We drill right above the coal seam and stop.

13 MR. WAMPLER: Mr. Mason.

14 MR. MASON: You say you're speaking of a 2.6?

15 MR. CARTIER: Of the part 2.6 of the proposed field rules on
16 page 3.

17 MR. FAIN: If I could clear that up. I think Mr. Cartier is
18 referring to an application that was filed by Cabot
19 before the last Board meeting and that would -- I think
20 it would now be paragraph 2.13 that he is objecting to.
21 Actually, it would be 2.15

22 MR. MASON: What you're really talking about is proposed
23 order, field order 8, isn't that correct? 3.18? Thank
24 you.

25 MR. MCGLOTHLIN: Excuse me, Mr. Chairman. How much coal

1 reserve does Clichfield have in this area?

2 MR. CARTIER: We have some lease holders. I've got a map
3 here. I don't know of any specific acreage but we have
4 interest in several coal seams.

5 MR. MCGLOTHLIN: Ball park figure of acreage?

6 MR. CARTIER: 1,000 acres. I don't know. I'd have to set
7 down and scale it off.

8 MR. MCGLOTHLIN: Thank you.

9 MR. WAMPLER: Any other questions? Thank you, sir. Chad
10 Harding. Do you need more room to make a presentation?

11 MR. HARDING: We will need to put up a map.

12 MR. FAIN: Maybe the Board would like to take a five minute
13 break so we can set up and maybe move around.

14 MR. WAMPLER: Do you need some time to get set up?

15 MR. FAIN: Maybe just about five minutes.

16 MR. WAMPLER: We'll do that.

17 (AFTER A BRIEF RECESS, THE PROCEEDINGS CONTINUED AS
18 FOLLOWS:)

19 MR. WAMPLER: The cabinet will come to order. Mr. Harding.

20 MR. MULLINS: For the Board my name is Tom Mullins. We
21 represent Edwards and Harding Petroleum Company. I'm
22 with the Street Law Firm. The lawyers that have been
23 representing Edwards and Harding have gotten younger and
24 it's not because I'm not any longer winded then the
25 older fellows, probably the opposite is true. We have a

1 proposal which we given to the Board a written proposal
2 concerning the proposed field rules. We don't have as
3 comments and detailed as Cabot had. We are only inter-
4 ested in a small portion of that. To put forward our
5 proposal, we'd like to call Mr. Chad Harding as our
6 witness.

7
8 RICHARD S. HARDING, JR.

9 a witness who, after having been duly sworn, was examined and
10 testified as follows:

11
12 DIRECT EXAMINATION:

13
14 BY MR. MULLINS:

15 Q. All right. Sir, would you please state your name.

16 A. My name is Richard S. Harding, Jr.

17 Q. What do you do for a living?

18 A. I'm officer and director of Edwards and Harding Petroleum
19 Company.

20 Q. Have you testified before this Board on prior occasions
21 as an expert of the oil and gas industry?

22 A. Yes, I have.

23 Q. All right, sir. And Edwards and Harding has submitted
24 this written proposal dated December 17, to the Board as
25 it's comments on the field rules, is that correct?

1 A. That's correct.

2 Q. Okay. There's a map contained in the packet in the back
3 of that proposal which is identical to this map that's
4 also correct, isn't that true?

5 A. Yes, that's true.

6 Q. All right, sir. What area of Buchanan County does this
7 map depict?

8 A. This map shows a four quadrangle area in the eastern
9 part of Buchanan County.

10 Q. All right, sir. Is this Pilgrims Knob area?

11 A. That's correct.

12 Q. All right, sir. You have a red line here that is a,
13 call it a outer boundary line, what does that designate?

14 A. That is a line depicting what we believe to be the
15 productive limits of the Berea Sandstone.

16 Q. That's based on information available to Edwards and
17 Harding, is that correct?

18 A. Correct. It's based on well data.

19 Q. That be well data to well drilled on this side and this
20 side of that line?

21 A. That is correct.

22 Q. Okay. Productive limit, you have 5 foot net pay iso-pack
23 in Berea. What does that mean?

24 A. That means within the red line we have, within the Berea
25 Sand more than 5 feet of sand with density less than 2.55

1 grains per cubic centimeter.

2 Q. Why is that important?

3 A. We believe that experience has shown that sands with
4 lower porosity, higher density will prove to be non-
5 commercial. This basically is an attempt to delineate
6 the limits of commercial berea gas production in this
7 area.

8 Q. All right. You're basing your assumptions on the same
9 assumptions or the same information that Cabot used in
10 their analysis. Is that correct?

11 A. To the best of my knowledge, that's correct.

12 Q. All right, sir. I see a black line that has yellow
13 portions in cased inside of it. Some of them are
14 isolated but most of them contain in this bigger area.
15 What does this area depict?

16 A. That depicts what we would refer to as the developed
17 portion of the Pilgrims Knob gas field.

18 Q. All right, sir. What do you mean by developed?

19 A. It's an area in which numerous wells have been drilled,
20 voluntary and statutory units have been formed and
21 basically where the development, well spacing and so
22 forth has already been determined for the most part.

23 Q. All right, sir. You said some units had been formed.
24 What shape and size are the units that are in there, if
25 you know?

1 A. The knowledge that I have about the units is that there
2 are various shapes and sizes.

3 Q. Is there any uniformity to the shapes and sizes of the
4 unit?

5 A. Not to my knowledge.

6 Q. Do all of the well have a unit associated with them?

7 A. I believe that many, if not most of the wells, do not
8 have units associate with them.

9 Q. All right, sir. What about these isolated area out
10 here. Why are they blocked off differently and not
11 included? Why are they set apart?

12 A. Those were outline Berea tests with voluntary units
13 created for those wells.

14 Q. So are these existing wells?

15 A. That's correct.

16 Q. And this one is, too?

17 A. That's correct.

18 Q. All right, sir. And this is, of course, the state line?

19 A. Yes.

20 Q. All right, sir. Now, this area in between, you have a
21 grid system. What is that and why is it there?

22 A. That grid system consist of 160 acre squares except
23 where the squares impinged upon the limits of the
24 productive area.

25 Q. Why a 160 acres?

1 A. We believe that a 160 acres is a reasonable area for a
2 Berea well to drain in this area.

3 Q. Are you saying that an area greater or larger would not
4 also be reasonable or are you saying that's a good
5 average and a good reasonable size unit for the area?

6 A. It's a good average.

7 Q. Why did you use square units?

8 A. A square unit has the benefit of being sub metric about
9 it's center point and in the absent of any other data, I
10 would assume that the drainage pattern for a given well
11 would be sub metric about the well location.

12 Q. If I understand what you're saying and you can correct
13 me, are you saying that you need a regular shaped unit
14 to insure sub metrical draining? Is that what you're--

15 A. I'm saying that a unit which is symmetric about it's
16 center point will more accurately reflect the actual
17 drainage pattern of the well.

18 Q. All right, sir. As far as the placement of the grid
19 system, where it is, physically why you put this grid
20 here or here or here, why did you do that?

21 A. We formed the grid system this way to put out EH-36 well
22 at the center of the 160 acre unit. We have an applica-
23 tion for a unit before the Board for this well in which
24 we are requesting a 160 acre square unit.

25 Q. Is this based upon the Board's, one of the Board member's

1 comment at the last hearing that we continue this matter
2 to see if whether this particular unit could be included
3 within the new field rule?

4 A. That's correct.

5 Q. Are you asking the Board to treat the area in yellow
6 different then the grid system you have outlined on the
7 area between the inner boundary and the outer boundary?

8 A. Yes, we are.

9 Q. Okay. And why is that?

10 A. Because of the existing wells, we feel that it would be
11 necessary for the Board to approach wells, new wells
12 within that boundary on a case by case bases.

13 Q. Are there areas in there left to be drilled?

14 A. Yes, there are some. Not many. I would postulate.

15 Q. Most of the area is drilled up but there are going to be
16 an occasion for a few wells, is that correct?

17 A. Yes.

18 Q. Okay. How long was some of those wells in that inner
19 boundary been producing if you know?

20 A. Over 30 years.

21 Q. You commented that some of them have boundaries either
22 voluntary boundaries or Board designated or state
23 boundaries, state designated boundaries. What are the
24 bases for the wells that don't have any boundaries? How
25 do they figure royalties and things?

1 A. As was pointed out in earlier testimony this morning,
2 many of the wells were drilled on a lease bases on a
3 couple of large tracts and those wells were drilled
4 according to statutes that prevailed at the time and
5 before state wide spacing had been adopted.

6 Q. So the royalty payments were based upon a lease and not
7 upon a unit?

8 A. That's correct.

9 Q. All right. What would be the effect of imposing a grid
10 system on top of that already developed area?

11 A. That would require redistribution of royalties which I
12 believe is not the intent of the field rules.

13 Q. In other words, there would be areas left open if you
14 put a grid in there that would be overlapping of pre-
15 existing units, overlapping of lease hold where you had
16 to pay royalties and there's potential of not have areas
17 drained at all and some areas with gaps in it, is that
18 correct?

19 A. That's correct.

20 Q. Okay. Also, in your written proposal you have request a
21 minimum of 2,000 feet distance between well spacing. We
22 heard earlier 1744 feet. What is the reason of the
23 reduce well spacing in both instances if you know? Why
24 is that important in this proposal?

25 A. I believe that in order to operate in this area you need

1 a certain amount of flexibility to move well locations in
2 order to conform with the mining plans, coal mining plans
3 and to place wells in locations in where you have
4 reasonable surface access.

5 Q. All right, sir. What would the effect be if the state
6 wide spacing of 2640 were left in place? First, let me
7 back up. What's the length of the a 160 acre leg of a
8 square?

9 A. 2,640 feet.

10 Q. All right, sir. What would happen if you placed a well
11 location, say in this grid right here and then in this
12 grid over here? What would the effect be on these grids
13 over here?

14 A. If you were required to maintain a --

15 Q. 2,640 space.

16 A. -- 2640, then the wells would have to be drilled at the
17 same position within the unit, in each unit.

18 Q. So from then on as that part would be drawn from here
19 over to here you would have to put your wells here and
20 here and all the way across, is that correct?

21 A. Yes, sir.

22 Q. Do you have any objection to the 1,744 feet proposed by
23 Cabot?

24 A. No, I do not.

25 Q. All right. I guess in summary, sir, how do you want the

1 Board to treat the yellow area?

2 A. Essentially on a case by case bases as application come
3 before the Board.

4 Q. Do you see that to be a very extensive or time consuming
5 proposal for the Board? Is there that much space
6 available for wells?

7 A. No, there is not that much space and I don't believe it
8 would be time consuming for the Board to consider those
9 cases.

10 Q. Would it be protective of correlative rights and prevent
11 waste and in fact would enhance the development of that
12 inner field to do it that way?

13 A. Yes, sir.

14 Q. All right, sir. The outer area between the red line and
15 the yellow inner boundary, how do you propose that, that
16 grid system that's established?

17 A. Yes, sir.

18 Q. Based upon a 160 acres?

19 A. Yes, sir.

20 Q. All right, sir. And square blocks?

21 A. Yes, sir.

22 Q. Unless the Board has any question of Mr. Harding, I
23 don't have any other presentation.

24 MR. MASON: Mr. Chairman.

25 MR. WAMPLER: Mr. Mason.

1 MR. MASON: You've heard the Cabot, what is it about that
2 that you would object to, if anything? Let me ask you
3 this, did you have an opportunity to see it before
4 today?

5 THE WITNESS: No. No, I haven't.

6 MR. MASON: Okay. The only thing that I've heard you all
7 really seem to disagree about is the grid size. Is that
8 correct?

9 THE WITNESS: Not the size of the units but the shape.

10 MR. MASON: Well, that's correct. The configuration.

11 THE WITNESS: Yes, sir.

12 MR. MASON: You propose squares, they propose rectangular.
13 They propose rectangular as I understand it based upon
14 the fact that they will overlay these 80 acre methane
15 bed proposals. I mean, I guess what I'm trying to do is
16 to seek out the common ground between your two proposals
17 and if possible if you could tell me what it is that you
18 find about their proposal other than that, that you can't
19 live with.

20 THE WITNESS: I don't know that there's anything in their
21 proposal that I would not be able to live with.

22 MR. MASON: Even in difference in the shape?

23 THE WITNESS: As I have pointed out, I think that there is
24 some advantage to having a square because --

25 MR. MASON: Drainage patterns, I understand.

1 THE WITNESS: Because of the drainage patterns. I do see the
2 benefits of having some consistence between the coal bed
3 methane and the deep gas unit patterns. And at this
4 point really that's about it as far as what I see as my
5 reaction to their plan.

6 MR. MASON: What about their proposed field rule related to
7 the 2,500 foot rule? Do you have any comments on that?

8 THE WITNESS: No.

9 MR. MASON: Okay. Thank you.

10 Q. (Mr. Mullins continues.) Maybe to help illustrate that
11 point. We could say that this would be the rectangle
12 although it's twice the size. What would be the effect
13 of placing a well here on the drainage pattern on a
14 rectangular shape? What areas would that drain if you
15 put a well right there?

16 A. In the absence of any other data I would always assume
17 that would be, I'd tend to assume that the drainage
18 pattern would be symmetric so, --

19 Q. So you're saying like that?

20 A. More or less.

21 Q. So it would not drain most of this block here, is that
22 correct, if this was the unit? If you put it right
23 there. It would drain more from this unit, this unit
24 and this unit then it would from this unit.

25 A. In the absence of any other data that is what I would

1 assume.

2 Q. And in a square system, even if you put it here it would
3 still drain to the majority of the drainage would come
4 from that particular unit, is that correct?

5 A. Yes.

6 MR. WAMPLER: Any other questions members of the Board?

7 MR. MULLINS: Thank you, sir.

8 MR. WAMPLER: Christopher Wallace. Go ahead, Mr. Wallace.

9 MR. WALLACE: Mr. Chairman, Member of the Board thanks for
10 allowing me to speak today. My name is Christopher
11 Wallace. I'm the regional land manager with Asto Re-
12 sources in Pittsburgh, Pennsylvania. Asto has been
13 previously been called NRM, Natural Resource Management
14 as a result of a name change about a year ago. We're
15 presently the lessee of approximately of 3,500 acres
16 within the field boundaries as has been described earlier
17 today by Cabot. We currently operate 4 producing wells
18 and 2 or 3 shorten wells and an intended gathering system
19 and field compressor. We support the notion of protect-
20 ing correlative rights preventing waste and minimizing
21 environmental disturbance with the orderly development of
22 the Berea Sandstone in the Pilgrims Knob field. And it
23 may be that we have a particular or abnormal lease
24 situation that causes our concerns. Our lease hold was
25 subject to litigation 4, 5, 6 years ago and part of that

1 result of that litigation is that any additional develop-
2 ment that we do with our acreage is confided by the terms
3 of settlement agreement to various specific drill site
4 locations. And I have a strong suspicion, although I
5 didn't see the grid map of Cabot's until earlier today,
6 that those drill site locations that have been specifi-
7 cally described and on litigation settlement agreement
8 don't coincide with the nice little 80 acres windows that
9 Cabot has gridded out for the field. While our position
10 may be a unique one I strongly suspect that there are
11 other lessees in the field that have lease provisions
12 which are very specific in so far as where drilling can
13 take place. Not only are there litigation results or
14 lease provisions that may well restrict development of
15 the Berea in the area but we're talking about western
16 Virginia, not western Kansas. The topography clearly is
17 going to, to a large degree, dictate where drilling can
18 and can't occur. And so I think that I can say that Asto
19 generally supports the Cabot and the Edwards and Harding
20 proposals with the proviso that the exceptional locations
21 that Cabot has mentioned be dealt with and granted in a
22 very, very, liberal way. I can also say that we have one
23 drilling permit application pending which has not been
24 acted on by the Board. There's been significate expense
25 incur in title review, field surveys and so forth and it

1 would certainly be our position that as long as excep-
2 tional locations corner to corner are going to be granted
3 or the proposal is that they be granted for permits are
4 already issued but not drilled upon yet that a similar
5 exception be granted for those permits that are currently
6 undergoing the review process. As you're probably aware,
7 there's a state order right now so that no additional
8 permits are being issued in the field. In short, our
9 objection, our concern with the two proposals that have
10 been set forth this morning is that we would stress that
11 exceptional locations need to be given very liberal
12 construction in the review process. I do question as my
13 experience out west has led me to believe that notice,
14 the notice requirements for granting a exceptional
15 locations are something that the Boards is going to have
16 to wrestle with. Personally, we would like to see a
17 telephone call or a letter or whatever to the inspector
18 but I feel that it's unlikely that in practice exception-
19 al locations are going to be granted on that informal a
20 way. There certainly going to have some impact as to
21 surrounding developers of both oil and gas in the coal.
22 That's all I have to say.

23 MR. WAMPLER: Any questions for Mr. Wallace? Thank you, sir.
24 Grant McGuire.

25 MR. MCGUIRE: My name is Grant McGuire and I'm attorney for

1 Ashland Exploration and my comments are brief. I had
2 not seen Cabot's revised proposal until today but
3 Ashland generally supports Cabot's proposal as it was,
4 as it was in it's original form. Particularly, with the
5 160 acres size units and Cabot proposed interpretation of
6 the coal owner veto statute. And that's all the comments
7 I'm authorized to make today.

8 MR. WAMPLER: Any questions? Thank you. Steve Breeding.

9 MR. BREEDING: My name is Steve Breeding and I'm coal bed
10 methane coordinator for Island Creek Coal Company and
11 I'm here today as a representative of the Virginia Coal
12 Association and a poor substitute for Tommy Hudson, who
13 intended to be here but is down with the flu. Now, we've
14 heard a lot of testimony today. Again, we're looking at
15 something -- this is the first opportunity we've had to
16 review anything in detail and some of the charts are not
17 clearly visible. I think it's something that we, as coal
18 operator, need to review with respect to our mining plans
19 to determine how these units through these proposed units
20 would impact corroborations. Specifically, with respect
21 to the proposal to interpret 361.12, I think we would
22 take exception to that. Our position would be that the
23 legislative intent of the 2,500 foot spacing was to
24 include any and all wells. I think that was determined
25 back in 1982 and again in 1989 at ADHOC committees

1 composed of oil and gas representatives, coal representa-
2 tives and I think if you'll go back and look at the
3 definition of a well in the oil and gas act that it
4 defines a well without stipulation as to depth or casing.
5 I might point out also that there are many exemptions
6 within that definition itself. VVH's, for example,
7 where the ventilation holes are exepcted. If it had been
8 within the intent of legislature to exempt these coal bed
9 methane wells, the definition of well itself would have
10 been the obvious place to put it. From out standpoint
11 it was clear that the legislature intended this as an
12 out and out veto of any well within any 2,500 foot of an
13 existing well. With respect to all the information
14 presented today, I think it is very important that we
15 have the opportunity to review this proposal and how
16 it's going to impact our particular operations. I know
17 between Island Creek and Consolidated Coal Company, we
18 probably have 99% of the area impacted by the proposed
19 field. I would also point out that the original notice
20 was for the Berea formation and I think it's somewhat
21 expanded out today to include additional formations
22 below the Berea. I would now ask that the Board continue
23 this matter at least until the next meeting to give the
24 coal operators an opportunity to review the information
25 that was provided today. I would also ask that all

1 interested parties be provided with copies of the
2 proposal that was submitted by Cabot and if possible a
3 copy of the testimony today and I understand that the
4 emergency regulations require that a reasonable number of
5 copies be made available to interested parties. We
6 didn't have an opportunity to have those. Basically,
7 that's all I can say.

8 MR. WAMPLER: Any questions of Mr. Breeding?

9 MR. MASON: Yes, sir.

10 MR. WAMPLER: Mr. Mason.

11 MR. MASON: I didn't get you name again.

12 MR. BREEDING: It's Breeding, Steve Breeding.

13 MR. MASON: Thank you.

14 MR. WAMPLER: Any questions? Thank you, sir. Mike Lougounna.

15 MR. LOUGOUNNA: My name is Mike Lougounna. I'm the Manager
16 of Planning Engineering, Island Creek Coal's Virginia
17 Division. I work in the Buchanan County, Virginia and
18 they're involved with a short term long range plans of
19 the mines that Island Creek operates and mines which
20 will be impacted by this proposed gas field. I just
21 wanted to make some brief comments on some of the
22 statements I heard this morning and try and expand and
23 give my opinions on some of the things said. One
24 statement was made earlier that the proposed grid
25 spacing will have little or no impact on longwall mining

1 at the Pocahontas 3 seam. I'd just like to illustrate
2 that conventional wells through the Number 3 seam with
3 anything that penetrates the Number 3 seam with longwall
4 mining particular because of its inflexibility does
5 affect the mine plans, will affect the mining. To
6 illustrate this I'd like to just briefly put up a mine
7 map showing how we lay out banks of panels, if I may?

8 MR. FAIN: Mr. Chairman, just a point of formality, did you
9 want to swear in the witness or --

10 MR. WAMPLER: We've not been doing that unless they have an
11 attorney representing the witness --

12 MR. FAIN: I see.

13 MR. WAMPLER: -- and presenting testimony.

14 MR. LOUGOUNNA: This is a bank of longwall panels, continuous
15 extracting panels and this entrances here at our BP3
16 mine. It's just typical mining layout. For illustrative
17 purposes, this is a 320 foot acre grid and if you were to
18 take this grid and just split it down the middle it would
19 encompass the 160 as proposed earlier. All I wanted to
20 point out here that anywhere within this grid with this
21 type of bank of panels there is no placement where will
22 not be impacted by longwall mining. The pillars that are
23 left in place are at the Number 3 coal seam level, they
24 are subjected to tremendous stresses, tremendous pressure
25 at the 1,600 to 1,800 foot mining level and there could

1 be complications problems associated with trying to have
2 active wells within a bank of longwall such as this. I
3 just wanted to just show you this as just an example of
4 that situation. The second item that I wanted to bring
5 out was the analogy that was made how coal bed methane
6 wells are identical to BVH's. Virginia Division of
7 Island Creek initiated, to my knowledge, initiated the
8 BVH program for deep gassy seams in the late '60's and a
9 lot of the technology and technic that evolved here have
10 been applied else where in this region as well as other
11 parts of the United States for methane drainage and we
12 have to date over twenty years of mining experience an
13 excess of over 250 BVH's not fracked, not stimulated
14 BVH's. To my knowledge I only know of three that were
15 done on experimental bases to this date. And the
16 majority of our BVH's don't even penetrate Number 3 coal
17 seam, they come in close proximity. In order to not
18 hinder and hamper coal mining. So I just wanted to make
19 it clear that, you know, BVH's and CBM can be very
20 different depending on the operator.

21 MR. WAMPLER: Is this map something that we can keep as an
22 exhibit to your testimony?

23 MR. LOUGOUNNA: I have no problem with that, no. It's just
24 the map on file with the State. All we've done is
25 superimpose some arbitratve lines on it.

1 MR. WAMPLER: Any questions?

2 MR. MASON: Yeah, I don't know if this is the appropriate
3 time and I don't want to take up your time. I really
4 don't understand how you all mine that. You know, would
5 you take about two minutes --

6 MR. LOUGOUNNA: Sure.

7 MR. MASON: -- and just explain to me just exactly what
8 happens when you mine though that area?

9 MR. LOUGOUNNA: The first sequence of mining, continuous
10 mining machines just mine these open entries and the
11 intention is as you see the future projections, just to
12 isolate a solid continuous block of coal, which is the
13 actual longwall panel. So first phase of continuous
14 miner extraction strictly 19, 20 foot entry, 18 foot
15 entry widths, pillars left for support systems for that
16 continuous miner and later support systems for the
17 longwall. Once that's completed and isolated, continuous
18 miners continue working ahead of the longwall, longwall
19 is progressively behind them and totally extracting every
20 bit of the reserve and one complete pass or several
21 passes from pillar line to pillar line extract an entire
22 blocks of coal.

23 MR. MASON: Okay. When that's finished, let me interpret you,
24 the parts that are in there that are gray are totally
25 removed and those long lines in between are left?

1 MR. LOUGOUNNA: These blocks that are here are what are left
2 in place and they call it the old gob areas. These are
3 the regions that are subjected to tremendous pressure and
4 stresses because you have essentially removed the
5 material, allowed the county to drop on those pillars and
6 then they go through their deformation.

7 MR. MASON: Thank you.

8 MR. FAIN: Mr. Foreman, may I ask one question?

9 MR. WAMPLER: Sure.

10 MR. FAIN: How wide is this pillar that's left in place?

11 MR. LOUGOUNNA: It will vary from, with this present design,
12 -- 120 to 130, approximately.

13 MR. FAIN: And you'll agree, won't you, that there's some
14 debate in the oil and gas industry about whether or not
15 you can successfully place a well in these? We call
16 these head gate entries, don't we?

17 MR. LOUGOUNNA: Head or tail.

18 MR. FAIN: Head or tailgate.

19 MR. LOUGOUNNA: I've not seen anything where it's been proven
20 that they'll survive at these depths. I've heard debate
21 both ways, they should survive, they may not survive. I
22 do not know if they will.

23 MR. FAIN: If you were to take a, like you said cut this in
24 half and you have a drilling window as Cabot proposes of
25 80 acres, they could put a well in these head gate

1 pillars. Although you suggest that there will be damage
2 but that's not conclusively proven, isn't that correct?

3 MR. LOUGOUNNA: Yeah. It's not conclusive but it's not been
4 proven that it can be done either and to my knowledge
5 it's never been done at these depths in the United
6 States.

7 MR. FAIN: Thank you, that's all I have.

8 MR. WAMPLER: Any other questions? Thank you, sir. Doug
9 Wells.

10 MR. WELLS: My name is Doug Wells and I'm employed by Coke and
11 Carbon in Buchanan County, Virginia. Until today I
12 haven't seen any data as to Cabot's proposal except a
13 little eight and a half by eleven map which is not
14 easily defined as to how it affects us. It's hard to be
15 specific on my comments and they will be general in
16 nature. We've been mining in this area since probably
17 1978 and we have leases with a economic interest dating
18 back to the 1960's. We presently have three to four
19 active mines in this area effective. Again, I'm assuming
20 the accuracy of this map. It's pretty vague, my copy.
21 It's almost not legible. Our concern is the effect of
22 this mining or this drilling on our reserves. Presently,
23 Oxy is drilling coal bed methane wells, Island Creek is
24 drilling vertical ventilation holes. Ashland has gas
25 wells in the area. We have the upper seams, which

1 haven't been addressed today, the seams that each of
2 these companies case though. And I understand Cabot's
3 proposal does not limit my 2,500 foot coal operator's
4 veto. A second concern, or another concern that we have
5 is lost of reserves around these gas wells. Everybody's
6 talking about it's easy to drill though this pillar or
7 that pillar. It's coal lost. WW have a economic
8 interest in that coal. That's our coal. Another problem
9 with drilling these holes is the expensive engineering to
10 locate them after they've been drilled and tie them into
11 our mine grids or mine survey systems. We have worked
12 and most of the companies put them on a standard grid of
13 the area which is not necessarily accurate or accurate
14 for us. We did that several years ago and we experienced
15 cutting into one of these holes with a continuous miner.
16 And if you can imagine a continuous miner bit grinding on
17 steel and 100 percent methane in behind and you can
18 realize the problems that we have with the safety. We
19 also and these holes were supposedly ties into our grids
20 and it was a basic human error. Every time one of them's
21 put down, it endangers us. And I'm addressing all these
22 holes, not necessarily Cabot. My comments are, again,
23 general. MSHA requires to obtain permits to mine around
24 these holes. Those permits require time, engineering
25 expense and planning and sometimes take quite a bit of

1 time. After we do plan to mine around those holes, we
2 have to track down the companies to get waivers to mine
3 within 200 feet of them, closer then 200 feet. We have
4 to make contact with them. The holes also have an affect
5 on our capitol expense. We have to set belt drive to
6 mine around them. The wells deviate at depth and we
7 understand that we can obtain a waiver to mine within 50
8 feet of them. But with the deviation, we don't or we
9 aren't privy to that information. When the gas wells are
10 drilled that isn't the only affect that they have. They
11 have to have pipelines running to them. Regulatory
12 agencies regulate our recovery of our reserves beneath
13 those pipelines due to the substance of the surface and
14 damage to those lines. Again, we've got an economic
15 interest in that coal. We need to understand whose going
16 to reimburse us for our economic interest. Nobody has
17 proposed anything to take care of that. And we under-
18 stand also that the gas can be recovered after we mine
19 our coal reserves and can be cased though old works as
20 well as mining in solid blocks of coal and taking our
21 coal. I, like Steve Breeding, would like to ask for a
22 continuance of this and I would also like to have copies
23 of the specific areas affected so that I might be more
24 specific with my comments at a later date and that is all
25 I have unless there are questions.

1 MR. WAMPLER: Any questions? Thank you, Doug. Randy Albert.
2 State your name for the record.

3 MR. ALBERT: My name is Randy Albert. I'm project manager
4 for the Pocahontas staff project, Consolidation Coal
5 Company. I came here today with prepare comments that I
6 thought we would be able to present but since it appears
7 that we were more or less blind sided with not being able
8 to see any of the material that Cabot had available until
9 today. I would like to go on record and that we would
10 like, also like to see this matter continued until the
11 next month's meeting to allow us time to see exactly what
12 we're getting into. From what I've heard so far, one of
13 our main concerns is that Cabot has asked the Board to
14 interpret section 45.1361.12 of the Virginia code so as
15 to apply the 2,500 foot limitation to only those wells
16 drilled and cased though a coal seam. Apparently, this
17 would appear to us as being an attempt to exempt coal bed
18 methane wells which may be drilled though a coal seam but
19 not cased though that coal seam. And more in particular
20 to limit the objection rights of the Pocahontas 3 seam
21 operators in this area of Buchanan County which it would
22 appear again based on what limited information we have
23 that would be us and Island Creek. I would agree with
24 Mr. Breeding assessment that I believe would we would
25 have firstly all of this acreage under lease. If I can

1 interpret their maps right, probably has a substantial
2 oil and gas lease hold in this area as well. We do not
3 believe that this exemption was ever intended when the
4 act was written. The legislative intent was clear though
5 all the meetings that were held between all the various
6 groups, most of which everyone in this room was repre-
7 sented on. It's clear in 45.1361.3 and the language
8 states and I quote, "To ensure the safe recovery of the
9 coal and to maximize the production and recovery of
10 coal." We believe that is, was the intent of the
11 legislature to give the coal operator an absolute veto
12 from having wells closer then 2,500 feet. Any well
13 drilled though a coal seam has the potential to limit
14 production recovery of coal therefore a 2,500 foot
15 spacing limitation was provided to give the coal owner
16 this protection. We feel the mere abstinence of casing
17 is not along the determinate of a well as was brought out
18 by Mr. Breeding. The definition of the well does not
19 exclude coal bed methane. Cabot would have you believe
20 that a vertical ventilation hole and a coal bed methane
21 well are the same. I would represent today they are not.
22 Consol has drilled about 120 vertical ventilation holes
23 over the past six years, of those 120 we have stimulated
24 about 40. So they would also have you believe that
25 every ventilation hole is stimulated and that certainly

1 is not the case. Cabot has argue that a coal bed methane
2 well which is drilled though but not cased though a coal
3 seam does not limit the production or recovery of coal
4 and therefore should not be included in this section. We
5 can not agree with this. There is very little experience
6 in Virginia with mining though of coal bed methane wells
7 and we at Consol probably have more experience with the
8 mine though of coal seam fracks then anyone else in
9 Virginia and at this time we will not drill and frack
10 except in plan longwall panels and in the center of plan
11 longwall panels where we have the large shields to
12 support the roof on the mine though. Anyone that would
13 lead you to believe that there is no damage associated
14 with the fracks of coal beds to the roof, that's the
15 wrong assumption. As a coal operator we had to make the
16 determination that the risk certainly of the roof damage
17 was far less then the risk associated with leaving the
18 methane in the coal seam. We do it strictly from a
19 safety point of view. With this in mind it should be
20 apparent that the spacing of other wells without regard
21 to coal bed methane wells would greatly increase the
22 difficulty of planning a mining operations around coal
23 bed methane wells and potentially numerous other wells.
24 There's also the potential for the existence of the coal
25 bed methane wells which the coal operator does not have

1 the right to mine though. In this situation there would
2 definitely be an impact of mining regardless of the
3 absence or presence of casing. Some would probably argue
4 that the coal operator consent provisions should take
5 care of this but you must remember there are exceptions
6 to this consent provision. Consent is not required where
7 the coal bed methane producer is operating under a lease
8 from the coal operator obtained prior to the effective
9 date of this act. There is also the real potential that
10 the coal operator may be successor and titled to a coal
11 seam on which previous consent was given and the current
12 operator has to deal with all the wells in his mining
13 plan. We ask that you reject Cabot's request and affirm
14 that it is intent of the act to provide the coal operator
15 protection from all gas wells, not just certain wells.
16 We believe the act is clear on this point and no further
17 interpretation by the Board is necessary.

18 MR. WAMPLER: Any questions? Your specific objection is two
19 things. One having time to review the specific proposal
20 and then specifically the coal owner objection --

21 MR. ALBERT: Yeah. Any under circumstance we're going to
22 objection to trying to do away with the 2,500 foot
23 limitation. I mean, that has been clear though most of
24 the 80's. It's been workable.

25 MR. WAMPLER: Thank you, sir. Mark Swartz. While you're

1 doing that I'll get Don Johnson. I panned you in.

2 MR. SWARTZ: That's fine. I appreciate that.

3 MR. JOHNSON: I've got some very brief comments about this
4 whole matter. As you know, I represent several of the
5 mineral owners in this area and from their prospective
6 this proposal needs some real thought and I think that
7 the Board should give this whole matter what thought and
8 consideration it deserves. I took part in the drafting
9 of the 1982 act and at that time I didn't know anything
10 about conservation and I can assure you there weren't
11 very many people that were in the room talking about it
12 that did except for some people from out west and they
13 were talking at that time about what would be the
14 progress of this statute, and they said something to the
15 effect, "We really didn't need any statute concerning
16 field rules like you all are talking about now because
17 that would happen much later." I think one question that
18 the Board needs to ask itself is whether or not this kind
19 of grid system is necessary or warranted at all and I
20 think when you look at the problems that have already
21 been raised at this meeting I think you ought to jump
22 that threshold first. Do you need this? Do you need
23 this grid system? Just because our good friends at Oxy,
24 USA came into the prior Board and throw up a grid system
25 three months ago, does that mean now for conventional gas

1 wells in this area that this is really what ought to be
2 done or should we continue as we have in the pass and
3 that is to allow the operators to find areas where they
4 believe they can drain and put wells down in locations
5 that they feel they can establish and also work with the
6 coal operators and other persons, surface owners and
7 others. I think this is just something that nobody has
8 said at this meeting at all and it's like is this really
9 necessary? Is the old system adequate for what needs to
10 be done? I also question, certainly question why Cabot
11 would come in here and propose rectangular units, I mean
12 that to me is something that yeah, they've got a just-
13 ification for because Oxidental comes in here with 80
14 acre units unless they just want to shove two 80 acres
15 units together. It doesn't make any sense from a
16 drainage standpoint. I believe any of the geologist
17 here will tell you that and I think Mr. Harding already
18 said, he said, "Well, assume I don't know anything else,
19 I assume it's going to be draining in a circle. It's a
20 symmetrical kind of thing unless you know something else
21 about the specific geologic situation." So I would
22 question Cabot coming in here and talking about rec-
23 tangles. I don't see how that's going to effectively
24 drain this area or be of any real benefit. With regard
25 to coal objections, all I can say is that the 2,500 foot

1 rule was the only thing that the coal industry ever got
2 out of the trials and tribulations with regard to how
3 the statute was put together and that was so they could
4 mine around and the basis of that 2,500 foot objection
5 was that the oil and gas industry said, "Yeah, that's a
6 minimum kind of drainage, guys, so we can space them at
7 2,500 feet." So the coal industry had to live with and
8 has lived with a 2,500 foot objection. I'd tell you that
9 it is the toughest coal objection in the country. I
10 don't know of any others that exist where all sands are
11 considered one which is very important and the fact that
12 the coal operator has an absolute objection on 2,500
13 feet. I think that's the only thing that's going to keep
14 the coal industry being able to function in these areas.
15 Certainly there are exceptions where the coal's already
16 been mined out and that kind of thing and everybody will
17 say what was the problem. But any tinkering that this
18 Board would do, and I use that word kindly liberally, but
19 any tinkering that you might want to do with a 2,500 foot
20 rule, I think would be an error. If that rule needs to
21 be changed I think Cabot and other should go to legisla-
22 ture and make their case and I'm sure that all these coal
23 companies that just showed up and told you about how bad
24 gas wells will also be at those meetings. I just think
25 it would be a mistake for this Board to start trying to

1 interpret what that statute means. Thank you for your
2 time and consideration.

3 MR. WAMPLER: Any questions of Mr. Johnson?

4 MR. FAIN: If I could make one comment on that.

5 MR. JOHNSON: You're not going to cross-examine?

6 MR. FAIN: No, I'm not. But I feel compel to respond on the
7 drainage of the rectangular unit which was mention by
8 Mr. Johnson. He's not taking into account Cabot's
9 proposal that alternative ends of successive units be
10 required to be drilled on so that you would have an even
11 drainage throughout the field and I felt compelled to
12 remind the Board that.

13 MR. WAMPLER: Mr. Swartz.

14 MR. SWARTZ: I will only request that -- I think what I'm
15 hearing from the coal companies this morning makes some
16 sense. We need some time to assess, shape and size and
17 other specific provisions of this proposal. I think if I
18 was the only person asking for that you probably wouldn't
19 consider it but rather then make comments today without
20 an opportunity to reflect on them, we'd like an oppor-
21 tunity to comment. We have some concerns but we got the
22 proposal this morning like everybody else and we would
23 like to take a look at.

24 MR. WAMPLER: Okay. Bill Covington.

25 MR. COVINGTON: Mr. Chairman, Members of the Board. My name

1 is Bill Covington. I represent George Pacific Corpora-
2 tion. George Pacific has an interest in oil and gas and
3 coal underlying 3,700 acres in the immediate vicinity of
4 Cabot's proposal. And after reviewing its application
5 for field rules and listening to evidence represented
6 before the Board today, I wish to express out support for
7 adoption for these rules. Thank you.

8 MR. WAMPLER: Any questions? Any others? Those are the only
9 people I had signed in with exception of me fitting in a
10 name or two of the people that I knew would probably
11 want to address the Board. Are there any other that
12 would like to address the Board regarding this hearing?

13 MR. FAIN: Mr. Foreman, could I also mention that Cabot
14 didn't mean to slight anyone by not giving copies of the
15 proposal in advance. It was our understanding that this
16 was on the Board's motion and therefore we were not
17 obligated to give notice under the statute and send out
18 in advance of the meeting --

19 MR. WAMPLER: It was on the Board's motion.

20 MR. FAIN: Okay. We will give copies --

21 MR. WAMPLER: You just happen to be first.

22 MR. FAIN: That's right.

23 MR. WAMPLER: Anyone else? What's the Board's pleasure,
24 besides lunch?

25 MR. MCGLOTHLIN: I make a motion we adjourn for lunch and

1 address this or do you want to get something on the map?

2 MR. WAMPLER: Whatever the Board wants to do. We just can't
3 discuss it at lunch and come back and re-discuss it or
4 talk about it, what you want to do then if that's what
5 your going to do.

6 MR. HARRIS: It seems to me there are people who are inter-
7 ested in the matter, definitely interested in the matter
8 who have not had time to review the proposal from Cabot,
9 especially since that seems to the major proposal and I
10 would offer an motion that we continue this to the next
11 meeting to give the other interested parties an oppor-
12 tunity to review at least their proposal, Edwards and
13 Harding, yeah also.

14 MR. MASON: If I may Mr. Chairman comment.

15 MR. WAMPLER: Mr. Mason.

16 MR. MASON: It seems to me that if you focus on everything
17 that was said today they're really only, it seems to me
18 really only two areas of controversy. One relates to
19 the well unit configuration and the other relates to the
20 2,500 foot spacing rule. It seems to me those are the
21 only two things that we really have any conflicting
22 things about. My personal thoughts and I feel relatively
23 strongly about this, is that this 2,500 foot rule is
24 being proposed here within context of field rules for a
25 single field. It seems to me that that is inappropriate.

1 That that, if dealt with needs to be dealt with within
2 the context of a ruling on the act itself, not within
3 terms of a single field.

4 MR. WAMPLER: Uh-huh.

5 MR. MASON: And because of it's magnitude and importance as
6 an interpretative act of this Board should become a part
7 of some of the other rule making and regulatory ac-
8 tivities that we intend to undertake. I think to deal
9 with that in the context of a single field on something
10 of that importance would be to really beg the necessary
11 issue in determining whether in fact that is the inter-
12 pretation or our interpretation of that law. And you
13 know, if there's something related to those things that
14 might make what we do in postponing this more efficient I
15 would be open to it. I just reflect on that.

16 MR. WAMPLER: I agree. I didn't find anything in testimony
17 that makes this field any different from any other well
18 that was drilled though coal. And then of course the
19 other thing we have before us is Mr. Johnson appropriate-
20 ly put before us, do we need this at all?

21 MR. MASON: Yeah, right.

22 MR. WAMPLER: And I think certainly that's a critical decision
23 we have to make as well and though provoking. I have a
24 motion before the Board.

25 MR. EVANS: Second.

1 MR. WAMPLER: Motion is seconded. Any further discussion?
2 All in favor of continuing the hearing until next
3 meeting signify by saying, yes. (All agreed.) Opposed,
4 say no. (None.) Motion carries. The Board's adjourned
5 for lunch.

6 MR. FAIN: Mr. Wampler, just so we won't have to continue
7 again to February can we have a understanding. Cabot
8 will send copies of it's proposal to everyone. We'd
9 like to have copies of everyone's counter proposals
10 before the January meeting so we won't have to come here
11 and ask for another continuance into February.

12 MR. WAMPLER: I think that would be great. The sharing of
13 the data and as far as the transcripts you know, there's
14 a independent reporter here.

15 CLERK: We'll be happy to sell copies of that.

16 MR. FAIN: Is it the Board's pleasure then that if someone
17 wants to present a counter proposal or discuss the Cabot
18 proposal, they should submit in advance to all interest
19 parties their own proposal?

20 MR. WAMPLER: Yes, the Board's rules would require that for
21 the next hearing that anything that you plan to present
22 that you would do that in advance for the appropriate
23 copies for the Board and you'll come under the Boards
24 rules under this continuance.

25 MR. FAIN: How many days in advance of the hearing should

1 those be submitted?

2 MR. WAMPLER: 10 days.

3 MR. MASON: I think it would be appropriate also to suggest
4 that the interested parties would be those that have
5 appeared here today. Wouldn't that be correct?

6 MR. WAMPLER: Even though our hearings are open certainly the
7 applicability of providing counter proposals --

8 MR. MASON: Right.

9 MR. WAMPLER: In advance and all that, yes.

10 MR. MASON: I was just saying, you know not to just any
11 interested party because I think anyone that's been on
12 the agenda today and be heard will be considered an
13 appropriate party to receive a copy of the response.

14 MR. WAMPLER: You're saying they're all on notice.

15 MR. MASON: Yeah.

16 MR. WAMPLER: That these parties have an direct answer so the
17 sharing of the data is definitely essential for the
18 people that have expressed an interest here today.

19 MR. FAIN: And we can get a list of the sign up sheet from
20 Ms. Davis?

21 MR. WAMPLER: Yes. Thank you very much. We will reconvene
22 at 1:30.

23 (AFTER THE LUNCHEON RECESS, THE PROCEEDINGS CONTINUED AS
24 FOLLOWS:)

25

1 (ITEM 2)

2
3 MR. WAMPLER: The next item on the agenda is a motion that's
4 been made by Oxy USA, Incorporated to the Board request-
5 ing consideration of alternative for escrowing funds from
6 a force pooling unit under section 45.1-361.22. Is there
7 anyone here that wishes to address the Board in this
8 matter? Okay. We'll continue that matter.
9

10 (ITEM 3)

11
12 MR. WAMPLER: The next item on the agenda is the establishment
13 of drilling unit and force pooling for EH-36 well,
14 regarding district Buchanan County as requested by
15 Edwards and Harding Petroleum. This was continued from
16 last hearing.

17 MR. MULLINS: Yes, sir. For Edwards and Harding, my name is
18 Tom Mullins. As the Board is aware, this application
19 has been pending, I guess, since maybe August or so and
20 we've continued it on several occasions on the basis of
21 the Board to consider this in connection with the field
22 rules. This is on a fridge area. Do we have that map
23 fellows? EH-36 is located right here. I believe the
24 testimony this morning was that this is the developed
25 area and the Board was going to have to consider this on

1 a case by case bases. I don't think anybody proposed
2 anything other than that. If you grant EH-36 at this
3 time, which the Board has authority to do. It's already
4 been permitted. The well has been permitted, that would
5 just in effect even up this line with this unit. The
6 Board has the authority under the section or field rules
7 45.1-361.20. Since this well is permitted, it doesn't
8 create any kind of conflict with the permitting of the
9 well. It is a 160 acre unit as testified this morning to
10 be the optional size of the unit for the average.
11 There's no one size that's perfect. As the optional
12 size, it fits. There's no coal objection to the present
13 location of the permitted well. It's a regular shape,
14 it's a regular size, all the statutory, regulatory
15 requirements of notice and everything have been met and
16 we just submit to the Board that this unit is a proper
17 unit since it is on a fringe. It has been continued on
18 several occasions and it would be proper for the Board to
19 go ahead and grant the force pooling on this application.
20 Evidence has already been taken by the Board on this
21 unit. If it wasn't the last hearing, it was either the
22 hearing before that or the hearing before that. I don't
23 really remember. So that's just our -- we request that
24 the Board grant that forced pooling.

25 MR. WAMPLER: Any questions member of the Board?

1 MR. MASON: Is there anybody else here?

2 MR. MULLINS: I don't believe there was any objections to that
3 application.

4 MR. WAMPLER: Any other party wishing to address the Board on
5 the well EH-36? No other parties. I don't think we have
6 had an objection. I think it was just continued to just
7 hear evidence has he appropriately stated to make a
8 decision on the field rules.

9 MR. MCGLOTHLIN: Mr. Evans stated an objection last time.
10 Are you satisfied now with --

11 MR. EVANS: No, I'm still waiting for field rules and it's
12 still on and my same argument that I made the last time.
13 I still feel the same way.

14 MR. MASON: I think just in comment, Mr. Chairman, looking it
15 that we've got basically three possible scenarios
16 before. We've got no field rules or the two configura-
17 tions that have been proposed and as I understand it from
18 looking at it, it doesn't greatly differ from either one
19 of the pro scenarios.

20 MR. WAMPLER: What would it do on the rectangular proposal
21 versus -- of course, here you've drawn it in squares --

22 MR. MULLINS: That's correct.

23 MR. WAMPLER: -- if you drill that would it be right in the
24 center of two rectangular units?

25 MR. MULLINS: If the Board were to put a rectangular, first a

1 rectangular unit would not fit exactly within the square
2 because it would have different dimensions. What the
3 effect of granting this unit would be would be to even
4 this side up of right here for the grid system to fit
5 against this side and not leave any opening or gaps
6 against it. The well location that has been permitted
7 already is I believe by this map, located right there
8 which is the approximate center of the unit. It would be
9 an effective drainage of the unit. And it would -- like
10 I stated, effectively even up at least this portion for
11 the future field rules if the Board so choose to do that.

12 MR. WAMPLER: Any further discussion, questions? Chair is
13 open for a motion. How do we dispense with it?

14 MR. MCGLOTHLIN: Any recommendation from the staff?

15 MR. FULMER: Not at this time in consideration of how the
16 Board wants to rule in their field rules and if this --
17 there maybe one thought that the Board may want to
18 consider is that would be to grant the unit on a intern
19 bases. I don't know.

20 MR. MASON: I just wanted -- you know this has been going on
21 for some time and it looks like these field rules may
22 still take a while to get adopted and I don't know what.
23 It doesn't have any major negative impact on what we're
24 proposing to do. I don't know that there's any real
25 justification for holding them up.

1 MR. WAMPLER: Have you drilled the well?

2 MR. EDWARDS: No.

3 MR. MULLINS: Why haven't you drilled the well?

4 MR. EDWARDS: We're waiting for a determination of the unit.
5 Basically, the unit will largely determine the ownership
6 and I don't usually like to drill wells until I know who
7 the owners are going to be.

8 MR. MULLINS: We've got the approval of all the people in the
9 proposed unit.

10 MR. EDWARDS: Well in excess of 90 percent.

11 MR. MULLINS: And when was the application filed? Do you
12 remember the approximate date?

13 MR. EDWARDS: August, July or August of '89.

14 MR. MCGLOTHLIN: Has the unit been modified to fit your 160
15 acre square?

16 MR. EDWARDS: No, this is the original unit that we applied
17 for. It does conform to the field rules proposal.

18 MR. EVANS: Mr. Chairman,

19 MR. WAMPLER: Mr. Evans.

20 MR. EVANS: I make a motion that this petition be denied
21 until such time as the field rules of this area are
22 established.

23 MR. WAMPLER: Motion for denial. Any second? Do I have a
24 motion to approve?

25 MR. MCGLOTHLIN: I'll make a motion to approve.

1 MR. WAMPLER: Okay. I have a motion to approve. Second?

2 MR. MASON: I guess I'll second that.

3 MR. WAMPLER: Okay. I have a motion and a second to approve.

4 Any discussion? All in favor signify by saying yes.

5 (All agreed, but Mr. Evans, opposed.) The unit is
6 approved.

7

8 (ITEM 4)

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10 MR. WAMPLER: Next on the agenda is the appeal of the inspec-
11 tor's decision for case docket VGOB-10-1020 though VGOB-
12 10-1028 that was continued from November docket, Cabot
13 Gas and Oil.

14 MR. FAIN: Mr. Chairman, my understanding is that you all
15 continued this as a courtesy to me because I was not
16 present when Jewell Smokeless and Oxy represented to the
17 Board that those applications were going to be withdrawn
18 and you wanted to see what Cabot's position on that was
19 and we do not have any objection to that and so I think
20 we can dispense with that item. We have no objection to
21 Oxy's withdrawal of those permit applications.

22 MR. WAMPLER: Any other party wishing to address the Board on
23 this matter?

24

25 (ITEM 5)

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MR. WAMPLER: Next on the agenda is the establishment of drilling unit and forced pooling for A-37, item number 5.

MR. SWARTZ: We're ready to proceed on that one. We were late getting back from lunch. What happen to our motion on escrow accounts, number 2 on the docket? Are we going to have to defer that for later in the hearing?

MR. WAMPLER: We called it and when you weren't here we continued and just started moving though the docket.

MR. SWARTZ: Assuming that we have time at the end of the docket, could we request that you, since I have some witness here Oklahoma, if we get though the other items on the docket that the Board would at lease consider hearing that --

MR. WAMPLER: If there are no objections from other parties, we'll go to it now. But I don't know how the other parties have time and consideration as well.

MR. JOHNSON: We'd like to get this over with.

MR. FAIN: I would suggest that too. I have to go though it now. I like to hear and I have to move on also.

MR. WAMPLER: Is that what you're saying, Mr. Johnson?

MR. JOHNSON: We'd like to have our pooling units consider. I don't think it will take very long. We can move though that.

MR. WAMPLER: Okay.

1 MR. WAMPLER: Okay.

2 MR. MCGUIRE: Mr. Johnson, I understand has another engage-
3 ment.

4 MR. JOHNSON: Yeah.

5 MR. MCGUIRE: I don't care one way or the other but I think
6 that we can do by stipulation the way we approached our's
7 last time.

8 MR. JOHNSON: Yeah, we can move though this pretty rapidly.

9 MR. WAMPLER: Okay.

10 MR. MCGUIRE: And move though the next three rapidly.

11 MR. WAMPLER: All right. We'll allow you to do that.

12

(ITEM 2)

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14

15 MR. SWARTZ: Mr. Chairman, with regard to A-37 I'd like our
16 first witness to be Glenn Vangolen.

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18

19

20

GLENN VANGOLEN

21 a witness who, after having been duly sworn, was examined and
22 testified as follows:

23

24

DIRECT EXAMINATION

25

1 BY MR. SWARTZ:

2 Q. Would you state your name for us, sir? You need the
3 packet for your name?

4 A. Yeah. My name is Glenn Vangolen.

5 Q. And who do you work for, sir?

6 A. Oxy, USA, Incorporated as the project land manager.

7 Q. Their project manager?

8 A. Right.

9 Q. The project manager of what project?

10 A. The coal bed methane project in Buchanan County, Vir-
11 ginia.

12 Q. Mr. Vangolen, have you testified before before the
13 Virginia Department of Mines, Minerals and Energy?

14 A. Yes.

15 Q. And have your qualifications been excepted previously?

16 A. Yes, they have.

17 Q. Do your responsibility for Oxy in your position as
18 project manager, include lands involved here with regard
19 and surrounding unit A-37?

20 A. Yes, it does.

21 Q. Are you familiar with the proposed exploration and
22 development of the unit involved here under Oxy's
23 proposed plan of development?

24 A. Yes.

25 Q. Are you familiar with and have you reviewed the applica-

1 tion in this matter?

2 A. Yes, I have.

3 Q. Is Oxy seeking to force pool the drilling rights in an
4 approximate 80 acres drilling and spacing unit identified
5 as drilling unit A-37 in the Oakwood Coal bed Gas Field
6 for all coal seams below the tiller seam?

7 A. Yes.

8 Q. Are you familiar with the ownership of drilling rights
9 in the unit involved here?

10 A. Yes, I am.

11 Q. Does Oxy own drilling rights in the unit involved here?

12 A. Oxy has been designated operator for Island Creek Coal
13 Company which by it's coal leases control coal bed
14 methane from the owners of 95.1 percent of the unit.

15 MR. SWARTZ: I would represent to the Board that we have the
16 coal leases here with us here today and we'll file them
17 at the conclusion to the testimony with regard to these
18 seams.

19 Q. (Mr. Swartz continues.) Does Oxy wish to dismiss any of
20 the persons notified of the application?

21 A. No, they don't.

22 Q. What are the interest that Oxy is seeking to force pool?

23 A. Any interest in the coal bed methane lying within the
24 unit owned by Lon B. Rogers, tract number 68, the Lon B.
25 Rogers/Bradshaw Trust. Fawn Rogers is second trustee,

1 Lon B. Roger and Ashland Exploration, Incorporated. Also
2 the Albert Day heir's tract, which is tract A, I believe,
3 in the plat. A. G. Day and Carrie Day, his wife; Paul T.
4 Chambers; Homer C. Chambers and Marline K. Chambers, his
5 wife; Jerry Chambers and Billy A. Chambers, his wife;
6 Gaynelle C. Horton and Donald C. Horton, her husband;
7 Mabel C. Cole and Donald L. Cole, her husband; Bernice C.
8 Nelson and Ronnie Nelson, marital status unknown; Edna
9 Day; Hazel D. Matthews, single; Sibyl D. Baldwin and
10 James E. Baldwin, her husband; Edith D. Ratliff and Ralph
11 Ratliff, her husband; Olla Gay D. Jordan and Melvin
12 Jordan, her husband; W. Day and Thelma F. Day, his wife;
13 Garrett W. Day and Alice S. Day, his wife; K. David Day,
14 Sylvia S. Day, his wife; Anthony Craig Hunsucker, single;
15 Juanita Jewell and Joshua Jewell, her husband; unknown
16 heirs, devacees, successors or signs of Shoalal D.
17 Altizer, deceased; unknown heirs, devacees, successors or
18 signs of Pearl D. Elks, deceased, and Ashland Exploration
19 Incorporated. We also have Lon Rogers, tract 9, Lon B.
20 Rogers, Fawn Rogers the second trustee; James L. Rogers,
21 III, trustee; William P. Donan, trustee for Shawn Rogers;
22 Derrick Browning Rogers and Kevin Rogers; T. G. Rogers,
23 III; Gregory Polus; Jason Polus; Pamela Polus and
24 Ashland Exploration Incorporated.

25 MR. SWARTZ: We'd represent to the Board, Mr. Chairman, that

1 the copies of the certified registered mail, receipts
2 have previously been filed with the Board and are on file
3 with you all with regard to this particular unit.

4 Q. (Mr. Swartz continues.) Approximately, how many net
5 coal acres are owned by the potential unleased potential
6 claimants in the proposed unit?

7 A. 3.9 coal acres in tract A.

8 Q. These unleased coal interest represent what percentage
9 of the proposed unit that we're dealing with?

10 A. 4.9 percent.

11 Q. Approximately, how many net oil, gas and or methane
12 acres are owned by potential coal bed methane claimants
13 in the proposed unit?

14 A. Looks like on Ashland Exploration has an conventional
15 oil and gas lease covering 79.7 percent of the mineral
16 acres.

17 Q. And Ashland's lease represents what percentage of the
18 proposed unit?

19 A. 99.7

20 Q. Of what interest?

21 A. Of the oil and gas lease.

22 Q. Does Oxy seek an order pooling all interest or estates
23 in this coal bed methane gas drilling unit for the
24 development and operation there of?

25 A. Yes.

1 Q. Does Oxy seek to force pool the drilling rights of each
2 individual notified, if living and if deceased the
3 unknown successor or successors to any such deceased
4 individual?

5 A. Yes.

6 Q. Before this hearing what efforts were made, if any, by
7 Oxy to contact each of these persons and attempt to work
8 out an agreement, specifically a lease, regarding of the
9 development of the units involved?

10 A. Every party was located and contacted more than once
11 either by phone, in person or mail. They were offered a
12 lease for their coal bed methane interest. For those
13 persons who's addresses were unknown, publication was
14 effected.

15 Q. What did you do and what results did you obtain in terms
16 of trying to lease acreage?

17 A. In addition we've done title searches, they were made in
18 the deed room of the assessors office, over the last
19 couple of years we've contacted virtually all the owners
20 of the coal bed methane interest within the Oakwood
21 field. Offer to lease were made to each of them and
22 proposal letters were sent, either hand delivered or sent
23 by certified mail with return receipt requested.

24 Q. In your opinion has Oxy made a bona fide effort to try
25 to reach and agreement with these persons on behalf of

1 read the total estimate on the DWE for confirmation that
2 we're dealing with the same.

3 THE WITNESS: The total estimated is \$232,585.

4 MR. SWARTZ: Is it the same?

5 MR. WAMPLER: Yes.

6 MR. SWARTZ: The last matter with regard to this unit A-37,
7 Mr. Worth, Marty Worth had to be out of town at another
8 meeting today and I have asked in turn Tim Scott to
9 review title opinions, title records with regard to this
10 unit. I just have a couple of questions for him with
11 regard to whether in his opinion, notices were sent to
12 the appropriate parties. So I think he would have to be
13 sworn.

14 MR. MCGLOTHLIN: Excuse me, Mr. Chairman, while Mr. Vangolen
15 is still on --

16 MR. WAMPLER: Sure.

17 MR. MCGLOTHLIN: -- the stand now. Or may I direct the
18 question to Mr. Swartz in regard to Mr. Vangolen. Mr.
19 Swartz, if you recall last month we had this hearing Mr.
20 Worth was your expert witness dealing with land matters.

21 MR. SWARTZ: Right.

22 MR. MCGLOTHLIN: Now, this time you have bought Mr. Vangolen
23 in here saying that his expertise also lies in land
24 areas when last hearing we had a lot of deferring of
25 answers. Mr. Worth would say, "No, I can't answer that.

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I have to pass that on to Mr. Vangolen" and when a land question came up to Mr. Vangolen, he always referred that to Mr. Worth.

MR. SWARTZ: The candied answer to your question is, I do not believe I can qualify him as an land expert and that's why I'm about to have Mr. Scott sworn to testify that he has review the title opinions that were done with regard to these units so he can offer a limited amount of testimony with regard to the land matter that will be address.

MR. MCGLOTHLIN: I was thinking of how much royalty is paid and bonuses paid.

MR. SWARTZ: Well, he's aware of what Oxy offers, Mr. Vangolen is.

THE WITNESS: Everything that Mr. Worth's offers has to be approved by me so I'm aware of the amount of money that are sent.

MR. SWARTZ: But when we go to title I agree with you and that's why I have Mr. Scott here today because Mr. Worth could not make it.

MR. MCGLOTHLIN: Thank you.

1 You've seen this before. It reappears from time to
2 time.

3 Q. (Mr. Swartz continues.) Mr. Vangolen, who would you
4 recommend to the Board to be named as operator under the
5 forced pooling order?

6 A. Oxy, USA, Inc.

7 Q. Does Oxy have on file with the Department of Mines,
8 Minerals and Energy a blanket bond and profit security?

9 A. Yeah, we have a blanket bond with the Department and
10 cover the cost of plugging and reclamantion.

11 Q. What is the projected total depth of the proposed
12 initial well under the applicants plan of the develop-
13 ment?

14 A. 2,085 feet.

15 Q. Will this depth be sufficient to penetrate and test the
16 formations involved here?

17 A. Yes, it will.

18 Q. Are you familiar with the well cost for the proposed
19 initial unit well under Oxy's plan of development?

20 A. Yes, I am.

21 Q. And was a DWE prepared by people who work for you?

22 A. Yes, it was.

23 Q. Okay. And under your supervision?

24 A. Yes.

25 MR. SWARTZ: I would represent that I believe that we have

1 Oxy?

2 A. Yes, we have.

3 Q. And what offer would you make for lease of these possible
4 coal bed methane interest?

5 A. Dollar and acre bonus, ten year primarily term and one
6 eighth royalty.

7 Q. I'll show you what has been prepared entitled exhibit to
8 Glenn Vangolen testimony with regard to unit A-37. Is
9 this something you've seen before?

10 A. Yes, it is.

11 Q. And this is something that is on file with the Board.
12 Does this contain a section, II, Oxy's recommendation
13 for force pooling order?

14 A. Yes, it does.

15 Q. And are these matters set forth in this exhibit things
16 that you would request that the Board consider including
17 in any force pooling order that it might make with regard
18 to unit A-37?

19 A. Yes, it is.

20 MR. SWARTZ: I would ask that the Board consider this exhibit
21 so there is not a need to have Mr. Vangolen read all of
22 these recommendations again.

23 MR. WAMPLER: Any objections?

24 MR. JOHNSON: We'd like to have a copy of that exhibit.

25 MR. SWARTZ: We can get you one. You can borrow this one.

1 filed this DWE with the Board.

2 Q. (Mr. Swartz continues.) Have you reviewed this DWE?

3 A. Yes, I have.

4 Q. Okay. Was it prepared within the last 90 days?

5 A. Yes, it was.

6 Q. Does this DWE represent a reasonable estimate of the
7 reasonable well cost for the proposed initial unit well
8 under Oxy's plan of development?

9 A. Yes, it does.

10 Q. Does this DWE contain dollars assign or an estimate
11 assign to fracking?

12 A. Yes, it does.

13 Q. And what amount is that?

14 A. \$79,000.

15 Q. And how many seams would be anticipated to be fracked
16 for that amount of money?

17 A. It's anticipated to frack three seams.

18 Q. That would be enough money to frack three?

19 A. Yes, it would.

20 MR. SWARTZ: The last matter that I would like to point out,
21 Mr. Chairman, that we have previously filed consent to
22 stimulate and a statement of more objection with the
23 regard to the well work on this well to comply with the
24 rule that we dealt with last time.

25 MR. WAMPLER: Let me clarify just for the record. Would you

1 TIMOTHY SCOTT

2 a witness who, after having been duly sworn, was examined and
3 testified as follows:

4
5 DIRECT EXAMINATION

6
7 BY MR. SWARTZ:

8 Q. State your name, please.

9 A. Timothy Scott.

10 Q. And what is your profession?

11 A. Attorney.

12 Q. Did I ask you to review certain title records with
13 regard to drilling unit A-37?

14 A. Yes, you did.

15 Q. For this hearing?

16 A. Yes.

17 Q. Could you tell us generally what you reviewed?

18 A. I reviewed five different title opinions that in specif-
19 ically with these, I don't have the application in front
20 of me, but I looked at the tracts that were included
21 within the unit. I looked at the opinions for Lon
22 Rogers, tract 68 and Lon Rogers, tract 9 and to ensure
23 that that notice had been effected to the proper parties.
24 And in so reviewing I looked at the documents that were
25 included in the chain of title and it is my opinion that

1 notice was effected.

2 Q. Let me ask you this question. It will be the only one I
3 have but have you review the list of folks to whom
4 notices were sent?

5 A. Yes, I have.

6 Q. And having reviewed the title to the tracts that are
7 included within the unit, do you have an opinion as an
8 attorney whether or not notices were in fact sent to all
9 people to whom they should have been sent?

10 A. That's correct.

11 MR. SWARTZ: That's all I have.

12 MR. WAMPLER: Any questions?

13 MR. MCGUIRE: With the permission of -- we have no cross-
14 examination. With the permission of Oxy, I'd like to
15 incorporate by reference our cross-examination and our
16 objections and our evidence from the October and November
17 hearings at which we did last month to expedite matters,
18 Mr. Swartz?

19 MR. SWARTZ: It's fine with me if it's okay with the Board.

20 MR. JOHNSON: Lon B. Rogers and Lon B. Rogers/Bradshaw Trust
21 makes the same motion and request.

22 MR. MCGUIRE: And I will mention those units just for the
23 record. It's unit C-38, E-36, D-36, E-34, which were
24 heard on October 11, 1990 and then unit C-36, D-34, and
25 E-35 which were heard November 21, 1990. I would just

1 like to incorporate by reference our cross-examination
2 and our evidence and our objections. We feel that the
3 issues have been decided for these units and believe the
4 Board will reach a similar conclusion. Because this one
5 unit varies slightly from the other units in that there
6 is an Albert Day heirs ownership interest, I would like a
7 conclusion to submit and representative Albert Day heir
8 lease to -- a lease to Ashland for the record but that's
9 the only additional evidence that I would propose to put
10 in with regard to this peculiar unit.

11 MR. SWARTZ: I don't have a problem if the Board accepts that
12 kind of mathology to proceed if it's okay with them.

13 MR. WAMPLER: We were just discussing so that the Board is
14 refreshed on exactly what the objection was about. I
15 think we've already ruled on the operating agreement.
16 We're not making that decision. You're incorporating by
17 reference your objection to the designation of operator,
18 is that correct?

19 MR. MCGUIRE: That's right and there were standing issue
20 which the Board has already ruled upon.

21 MR. WAMPLER: Right.

22 MR. JOHNSON: We filed pleadings, we filed motions to dismiss
23 and filed objections that are in writing.

24 MR. WAMPLER: Right.

25 MR. JOHNSON: And we presented Michael Edwards at the hearings

1 in October and examined him concerning the operating
2 agreement. You all have made a ruling on that. We've
3 questioned them somewhat with regard to the DWE or
4 whatever it's called and we've had testimony with regard
5 to that. So all of those things we would want to have
6 stipulated with regard to the evidence and the cross-
7 examination to the extent that it's applicable to these
8 wells.

9 MR. WAMPLER: Any questions members of the Board.

10 MR. MASON: Yeah, I move the Board except the stipulation of
11 their objections in accordance with prior testimony and
12 the prior evidence offered in regard to that and those
13 stipulations, evidence and testimony be incorporated as
14 a response to the application for this A-37.

15 MR. LEPCHITZ: Would this hold true the next three, also?

16 MR. MCGUIRE: There are two more and I think since they do
17 not involve the Day heirs -- they just involve the
18 parties at this table I think that we could consolidate
19 those two for the hearing.

20 MR. SWARTZ: Well, it makes it a little difficult for Glenn
21 and I to keep interest straight so maybe we can con-
22 solidate your view of it but it's a lot easier for me to
23 have people to testify to one unit at a time.

24 MR. JOHNSON: We'll accept your view of not consolidating.

25 MR. WAMPLER: We were just getting clarified from the Board's

1 standpoint. I think the Board's straight on what's going
2 on here.

3 MR. MASON: Well, we still have the issue this A-37.

4 MR. WAMPLER: We have to make the decision on A-37. I have a
5 motion that the Board except the stipulation for A-37.
6 They were just simply clarifying that they have the same
7 stipulation on the other two with the exception of the
8 Day heirs. Do I have a second on the motion to except
9 stipulation?

10 MR. MCGLOTHLIN: Second.

11 MR. WAMPLER: All in favor signify by saying aye.

12 (All agreed.) Opposed. (None.) Okay. We'll accept
13 stipulation and what's your pleasure on A-37?

14 MR. MCGUIRE: I'd like to designate this lease, the one I
15 spoke about, as part of the record on A-37.

16 MR. FULMER: Mr. Chairman, I hate to be picky but I can't
17 read go with this oil and gas lease and I think it's a
18 travesty that someone would offer that as evidence.
19 It's illegible.

20 MR. MCGUIRE: May I have the Board's permission to substitute
21 a legible copy. This is as a result of poor facsimile
22 machines and poor photocopying.

23 MR. WAMPLER: Is there any objection. What's your pleasure?
24 There will be a stipulation that you will replace this
25 with a legible copy.

1 MR. MASON: Mr. Chairman, I move the adoption of approval
2 this application.

3 MR. WAMPLER: To establish a drilling unit force pooling?

4 MR. MASON: Yes, sir.

5 MR. WAMPLER: Okay. I have a motion. Motioned and second.

6 All in favor signify by saying yes, (Most agree.) Oppose
7 say no.

8 MR. MCGLOTHLIN: Abstention.

9 MR. WAMPLER: Noted. Thank you. Motion carries.

10 (ITEM 6)

11
12 MR. WAMPLER: Next item is establishment of drilling unit
13 forced pooling for A-38 proposed by Oxy, USA Incor-
14 porated.

15 MR. SWARTZ: Mr. Chairman, we're ready to proceed on this on
16 as well. We have previous filed with the Board the
17 copies of the mailing notices, the receipts from the
18 post offices. You should also have on file the consent
19 to stimulate an affidavit of Ken Price with regard to
20 his authority to execute that. We have copies of the
21 coal leases which will be the subject of this unit that
22 we're attempting to pool and those we will file at the
23 conclusion of the hearing but we have 10 copies for the
24 Board of the coal leases. I would like to start with
25 Mr. Scott and get through the notice analysis section

1 before I go to Mr. Vangolen. I would also like to point
2 out to the Board that it was not an oversight that we did
3 not discuss our joint operating agreement last time and
4 you're not going to hear any more from us on that
5 subject. We understand your position. I just wanted you
6 to realize that I'm trying to comply.
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10

11 TIMOTHY SCOTT

12 a witness who, after having been previously sworn, was
13 examined and testified as follows:
14

15 DIRECT EXAMINATION

16
17 BY MR. SWARTZ:

18 Q. Did I ask you to do some work for me with regard to this
19 hearing with regard to unit A-38?

20 A. Yes.

21 Q. And what did I ask you to do?

22 A. To review the property opinions rendered on these tracts
23 that were included in the unit to see if notice was
24 properly given.

25 Q. And tell me what you did to accomplish that task.

1 A. I reviewed the instruments and the chains of title for
2 these tracts and determined that notice was effective to
3 the proper parties.

4 Q. Did you compare the names of the parties that you
5 determined were appropriate from your review of chain of
6 title to the notices that were actually mailed by Oxy and
7 the notices that had been filed with the Board?

8 A. Yes, sir.

9 Q. And when you compared them, what conclusion did you
10 reach with regard to whether or not Oxy had in your
11 opinion notified all people that they should notify
12 based on your review of the chain of title?

13 A. Oxy had in fact notified the proper people.
14
15

16 GLENN VANGOLEN

17 a witness who, after having been previously sworn, was
18 examined and testified as follows:
19

20 DIRECT EXAMINATION

21
22 BY MR. SWARTZ:

23 Q. You have been previously sworn and are still under oath.
24 With regard to drilling unit A-38, are you familiar with
25 the proposed exploration and development in the unit

1 involved here under Oxy's proposed plan of development
2 for this unit?

3 A. Yes.

4 Q. Have you read and are you familiar with the application
5 in this matter?

6 A. Yes, I am.

7 Q. What size unit is being sought to be forced pooled here?

8 A. We're forced pooling a 100 acre unit for the A-38 from
9 the tiller seam, from all coal seams below the Tiller
10 seam.

11 Q. And why is this a 100 acre unit instead of an 80 acre
12 unit?

13 A. This is in the northern edge of the field, an adjustment
14 unit. The well is placed on the northern side of that
15 unit for topography and coal considerations which made
16 this a 100 acre unit.

17 Q. Is the 100 acre unit, was it established at 100 acres by
18 the Board in it's prior order with regard to establishing
19 rules for the Oakwood field or are you simply extending
20 the unit here?

21 A. It was allowed under the field rules to make it a 180
22 acre unit. A larger unit for an adjustment unit.

23 Q. A 100 acre?

24 A. Yes.

25 Q. Okay. Are you familiar with the ownership of drilling

1 rights involved here?

2 A. Yes, I am.

3 Q. Does Oxy own drilling rights in this unit?

4 A. Yes.

5 Q. And what is Oxy's interest?

6 A. Oxy is designated operator for Island Creek Coal Company
7 by virtue of it's coal lease controls, coal and methane,
8 100 percent of the unit.

9 Q. And when you say a 100 percent of the unit would that be
10 certain seams?

11 A. Yes, below the Tiller.

12 Q. Okay. Does Oxy wish to dismiss any of the persons
13 notified of this application?

14 A. No, they don't.

15 Q. What are the interest that Oxy foresee in forced pool?

16 A. Any interest in coal bed methane lying within the unit
17 and owned by tract 68 and 69 of the Lon B. Rogers/Brad-
18 shaw Trust, Fawn Rogers second trustee; Lon B. Rogers and
19 Ashland Exploration Incorporated, tract 9, Lon B. Rogers
20 and Fawn Rogers second trustee; James L. Rogers the third
21 trustee; William P. Donan, trustee for Shawn Rogers;
22 Derrick Browning Rogers and Kevin Rogers; T. G. Rogers,
23 III; Gregory Polus; Jason Polus; Pamela Polus and
24 Ashland Exploration.

25 Q. Approximately, how many net coal acres are owned by

1 potential unleased claimants in the proposed units?

2 A. Oxy's been designated operator and has under lease a 100
3 acres, 100 coal acres.

4 Q. So the answer to that question is probably 0.

5 A. Correct.

6 Q. Ashland's lease represents what percentage of the
7 proposed unit is so far as the oil and gas is concerned?

8 A. 100 percent of the oil and gas.

9 Q. Does the applicant seek an order pooling all interest or
10 estate in this coal bed methane gas drilling unit for
11 the development and operations thereof?

12 A. Yes.

13 Q. Do you seek to force pool the drilling rights of each
14 individual that has been notified if living and if
15 deceased, the unknown successor or successors to any
16 such deceased individual?

17 A. Yes.

18 Q. Describe for me what efforts, if any, were made to
19 determine that the individuals notified were living or
20 deceased or there whereabouts and if deceased who their
21 heirs or successors might be.

22 A. We contacted either in person or -- also went though
23 courthouse deed books, records, trying to find out all
24 the people.

25 Q. You know that there is an exhibit B that is attached to

1 the application which is a list of names and addresses?

2 A. Yes.

3 Q. Okay. Can you tell me whether or not the names and
4 address as set forth in exhibit B are in fact the last
5 known address for the people that you notified?

6 A. Yes, they are.

7 Q. And can you tell me whether or not based on your ex-
8 perience and your knowledge what goes on in your office
9 if do diligence were exercised to locate all of these
10 people?

11 A. Yes, they were.

12 Q. Before this hearing, what efforts in general were made
13 by Oxy to make contact with people and train and work
14 out an agreement regarding potential claims that they
15 may have on an amicable basis?

16 A. As I stated, we try to contact and located every party
17 either by phone, person, mail and offer to lease their
18 coal bed interest.

19 Q. In your opinion, did Oxy or some agent of Oxy or group of
20 people on behalf of Oxy, make bona fide efforts to reach
21 agreement with these people on behalf of Oxy?

22 A. Yes, they did.

23 Q. Have you prepared an exhibit which sets forth the lease
24 terms that you were offering to parties to lease their
25 interest?

1 A. Yes, we have.

2 Q. And does that exhibit state the bonus -- tell me what
3 the bonus, the term of the royalty would be?

4 A. Dollar an acre bonus, ten year primary term, and one
5 eighth royalty.

6 Q. Does that same exhibit with regard to A-38, which has
7 not been filed, I need to copy it and file it with you,
8 with regard to this well, set forth the recommendations
9 you and Oxy would make to the Board with regard to items
10 that they should consider, the Board should consider
11 incorporating in any pooling order entered with regard to
12 this unit?

13 A. Yes.

14 Q. And would you ask that the Board consider those recommen-
15 dations?

16 A. Yes, I do.

17 Q. Have you or someone under your direction prepared a DWE
18 with regard to well A-38?

19 A. Yes, I have or yes, someone has.

20 Q. Okay. Have you reviewed that before coming here today?

21 A. Yes, I have.

22 Q. Tell us what the total estimate is at the bottom so the
23 Board members can compare it to the one that they should
24 have.

25 A. \$231,142.

1 Q. What is the projected total depth of this well?
2 A. 2,069.
3 Q. Would that depth be sufficient to penetrate and test the
4 formations involved here?
5 A. Yes, it will.
6 Q. Has this DWE been prepared within the last 90 days?
7 A. Yes, it has.
8 Q. Does this DWE represent in your opinion a reasonable
9 estimate of the reasonable well cost for the proposed
10 initial unit well under applicants plan of development?
11 A. Yes, it does.
12 MR. SWARTZ: We'd like to file 10 copies of the coal lease at
13 this point. I have no further questions.
14 MR. WAMPLER: Questions members of the Board? Record will
15 note that you have the same stipulation as the last --
16 MR. JOHNSON: No, got some questions.
17 MR. MCGUIRE: We have the same stipulations with some addi-
18 tional questions, okay.
19 MR. WAMPLER: Okay. Go ahead.

20
21 CROSS-EXAMINATION

22
23 BY MR. JOHNSON:

24 Q. Mr. Vangolen, you testified that for some reason this
25 particular unit has a 100 acre unit of all the other

1 units we've talked about in the past has been 80 acre
2 units and I'm wondering whether or not you would have a
3 copy of exhibit 1 to the order of the Board entered on
4 May 18, 1990 by Chairman Wampler which requires 80 acre
5 units. If you have a copy of the exhibit that shows
6 that the Board authorize this particular unit be 100
7 acres?

8 A. I don't have that with me. No, sir.

9 Q. Do you know whether or not that exhibit will show this
10 particular unit which you have designated in the grid
11 system as A-38 was somehow depicted differently in the
12 exhibit from the other 80 acre units?

13 A. What was the questions there. Does the Board allow us to
14 make this 180 acre unit?

15 Q. The drilling units were establish pursuant to an exhibit
16 that you filed with the Board.

17 A. Right.

18 Q. And I'm wondering whether or not the exhibit, whether
19 you have that exhibit or whether or not that exhibit,
20 I'm going to ask you whether or not that exhibit shows
21 this as a 100 unit and why this is a 100 acre unit.

22 A. Well, this exhibit is on file with the Board. I don't
23 have a copy with it but it's a boundary unit.

24 MR. WAMPLER: I don't have the exhibit but the language of
25 the order is that the drilling units are hereby es-

1 tablISHED for Oakwood coal bed gas field each such
2 drilling unit to be composed of an area of 80 acres more
3 or less, in the shape of a square except makeup drilling
4 units adjacent to the internal boundaries of the field.
5 Now, as to whether or not this is -- I don't have the
6 exhibit.

7 MR. JOHNSON: Item number 5 in that order, Mr. Wampler, says
8 that the drilling units established hereby shall be
9 aligned and arranged so that they constitute a grid
10 beginning at and it talks about that and then it says,
11 "As depicted on the map submitted by applicant, Oxy,
12 USA, Inc. as exhibit number 1."

13 MR. WAMPLER: Right.

14 MR. JOHNSON: I just question whether or not that exhibit map
15 reflects what's being proposed here.

16 MR. MASON: If I may, Mr. Chairman.

17 MR. WAMPLER: Go ahead, Mr. Mason.

18 MR. MASON: As I understand, we were asking Mr. Vangolen is
19 whether or not that's his representation, --

20 MR. JOHNSON: Yeah.

21 MR. MASON: -- that, in fact, this drilling unit does reflect
22 what was depicted on exhibit 1 submitted previously.

23 THE WITNESS: I believe that's true.

24 Q. (Mr. Johnson continues.) Where does this particular
25 unit lie in relation to the West Virginia state line?

1 A. Southwest.

2 Q. How far?

3 A. I can't tell that from here.

4 Q. Are all the units on there that are in category A, are
5 they all 100 acre units?

6 A. Mr. Johnson, I believe that's true but I can't be sure
7 now but I believe it is.

8 Q. Is what you're referring to is that exhibit A or is that
9 some other map?

10 A. This looks to be a copy of exhibit A.

11 MR. WAMPLER: Mr. Johnson, this is exhibit A if you'd like to
12 look at it. Note the top line all the way across says
13 larger than the others.

14 Q. (Mr. Johnson continues.) There is a well designated on
15 here as CBMI838, which appears to be at the northern end
16 of this particular unit. Is that where you propose to
17 drill the well?

18 A. Yes, we do.

19 Q. With regard to the unit which we just discussed, A-37,
20 is that a 100 acre unit or a 80 acre unit?

21 A. That was a 80 acre unit.

22 Q. Can you explain why it was a 80 acre unit when the
23 exhibit inquires a 100 acre unit?

24 A. Because it was located in the southern half of that
25 unit. An 80 acre unit could be established and the

1 makeup unit did not have to be put on the plat.

2 Q. This particular well is going to be drilled at the

3 northern end of the unit, is that correct?

4 A. That is correct.

5 Q. How far is it going to be from the southern boundary of

6 the unit?

7 A. I don't know if I can tell you that without a scale, Mr.

8 Johnson. I don't have no way of determining that I

9 don't think.

10 Q. Can you tell me how far it is from the northern end of

11 this unit?

12 A. Not exactly but it looks -- maybe 400 feet. I'm just

13 guessing.

14 Q. Is the total length of the north/south line 2,333.45

15 feet?

16 A. Yes.

17 Q. This well is going to be about 1,900 feet from the

18 southern boundary?

19 A. Yeah, approximately.

20 Q. And about 400 feet from the northern boundary?

21 A. Yes, approximately. That would lay outside of the 80

22 acre unit.

23 MR. JOHNSON: That's all the questions I've got and Mr.

24 McGuire may have others but as far as the stipulation

25 we'd ask for the same stipulation that we requested with

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regard to the previous well.

MR. MCGUIRE: I have no other questions.

MR. MASON: Mr. Chairman.

MR. WAMPLER: Mr. Mason.

MR. MASON: I would make the same motion as regard to the stipulation as I made for A-37, excuse me. Just so we can dispose of the stipulations (inaudible) Yeah, I'm not trying to dispose of any other parts.

MR. WAMPLER: I have a motion for excepting stipulations. Second. Second. All in favor signify by saying yes. (All agreed.) Oppose say no. (None.) Okay. Any questions?

MR. MCGLOTHLIN: I've got one.

MR. WAMPLER: Mr. McGlothlin.

MR. MCGLOTHLIN: With exhibit A you've testified that it seemed to you that all of row A were 100 acre plots, units and now you're saying that A-37, you have A-37 as a 80 acre unit, A-38 as a 100 acre unit. I'm confused.

THE WITNESS: The whole row A is an adjustment unit. If you can obtain an 80 acre unit, you put in a 80 acre unit. If you can't, you make an adjustment to that unit because there is not enough room in that unit to put two wells in that unit. In other words, there's not another 80 acres on top of there that's a negative A for instances. It's an adjustment unit.

1 MR. MCGLOTHLIN: Are you telling me that somewhere with the
2 West Virginia line runs though there somewhere? That we
3 don't have any jurisdiction over the next --

4 THE WITNESS: No. I don't see that.

5 MR. SWARTZ: If I might interject. When this Oakwood field
6 was created, it was created based on geology and test-
7 imony that the known orders of the field roughly, would
8 roughly coincide with this map you have and I think your
9 question assumes that there is a coal bed methane field
10 continuing north and that you could just extend this map
11 forever and --

12 MR. MCGLOTHLIN: No, I'm assuming that we have a square or
13 some type of geometric configuration here, that repre-
14 sents to me to be a square, and if you're longitude here
15 should be the same all the way across and if you come
16 down here, if this one's a 100 acres A-1 is a 100 acres
17 and A-39 should be a 100 acres, A-38 is a 100 acres, A-17
18 should be a 100 acres.

19 MR. SWARTZ: On that map their all 100 acres and the map
20 clearly shows that.

21 MR. MCGLOTHLIN: How did we lose 20 acres?

22 MR. SWARTZ: Do you want to tell him again?

23

24

REDIRECT EXAMINATION

25

1 BY MR. SWARTZ:

2 Q. First of all I think you might tell us whether or not
3 you agree that as that map is drawn they all appear to
4 be 100 acres?

5 A. They appear to be. Now, I haven't put a perimeter to
6 that adjustment rule so I don't know.

7 Q. If you could explain, which I think the question he's
8 really asking you is, how can you have an 80 acre unit
9 and a 100 acre unit in row A if you have an answer for
10 that question?

11 A. The effective drainage is 80 acre. If you can stick a
12 well into the unit to obtain a 80 acre unit, that's what
13 should be done. Now, if you have to stick a well in
14 there that doesn't allow you to establish an 80 acre
15 unit and protect all the rights involved then that unit
16 is an adjustment unit and you make an adjustment unit
17 accordingly.

18 MR. MASON: May I interject something?

19 MR. SWARTZ: Yeah, I'd be happy --

20 MR. MASON: If what I'm interpreting what you're telling us
21 is you're saying that these drilling units that are on
22 the boundary of this map that you call adjustment units
23 are units that don't have any fix size, is that what
24 you're saying? That the mere fact that they are an
25 adjustment unit doesn't make you conform to the exact 80

1 acre spacing and basically because this is on the
2 periphery then you can adjust these units according to
3 the needs of each individual unit. There's more in-
4 dividual discretion as to these sizes. I thought the
5 whole purpose of this was to fix the size of the unit
6 and what you're telling us is, as I understand it, is
7 that these so called adjustment units on the boundary
8 don't have to all be the same size or in conformity with
9 the order of the Board as to the spacing, is that
10 correct?

11 THE WITNESS: That's correct. They have to be at least 80
12 acres.

13 MR. JOHNSON: May I say something about this. I think what
14 we're looking at here if you look at it is a well that
15 they propose on the northern end of this property and
16 because it's on the northern end for whatever reason and
17 they haven't explained why it has to be where it is but
18 for whatever reason it's on the northern perimeter. If
19 they had moved the well south of where they propose it,
20 then they could have fit it into an 80 acre unit cate-
21 gory. They decided, for whatever reason, to put this
22 well in the northern perimeter. There's not going to be
23 any well's drilled. You take the distance between that
24 well location and the bottom of the unit, the southern
25 most portion of the unit and then the additional distance

1 of protective area and you're probably talking about
2 2,500 feet or so away would be the closest that they
3 could drill south of there. Their just sticking it up
4 there for whatever reason and like I say, they haven't
5 explained that to us.

6 THE WITNESS: I believe in my testimony I said we put it up
7 there because topographic considerations and because of
8 mining plan.

9 MR. JOHNSON: Well, it seems to me that it makes it convenient
10 for you to --

11 MR. SWARTZ: I have some tape if it will help the Board if
12 you want to tape that map up.

13 MR. MCGLOTHLIN: If you have a 80 acre tract on this row A
14 across though here and Joe Blow owns 80 acres and up
15 above him is Joe Loser and Joe Loser has the 20 acres
16 above that but you're having troubles dealing with Joe
17 Loser so you go in there and just cut off and say, no
18 we're just going to make this a 80 acre tract instead of
19 a 100 acre tract. Unless there is a political sub-
20 division there someplace I don't understand why they all
21 are not 100 acre tracts. Or political division, excuse
22 me.

23 MR. JOHNSON: I think whoever is south of this well location,
24 whoever owns that is not getting enough wells in there if
25 the idea's to drain it. Again, we're objecting to these

1 locations. But there's a drainage problem you've got
2 there because they're drilling on the northern perimeter,
3 taking full advantage of the off-set rule that's set
4 forth in this order.

5 MR. WAMPLER: What specific geographic considerations and
6 coal owner considerations were taken in --

7 THE WITNESS: When we went into this area they laid out all
8 of the mining maps and tried to overlay the mining area
9 with the topography and trying to find a economic
10 location and this is where it turned out to be. The
11 order does allow for these adjustment units and this was
12 a need for it.

13 MR. WAMPLER: Mr. Vangolen, would you expand on the --
14 considerate the mine plan considerations? Do you have
15 anything to offer the Board in that regard?

16 THE WITNESS: I didn't bring anything.

17 MR. JOHNSON: To whose mine plan considerations are you
18 reviewing? What company?

19 MR. SWARTZ: Jewell Ridges up there.

20 MR. JOHNSON: Jewell Ridge Coal Corporation?

21 MR. SWARTZ: Yeah, Jewell Ridge Mining Corp.

22 MR. JOHNSON: There's any such thing.

23 MR. SWARTZ: That's what the map says, Jewell Ridge Mining
24 Corporation.

25 MR. MCGLOTHLIN: I think there's a simple answer that can

1 take care of me but I'm certainly not going to be the
2 one to suggest it.

3 MR. WAMPLER: Well, obviously the Board's order allows a
4 makeup area. I think that's clear in the order. I
5 think the one thing that we want to make sure that any
6 operator putting a well in that area, in that makeup
7 area exercises due diligence and doesn't just arbitrarily
8 move a well. I think that certainly we have a respon-
9 sibility to ensure that that's done.

10 MR. JOHNSON: I think that the big point about this on those
11 100 acres units is that it appears that for whatever
12 reason they decided that this top level, this top row
13 ought to be larger for whatever reason. Whatever give
14 there was in this whole plan should given to the most
15 northern units and to the extent that they're going to
16 be trying to accommodate that, they ought to be drilling
17 in the middle of those units opposed to in the peripher-
18 al. And they're telling you that if they drill in the
19 middle of them they're going to make them 80.

20 MR. WAMPLER: Any other questions?

21 MR. MASON: I have one, Mr. Chairman.

22 MR. WAMPLER: Mr. Mason.

23 MR. MASON: Why didn't you make this drilling unit include
24 the entire area in this Oakwood exhibit A map?

25 THE WITNESS: A-38?

1 MR. MASON: Uh-huh.

2 THE WITNESS: I think we did include all that.

3 MR. MASON: I'm looking at this map and you're saying that
4 this drill unit includes all of this A-38?

5 THE WITNESS: Yeah, I believe that's right, Mr. Mason.

6 MR. SWARTZ: It's A-37 that we just dealt with.

7 MR. MASON: So, you're saying that this drill unit includes
8 all of A-38?

9 THE WITNESS: I believe that's right, yes.

10 MR. MASON: And then you're saying that A-37 was only 80
11 acres, which would be even part of it.

12 THE WITNESS: Uh-huh.

13 MR. MASON: Why did you do that?

14 THE WITNESS: Because we were able to obtain a location in the
15 southern half of that unit. Where ever we could obtain a
16 80 acre unit we make a 80 acre unit because that's the
17 effective drainage of that unit and where we can't put a
18 location into that adjustment unit, we adjust it to the
19 size of whatever that unit is there which is 100 acres.

20 MR. MASON: Okay, thank you.

21 MR. JOHNSON: I'd like for you all to look at the map on A-
22 37 in response to what he just told you and look at
23 where the well is that they're proposing cause it's not
24 quoted, end quoted, on the southern end. It's in the
25 middle but on --

1 MR. EVANS: Mr. Chairman, I'd like to make a motion.
2 MR. WAMPLER: Mr. Evans.
3 MR. EVANS: I move that Oxy be required to file with the
4 Board the more specific mining plans and topographic
5 constraints concerning this well to continue this till
6 the next meeting until that information is available to
7 us.
8 MR. WAMPLER: Okay. You heard the motion. Second?
9 MR. MCGLOTHLIN: Second.
10 MR. WAMPLER: Motion is seconded. Further discussion? All
11 in favor signify by saying yes. (All agreed.) Opposed
12 say no. (None.) It will be continued and provide the
13 Board with additional information.

14
15 (ITEM 7)

16
17 MR. WAMPLER: Next item on the agenda is the establishment of
18 drilling unit and forced pooling for D-35, a coal bed
19 methane well as requested by Oxy, USA, docket number
20 VGOB-1120-67. This was also continued from prior docket.
21 MR. SWARTZ: I'll recall Mr. Scott.

22
23 TIMOTHY SCOTT

24 a witness who, after having been previously sworn, was
25 examined and testified as follows:

1
2 DIRECT EXAMINATION

3
4 BY MR. SWARTZ:

5 Q. Mr. Scott, did I ask you to make any examination to the
6 title with regard to unit D-35?

7 A. Yes, sir.

8 Q. And what did you do to accomplish that examination?

9 A. I reviewed the instruments and chains of title to the
10 tracts that are encompassed by the unit and to ensure
11 that the notification was proper.

12 Q. Have you also reviewed all of the notices which have
13 been previously been filed with the Board with regard to
14 unit D-35?

15 A. Yes, sir.

16 Q. And have you compare the names of the people to whom
17 notice was given to the names that you identified in your
18 title exam?

19 A. Yes, sir.

20 Q. Can you tell me whether you have an opinion on the
21 question of whether Oxy has notified all persons that
22 they should have notified based on your examination of
23 the title?

24 A. Yes, sir, I do have an opinion that the owners of the
25 title examination revealed were notified by Oxy prior to

1 or at the time of the filing of the application for this
2 course --

3
4 GLENN VANGOLEN

5 a witness who, after having been previously sworn, was
6 examined and testified as follows:

7 DIRECT EXAMINATION

8
9 BY MR. SWARTZ:

10 Q. Mr. Vangolen --

11 A. Yes, sir.

12 Q. -- do your responsibility as project manager include
13 lands involved in this unit and the areas surrounding
14 this unit?

15 A. Yes, they do.

16 Q. Are you familiar with the proposed exploration and
17 development of unit D-35?

18 A. Yes, I am.

19 Q. Are you familiar with the application in this matter?

20 A. Yes, I am.

21 Q. What is the size of this proposed unit?

22 A. 80 acres.

23 Q. Is Oxy seeking to force pool this 80 acre unit D-35 for
24 all coal seams below the tiller seams?

25 A. Yes, we are.

1 Q. Are you familiar with the ownership of drilling rights
2 in the unit involved here?
3 A. Yes, I am.
4 Q. Does Oxy own drilling rights in this unit?
5 A. Yes.
6 Q. What is Oxy's interest?
7 A. Oxy is designated operator for Island Creek Coal Company
8 with by virtue of it's coal lease controls coal bed
9 methane from the owners of 100 percent of the unit.
10 Q. Does Oxy wish to dismiss any of the people notified of
11 this application?
12 A. No.
13 Q. What interest is Oxy seeking to force pool?
14 A. Any interest in coal bed methane lying within the unit
15 and owned by tract 68 and 70, the Lon B. Rogers/Bradshaw
16 Trust, Fawn Rogers the second trustee; Lon B. Rogers and
17 Ashland Exploration Incorporated. Tract 41, Lon B.
18 Rogers, Fawn Rogers the second trustee, James L. Rogers,
19 third trustee; William P. Donen, trustee for Shawn
20 Rogers; Derrick Browning Rogers and Kevin Rogers; T. G.
21 Rogers, III; Gregory Polus; Jason Polus; Pamela Polus
22 and Ashland Exploration Incorporated.
23 Q. How many net coal acres are owned by potential unleased
24 claimants in the proposed unit?
25 A. Zero percent. Oxy is the designated operator under the

1 lease of 80 coal acres.

2 Q. Ashland has a lease and their lease represents what
3 percentage of the oil and gas in the proposed unit?

4 A. 100 percent of the oil and gas.

5 Q. Does Oxy seek an order pooling all interest or estates
6 in this coal bed methane gas drilling unit for develop-
7 ment and operation thereof?

8 A. Yes.

9 Q. Do you seek to force pool the drilling rights of each
10 individual that you've notified, if living, and if
11 deceased the unknown successor or successors of any such
12 deceased individual?

13 A. Yes.

14 Q. Were efforts made to determine if individuals notified
15 were living or deceased and there whereabouts and if
16 they were deceased efforts to made to find their succes-
17 sors?

18 A. Yes.

19 Q. Have you reviewed exhibit B attached to the application?

20 A. Yes.

21 Q. And are the address set forth there in the last known
22 addresses of all the people notified as far as Oxy
23 knows?

24 A. Yes, they are.

25 Q. Before this hearing, can you tell me in general what

1 efforts Oxy has made to lease acreage from conflicting
2 claimants?

3 A. Every party was contacted, located, tried to be located,
4 either by phone, in person or mail and offer to lease
5 their coal bed methane interest. Over the last couple of
6 years we made efforts for all the coal owners and gas
7 owners over the 8000 acres. Title searches have been
8 made in the deed room in the assessors office and were
9 also made personal or through telephone and mail contracts
10 were sent to these people, offers for lease were made
11 then. We also hand delivered or mail certified return
12 receipts for coal bed methane leases to each of those
13 persons.

14 Q. In your opinion did Oxy or employees of Oxy make a bona
15 fide effort to reach an agreement with these persons?

16 A. Yes, they did.

17 Q. And what were the terms being offered to lease?

18 A. Dollar and acre bonus, ten year primarily term, one
19 eighth royalty.

20 Q. Are those terms set forth in exhibit that you've prepared
21 that sets forth the terms and your recommendations with
22 regard to the forced pooling order?

23 A. Yes, it was.

24 Q. And with regard to the recommendations made in the
25 exhibit with regard to D-35, which will be filed, would

1 you request that the Board consider those recommendations
2 in entering an order if an order is enter?

3 A. Yes, I do.

4 Q. What is the proposed depth of the or projected total
5 depth of this initial well?

6 A. 1995 feet.

7 Q. Will this depth be sufficient to penetrate and test the
8 formations that are involved here?

9 A. Yes, it will.

10 Q. Are you familiar with the well cost for the proposed
11 initial unit well?

12 A. Yes, I am. That cost is \$230,350.

13 Q. Have you prepared or cause someone in your department to
14 prepare this DWE that you're looking at and that's been
15 filed with the Board?

16 A. Yes.

17 Q. Has that been prepared in the last 90 days?

18 A. Yes, it has.

19 Q. And does this DWE in your opinion represent a reasonable
20 estimate of the reasonable well cost for the proposed
21 initial unit well under your plan of development?

22 A. Yes.

23 MR. SWARTZ: Mr. Chairman, we have previously filed with
24 regard to this unit a consent to stimulate and the
25 affidavit of Ken Price. I believe you have the DWE's

1 and the notices of mailing. I need to make copies of the
2 D-35 exhibit and I just have an original and I request
3 that I could file a D-35 and A-38 ten copies tomorrow
4 morning if necessary or mail them to you if we don't
5 reconvene tomorrow, if we finish that today.

6 MR. MCGUIRE: I'd like a copy as well.

7 MR. WAMPLER: Okay.

8 MR. SWARTZ: I have nothing further except for the coal lease
9 I believe are already on file.

10 MR. WAMPLER: Mr. McGuire, Mr. Johnson any questions?

11 MR. MCGUIRE: No, we'd like to enter into the same stipula-
12 tion.

13 MR. JOHNSON: Same stipulation.

14 MR. WAMPLER: Okay.

15 MR. MASON: I make my same motion if I may in regard to the
16 stipulation.

17 MR. WAMPLER: You may. I have a motion that the stipulation
18 be accepted.

19 MR. EVANS: Second.

20 MR. WAMPLER: Seconded. All in favor signify by saying yes.
21 (All agreed.) Oppose say no. (None.) We will accept
22 the stipulations. What's your pleasure Board, any
23 questions? Do I hear a motion?

24 MR. MASON: I move we approve the application.

25 MR. WAMPLER: I've got a motion that we approve the applica-

1 tion for D-35. Second. I have a motion and a second.
2 All in favor signify by saying yes. (All agreed.)
3 Oppose say no. (None.) Motion carries. Thank you.
4 We'll take a five minute break. When we reconvene we'll
5 come back to that motion on the Board's agenda number 2.
6 (AFTER A BRIEF RECESS, THE PROCEEDINGS CONTINUED AS

7 FOLLOWS:)

8 (ITEM 2)

9
10 MR. WAMPLER: I call the hearing back to order. We're moving
11 to item number 2 on the agenda. Motion's been made by
12 Oxy USA Incorporated to the Board requesting considera-
13 tion of alternative for escrowing funds from a forced
14 pool unit under section 45.1-361.22.

15 MR. SWARTZ: Mr. Chairman, we have filed a submission act
16 with regard to the escrow question that we're going to
17 be addressing with the Board. You all have ten copies.
18 I have an extra five copies that people who feel they
19 have an interest and want to review, I'll pass out. I
20 don't know if I have enough for everybody but they're a
21 couple of extras here.

22 MR. MASON: We need ten total though.

23 MR. SWARTZ: (Gives Opening Statement on behalf on Oxy, USA)

24 MR. MASON: Mr. Chairman, I was just going to ask you before
25 we get into this. In reading the two provisions that
relate to this and based on what the Board done in the

1 past. Do you have anything to offer us in way of
2 guidance as to the fact that we can in fact do this?

3 MS. PATTEN: Can co-mingle?

4 MR. MASON: No, well, the act doesn't mean exactly what it
5 says, that you'll create an escrow account.

6 MS. PATTEN: I can address that issue. I'm Patty Patten with
7 Oxy, USA, and if you all would have the benefit of
8 legislative history on that. Initially this act was
9 derived, the forced pooling statute, was derived from
10 several different states statutes and one of those
11 pooling that we utilize in drafting this was the State of
12 Wyoming. Wyoming has an unique provision in their
13 statute that allows the escrowing of royalty. So if an
14 operator is producing and he's not sure who's entitled to
15 royalty, in order to protect the royalty interest owner
16 that goes into an escrow account. That statute deals
17 only with royalty interest. It doesn't deal with the a
18 working interest and it doesn't deal with participation.
19 That statute specifically allows co-mingling in one
20 account for a multitude of interest and Mr. Terwilliger
21 will be testifying about how we maintain our Wyoming
22 statute. But when we drafted the initial emergency
23 legislation for coal bed methane, that became effective
24 as emergency legislation. That statute specifically
25 provides that the funds may be co-mingled because that
was made very clear to the legislature during that time

1 that because of the experience that we've had in the ten
2 years we've been involved in Wyoming and because this was
3 going to be even more massive type of operation and
4 because you may deal with units where the escrow fees
5 would far exceed the value of what may be in an account
6 for that. That language was contained in the previous
7 forced pooling statute. When the legislative services
8 revised the entire Oil and Gas act, in 1989 which became
9 effective in March and in July of 1990, they streamline
10 the entire act. And in the process of doing that, they
11 eliminated a lot of the more verbose provisions of the
12 act that in my view made it easier to understand what the
13 intent of the force pooling is. And if you go back and
14 you look at Senate Bill 381, which was from March to
15 July, that does have the co-mingling provision in it and
16 that was always the legislative intent. When they
17 eliminated that specificity, they didn't just single that
18 one provision out. They streamline to a large extent the
19 entire act which made it more difficult.

20 MR. MASON: Yeah, you know I was just looking at the provi-
21 sions, you know, under 21-D says, "And the Board shall
22 cause to be established an escrow account into which the
23 unknown lessor share proceed shall be paid and held for
24 his benefit." And then under 22, 2 and 3, you know, it
25 says, "The Board shall cause to be establish an escrow
account into which the payment for cost and procedes are

1 attribuatble to the conflicting interest shall be
2 deposited and held." I don't honestly know what it means
3 but it would be just as easily interpreted to me that a
4 single bank account for each well, I suppose, would be or
5 each -- and that's what's been done.

6 MS. PATTEN: I understand the way the orders have assigned
7 that. When you look at that act, that you can read it
8 that way I think you can also read it that an account can
9 refer for an individual operator to the Oxy, USA escrow
10 account at X Bank and that account is the account to
11 which any escrow proceeds go into from any Oxy USA forced
12 pooling. When Mr. Terwilliger starts explaining how we
13 propose to do the accounting, it really is irrelevant
14 whether you set up a separate account or whether you have
15 one account because if you set up a separate account,
16 what we have discovered from working with our treasury
17 department and various departments within our company,
18 the accounting and the possibilities and the conflicting
19 claims on this are so incredibility complicated that when
20 I ask a simple question from our departments, "Can any
21 bank handle the accounting?" the response was, "This is
22 the most complicated escrow we've ever seen. No bank can
23 handle this even if they attempted to do it, the cost
24 would be a half a million dollars a year." So the base
25 accounting for the units is going to be, what we're
 proposing to do is that Oxy would do that accounting.

1 So the critical part of it, which is the accounting,
2 would be done, the proposal is we would do it. So the
3 fact that you have that money tied into a unit or tied
4 into a series, is really irrelevant because the bank
5 isn't going to do the accounting.

6 MR. MASON: My concern, though, is the fact that a bank
7 account assumes that the escrow relationship with the
8 bank is as a depositor. What I would consider to be the
9 commercial side of the bank as opposed -- with all the
10 accompanying regulations and rules as opposed to the
11 relationship which you all propose, which is to deal with
12 the trust department and have the funds held by the bank
13 as a trustee or a fiduciary pursuant to an escrow
14 agreement. Now, I see those rules or the rules relating
15 to those rolls as being very distinctly different in
16 terms of the banks responsibility as a trust department
17 or a trust function as opposed to a depositor function.
18 What I'm concerned about is whether or not this language,
19 if you read it literally, it doesn't envision or attempt
20 to envision a depositor relationship only and you're
21 saying that the history and all -- I have no knowledge of
22 those things that you speak of but I think there's a
23 tremendous difference in a relationship that a depositor
24 has with a commercial bank and the relationship you have
25 in the trust department as an escrow person. I may be
anticipating some of the things you're going to say but I

1 mean those are certainly my concerns. I mean, I can
2 certainly see the benefits of what you're propose in
3 terms of accounting and all this. I'm only concerned
4 with that this Board has the authority within the
5 language of the statute to do what it is you propose.

6 MR. SWARTZ: I think you've raised two interesting questions.
7 I have an answer for one and I'm not sure I have an
8 answer for the other one. If I were given a choice
9 between an commercial customer of a bank, to raise your
10 second point first, and being in a trust department
11 escrow relationship with that bank where the investments
12 of my funds and deposits were in U.S. backed Government
13 Securities, I would always pick the trust department
14 because the FDIC problems that we're well aware of --
15 accounts are insured up to a \$100,000 and you can see
16 that even one account based on this example is over
17 \$100,000. As soon as somebody participates in the tune
18 of 50 percent. So I mean you blow by the insure limit of
19 a commercial deposit right quick. If you require the
20 trust department to invest your funds that they have in
21 direct obligation of the United State Government, it's
22 better then the FDIC because the whole United State
23 Government would have to go down the tubes before that
24 money was lost. I mean, it could happen but at that
25 point who cares. I think that's the second question you
asked. The first question you asked, which is an

1 interesting question, and I'll be frank with you, I don't
2 think what we have available to us answers that question.
3 I can't tell you reading this the provision that address
4 the establishment of an escrow account. If they're
5 saying you need one for every well or you can't have more
6 than one well in one or what they're saying. You can
7 make a pretty good argument that the word "an" means one
8 but then I can make a pretty good argument that well as
9 long as every designated operator has a trust account,
10 okay or an account. I just don't know if that this
11 answers the question you're asking and I can't point you
12 to something that -- I want to be frank with you there.
13 I can't pull something else up that says --

14 MR. MASON: My question, I didn't know whether you all had
15 any other information that related to similar provisions
16 in anywhere in which, you know this type of language had
17 been used in any other legislation. I mean, for in-
18 stances, I'm personally very content of the usage of the
19 word, "account within pension trust," which, you know is
20 purely an accounting function but I just wondered, I
21 don't know, what guidance you all may have for us in
22 terms of deciding whether the legislature envisioned this
23 language to mean a depositor relationship or an account,
24 initially what is an accounting relationship.

25 MR. SWARTZ: Having read -- just to maybe summarize briefly
what Patty has said, having read that there is versions

1 of this law that eventually turn into the one we're
2 dealing with today it's clear to me at some point in
3 time it actually says you can co-mingle and when it came
4 out it appears to me that there was -- there is nothing
5 to indicate there was an intent to say you can no longer
6 co-mingle, it just left it up for grabs. At least that's
7 my view of it. But that's my opinion. And beyond the
8 legislative history we could certainly furnish you all
9 with copies of the various versions of that. I don't
10 think there's a specific answer in Virginia to the
11 question you're asking.

12 MR. MASON: I didn't know whether you had anything to offer
13 in that regard.

14 MR. WAMPLER: Two other things maybe I'll just get out on the
15 table as you asked your questions, you can frame them or
16 either answer them now. The most obvious one to me is
17 why the Mellum Bank in Pennsylvania and not a Virginia
18 Bank?

19 MR. SWARTZ: We anticipated you might asked that question.

20 MR. WAMPLER: I thought you might.

21 MR. SWARTZ: And we have an handy answer which I just think
22 I'll tell you and if you want to press Mr. Terwilliger
23 on it you can but we have been unable to find any other
24 bank that would allow us to have the kinds of funds that
25 we anticipate we would be likely to have on deposit for
\$1,500 a year as an escrow. Most of them wanted per-

1 centage and as you know even an half of percent if you
2 have two million dollars on a deposit become -- the fees,
3 it's completely fee driven. It's \$1,500 per account.
4 It's so good a deal that Oxy's just willing to pay it. I
5 mean, we're not going to back it back to anybody. If you
6 could find us a national bank, you know we haven't been
7 able to in Virginia that would give us that kind of a
8 rate.

9 MS. PATTEN: Because of the amounts of funds, we don't know
10 what kind of funds will be involved. It could be \$1,000.
11 It could be \$20,000. Because at the time if we start
12 with the concept that this is going to be a trust
13 relationship, the time the checks are issued and it's
14 transferred out of the account, at that time that that
15 money is being transfer it's exposed. If that bank
16 becomes insolvent during that time, that money to the
17 extent that it's in excess of \$100,000 is not insured.
18 One of the major concerns our company had when they
19 started looking at the stability of banks in Virginia,
20 was if you take the outside, say this is \$20,000,000, we
21 were reluctant to recommend a bank that we felt may not
22 have the financial backing to withstand insolvency to
23 the extent that these sums of money involved. If the
24 Board on the other hand says, "We direct that a Virginia
25 bank be used." we feel that you have in some respect
taken that liability away from us. But that was a major

1 consideration with all of the news recently about the
2 insolvency of banks. We just were a little uncertain
3 about them.

4 MR. MASON: Can I interpose a question? Does the Mellen Bank
5 have any branches in Virginia?

6 MR. SWARTZ: I don't know the answer to that question.

7 MR. MASON: Does anybody know. Mainly, I was curious would
8 they be amenable to process in Virginia? In terms of any
9 enforcement or any relationship that we may have. You
10 know the worse thing, I would think, you know Mike would
11 be a situation in which we would be dealing with funds
12 held in a bank that the jurisdiction of the Courts in
13 this state couldn't even act against.

14 MR. WAMPLER: Right.

15 MS. PATTEN: We understand that.

16 MR. WAMPLER: I think that's the key question here.

17 MR. SWARTZ: Well, they have agreed in the escrow agreement
18 as drafted to be bound by any order of the Board and
19 they've agreed to have the agreement interpreted by
20 Virginia law. So I assume -- having gotten those two
21 things out of them I assume that yes we could, and
22 that's certainly would be a reasonable request on your
23 part. It would be crazy to have some of you that was
24 not amenable to jurisdiction holding these funds.

25 MR. MASON: Exactly.

MR. WAMPLER: Yeah.

1 MR. SWARTZ: That would be certainly something we would
2 pursue with them and based on what you see in the escrow
3 agreement as it currently stands, I would be surprised if
4 they said no.

5 MR. MASON: I thought it was interesting that your zero
6 balance and the draw down from trust don't occur until
7 the check clears was a way to narrow the window of
8 exposure --

9 MR. SWARTZ: We may have given you the wrong document. Did I
10 give you the wrong document?

11 MS. PATTEN: I gave him our old draft.

12 MR. SWARTZ: Okay.

13 MR. MASON: Is that not in the new one?

14 MR. SWARTZ: That is not in the new one because they wanted
15 to charge us some serious money to do that. It's a
16 great idea --

17 MR. MASON: I thought that was -- it's a way to narrow the
18 window down.

19 MS. PATTEN: It was great.

20 MR. SWARTZ: It was so good an idea that it caused them
21 financial pain and they wanted to charge us for it. But
22 what we had proposed originally to do was to have them
23 issue drafts in effect and the money from the trust would
24 not transfer into the account until the draft was
25 received so, they couldn't have our money at no interest.
It deflated, right. But they didn't like that and it was

a great idea.

1 MR. WAMPLER: The other thing was in your examples I didn't
2 see dealt with anywhere or didn't caught in the agreement
3 the tax credit issue and how that is handled accounting
4 wise. I know you're doing the accounting but at least it
5 will be an issue that the Board has to deal with.

6 MR. SWARTZ: There are comments in the packet I've given you
7 all -- I think with regard to both of these and -- on
8 one of them, it's paragraph number 10 and I say, "No
9 provision is made for the payment of state and federal
10 income tax in these calculations." Oxy makes no represe-
11 ntations as to whether or not the escrow account will be
12 regarded as a tax payer and required to pay state and
13 federal income taxes. In addition, the escrow report
14 does not consider the effect if any of the section 29 tax
15 credits which may or may not be available to any tax
16 payer. I'm not going to have a tax lawyer here to
17 testify with regard to this. I don't have any answers.
18 I just want you all to be alerted to the fact that these
19 are issues which some people are going to have to fight
20 out at some time. I'm not sure that you will ever have
21 to deal as a Board with tax credits.

22 MS. PATTEN: Basically, the way we view this account was to
23 the extent that parties have received notices of forced
24 pooling and that indicates their individual interest in
25 the unit is, as to the acreage or percent interest. To

1 the extent they have, for example, a royalty claim that's
2 subject to a conflicting claim, they would have an income
3 interest, an economic interest in the property that
4 theoretically would be eligible for the tax credit if
5 they are in whatever bracket --

6 MR. MASON: Sure.

7 MS. PATTEN: -- and whatever entitles them. At the time that
8 there is -- say you show that there is \$100 attributable
9 to unit C-34 and they're entitled to one eighth of that
10 which would be \$12.50. If they feel that that \$12.50
11 entitles them to the tax credit allocable to that and if
12 they have an aggressive tax advisor, that individual may
13 well like to go ahead and file claim that on his return.
14 Similarly someone who's involved as a working interest
15 owner may elect to claim IDC's in and they also elect to
16 claim the tax credit allocable to that. At any given
17 time, depending on the percent of conflicting claims in a
18 unit, you could have tax credits claim on 400 percent of
19 the actual production which I'm sure when the IRS figures
20 out something's going on in Virginia, that there's going
21 to be an entirely new set of IRS regulations given of
22 this issue. But all we hope to be able to do is to
23 provide sufficient information for the forced pooling
24 applications and the account balance and well by well
25 accounting whether in one account or whether you're in
one, that will give them that ability to seek competent

tax advisement.

1 MR. WAMPLER: Okay. Thank you. May I ask you just one other
2 question? Before you begin the testimony, is it better
3 to ask questions on this agreement now or wait till the
4 testimony in your opinion.

5 MR. SWARTZ: If the questions are fresh in your mind, I mean
6 I have an outline of his testimony, I'll remember that
7 so. I mean, if you want to ask --

8 MR. WAMPLER: Well, it may help as far as him clarifying
9 something or what have you. On page 2, for example, --

10 MR. SWARTZ: Of the escrow?

11 MR. WAMPLER: Of the escrow --

12 MR. SWARTZ: Okay.

13 MR. WAMPLER: -- agreement. You're suggesting the Board get a
14 quarterly report but you're getting a monthly report. Is
15 there any problem with the Board getting a monthly
16 report?

17 MR. SWARTZ: No, the reason that we did it that way, the
18 accounting department at Oxy wants to do monthly account-
19 ing and I didn't know how often you wanted reports. I
20 think you had ordered us to file quarterly reports with
21 regard to the individual wells and that's why I stuck in
22 quarterly but we could provide -- we have the reports
23 from the bank and we could provide them on a monthly
24 basis. Can we swear this witness?

25 MR. WAMPLER: Go ahead.

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CHARLES TERWILLIGER, JR.

a witness who, after having been duly sworn, was examined and testified as follows:

DIRECT EXAMINATION

BY MR. SWARTZ:

Q. Why don't you state your name?

A. Charles Terwilliger, Jr.

Q. Charles could you respond to the Chairman's question and distinguish between the escrow reporting as you envision it and Oxy reporting?

A. What we envision the reporting that we'll be getting from the escrow agent will be just like a savings account statement that you get at home. Basically, it will have a beginning balance, any deposits, including the interest deposits, any withdrawals, and an ending balance, one page. We intend to take that and create well by well reporting. The volume of that reporting as the historical period grows in time, once you're three years down the road you have a stack about like this every month. Or I can put them on microfisch. The volume is you want -- if you're talking the well reporting so that you can communicate with a royalty owner or

1 conflicting claimant, you're talking about a volume that
2 is going to grow tremendously as you go down further out
3 in time. Because, what you're going to see on that
4 reporting is a one line entry for every conflicting
5 owner, for every transaction that takes place on a well
6 per month, excuse me, historically.

7 MR. WAMPLER: But you're representing that you as a corpora-
8 tion will have that substantiated --

9 THE WITNESS: Yes, sir.

10 MR. WAMPLER: -- record? Whenever we may call for it for any
11 specific instances, it would be available?

12 THE WITNESS: If you wanted it in an interim period for some
13 reason, we could provide it for you. We had planned on
14 giving under the terms of the order on a quarterly bases
15 and if you're amenable to every six months, we'll change
16 it to every six months. It's however often you want to
17 receive it. Just realize the volume that you're going to
18 be getting once we get into this thing and we're two
19 years down the road.

20 MR. WAMPLER: Okay. On page three of this agreement, under
21 item number 11, it stops at or, my copy does, anyway.

22 MR. SWARTZ: I will try and find what that use to say. Wait
23 a minute.

24 MR. WAMPLER: I have the old copy if that will help.

25 MR. SWARTZ: It got revised so many times.

MR. WAMPLER: It used to say, "or rights of the persons

1 executing or delivering or purporting to execute or
2 deliver any such documents.

3 MR. SWARTZ: That's what it should say.

4 MR. MASON: Mr. Chairman, if we're going to do that there's a
5 couple of things I haven't noted and I have this old
6 draft that you all might want to comment. If I may just
7 whip through here and you can tell me that they are no
8 longer applicable. On page 1 of the escrow agreement,
9 number 4, "The bank within 7 days shall mail certified a
10 check for the specified amount to the claimant." If I
11 look at this agreement in the Board's order, how was the
12 bank to know where to send it?

13 MR. SWARTZ: The new agreement that you have at paragraph 3
14 says that the bank will only pay on receipt of a cer-
15 tified copy of an order from the Board which directs
16 payment in the amount stated in the order to a claimant
17 whose names in order, where his address is in the order
18 and that's the mechanism.

19 MR. WAMPLER: This is the only agreement that you're repre-
20 senting to the Board at this time, is that correct?

21 MR. SWARTZ: Correct.

22 MR. MASON: Okay. Well, maybe you've addressed all of these.
23 On number 7, on page 2, says, "The escrow agent shall
24 identify to Oxy every three months the name, address and
25 dollar amount," three months from when? I mean, where
does it start?

1 MR. SWARTZ: Every three months to me means quarterly on a
2 calendar year.

3 MR. MASON: Okay. And then it goes on to say, "to claimants
4 which have not been cashed within 90 days,"

5 MR. SWARTZ: No, that's changed. I didn't like that. It now
6 says, "Will provide Oxy every three months a written list
7 of all checks identified by date, pay, address and dollar
8 amount, which have been issued but which have not been
9 presented for payment and paid." So, it goes historical-
10 ly back for --

11 MR. MASON: Okay.

12 MR. SWARTZ: -- because the 90 days didn't do us any good, I
13 felt.

14 MR. MCGLOTHLIN: What figure is that under the new one?

15 MR. SWARTZ: That is now in paragraph 7 of the new agreement.

16 MR. MASON: All right, let me just continue though the next
17 part.

18 MR. SWARTZ: All right.

19 MR. MASON: The next part of that paragraph addresses the
20 escheat thing yet unless you've changed it there is no
21 where in here, you have a procedure by which funds can
22 be disbursed to claimants, but there is no recognition
23 and procedure for disbursement from the account related
24 to any escheat. In other words --

25 MS. PATTEN: That's right and the Board made it clear the
last time that the actual is cheap where you initially

1 don't know the loans that are going to be a separate
2 escrow account. What we realized when we were working
3 on this one is that although today you may know who owns
4 it, in five years that may be an escheat situation.
5 What we envisioned at that point is we would make that
6 available to you in a hearing and identify that we are
7 aware of all of these and then you would direct that that
8 would be disbursed to the escheat.

9 MR. MASON: Okay. But I'm just saying that there seems to me
10 should be some provision here that specifies how the
11 escrow agent would deal with that disbursement only to
12 the affect that in other words, that upon receipt of a
13 Board ordering the transfer of escheated funds or
14 something like -- in other words --

15 MR. SWARTZ: What I think -- I really haven't thought about
16 this problem but if you look back up at paragraph 3.
17 Well, it talks about claims and stuff. We can fix that.

18 MR. MASON: These are just questions that I have. In other
19 words, it seems to me you had a procedure for disburse-
20 ment for claimants --

21 MR. SWARTZ: Right.

22 MR. MASON: -- You recognize the escheat situation but there
23 didn't seem to be a mechanism --

24 MS. PATTEN: That's right. And you need to put in money out
25 of that account (inaudible)

MR. SWARTZ: Well, I think what we really need to look at is

1 what is the mechanism under Virginia law whereby and how
2 funds escheat by statute and we probably need to put
3 something in the --

4 MR. MASON: Well, I don't know.

5 MR. SWARTZ: I don't know either.

6 MR. MASON: Somehow that needs to be dealt with it seems to
7 me.

8 MR. SWARTZ: If we identify an unknown interest, you're going
9 to get the money it's going to be your problem. Do you
10 understand? There would be a separate escrow account for
11 that. What you're talking about is funds that were paid
12 out of this account that nobody never claims by cashing a
13 check which would escheat on a completely different
14 basis. So that's a different problem and I will look at
15 the statutory aspects of what we need to provide that
16 would cause that to happen.

17 MR. MASON: The other thing, on number 10 it says that the
18 bank, "All funds held by the bank shall be invested as
19 follows:" Who makes the investment decision?

20 MR. SWARTZ: The bank trust department.

21 MR. MASON: Okay. In other words it says between these
22 various things, they make the decision? They hold the
23 investment power?

24 MR. SWARTZ: Right.

25 MR. MASON: What if there's a lost? In other words there's a
 possibility that these obligations could be redeemed at

1 then they were purchased for. As I understand it, there
2 is never suppose to be less money in this account than
3 what there were, particularly as to regards to the
4 participation money. What if like, these instruments as
5 I, I'm not a financial whiz, are all interest rate
6 sensitive and there's a possibility that an investment
7 could be liquidated at less than its purchase price. If
8 there's a loss, what happens?

9 MR. SWARTZ: Let me make two --

10 MR. MASON: You don't have to necessarily respond to me. I'm
11 just raising a question.

12 MR. SWARTZ: I have an answer and I thought I'd tell you.

13 MR. MASON: Okay.

14 MR. SWARTZ: The bank under this agreement is reporting to us
15 on a monthly -- to Oxy on a monthly basis so they can
16 work it into their accounting the average rate of return.
17 My assumption is that it would be offsetting -- I'm
18 assuming that we don't lose, that the bank doesn't lose
19 on every investment they had that month and their sum net
20 income, okay? That could be the way to handle it on an
21 accounting bases. Another answer to your question is I'm
22 not sure what the likelihood of that happening with
23 instruments that they have maturities of less than three
24 years is. I don't know what kind of amazing thing would
25 have to happen in the United States for those instruments
to lose.

1 MR. MASON: I know that instruments that are sold at 6
2 percent, you know, they have coupon of 6 percent in
3 prime rate or the normal investment rate goes to 12
4 percent, you're not going to the \$1,000 that you invested
5 for those bonds or those notes or those bills.

6 MR. SWARTZ: Well, tThe government obligations I think this
7 agreement contemplates are T-bills initially, with
8 maturities less than three years and you pay, for
9 example let's say you buy a three year --

10 MR. MASON: I don't --

11 MR. SWARTZ: -- You can pay a face amount and redeem the
12 entire amount so unless you are forced to sell --

13 MR. MASON: Prior to maturity --

14 MR. SWARTZ: -- prior to maturity you'll never take a hit.
15 And because they're short term obligations, I mean
16 that's why we put that in there. I can't guarantee it
17 will never happen but I think -- and if it does happen
18 and there is income in that month, it would lessen the
19 rate of return that month I mean, unless all of them
20 were losers.

21 MR. MASON: I don't know either. I think that's something to
22 be considered and you may want to address that. That's
23 why I was raising this point. The second one in para-
24 graph 12, is it in the new agreement -- particularly to
25 the last thing. It says, "As such as may arise though
or because by its negligence" of the bank?

MR. SWARTZ: Yes.

1
2 MR. MASON: I would suggest that that should include any
3 agents of the bank. My thought about that is bank
4 holding trust companies and trust departments are
5 presently construed. They do a lot of stuff spread
6 around their very subsidiaries. They have people acting
7 for them who really are a part of you know, it's up to
8 what you all decide. Well, it would be someone acting as
9 their agent it would be someone acting in their capacity
10 under contract. It seems to me that they should be
11 responsible also. In 13 it says, "It is agreed a
12 reasonable additional fee should be paid for any unusual
13 or extraordinary services." Is it envisioned it be paid
14 by whom?

15 MR. SWARTZ: The trust assets.

16 MR. MASON: Okay. Does the new version clarify that? I
17 don't know that it says that.

18 MS. PATTEN: Yes, it does. From the escrow account.

19 MR. MASON: Okay. Also, down here where it talks about money
20 for the protection of the escrow property and of itself.
21 Is that also to be paid from the -- in other words, if
22 the bank pays money to defend itself is that to come out
23 of the escrow money?

24 MR. SWARTZ: Right, except in the new agreement we have added
25 parenthesis after itself, (in the event Oxy consents to
the employment of an attorney)"

1 MR. MASON: I mean, that's very troublesome to me because if
2 they were sued, for instances, violating some fiduciary
3 obligation then they could use these peoples funds to
4 defend themselves against those very same people.

5 MR. SWARTZ: Right, and if they lost they would have to make
6 up the funds. Most trust departments when they're
7 sued --

8 MR. MASON: I know they like that.

9 MR. SWARTZ: I do work for trust departments and I can't say
10 they're all the same. But most trust departments when
11 they are sued for negligence, set up a separate account
12 that is not money coming out of the trust because they've
13 been sued in their own capacity. To protect the escrow
14 property, I think they have the right to be paid out of
15 the escrow funds.

16 MR. MASON: I don't know.

17 MR. SWARTZ: Of themselves, I think there needs to be some
18 control over that and we would substitute the Board's
19 permission or something like that but that needs to be
20 addressed.

21 MR. MASON: That's my point exactly. I'm not trying to like
22 suggest things but these are just concerns that I had
23 that I felt like were sensitive points.

24 MR. SWARTZ: Uh-huh.

25 MR. MASON: The last one on that, is the part still in there,
"Shall have a lien on all money, documents or property

held in a --

1 MR. SWARTZ: Yeah.

2 MR. MASON: Okay. If they have a lien on the entire fund, if
3 there was a dispute and they were unpaid wouldn't that
4 prevent any disbursement? If they have a lien on all
5 money?

6 MR. SWARTZ: In theory, yeah but I can't imagine them taking
7 that position. In theory, to answer your question is
8 yes.

9 MR. MASON: I find that troublesome. I mean, I understand
10 they have the right to be paid but I also feel like to
11 tie this whole thing up over a dispute.

12 MR. SWARTZ: Our future negotiation, I think the best response
13 I could make to the points that some of you have raised,
14 in our future negotiations with the Mellen Bank we intend
15 to address these questions. The problem is that on one
16 hand I have you all who have your own concerns and the
17 other hand if I take all this stuff out of here I'm never
18 going to be able to find a bank that will sign this
19 agreement. What I'm saying is that you have raised
20 legitimate points and I am making notes on these and we
21 will see what we can do because we're obviously not
22 asking this thing today anyhow.

23 MR. MASON: Okay.

24 MR. SWARTZ: What we can do to address those concerns and in
25 some respects I may unfortunately come back to you hat

1 in hand and say, "They won't do that." In other respects
2 I think some of the things I think they'll probably will
3 do but we've made a list and I will pursue those.

4 MR. MASON: Okay. One other point. On the provision that
5 provides for the escrow agent can in effect resign. Not
6 withstanding, the escrow agreement may be amended,
7 modified or cancelled?

8 MR. SWARTZ: Right.

9 MR. MASON: Generally, it's my understanding that that is
10 made affect or they can do that only if someone else
11 agrees to accept the funds. Or did you can the situa-
12 tion?

13 MR. SWARTZ: We changed that from the original, that provision
14 and it now says that only if Oxy agrees, they agree and
15 the Virginia Gas and Oil Board approves the modification
16 cancellation.

17 MR. MASON: Normally a trust agreement or an escrow agreement
18 will provide that one escrow agent can not be removed
19 until there is an acceptance of the transfer from someone
20 else.

21 MR. SWARTZ: Right.

22 MR. MASON: I mean, I don't know where the money would go.

23 MR. SWARTZ: I was more concerned that this agreement could
24 not be avoided, modified or cancelled without your
25 consent. If you're satisfied it can happen those
problems can be address, if you're not this agreement

1 can't be terminated. I mean, that's the way it's been
2 ordered.

3 MR. MASON: I mean, my concern was that like you said, that
4 there would be a situation where they could resign.

5 MR. SWARTZ: And then what are you going to do with the
6 money?

7 MR. MASON: Exactly. I hope I didn't belabor that but it --

8 MR. SWARTZ: No. If you don't tell us what we need to look
9 at in negotiating the agreement we have to guess.

10 MR. MASON: What troubles me about all of this, if you really
11 want to know where I'm coming from, is all this language
12 that says, "The Board shall cause to be established."
13 It seems to me that the language of that puts a lot of
14 responsibility on us.

15 MR. WAMPLER: The language of the statute.

16 MR. MASON: The language in the statute I'm looking -- in both
17 instances says, "The Board shall cause to be established
18 an account." Seems to me to be an direction that is our
19 responsibility and that concerns me grievously. Since
20 it's thus far the Attorney General has not yet been
21 ordered an opinion I can't be sued for this.

22 MR. SWARTZ: Why don't you tell them what you told me.

23 MR. TERWILLIGER: If the Board wants to establish the accounts
24 and do the accounting, I'm tickled to death.

25 MR. MASON: No.

MR. TERWILLIGER: I mean, in that that statute directs you to

do it.

1 MR. MASON: No, I'm just saying that I think that implicated
2 as that is, that we have a lot of responsibility --

3 MR. SWARTZ: Yeah.

4 MR. MASON: -- for how this is done. You know, in reading
5 over that I decided that perhaps I should spend some
6 time thinking about what it was I wanted to do to make
7 sure that we did this properly.

8 MS. PATTEN: And that is exactly why we've done the work and
9 came to you for that reason because initially, the
10 preceding statute just simply provided that if there's
11 an escrow account the escrow agent may co-mingle monies
12 received into escrow from any one lessee or operator
13 purchaser or other party legally responsible. One of
14 the concerns that the legislature had was you were going
15 to have several operators out in the area, forced
16 pooling and there needs to be established a procedure
17 and the Board needs to supervise that to insure that not
18 just Oxy but whoever establishes escrow accounts and is
19 taking money that may be attributable and owned by
20 several other people, that that money is protected and
21 that's why we approached it from the trust account was
22 that the discussions we had with members of the legisla-
23 ture, at the time, and with legislative services when
24 they were drafting it and with various members of the
25 department in Richmond.

1 MR. MASON: Is there any documentation of the legislative
2 history of this in terms of like the committee reports
3 or drafts of committee statements or anything about it.

4 MS. PATTEN: I think if you all check with John Herd of
5 Legislative Services and he has probably the most
6 extensive set of records that is available on this
7 issue.

8 MR. MASON: You know, Virginia legislators have always been
9 very shy about committing themselves in writing to their
10 statements in drafting legislation.

11 MS. PATTEN: Kathy Reynolds was also involved in discussions
12 on the escrow accounts and because there were changes
13 made, they're definitely in my mind, there was the
14 concern that the department have more supervision over
15 the account then originally appeared in 381. But
16 between those two people, I think those individuals
17 probably have more information about issue then anyone
18 else. Also, if the state wishes to contact Wyoming
19 since they are the other jurisdiction that has it even
20 though they don't cover working interest and participa-
21 tion, they have least have had several years of ex-
22 perience in handling escrow agreements dealing with
23 royalty interest, that that may be of some help.

24 MR. MASON: Thank you.

25 MR. WAMPLER: Go ahead.

Q. (Mr. Swartz continues.) Why don't you remind us of your

name again, Chuck and maybe we can --

- 1 A. I'm Chuck Terwilliger.
- 2 Q. Where do you live?
- 3 A. Brokmere, Oklahoma.
- 4 Q. What city, larger city is Brokmere?
- 5 A. It's a suburb of Tulsa.
- 6 Q. And you work for Oxy?
- 7 A. Yes, that's correct.
- 8 Q. Do you have a title?
- 9 A. Yes. I'm the manager of joint interest audit.
- 10 Q. What is joint interest audit?
- 11 A. We are the people that go out and check on other operat-
- 12 ors to make sure that they are accounting to us properly.
- 13 Q. So, you do the kind of audit that might some day be done
- 14 with regard to escrow accounts?
- 15 A. That's quite possibly so, yes.
- 16 Q. How long have you been with Oxy?
- 17 A. I'm been with Oxy 10 years.
- 18 Q. How long have you had that position?
- 19 A. I've had that position now for 13 months.
- 20 Q. Before you came with Oxy 10 years ago, what were you
- 21 doing?
- 22 A. I was an airplane mechanic.
- 23 Q. Which job did you like better?
- 24 A. You want a honest answer. I like Oxy better.
- 25 Q. In your experience while you've been with Oxy, could you

1 summarize the kinds of accounting projects that you've
2 been involved in and the kinds of interest you have
3 accounted for?

4 A. Yes, when I first started with Oxy or it's predecessor,
5 City Service, I was in the international accounting
6 area. I have assisted in the development of an automated
7 system for the international accounting. Transferred to
8 Tulsa, was named partnership accounting manager, built a
9 partnership accounting system to account for four limited
10 partnerships, two drilling funds and four legal partner-
11 ships that we have. After that I was named assistant
12 manager of drilling interest accounting. I led the
13 development group in the redevelopment of the joint
14 interest system. After that I was the staff assistant in
15 control of doing special projects, property sells and
16 acquisitions, discontinued operations and then 13 months
17 ago I was named manager of joint interest accounting. I
18 mean, joint interest audit, excuse me and I retained all
19 of my old duties as a staff assistant. We still do
20 property sell and acquisitions, special projects,
21 discontinued operations, in addition to joint interest
22 audit, contractor audits, and vender and audits.

23 Q. How many checks a month does Oxy send out with regard to
24 gas and oil wells to either royalty owners or working
25 interest owners?

A. We generate approximately 62,000 revenue checks a month.

1 Q. Give me the various kinds of accounts that Oxy maintains
2 and accounts for in the ordinary course of it's business?

3 A. Of course we have properties in which we're a 100% owner
4 with no partners. We have normal joint interest pro-
5 perties. We have carried accounts within those pro-
6 perties for non-consents. We still have two drilling
7 funds we account for. We have three legal partnerships
8 that we continue to account for.

9 Q. Is the accounting with regard to revenue and expense
10 accounting, is that accounting centralized?

11 A. Yes.

12 Q. Is it a computer accounting?

13 A. Yes.

14 Q. What involvement, if any, have you had in the design of
15 the computer programing or the accounting programing to
16 do revenue accounting or expense accounting?

17 A. On the expense side, I developed the partnership system
18 and led the redevelopment of the joint interest system
19 which are the two principle systems generating all of
20 the expense entries. On the revenue side, I am familiar
21 with their systems but I have not done any work in them.

22 Q. Just as simply as you can, could you summarize the
23 source of information that comes to Oxy from an account-
24 ing standpoint, starting with a meter chart and what that
25 goes though and then on the expense side without taking
every little detail but giving us some idea how the

1 information comes into the computer system and how it's
2 handled and the options for how that might be handled?

3 A. The meter chart basically are picked up in the field,
4 which would be in Virginia and sent to Oklahoma City
5 where the volumes are entered by well on the computer.
6 That information is transmitted to Tulsa where the
7 contract pricing information is loaded for the sales
8 data, sales price. The computer system will then
9 multiply out volumes times the value to get a lease
10 gross and then it goes through what we call vision of
11 interest, which will apportion each individual par-
12 ticipates share or each owners share. The owners also
13 identified within the system as whether it's a royalty
14 owner, working interest owner, and overriding royalty
15 owner and there's two or three more codes. I can't tell
16 you what all of the codes are for classification of the
17 type of owner. The end of the month all of that's
18 accumulated and checks are written to each revenue owner.
19 On the expense side, invoices are received in the field.
20 They're approved and coded, sent to Oklahoma City for
21 further review, on to Tulsa and input into the system,
22 into the payable system to generate checks to the
23 vendors. That system feeds the joint interest system.
24 Cost goes in there and it goes through division of
25 interest once again. That system creates an output which
gives us our company books. It creates the billings to

1 the joint interest partners for their share of the cost.
2 It also feeds the partnership accounting system data for
3 accumulation in that system for partnership reporting.
4 There is a hook between the joint interest system and the
5 revenue system for those owners who opt to be net billed,
6 which is what their expenses are deducted from their
7 revenue check and in which case the expenses are passed
8 over to the revenue system and when that check is
9 generated for that owner, the expenses are deducted from
10 his revenue. He then receives statements detailing all
11 of the expenses and all of the revenue by well, by
12 classification.

13 Q. You and I have gone over the packet that we've submitted
14 to the Board --

15 A. Uh-huh. (Witness nods head in affirmative response.)

16 Q. Under the escrow agreement that we have, in fact you had
17 a hand in drafting and negotiating to some extent
18 anyway, and the packet that we've submitted. Could you
19 tell the Board what you, I think you've given them part
20 of the answer, but what kind of information you envision
21 coming from the escrow account, whoever it is that's the
22 escrow agent and then limiting your answer now, not
23 talking generally about all the kinds of accounting but
24 limiting your answer, the kind of promise you see with
25 coal bed methane, what kind of reporting would be
generating internally by Oxy?

1 A. We of course, as I said earlier, would get a one page
2 statement similar to a savings account statement from
3 the escrow agent. We intend to account right now for
4 the two escrow accounts separately. The escrow account
5 for the working interest contribution of a well cost
6 because that contribution is based on the well estimate
7 and not actual cost. That number will not tie to
8 anything in our books, in our ledgers. So, therefore we
9 propose to maintain that escrow account just on like a
10 P.C. system where we will track it by owner, the date of
11 the deposits, the amount of the deposits and then each
12 month when we get the earnings of the account, the
13 escrow account, from the agent we will then put that in
14 the system and just let the computer spread it to each
15 owner based on the number of days and dollars that they
16 had on deposit for that month. That one, I think, is
17 real simply and straightforward. The royalty owners --
18 for the royalty owners we propose to handle that one in
19 our normal revenue system. We will suspend all of the
20 royalty owners who have conflicting interest. The
21 checks will be cut out of the revenue system into the
22 escrow agent. The deposits will be made monthly when we
23 get the statement from the escrow agent. We will input
24 the interest. And here's where we're going to have to
25 make some modifications just a little bit and shouldn't
be a big problem, to allow passing of the interest to

1 only the conflicting royalty owners. It may be that
2 we'll handle that interest as a credit to the expense
3 side which allows us to go direct to an individual owner.
4 Those checks, once again, will be cut to the escrow agent
5 and sent out. We intend to use the partnership account-
6 ing system to accumulate cost for reporting by owner.
7 It's a system that's design to handle -- it can handle
8 whatever nine times nine hundred and ninety is owners
9 within the system. It will accumulate every charge,
10 every credit on a historical bases. We can create a
11 report by group of owners, by well. We can't narrow the
12 report down and get it by owner. We will have it by
13 well. We'll also use the partnership system to accumu-
14 late the well cost, the operating cost. Those will be
15 deducted from the working interest owners revenue checks
16 before those checks are sent to the escrow agent. And
17 that's basically it. We don't foresee any major prob-
18 lems.

19 Q. You indicate that you would be keeping records of the
20 royalty interest for example --

21 A. Uh-huh.

22 Q. -- and calculating that on your computer system and then
23 cutting the checks to the escrow agent?

24 A. That's correct.

25 Q. Did I understand you to say that you would be keeping
track of the royalty interest collective rather than

individual --

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A. No.

Q. -- with regard to any potential claim.

A. No. The royalty interest will be kept individual by owner by well, by month.

Q. Have you looked at or considered, have you looked at the ownership problems with regard to coal bed methane in Virginia?

A. Yes, sir.

Q. Have you seen this exhibit before?

A. Yes, I have.

Q. What is this exhibit attempt to show?

A. This exhibit was developed by one of our legal counsels and I think it (inaudible) to show a worse, what I hope is a worse case example of what could happen in the coal bed methane frack.

Q. Are you going to make any effort at all to do what if accounting, by that I mean take this worse case example, are you going to do what if A wins, what if L wins at the end on any kind of ongoing basis?

A. No, sir.

Q. Okay. If one of these people in this worst case scenario would like to know what his or her piece of the Virginia lottery at the end of this lawsuit. What information do you believe under the system that we're proposing would be available to them and whether or not if they wanted to

1 spend the time they could utilize that information to
2 make estimate?

3 A. What we would propose is to tell that owner what the 100
4 percent share of the royalty escrow account was on that
5 well and then if they had 50 percent of it or 3 percent
6 or 2 percent of it they would have to multiply out their
7 percentage or if that's what their claim was. They would
8 have to multiply out their percentage to figure out what
9 their individual piece is.

10 Q. And the same for the participating interest?

11 A. Yes.

12 Q. What information, if any, would be available for carried
13 interest owners?

14 A. On a carried owner we will generate a pay out statement
15 on a monthly basis.

16 Q. In terms of the kind of information that parties and the
17 Board would need, when the parties come before the Board
18 and look for a payout, okay?

19 A. Uh-huh.

20 Q. Have you reviewed generally the packet and the kind of
21 information that showed as a pay out?

22 A. Yes.

23 Q. Okay. Would the information that you would have avail-
24 able in your accounting system be more or less detailed
25 than this?

A. It would probably be more detailed --

Q. Okay.

1 A. -- because it would show the proceeds by month received.
2 It would show the expenses by month and also by account-
3 ing classification.

4 Q. Can you tell me whether or not the information which Oxy
5 would be generating in house taken together with the
6 escrow agent report that sort of a account balance,
7 reports that you're getting would in your judgement
8 enable the parties and the Board to enter a well reasoned
9 and very computed order at the end to pay out the escrow
10 accounts?

11 A. Yes, it would.

12 Q. In terms of passing information to conflicting claimants,
13 do you have a request as to how those, how that informa-
14 tion passes? Do you wanted funneled though the Board? I
15 mean, do you have a recommendation with regard to that?

16 A. I guess what I would like to see is you know, some way
17 of limiting frivolous requests for information. I don't
18 want to see 180 claimants sending me something every
19 month, telling me that they want to know what their share
20 is worth, if they are successful. I sometimes, I wonder
21 if that should go though the Board. The Board should
22 have some kind of idea what they're expecting the
23 operator to provide. I'm not sure I know a solution but
24 it -- I guess what I'm saying is, I don't have a problem
25 if it comes direct to me as long as the magnitude just

1 doesn't grow horrendous. We currently have a department
2 that answers phone calls from royalty owners. It's
3 staffed by three people with a 1-800 number. The calls
4 could come in there but it's going to take a while to get
5 responses. I's almost like to see the Board say that
6 we'll provide reporting to these people on a quarterly,
7 semi-annual bases or something like that and in the mean
8 time, folks you just got to sit on your hands. I don't
9 know if you guys can do something like that but it would
10 sure be beneficial.

11 Q. Oh, I know. There is one last area. Could you comment
12 on the fees that Oxy has agreed to pay under the escrow
13 agreement as drafted and the question of fees associated
14 with individual accounts or percentage fees?

15 A. We shopped around, we did some shopping for an escrow
16 agent. We shopped primarily at banks where Oxy had had,
17 either had or had had a business relationship at some
18 point in the past. The majority of the banks wanted on a
19 percentage bases. Mellum was willing to accept it on a
20 \$1,500 account basis. We felt that in the long run we
21 were a lot better off with Mellum's \$1500 offer. As long
22 as we could limit it to two escrow accounts. What
23 happens to you, if you start blowing that up and all of a
24 sudden you start creating two escrow accounts per well
25 times two hundred wells and you taken, you've got
\$600,000 a year in escrow fees that somebody's going to

1 have to pay because I can't afford to pay it, not for a
2 agent. We kindly narrowed in on Mellum simply because of
3 their fees, the fee structure. We have had a good
4 working relationship with them in the past. I don't know
5 if they have any business relationships at the present
6 time.

7 Q. One last thing and that's all the questions I have and
8 you can ask him some questions. In terms of reporting,
9 and this is simply something I'd asked you to think
10 about, there are confidentiality provisions in the
11 statute and what I would anticipate the reporting from
12 Oxy to the Board or to potential claimant to be would be
13 revenue reporting rather than production reporting and in
14 entering an order or giving consideration to the kind of
15 information that Oxy, the escrow agent and the Board need
16 to make available to people, to the public, you should
17 consider that there is at least to us from a confiden-
18 tiality standpoint a big difference between revenue
19 reporting and production reporting. And if we're going
20 to be required to produce for public disbursal, MCF or
21 MMBTU produced by any given well and actual prices as
22 opposed to a gross number, revenue number, we may be
23 force to asset some of our rights to confidentiality and
24 I think that the people really need to know the numbers
25 if they want to figure what their claim is potential
worth, we're willing to provide them with the dollars and

1 cents numbers to the extent that we start to get into
2 production figures, they may be a confidentiality
3 problem. I'm just alerting you to that if you give some
4 consideration to that in looking at this issue. Have an
5 questions for Chuck?

6 MR. EVANS: Mr. Chairman, I've got a couple. I seen that
7 you've checked with Mellum and I've heard you've checked
8 with other people, do you have any of the proposals made
9 by any other banks that you contacted that you could
10 maybe let us see?

11 MR. SWARTZ: It's all been oral. I think primarily tele-
12 phones. So, no we don't.

13 MR. EVANS: That's fine.

14 MR. WAMPLER: You mentioned earlier about people taking their
15 share -- if you have protection of production figures,
16 how could we possible deal with that issue?

17 MR. SWARTZ: At what point, I mean if there are conflicting
18 claims you wouldn't know who to give -- I mean, until
19 conflicting claims are resolved, I mean I could create
20 examples and this much might be true, but let's assume
21 there's a conflicting claim with regard to every interest
22 in the unit. My assumption is that Oxy or the other
23 operator would be producing from that well and paying a
24 100 percent of the funds after deducts that you can take,
25 in the escrow. You wouldn't know who to give it to. If
50 percent of the unit was in dispute and 50 percent

1 wasn't, I would suppose that the 50 percent that was not
2 in dispute was not subject to escrow if people wanted to
3 assert their rights, fine, because there would be no
4 legal impediment to it. But for a interest that's in
5 dispute or subject to a conflicting claim, I don't think
6 there's any choice but to sell the gas and pay the
7 proceeds into the escrow account.

8 MR. WAMPLER: You did say that you were going to maintain the
9 detail accounting --

10 THE WITNESS: Historically.

11 MR. WAMPLER: -- so that you could recreate that at any point
12 in time?

13 THE WITNESS: Yes.

14 MR. SWARTZ: Let me ask you this. Five years hence, six
15 years hence, ten years hence, are you going to have
16 production information?

17 THE WITNESS: Uh-huh.

18 MR. SWARTZ: And you're going to have that information?

19 THE WITNESS: Yes.

20 MR. WAMPLER: Detail?

21 THE WITNESS: Right.

22 MR. SWARTZ: Detailed.

23 MR. WAMPLER: That would completely recreate a complete
24 history that you were talking about?

25 MS. PATTEN: With respect to your question about parties
taking in kind, to the extent that someone would elect

1 to participate and their interest would conflict 100%
2 with another party who also wants to participate, you
3 basically would have, I guess, duelling gas contracts.
4 If one party elects to participate doesn't have a gas
5 contract, then you don't really have an initial of
6 taking it and kind under the operating agreement. If
7 that other party has a gas contract but they have reason
8 to believe is a better contract and a better price than
9 what you think you can market the gas for, then I think
10 that's an area that the parties would discuss and see if
11 you feel that that other market is better although in
12 that situation you get into areas of anti-trust because
13 you're discussing the marketing of gas and prices. So,
14 that's a real sensitive area coupled with disclosure of
15 pricing information and production that we're real
16 concerned about and we're not really sure, as Mark said,
17 how it all fits into this.

18 MR. WAMPLER: Any other questions? The Board wishes to do
19 this, take under advisement --

20 MR. MCGUIRE: Mr. Chairman, are you going to allow at some
21 point comments of interested parties. I represent
22 Ashland Exploration --

23 MR. WAMPLER: Absolutely.

24 MR. MCGUIRE: I just wanted to make sure you weren't going to
25 make a decision right now. I would certainly prefer to
have this continued and apparently is something that

can't be resolved today so that we can --

1 MR. WAMPLER: I think I was going to clarify that.

2 MR. MCGUIRE: Thank you.

3 MR. WAMPLER: But we are open to other people addressing the
4 Board. I'll go ahead and say what I was going to say
5 and then I'll listen to any objection to that. The
6 Board could consider taking this under advisement,
7 obviously continuing but letting it be known that we
8 will consider an alternative to the escrowing that we're
9 currently doing and allowing Oxy and others to continue
10 to pursue, continue to talk with the bank, we'll talk
11 with some folks and follow up and certainly will listen
12 to and receive in writing any comments that interested
13 parties have. If that's what we agree to do. Is that
14 consistent?

15 MR. MCGUIRE: Yes. I have to say I'm not quite sure how I
16 come down on this. It hits me cold. I think it offended
17 me when I first this agreement Ashland Exploration being
18 someone who is either going to contribute a 100 percent
19 or participate on a carried bases, is going to have a big
20 investment in this and I can't, couldn't see who's going
21 to be protecting Ashland, whether it was going to be Oxy,
22 they appear not to want to disclose information, the
23 Board is not sure how much obligation it wants to take
24 and Mellum Bank, I'm not sure how much obligation it
25 wants to take and I'm trying to find out who's going to

1 protect my client and I'm sure there's other people out
2 there who have similar concerns.

3 MR. WAMPLER: Would you just state your name for the record?

4 MR. MCGUIRE: I'm Grant McGuire for Ashland Exploration. I
5 would appreciate it, I'd like to work with Oxy's counsel
6 on this. If we could exchange information, if they filed
7 something with the Board, proposal, that they give me a
8 copy because I am very interested and I would be happy to
9 do the same with mine, if I have any, or comments.

10 MR. WAMPLER: Anyone else wishing to address the Board on
11 this matter?

12 MR. MASON: Mr. Chairman, I'm still back to this authority
13 issue. I would be very interested in counsel for Oxy if
14 they have any, you know something that they might put
15 together in the form of a legal position on their belief
16 that we can do this. You know, I think that might be
17 appropriate.

18 MS. PATTEN: We'd be happy to do that. We do have quite a
19 bit of information on it.

20 MR. MASON: I think that in making a decision on that issue,
21 you know we're going have to resolve whether we can and
22 I would feel much more comfortable in having something
23 then other, some real concrete bases.

24 MR. MCGLOTHLIN: I really would like to see Attorney General's
25 opinion.

MR. MASON: I was thinking more in terms of getting something

1 from you and giving it to him and saying, "What do you
2 think?"

3 MR. SWARTZ: We will take lead of that.

4 MR. MCGLOTHLIN: If we allow motions for Oxy to well, to
5 present motions as to why we can do this, I think we
6 ought, if there's anybody out who wants to take the
7 other side --

8 MR. WAMPLER: Of why we shouldn't.

9 MR. MCGLOTHLIN: -- of why we shouldn't, feel free to.

10 MR. MASON: As I understand it, you all have made a motion
11 for us to adopt a rule to essentially allowing this and
12 all I was asking for was any support or some you know,
13 in the form of memorandum or you know, that would
14 support the legal position that we have the authority to
15 do so.

16 MR. SWARTZ: And I have the list of the things that, questions
17 that people have asked and that will be on my list to
18 address. I had not anticipated that you all would make a
19 decision today and I frankly expected this to be con-
20 tinued but if we don't start the ball rolling at some
21 point in time we're never going to find out whether or
22 not we can do this so, I would not oppose a motion or any
23 decision to continue because I frankly, we all expected
24 that was going to happen. We will try to answer, -- I
25 would like it to continue to the next hearing though,
because we'd like to come back and try and answer some

1 of the questions that you all have raised. We don't have
2 any money yet that we have to put into an escrow account
3 but eventually we're going to have some and we would like
4 to --

5 MR. WAMPLER: Well, your motion was requesting the Board to
6 consider an alternative and I was just suggesting the
7 Board may want to say that it is willing to consider
8 this as an alternative and look further and explore it
9 further and continue it to next hearing. That way, if
10 the Board's willing to do that, you have something that
11 is on record, that is being considered, whether or not
12 opportunity for comment. That makes it a little bit
13 less nebulous for interested parties.

14 MR. MCGLOTHLIN: Mr. Chairman, I would like Oxy to present to
15 the Board written proposals from various financial
16 institutions on what their cost of handling the escrow
17 accounts would be.

18 MR. SWARTZ: Can't I substitute for that because we won't get
19 a written proposal. Can I substitute that a letter or a
20 (inaudible) from the people in Oxy who have done a poll
21 to get prices saying, "I called this bank, this is what
22 they wanted." I mean, we're not taking bids. I don't
23 think we could realistically.

24 MR. TERWILLIGER: It's going to be hard to get somebody to
25 commit to real dollars to date because you can't tell
them how much money's going to be in that fund and that

1 has a great deal of impact on the anticipated fees. You
2 know, we're using some wild guesses.

3 MS. PATTEN: I'll have our people compile whatever information
4 we can get and put that together and to the extent we
5 have conversations, we'll just confirm that in writing
6 and make those letters available. Whether the result is
7 that they can't tell us because of the amount of money or
8 whatever, we'll have that.

9 MR. MCGLOTHLIN: Yeah, something in writing.

10 MR. PATTEN: Yeah, we'll do that.

11 MR. MASON: Also, if I may interrupt again, the question that
12 I raised and Mike mention too about whether if it is in
13 fact not a bank licensed in Virginia or doing business in
14 Virginia that they would be agreeable to enter into some
15 sort of jurisdictional agreement.

16 MR. SWARTZ: I got that on my notes.

17 MR. MASON: Okay. I think that's very important to us. I
18 move we continue this hearing to the docket of the next
19 meeting of this Board. Subject to Mr. Wampler's proviso
20 that included in that is the expression of this Board to
21 be opened to examining this issue both as to whether we
22 can do this and if so, on what terms.

23 MR. WAMPLER: Do I hear a second? Second.

24 MR. WAMPLER: Motion is second. All in favor signify by
25 saying, "Yes." (All agree.) Oppose say, "No." (None.)
Motion carries. Now we have an decision. Do we continue

1 in route or do we stop until tomorrow? Do we have an
2 contested hearings here this afternoon?

3 MR. MULLINS: Your Honor, I think Edwards and Harding has
4 three and there's been no objections filed.

5 (AFTER A BRIEF RECESS, THE PROCEEDINGS CONTINUED AS
6 FOLLOWS:)

7 (ITEM 8)

8 MR. WAMPLER: 29 conventional gas well as requested by
9 Edwards and Harding.

10 MR. MULLINS: Yes, sir, Your Honor. My name is Tom Mullins.
11 I'm with the Street Law Firm in Grundy representing
12 Edwards and Harding. This involves a unit that is
13 contain as the Board heard earlier in this inter deve-
14 loped area and that accounts for the shape of the unit.
15 I will have one witness on today on this particular unit
16 and that will be Mr. Mike Evans. If we could have Mr.
17 Edwards sworn at this point.

18
19
20 MICHAEL L. EDWARDS

21 a witness who, after having been duly sworn, was examined and
22 testified as follows:

23
24 DIRECT EXAMINATION
25

BY MR. MULLINS:

- 1 Q. All right, sir, what do you do for a living?
- 2 A. I'm president of Edwards and Harding Petroleum Company.
- 3 Q. And sir you've testified before this Board upon prior
- 4 occasions and have been excepted as an expert witness in
- 5 the oil and gas industry, is that correct?
- 6 A. Yes, that is true.
- 7 Q. All right, sir. Are you familiar with the application
- 8 filed by Edwards and Harding for a drilling unit desig-
- 9 nated by EH-29?
- 10 A. Yes, I am.
- 11 Q. All right. Is Edwards and Harding seeking to force pool
- 12 the interest in unit EH-29, identified on the plat which
- 13 was attached to the application?
- 14 A. That is correct.
- 15 Q. Has notice been sent to all the interested parties by
- 16 certified mail as required by statute?
- 17 A. It has.
- 18 Q. What size is this particular unit?
- 19 A. 143.21 acres.
- 20 Q. All right. How much of this unit is lease and how much
- 21 is outstanding?
- 22 A. The leased acreage in the unit is 98.8 percent. There's
- 23 1.2 percent that's unleased.
- 24 Q. All right. What is Edwards and Harding's interest?
- 25 A. Our interest is 60.9 percent.

1 Q. All right. Do you want to dismiss any persons lease
2 subsequent to your filing of this application?

3 A. Yes. We've reached agreement with Cabot Oil and Gas
4 Corporation regarding their interest in this well. They
5 had 37.84 percent of the unit under lease via the Georgia
6 Pacific property.

7 Q. All right, sir. Is there anyone else?

8 A. No.

9 Q. Who owns the drilling rights in this unit?

10 A. We own the majority of the drilling rights for this
11 unit, Edwards and Harding Petroleum.

12 Q. All right, sir. Is this a gas well?

13 A. This is a gas well. That's correct.

14 Q. What formation or formations are you asking to be forced
15 pooled?

16 A. We would ask that all the prospective productive forma-
17 tions in this area be included, the Devonian Shell, the
18 Berea Sand, the Big Lime, the Maxtonn and Raven Cliff
19 Sand.

20 Q. All right, sir.

21 MR. EVANS: Excuse me. Clarification, from the base of the
22 Devonian up?

23 MR. SWARTZ: That would be fine.

24 Q. (Mr. Swartz continues.) All right, sir, maybe this would
25 be of point here. Might notes and typographical errors
in the application on page 2 under percentage ownership

1 in tract 1. Is there any change that need to be made in
2 that part of the application?

3 A. Yes, sir. That reads for the lease interest 30.82
4 percent, that should read, 34.82 percent.

5 Q. All right, sir. Also for the estimated cost for drill-
6 ing, completing and producing well also on page 2 at the
7 bottom, is there any change, correction that needs to be
8 made on that provision?

9 A. Yes. That needs to be altered to \$261,695.

10 Q. All right, sir.

11 MR. WAMPLER: \$261,695.

12 THE WITNESS: Correct.

13 Q. (Mr. Mullins continues.) What is the proposed depth of
14 the well?

15 A. 5385 feet.

16 Q. All right. Have you attempted to contact each party
17 concerning an agreement prior to filing your application?

18 A. Yes, we have.

19 Q. What efforts were made and what were the results?

20 A. We've made extensive personal contact with all the lease
21 and unleased interest. The most difficult tract was the
22 drill site property which is the Orson Ratliff heirs
23 property in which there's numerous property owners.
24 We've been able to find all but one owner, Ms. Phyllis
25 Fields of New Alba, Ohio. She's the only outstanding
interest owner at this time.

1 Q. What's her percentage of ownership?
2 A. She owns 1.2 percent of the unit.
3 Q. All right, sir. Were leases sent to these parties or to
4 the parties?
5 A. Yes, they were and our land agent has personally visited
6 Ms. Field in Ohio in an attempt to sign her and her
7 husband.
8 Q. Okay. Was due diligence used to locate the party?
9 A. Yes, sir.
10 Q. So I guess I need to ask you who's interest and drilling
11 rights are you seeking to force pool here today?
12 A. On page 4 of exhibit B, the only interest that we're
13 seeking to force pool is that of Phyllis and Damsel
14 Fields or Albania, Ohio.
15 Q. All right, sir. Is Edwards and Harding requesting to be
16 named as the drilling operator in this unit?
17 A. Yes, we are.
18 Q. Okay. Was an AFE prepared for this unit?
19 A. Yes, it was.
20 Q. I'd like to show you this document and ask you to
21 identify it and state whether that is the AFE prepared
22 for this unit.
23 A. That's correct.
24 Q. Are these ten copies, copies of that same document?
25 A. Yes, sir.
MR. MULLINS: I'd like to hand these to the Board.

1 Q. (Mr. Mullins continues.) Was this AFE prepared by a
2 person knowledgeable in the cost and the operation of
3 wells of this type?
4 A. That is correct.
5 Q. Okay. Are you familiar with the AFE itself?
6 A. I am.
7 Q. All right. Is it your desire to have that AFE filed as
8 an exhibit to this application?
9 A. Yes, sir.
10 Q. Based upon your experience in the gas industry, is this
11 a reasonable AFE?
12 A. We believe it to be, yes.
13 Q. Okay. Have you previously filed with the Board a joint
14 operating agreement in the application on wells EH-31
15 and EH-36 the provisions in which will also apply to
16 this well?
17 A. We would anticipate that the operating agreement to be
18 used in this unit would be similar to that of the
19 previously mentioned units.
20 Q. Okay. Are there any owners out there who have decided
21 to be a nonparticipating operator?
22 A. Not that we're aware of at this time.
23 Q. Does any amount of money need to be escrowed by the
24 Board?
25 A. No, sir.
Q. Okay. What is the estimate production over the life of

this well?

1 A. We estimate that the reserves and production of this
2 well to be approximately, 400,000,000 cubic feet of gas.

3 Q. All right. What's the, and maybe I'm using this term
4 wrong, reserves of the unit?

5 A. The same figure.

6 Q. All right, sir. Is there a bond in place for plugging
7 the well to the necessary statutory reclamation proce-
8 dures?

9 A. Yes, sir. We have a state wide bond in place.

10 Q. All right. That's all the presentation we have of Mr.
11 Edwards unless the Board has some questions.

12 MR. EVANS: Mr. Chairman,

13 MR. WAMPLER: Mr. Evans.

14 MR. EVANS: I've got a question or clarification. On the map
15 that you have up on the wall there that you eluted to,
16 you have a yellow area that's been designated as fully
17 developed or previously develop or whatever.

18 THE WITNESS: Uh-huh.

19 MR. EVANS: We have in previous before this Board another map
20 similar to that that shows a slightly different area as
21 being designated as developed as being submitted by Cabot
22 Oil and Gas and I'm assuming that this covers
23 the same area?

24 THE WITNESS: I assume that to be the case.

25 MR. EVANS: Okay. I guess what I'm asking is there are some

1 statutory units that have been created, I'm I not
2 correct?

3 THE WITNESS: Yes, that's true.

4 MR. EVANS: Where does those lie in that?

5 THE WITNESS: The one's that I am aware of --

6 MR. EVANS: Where does this well lie in relation to those?

7 THE WITNESS: This well is right here.

8 MR. EVANS: And where are those statutory created units?

9 THE WITNESS: No, excuse me. The EH-29 well is right here.

10 There have been statutory units created on this well, EH-
11 8, EH-9, EH-10 and EH-15.

12 MR. EVANS: Okay. Are there voluntary units established in
13 there also?

14 THE WITNESS: Yes, sir. EH-13, which bounds the proposed EH-
15 29 unit, EH-30, which also bounds the EH-29 unit, EH-32,
16 which is immediately to the south to the EH-29 unit and
17 the EH-12, which is to the west of this.

18 MR. EVANS: Has any of this come before the Board, those
19 particular units that you were just discussing?

20 THE WITNESS: No, sir. Those have all been -- and most of
21 those wells have been drilled and are in production.

22 MR. EVANS: I guess what I'm asking is, I'm trying to take a
23 look at this and place it someplace within this context.
24 If you would --

25 MR. MULLINS: Can I be of some help?

MR. EVANS: Sure. This is what Cabot proposes which you have

a copy of.

1 MR. MULLINS: That's the EH-29 unit right there.

2 MR. EVANS: This is not legible for me anyway.

3 MR. MULLINS: Yeah, I know.

4 MR. EVANS: And this is the EH-29?

5 MR. MULLINS: Correct.

6 MR. EVANS: Okay. So that is previously proposed. I suppose

7 that you're going to do a couple of more here just --

8 MR. MULLINS: Yeah, this is the last one in this field.

9 MR. EVANS: Okay, that's fine.

10 MR. WAMPLER: Do you have the certified mail and returned

11 receipts that you --

12 MR. MULLINS: Haven't those been previously filed with the

13 Board, the copy of those?

14 THE WITNESS: Yes, sir. Those were filed on Thursday with the

15 Gas and Oil Board I believe, according to my personal.

16 MR. WAMPLER: Have any other questions members of the Board?

17 We can just subject to the filing of that, clarification

18 of that. Have a motion?

19 MR. MCGLOTHLIN: So moved to --

20 MR. WAMPLER: Approve.

21 MR. MCGLOTHLIN: -- approve.

22 MR. WAMPLER: Request on EH-29, have a motion for approval.

23 Second. MR. WAMPLER: Motion is seconded. All in favor

24 signify by saying yes. (Majority agree.) Oppose say no.

25 MR. EVANS: No.

1 (ITEM 9)

2
3 MR. WAMPLER: Next item on the agenda is EH-27.

4 MR. MULLINS: Mr. Chairman, again for Edwards and Harding,
5 I'm Tom Mullins. We're here on a pooling application of
6 Edwards and Harding and location variance request on a
7 unit designate as EH-27. We have one witness to present
8 today and that would be Mr. -- We have one witness Mr.
9 Mike Edwards to present here today. We request that he
10 be sworn at this time. Well, we have two witness, Mr.
11 Mike Edwards and another witness.

12 MICHAEL L. EDWARDS

13 a witness who, after having been previously sworn, was
14 examined and testified as follows:

15
16 DIRECT EXAMINATION

17
18 BY MR. MULLINS:

19 Q. Could you please state your name for the Board, please?

20 A. Michael L. Edwards.

21 Q. All right, sir, and you just finished testifying concern-
22 ing other wells and you have testified before the Board
23 before concerning forced pooling applications. Is that
24 correct?

25 A. That's correct.

1 Q. All right, sir. Are you familiar with the application
2 filed by Edwards and Harding Petroleum Company for the
3 drilling unit designated as EH-27?
4 A. Yes, I am.
5 Q. All right, sir. Where is that drilling unit located?
6 A. This well is located in the Haysi quadrangle of Dickenson
7 County, Virginia. I believe the public notice that was
8 sent out by the Board identified this as being in
9 Buchanan County but this well is actually located in
10 Dickenson County.
11 Q. All right, sir. Is Edwards and Harding Petroleum
12 Company seeking to force pool the interest in the unit
13 EH-27 identified on the plat as part of the application?
14 A. Yes, we are.
15 Q. And you're also asking to be the operator and obtain a
16 location variation, is that correct?
17 A. That's correct.
18 Q. All right, sir. Has notice been sent to the interest
19 parties by certified mail by return receipt requested?
20 A. Yes, it has.
21 Q. Okay. What size is this unit?
22 A. 123 acres.
23 Q. All right, sir. How much of the unit is leased and how
24 much is outstanding?
25 A. The total lease interest in this unit is 83.15 percent,
the unleased interest is 16.85 percent.

1 Q. What are the interest of Edwards and Harding?

2 A. We currently have under lease 50.38 percent. We also
3 have voluntary unit agreements with two other operators
4 that have the remaining lease interest, Columbia Natural
5 Resources and Equitable Resources Exploration.

6 Q. So I guess I need to ask you, do you want to dismiss any
7 party leased subsequent to Edwards and Harding's filing
8 of it's application?

9 A. Yes, sir. As I previously stated, we have reached an
10 agreement with Columbia Natural Resources and with
11 Equitable Resources Exploration.

12 Q. All right, sir. This is a gas well is it not, conven-
13 tional gas well?

14 A. Yes, sir.

15 Q. What formations are you asking to be forced pooled?

16 A. The Devonian Shell, Berea, Big Lime, Maxton, and Raven
17 Cliff formations.

18 Q. All right, sir. What is the proposed depth of this
19 well?

20 A. 4,750 feet.

21 Q. Have you attempted to contact each party concerning an
22 agreement prior to filing your application that we're
23 here on today?

24 A. Yes, sir we have.

25 Q. Okay. What efforts were made and what were the results
of those efforts?

1 A. We contact each of the parties and we have on going
2 negotiations with certain of them and I'm confident that
3 within 30 to 45 days we'll have several of these, at
4 least 2 of these parties voluntarily signed. Certain of
5 the parties have indicated that their defiantly not
6 interested in leasing. Their not unfriendly but they
7 just don't want gas development on their properties and
8 for that reason we have no recourse except to seek
9 redress though the pooling provisions.

10 Q. All right, sir. Were leases sent to the parties?

11 A. All the parties have been provided with leases, yes,
12 either in person or mail.

13 Q. Okay. As an exhibit to the application there is the
14 list naming the parties that are not leased isn't that
15 right?

16 A. Yes, that is correct.

17 Q. And you did use due diligence to locate these parties?

18 A. That is true.

19 Q. Okay.

20 A. And as I said, I anticipate that certain of these
21 parties will be leased within 30 to 45 days.

22 Q. All right. Who's interest and drilling rights are you
23 seeking to be forced pooled here today?

24 A. Beginning on page 4 of exhibit B we would seek to pool
25 the interest of the Alvin Puckett heirs, the interest of
Mr. Hugh Belcher, he's the owner of the interest iden-

1 tified on the plat belonging to Uni-Puckett and to
2 Maggie Hill, The Dickenson Board of Education, the Becky
3 Epling estate and the Fannie Gilbert heirs who represen-
4 tative is Lynn Gilbert.

5 Q. All right, sir. Is Edwards and Harding requesting to be
6 named as the drilling operator in this unit here today?

7 A. Yes, sir we are.

8 Q. Was an AFE prepared?

9 A. Yes, it was.

10 Q. And is the document you have before you that AFE?

11 A. That's correct.

12 Q. All ten copies of that AFE identical copies?

13 A. Yes, they are.

14 MR. WAMPLER: Do you have a Pine Mountain Oil and Gas lease?

15 THE WITNESS: Their interest is under lease. A part of it's
16 under lease to Columbia Natural Resources and part of
17 it's under lease to Equable Resources and we have reached
18 agreement with those parties. So, yes, in answer to your
19 question we do have them.

20 MR. WAMPLER: All right, sir.

21 Q. (Mr. Mullins continues.) Was this AFE prepared by
22 someone knowledgeable in the cost and operation of wells
23 of this type?

24 A. Yes, it was.

25 Q. Are you familiar with the AFE itself?

 A. I am.

1 Q. Is it your desire to have this AFE. filed as an exhibit
2 to the deposition?
3 A. Yes, sir.
4 Q. All right. Based upon your experience, do you feel this
5 to be a reasonable AFE?
6 A. Yes, we do.
7 Q. All right. You have filed previously and correct me if
8 I'm wrong, joint operating agreements in wells EH-31 and
9 EH-36 which are those agreements to be similar to the
10 joint operating agreement to be deployed in this par-
11 ticular unit?
12 A. Yes, that's correct.
13 Q. All right. Are there any owners who have decided to be
14 nonparticipating operator?
15 A. We do not know of any at this time.
16 Q. Okay. Does any amount need to be escrowed by the Board?
17 A. No, sir.
18 Q. What is the estimated production over the life of this
19 well?
20 A. We estimate 400,000,000 cubic feet of natural gas.
21 Q. All right, sir. I have a few more questions for Mr.
22 Edwards concerning the location of the well itself. Mr.
23 Edwards, if we could refer to the plat attached to the
24 application, if you move this well to the northeast, what
25 effect geologically would that have based upon the
geology underlying this particular unit?

1 A. We believe that any movement to the northeast would be
2 adverse to the productivity of the well. There's a
3 major, the Russell Fork Fault, cutting through along
4 Route 80 in the Russell Fork River there and generally
5 the closer you can get to that fault the better the
6 wells are going to be and the further away you move --

7 Q. Is that because the fault line is a sort of a natural
8 stimulation of the area or why is that?

9 A. That's correct. We believe that there's a extensive
10 amount of natural fracturing that occurs in the proximity
11 of the Russell Fork Fault.

12 Q. All right, sir. I believe that's all the testimony for
13 Mr. Edwards. We do have another witness and the Board,
14 of course to it's pleasure.

15 MR. WAMPLER: Just a second.

16 MR. EVANS: Mr. Chairman, I've got a question. Based on what
17 you just said, I notice that in the two AFE's one for
18 the previous well and one for this one, that you've got
19 stimulation cost for one zone frack and in this case for
20 this well it's \$30,000 the other well it's \$25,000. In
21 light of what you just said, can you explain why there's
22 that difference if you have a natural situation here that
23 acts as natural situation why your frack cost is more on
24 this well?

25 THE WITNESS: The main (inaudible) in this area is the Berea
sand. The Berea Sand in this area and Dickenson County

is approximately 100 feet thick --

1 MR. EVANS: That's all I need to know.

2 THE WITNESS: Yeah. It's about that over in Buchanan County.

3 MR. EVANS: That's fine.

4 MR. WAMPLER: Have you filed or do you have the returned
5 receipts requested on notifications?

6 THE WITNESS: Yes, sir and again I believe that we have
7 provide those to the --

8 MR. WAMPLER: Have you notified the Department of Highways,
9 Department of Transportation, any interest they may have
10 on Route 80 and I guess Route 83 that intersects as well.

11 THE WITNESS: We have not but we're acting upon the opinion
12 of our title counsel in this area that the state does not
13 own an interest in the rights that we're underlying this
14 unit. That the conveyances to the state were of the
15 surface only.

16 MR. WAMPLER: What about with the stream, Virginia Marine
17 Resources Commission, any interest they have?

18 THE WITNESS: Our survey information indicates that the
19 ownership is as depicted on the plat. I don't have any
20 information that would indicate The Commonwealth owns a
21 interest there.

22 MR. WAMPLER: I think any order that we do we would have to
23 condition, contact with those folks for verification of
24 that.

25 THE WITNESS: We'd be more than happy to provide whatever

documentation you desire.

1 MR. WAMPLER: Any other questions of this witness? (Pause.)

2 What are you lease terms?

3 THE WITNESS: Five dollars a acre, delay rental, one eighth
4 royalty. That's the standard royalty in this area.

5 Typical length of lease is five years.

6 MR. WAMPLER: Any other questions of this witness? Go ahead
7 with your next witness.

8 MR. MULLINS: I'd like to call Mr. Alan Mueller, please.

9
10
11
12 ALAN W. MUELLER

13 a witness who, after having been duly sworn, was examined and
14 testified as follows:

15
16 DIRECT EXAMINATION

17
18 BY MR. MULLINS:

19 Q. All right, sir. Could you state your full name for the
20 Board, please?

21 A. Alan W. Mueller.

22 Q. All right, sir. What do you do for a living?

23 A. I'm a field engineer employed by Edwards and Harding
24 Petroleum Company.

25 Q. How long have you held that position?

1 A. Approximately, three and a half months.

2 Q. Have you ever testified before this Board before?

3 A. No, sir I haven't.

4 Q. Maybe we'll go into your background briefly. Did you go
5 to college?

6 A. Yes, sir. I received a BS degree in geology from
7 Eastern Illinois University.

8 Q. All right, sir. What did you do after you got your
9 degree from Eastern Illinois?

10 A. I was employed by (inaudible) Fracturing and Summiting
11 Service Company for approximately 11 years.

12 Q. Is that one of the firms that does fracturing and
13 stimulation in this area?

14 A. That is correct.

15 Q. And how long did you work for them?

16 A. 11 years.

17 Q. All right, sir. After you worked for that concern,
18 where did you go?

19 A. I was self employed as a engineering contractor for
20 approximately three and a half months. After that I was
21 employed by the Commonwealth of Virginia for approximate-
22 ly 2 years as assistant oil and gas inspector.

23 Q. Where were you employed as an assistant oil and gas
24 inspector for the Commonwealth?

25 A. At the Abingdon office, Division of Gas and Oil.

Q. That was for how long?

1 A. Approximately 2 years.

2 Q. Okay. What time frame, what year was that that you were

3 hired?

4 A. 1988 until just recently, September of this year.

5 Q. So you left there and went to Edwards and Harding. Is

6 that correct?

7 A. That is correct.

8 Q. All right, sir. Sir, are you familiar with the physical

9 location of well EH-27, where it is on the ground in

10 Dickenson County?

11 A. Yes, sir, I am.

12 Q. Have you prepared a written statement and some charts

13 for the Board?

14 A. Yes, I have.

15 Q. Are these those charts?

16 A. Yes. Yes, they are.

17 Q. I have ten copies here for the Board. What is the cover

18 page of that proposal or that handout say? What does it

19 mean?

20 A. The first paragraph just depicts the topography in the

21 area and the second paragraph depicts the problem that

22 we exist near the well site, the proposed site.

23 Q. Okay. What is that problem?

24 A. The problem is there is a high, high voltage transmission

25 line which is approximately 250 foot from this proposed

site.

1 Q. All right, sir. As we're looking at the map or the
2 plat filed as a part of the application, here is the
3 proposed well location, where is that power transmission
4 line as identified on this plat?
5 A. The transmission line runs approximately northeast to
6 southwest in that direction.
7 Q. So right though here.
8 A. Right though there.
9 Q. All right, sir. Now, you're aware that there's a
10 distance problem with well EH-27 as between EH-23?
11 A. Yes.
12 Q. You're aware of that?
13 A. Yes, sir.
14 Q. All right. This chart which is also included in that
15 packet, is that correct?
16 A. Right. That is correct.
17 Q. This chart shows EH-23 and EH-27, what is that designate?
18 A. The EH-23 is a producing well and EH-27 is a proposed
19 site.
20 Q. What is this green line?
21 A. Okay. That depicts elevation of the ground and the
22 cross section between the two wells.
23 Q. Topography?
24 A. Topography.
25 Q. All right, sir. Is this the proposed location of well
EH-27?

1 A. Yes, it is.

2 Q. And is this the transmission line that --

3 A. Yes, it is.

4 Q. -- you spoke of earlier? What reason do you have for
5 not moving this well down closer to these power lines?

6 A. The problem exist whenever you move in a drilling rig or
7 a service rig and trying to rig up guide lines, working
8 around that close to transmission lines there's always
9 the possibility of electrical shock, electrocution and
10 also if there were any shooting to be done has for as
11 site preparations, site building, you would have acciden-
12 tal detonation of blasting caps or charges. And thirdly,
13 the possibility exist of accidental detonation of
14 perforating charges during perforating operations.

15 Q. All right, sir. When you said shooting, you meant
16 blasting?

17 A. Blasting.

18 Q. All right, sir. Are there any topographical features
19 that would be adverse to moving it on down?

20 A. And when you move it on down you get into, the slope
21 gets real steep.

22 Q. All right, sir. So it would be very difficult or
23 impossible to move it down just from a topography stand
24 point not even taking into account --

25 A. Yes, sir.

Q. -- the power lines?

1 A. Yes, sir. And below that you've got the town of Haysi
and the high school.

2 Q. So if you moved on down this way, what would be here?

3 A. Haysi High School and the town of Haysi.

4 Q. I don't believe I have any other questions for this
5 witness. You may answer any questions the Board may
6 have.

7 MR. WAMPLER: Any questions. What's your pleasure?

8 MR. EVANS: Mr. Chairman.

9 MR. WAMPLER: Mr. Evans.

10 MR. EVANS: I make a motion that we grant E and H's request
11 for variance from state wide spacing and to grant their
12 petition as it comes to us today.

13 MR. MASON: Second

14 MR. WAMPLER: And the motion is seconded. Any further
15 discussion? All in favor signify by saying yes. (All
16 agree) Oppose say no. (None) Thank you. Next item on
17 the agenda is Edwards and Harding requesting the Board
18 to allow EH-14 conventional gas well to be drilled
19 closer then 2640 feet 2 EXP39 and EXP257. All parties
20 wanting to address the Board on this matter, come
21 forward, please. Is there any opposition to this?

22 MR. MULLINS: Excuse me, sir?

23 MR. WAMPLER: Is there any opposition to this?

24 MR. MULLINS: None that I'm aware of.

25 MR. WAMPLER: Okay.

1 (ITEM 10)

2 MR. MULLINS: Sorry for the delay. Again, my name is Tom
3 Mullins. We're here on what's been designated as EH-14.
4 We have one witness to call and that would be Mr. Alan
5 Muller.
6

7 ALAN W. MUELLER

8 a witness who, after having been previously sworn, was
9 examined and testified as follows:
10

11
12 DIRECT EXAMINATION
13

14 BY MR. MULLINS:

15 Q. Mr. Mueller, we've already gone through the preliminaries
16 of who you are and where you work. Could you just sum it
17 up?

18 A. Okay, I've been employed in the oil and gas industry
19 approximately now 13 years with experience in fracking
20 and stimulation work and also worked for The Commonwealth
21 for the Division of Gas and Oil. I've also worked as an
22 independent contract engineer and now I'm employed by
23 Edwards and Harding as a field engineer.

24 Q. All right, sir. Are you personally familiar with
25 physical location of the well location EH-14?

1 A. Yes, sir I am.

2 Q. Have you prepared a packet of information --

3 A. Yes, sir I have.

4 Q. -- for the Board? Is that that packet of information?

5 A. This is the packet.

6 Q. Sir, you put up this map earlier. What does this map

7 show?

8 A. That shows the location of the EH-14 with the outlying

9 wells in showing the distance from EH-14.

10 Q. Is this a topographical map --

11 A. Yes, sir.

12 Q. -- showing contour lines?

13 A. Yes, it is.

14 Q. Is this where you got it indicated EH-14?

15 A. Yes, it is.

16 Q. All right. This well, P-257, is that one of the wells

17 that yet Edwards and Harding is asking a variance from?

18 A. Yes, it is.

19 Q. And this well, P-239, is it also one of the other wells?

20 A. Yes, it is.

21 Q. Edwards and Harding is not asking for a variance from P-

22 335, there's --

23 A. No, sir.

24 Q. -- no need for it, is that right?

25 A. Yes.

Q. All right, sir. You've also done charts. Are those the

same type of charts that you --

- 1 A. Previously had on before, yes, sir.
- 2 Q. All right, sir. I'd like to ask you, sir, what would
- 3 happen if you moved EH-14 further away from the well P-
- 4 257?
- 5 A. You begin to get in the spacing out of compliance with
- 6 the P-335.
- 7 Q. So you would be getting closer to this well?
- 8 A. Yes, sir.
- 9 Q. All right sir. Are there any other features in the
- 10 area?
- 11 A. Yes, sir there are some homes in the area.
- 12 Q. Are there also some roads and some driveways?
- 13 A. Yes, sir. County road 820 and some driveways leading
- 14 off of that to the homes.
- 15 Q. All right, sir. This is a slice section of that distance
- 16 in the straight line, is that correct?
- 17 A. Yes, sir.
- 18 Q. And if you moved it back are there any topographical
- 19 features that would also prevent you from also moving
- 20 that well around?
- 21 A. The houses in the immediate vicinity would prevent
- 22 moving it back that way.
- 23 Q. All right, sir. What would prevent you from moving EH-
- 24 14, if anything, further away from well that's been
- 25 designated as P-237?

1 A. You begin to get on a steep hillside which would be
unstable.

2 Q. I meant 239, I said 237. Is this a cut view of that of
3 that --

4 A. Yes, sir.

5 Q. -- distance? And is this the steep slope that --

6 A. Yes, sir.

7 Q. -- your speaking of? Are there any houses or any other
8 features on the ground that would permit the moving of
9 that well back?

10 A. Yes, sir, there are two houses in the immediate vicinity.

11 Q. To your knowledge has there been any objection filed to
12 the present locatio of this well?

13 A. No, sir.

14 Q. And this is a voluntary unit, is that not correct?

15 A. Yes, sir.

16 MR. MCGLOTHLIN: Mr. Chairman,

17 MR. WAMPLER: Yes, Mr. McGlothlin.

18 MR. MCGLOTHLIN: What's the distance on your topo?

19 THE WITNESS: It's a scale of 1 to 400.

20 MR. MCGLOTHLIN: Thank you.

21 Q. (Mr. Mullins continues.) Is it the desire of Edwards
22 and Harding that a variance be granted from these
23 distance locations?

24 A. Yes, it is.

25 Q. Have you sent notices out to the interest parties?

1 A. Yes, sir we have.

2 MR. WAMPLER: Let me clarify that on a notice issue. The map
3 goes out shows a 1,250 radius rather than a 1,320. Have
4 notices been sent to the one's out 1,320?

5 MR. EDWARDS: Mr. Chairman, my understanding is that if the
6 radius encircled were extended to 1,320, all the parties
7 would be the same so, yes notice has been provided.

8 MR. WAMPLER: Would you provide the Board with a revised map
9 showing --

10 MR. EDWARDS: Yes, sir.

11 MR. WAMPLER: -- your well location map showing the 1,320 and
12 the notice.

13 MR. EDWARDS: Yes, sir.

14 MR. WAMPLER: The documents you have up here exhibits for the
15 Board?

16 MR. MULLINS: Yes, sir, Your Honor, in fact I think those are
17 the same documents included in the packet but the Board
18 can keep those larger ones.

19 MR. WAMPLER: Okay. Any other questions?

20 MR. EVANS: I've got --

21 MR. WAMPLER: Mr. Evans.

22 MR. EVANS: -- just a real quickly. I noticed you have it on
23 a high. I also notice on this topo map you have a house
24 located on either side of the well but there's a assess
25 road shows as an old Jeep trail coming up. What would
prevent you from moving that well back -- Okay, to, right

there.

1 THE WITNESS: Is this the area?

2 MR. EVANS: Right. Back in there.

3 THE WITNESS: It's fairly steep and you get down below the
4 hill there it gets fairly steep and --

5 MR. EVANS: Looking at the contour here it doesn't show that.
6 That shows it to be in a natural drain and contour
7 interval there at 40 feet.

8 THE WITNESS: But it also gets in close to somebody's back
9 yard there too.

10 Q. (Mr. Mullins continues.) Is this the cut away section of
11 that --

12 A. Yes, it is.

13 Q. What's the scale of this?

14 A. That's a 1 to 400 scale, excuse me, 1 to 100.

15 Q. So 1 foot on this is a 100 feet, is that correct?

16 A. Horizontal scale is 1 to 100 foot.

17 MR. MCGLOTHLIN: I'm assuming that that line is your same
18 cross sectional line but on here does it extend out
19 because this shows down off that knob and then back up
20 on your topo map if you look at it, is you go across
21 there. And all I'm asking is, is there not another area
22 that you could drill that to maintain your proper
23 spacing?

24 THE WITNESS: If we go toward the west --

25 MR. MCGLOTHLIN: Uh-huh.

1 THE WITNESS: -- there is another permit site out in that area
2 and then we would get into spacing violations in that
3 area.

4 MR. EVANS: So, there's another permitted well, --

5 THE WITNESS: Permitted site --

6 MR. EVANS: -- permitted site out here?

7 THE WITNESS: Permitted site. It's an undrilled site.

8 MR. EVANS: That's not on this map?

9 THE WITNESS: No, sir.

10 MR. MCGLOTHLIN: What's the distance of it?

11 THE WITNESS: I'm not sure, off the top of my head it's
12 probably 2,300 -- 2,400 foot.

13 MR. EVANS: If you put this well down we're going to be faced
14 with another prospective -- is it your well?

15 THE WITNESS: Yes, sir.

16 MR. MCGLOTHLIN: What's the maximum distance? Its 2,300 --
17 2,400 foot if that's the case then won't you need a
18 variant from that well as well?

19 MR. EDWARDS: It's not completed at this time.

20 MR. EVANS: My comment was at such time that you decide to
21 put that one down, we're going to be facing the same
22 thing again, correct?

23 MR. EDWARDS: That well's already been permitted, I believe
24 and there's no unit required. I don't believe that
25 there's any further requirements with the other location.

MR. EVANS: That's fine.

1 MR. WAMPLER: Does anyone here have any objection to what's
2 been proposed? Any comment? Any further comments from
3 the Board? What's your pleasure?

4 MR. MASON: I move approval for their motion for a variance.

5 MR. WAMPLER: Motion for approval.

6 MR. EVANS: I'll second.

7 MR. WAMPLER: Motion was seconded. All in favor signify by
8 saying yes. (Majority agrees.) Oppose say no.

9 MR. MCGLOTHLIN: No.
10
11

12 (ITEM 11)
13

14 MR. WAMPLER: Final item on today's agenda is the establish-
15 ment of drilling unit and force pooling for P-487 well in
16 Dickenson County requested by Equitable Resource Explora-
17 tion.

18 MR. COUNTS: (Gives opening statement for Equable Resources.)
19
20

21 DON C. HALL

22 a witness who, after having been duly sworn, was examined and
23 testified as follows:
24

25 DIRECT EXAMINATION

1 BY MR. COUNTS:

2 Q. Mr. Hall, you stated your employed by Equitable Resources
3 Exploration, Inc. Would you state what capacity?

4 A. Land man.

5 Q. Have you testified before this Board before?

6 A. Yes.

7 Q. Are you familiar with the application in this matter?

8 A. Yes.

9 Q. Are you familiar with the ownership of the drilling
10 rights of the land involved herein?

11 A. Yes, I am.

12 Q. Mr. Hall, does Equitable own rights within this unit?

13 A. Yes, we do.

14 Q. And would you state for the Board Equitable's interest in
15 this unit?

16 A. We have 99.48 percent lease holding the oil and gas.

17 Q. Okay. And does Equitable wish to dismiss and of the
18 respondents listed in exhibit B to its application?

19 A. No.

20 Q. What therefore are the interest that Equitable Resources
21 seek to force pool?

22 A. We seek to force pool Jackie Lee Owens and Wanda C.
23 Owens, his wife.

24 Q. And approximately how many acre are owned by these
25 respondents in this unit?

1 A. .585 acres.

2 Q. And this represents what percentage of the over all

3 unit, Mr. Hall?

4 A. .52 percent.

5 Q. Mr. Hall, does Equitable seek to force pool the drilling

6 rights of each individual respondent if living and if

7 deceased the unknown successor or successors to any

8 decease individual respondent?

9 A. Yes, we do.

10 Q. Mr. Hall, has efforts been made to contact those respond-

11 ents listed in exhibit B in order to obtain a lease

12 concerning their interest?

13 A. Yes, they are.

14 Q. And what were the results of those efforts?

15 A. They refused to lease.

16 Q. Mr. Hall, in you opinion was a bona fide effort made to

17 reach an agreement with these individuals?

18 A. Yes, it was.

19 Q. Does Equitable request that the Board's order establish

20 and specifies a boundary of the unit the 1,250 foot

21 circle surrounding the proposed location for well number

22 P-437 as depicted on the Equable well plat in exhibit A

23 of the application?

24 A. Yes, we do.

25 Q. Do you recommend the order issued by the Board provide

for the following options: 1. Participation. 2. A lack

as a carried interest or 3. To execute a lease.

1 A. Yes, we do.

2 Q. And has Equitable prepared an exhibit that sets forth
3 these lease terms that we propose as well as this
4 recommendation regarding provisions to include in the
5 pooling order?

6 A. Yes, we have.

7 MR. COUNTS: Mr. Chairman, this has been provided this
8 afternoon as exhibit C.

9 Q. (Mr. Counts continues.) Mr. Hall, does Equitable have on
10 file with the Department of Mines, Minerals and Energy,
11 a plugging agreement with profit security for such
12 agreement?

13 A. Yes, we do.

14 Q. Mr. Chairman, I have no further questions for Mr. Hall.

15 MR. WAMPLER: Has notice been provided to the Department of
16 Transportation?

17 THE WITNESS: No.

18 MR. WAMPLER: Marine Resources Commission for the river?

19 THE WITNESS: No.

20 MR. WAMPLER: Any order that we'll issue we would stipulate
21 that you make those contacts.

22 MR. COUNTS: Mr. Chairman, it would be our position that all
23 parties that are entitled to notification as owners
24 within this unit have been notified.

25 MR. WAMPLER: Why have you dealt with a radius of 1,250 feet?

1 MR. COUNTS: Mr. Chairman, this permit was applied for prior
2 to July 1.

3 MR. WAMPLER: Is it under permit now? Has it been issued?

4 MR. COUNTS: Yes, sir it is.

5 MR. WAMPLER: Is it issued prior to July 1?

6 MR. COUNTS: I'm not sure about that.

7 MR. FULMER: The hearings were held --

8 MR. WAMPLER: It was applied for but not issued.

9 MR. FULMER: Right. It was held under 315 of the old code.

10 MR. WAMPLER: Okay. Do you have other witnesses?

11 MR. COUNTS: Mr. Bob Dahlin be testifying as geologist.

12 MR. WAMPLER: Any other questions of Mr. Hall? Okay. Thank
13 you, Mr. Hall.

14 BOB DAHLIN

15 a witness who, after having been duly sworn, was examined and
16 testified as follows:

17
18 DIRECT EXAMINATION

19
20 BY MR. COUNTS:

21 Q. Mr. Dahlin, have you previously testified before the Oil
22 and Gas Board and have your qualifications been accepted?

23 A. Yes, I have.

24 Q. Is Equitable seeking to force pool the drilling rights of
25 approximate 112.69 acre drilling and spacing unit of the

1 north field for all formations below the base of the
2 Pennsylvania and unconformity to 100 feet below the
3 stratigraphic pool of the Devonian Brown Shell?

4 A. That's correct.

5 Q. What is the propose tunnel depth of proposed initial
6 well under Equitable's plan of development?

7 A. Total would be approximately 4,570 feet.

8 Q. And would this be sufficient to penetrate and test the
9 formations of involved area?

10 A. It will.

11 Q. Have you previously provided the Board with a copy of
12 the joint operating agreement which will used to govern
13 operations under the Shell?

14 A. Yes, we have.

15 Q. Mr. Dahlin, are you familiar with the AFE for well cost
16 for well P-487?

17 A. I am.

18 Q. And has this AFE been attached to the application as
19 exhibit C and is it presently before the Board?

20 A. That is correct.

21 Q. Would you stipulate for the benefit of the Board the dry
22 whole cost?

23 A. Dry hole cost for \$153,040.

24 Q. And your complete the well cost?

25 A. \$207,690.

Q. Mr. Danlin, was the AFE prepared by an engineer knowledg-

1 eable in preparation of AFE's and knowledgeable regard to
2 well cost in this area within the last 90 days?

3 A. Yes, it was.

4 Q. And does this AFE represent a reasonable estimate of the
5 reasonable well cost with the proposal initial unit well
6 under applicants plan of development?

7 A. It does.

8 Q. Mr. Dahlin, in your opinion would the granting of this
9 application be in the best interest of conservation,
10 prevention of waste and the protection of correlative
11 rights?

12 A. Yes, it will.

13 MR. COUNTS: No further questions, Mr. Chairman.

14 MR. EVANS: One clarification.

15 MR. COUNTS: Yes, sir.

16 MR. EVANS: Did you say 270 or 207?

17 THE WITNESS: 207.

18 MR. EVANS: Okay.

19 MR. WAMPLER: Any other questions? You have anything further,
20 Mr. Counts?

21 MR. COUNTS: No, sir, Mr. Chairman.

22 MR. WAMPLER: What's the Board's pleasure?

23 MR. MCGLOTHLIN: Motion to approve.

24 MR. WAMPLER: Have a motion to approve the establishment of
25 drilling unit and force pooling for the P-487 convention-
al gas well.

MR. MASON: Second.

1 MR. WAMPLER: Motion is seconded. Any further questions?

2 All in favor signify by saying yes. (All agree) Oppose
3 say no. (None.) Motion carries. Thank you. Before the
4 Board takes off here be sure and read the direct orders
5 and contact myself or Tom or Diana. Try to do that
6 tomorrow if at all possible so that we can get the orders
7 out especially if you have any questions or anything. If
8 not we'll sign them and get them out.

9 MR. FULMER: Mr. Chairman,

10 MR. WAMPLER: Mr. Fulmer.

11 MR. FULMER: Before the adjournment of the meeting I'd like
12 to run over with the Board for next month's agenda. So
13 far that we have on the agenda and correct me if I'm
14 wrong, drilling units and field rules for Pilgrims Knob
15 area was continued --

16 MR. WAMPLER: That's right.

17 MR. FULMER: -- escrow accounts and the Oxy motion was
18 continued --

19 MR. WAMPLER: Yes.

20 MR. FULMER: -- drilling unit for A-38 docket number VGOB-
21 11.2064 was continued for additional information,
22 request for additional information.

23 MR. WAMPLER: That's correct. A-38.

24 MR. FULMER: Right.

25 MR. WAMPLER: That's correct. And so far as what has been

1 filed with the Board we have appeals from inspectors
2 decision by Ashland, by Cabot to Oxy USA wells. There's
3 several of them and they probably all be grouped as one
4 but we have appeals by a ruling so to speak, from Ashland
5 and from Cabot. And that's all we have, sir.

6 MR. WAMPLER: Very good. And the next meeting is scheduled
7 for when? Do you have that in front of you? 18th and
8 19th, I believe, of January. 22nd and 23rd of January.

9 (End of proceedings for
10 December 18, 1990.)

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CERTIFICATE

COMMONWEALTH OF VIRGINIA

COUNTY OF WASHINGTON

I, Tamara L. White, Notary Public in and for the Commonwealth of Virginia, at Large, do hereby certify that the foregoing is a true transcript of the proceedings had in the matters before the Virginia Gas and Oil Board on December 18, 1990; that all of said proceedings were recorded electronically and have been reduced to writing by me from said electronic recordings, and that to the best of my knowledge and ability, said transcript accurately reflects the proceedings had.

GIVEN under my hand this 14th day of January, 1991.

TAMARA L. WHITE
NOTARY PUBLIC

My commission expires January 21, 1992.