

STATE OF NEW MEXICO  
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT  
OIL CONSERVATION DIVISION

IN THE MATTER OF THE HEARING )	
CALLED BY THE OIL CONSERVATION )	
DIVISION FOR THE PURPOSE OF )	CASE NOS. 11,243
CONSIDERING: )	11,244
)	11,246
APPLICATIONS OF AMOCO PRODUCTION )	11,247
COMPANY AND RICHARDSON OPERATING )	(Consolidated)
COMPANY )	
_____ )	

REPORTER'S TRANSCRIPT OF PROCEEDINGS

EXAMINER HEARING

BEFORE: MICHAEL E. STOGNER, Hearing Examiner

April 20th, 1995

Santa Fe, New Mexico

This matter came on for hearing before the Oil Conservation Division on Thursday, April 20th, 1995, at the New Mexico Energy, Minerals and Natural Resources Department, Porter Hall, 2040 South Pacheco, Santa Fe, New Mexico, before Steven T. Brenner, Certified Court Reporter No. 7 for the State of New Mexico.

\* \* \*

STEVEN T. BRENNER, CCR  
(505) 989-9317

## I N D E X

April 20th, 1995  
 Examiner Hearing  
 CASE NOS. 11,243, 11,244, 11246 and 11,247 (Consolidated)

	PAGE
EXHIBITS	3
APPEARANCES	5
AMOCO WITNESSES:	
<u>JULIE JENKINS</u>	
Direct Examination by Mr. Carr	8
Cross-Examination by Mr. Kellahin	23
Examination by Examiner Stogner	37
Examination by Mr. Carroll	40
<u>BILL HAWKINS</u>	
Direct Examination by Mr. Carr	43
Cross-Examination by Mr. Kellahin	62
Examination by Examiner Stogner	73
Further Examination by Mr. Kellahin	76
RICHARDSON WITNESSES:	
<u>CATHLEEN COLBY</u>	
Direct Examination by Mr. Kellahin	77
Cross-Examination by Mr. Carr	101
<u>DAVID B. RICHARDSON</u>	
Direct Examination by Mr. Kellahin	115
<u>DANA L. DELVENTHAL</u>	
Direct Examination by Mr. Kellahin	128
Cross-Examination by Mr. Carr	151
Examination by Examiner Stogner	152
<u>RODERICK A. MARKHAM</u>	
Direct Examination by Mr. Kellahin	154

(Continued...)

## CLOSING STATEMENTS

By Mr. Kellahin	162
-----------------	-----

By Mr. Carr	167
-------------	-----

REPORTER'S CERTIFICATE	172
------------------------	-----

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## E X H I B I T S

Amoco	Identified	Admitted
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## Exhibit 1

Application	12	23
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Ownership	13	23
-----------	----	----

Correspondence	18	23
----------------	----	----

Well Cost	44	62
-----------	----	----

Overhead and Risk	58	62
-------------------	----	----

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Richardson	Identified	Admitted
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Exhibit 1	80	101
-----------	----	-----

Exhibit 2	84	101
-----------	----	-----

Exhibit 3	85	101
-----------	----	-----

Exhibit 4	86	101
-----------	----	-----

Exhibit 5	87	101
-----------	----	-----

Exhibit 6	88	101
-----------	----	-----

Exhibit 7	95	101
-----------	----	-----

Exhibit 8	95	101
-----------	----	-----

Exhibit 9	98	101
-----------	----	-----

Exhibit 10	100	101
------------	-----	-----

Exhibit 11	117	126
------------	-----	-----

Exhibit 12	120	126
------------	-----	-----

Exhibit 13	121	126
------------	-----	-----

Exhibit 14	-	-
------------	---	---

Exhibit 15	133	150
------------	-----	-----

(Continued...)

## E X H I B I T S (Continued)

Richardson	Identified	Admitted
Exhibit 16	137	150
Exhibit 17	140	150
Exhibit 18	145	150
Exhibit 19	146	150
Exhibit 20	148	150
Exhibit 21	-	150
Exhibit 22	149	150
Exhibit 23	149	150
Exhibit 24	149	150
Exhibit 25	153	-
Exhibit 26	153	-

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

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By: WILLIAM F. CARR

## FOR RICHARDSON OPERATING COMPANY:

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By: W. THOMAS KELLAHIN

\* \* \*

1           WHEREUPON, the following proceedings were had at  
2   1:40 p.m.:

3           EXAMINER STOGNER: This hearing will come to  
4   order.

5           At this time I'll call Case Number 11,243.

6           MR. CARROLL: Application of Amoco Production  
7   Company for compulsory pooling, San Juan County, New  
8   Mexico.

9           EXAMINER STOGNER: At this time I'll call for  
10   appearances.

11          MR. CARR: May it please the Examiner, my name  
12   is William F. Carr with the Santa Fe law firm Campbell,  
13   Carr and Berge.

14          We represent Amoco Production Company in this  
15   case.

16          I will request that this case be continued with  
17   three other cases, the other Amoco case being 11,244. And  
18   I believe it should also be consolidated with applications  
19   filed by Richardson Operating Company, styled Case 11,247  
20   and 11,246.

21          EXAMINER STOGNER: Now, you said "continued".

22          MR. CARR: Consolidated.

23          EXAMINER STOGNER: Do you mean "consolidated"?

24          MR. CARR: We could continue them. No, we'd like  
25   them all consolidated.

1 EXAMINER STOGNER: Okay. Are there any  
2 objections -- That's 11,243, which we just called,  
3 consolidated with Amoco Case 11,244, Richardson Case 11,247  
4 and Richardson Case 11,246; is that correct?

5 Are there any objections to the consolidation of  
6 this?

7 MR. KELLAHIN: Mr. Examiner, for the record my  
8 name is Tom Kellahin of the Santa Fe law firm of Kellahin  
9 and Kellahin.

10 I'm appearing today on behalf of Richardson  
11 Operating Company, and I have no objection to the  
12 consolidation of these four matters together to be heard as  
13 one presentation.

14 EXAMINER STOGNER: Okay. With that, I'll also  
15 call the three cases, 11,244, 11,247 and 11,246 at this  
16 time.

17 MR. CARROLL: Application of Amoco Production  
18 Company for compulsory pooling, San Juan County, New  
19 Mexico.

20 Application of Richardson Operating Company for  
21 compulsory pooling, downhole commingling and an unorthodox  
22 gas well location, San Juan County, New Mexico.

23 Application of Richardson Operating Company for  
24 compulsory pooling and an unorthodox gas well location, San  
25 Juan County, New Mexico.

1 EXAMINER STOGNER: Other than the two parties  
2 involved, Amoco and Richardson, are there any other  
3 appearances in any of these cases?

4 Okay, there being none, do you -- How many  
5 witnesses do you have, Mr. Kellahin?

6 MR. KELLAHIN: I have four witnesses to be sworn.

7 EXAMINER STOGNER: Mr. Carr?

8 MR. CARR: I have two witnesses.

9 EXAMINER STOGNER: At this time will all the  
10 witnesses please stand to be sworn?

11 (Thereupon, the witnesses were sworn.)

12 EXAMINER STOGNER: Is there any need for opening  
13 statements at this time, gentlemen? Opening statements, is  
14 that needed at this point?

15 MR. KELLAHIN: I don't believe so, Mr. Stogner.

16 EXAMINER STOGNER: So at that point, I guess we  
17 will start with you, Mr. Carr, and your witnesses.

18 MR. CARR: Mr. Stogner, at this time I would call  
19 Julie Jenkins.

20 JULIE JENKINS,  
21 the witness herein, after having been first duly sworn upon  
22 her oath, was examined and testified as follows:

23 DIRECT EXAMINATION

24 BY MR. CARR:

25 Q. Will you state your name for the record, please?



1 A. Julie Jenkins.

2 Q. Where do you reside?

3 A. Denver, Colorado.

4 Q. By whom are you employed?

5 A. Amoco Production Company.

6 Q. What is your current job with Amoco?

7 A. I'm a senior land negotiator with Amoco.

8 Q. Have you previously testified before the New  
9 Mexico Oil Conservation Division?

10 A. Yes, I have.

11 Q. At the time of that testimony, were your  
12 credentials as a senior land negotiator accepted and made a  
13 matter of record?

14 A. Yes, they were.

15 Q. Are you familiar with the Applications filed in  
16 each of the four consolidated cases?

17 A. Yes, sir, I am.

18 Q. And are you familiar with the status of the lands  
19 involved in each of these cases?

20 A. Yes, I am.

21 MR. CARR: Are the witness's qualifications  
22 acceptable?

23 EXAMINER STOGNER: Any objections?

24 MR. KELLAHIN: No objection.

25 EXAMINER STOGNER: So qualified.

1           Q.    (By Mr. Carr)  Ms. Jenkins, could you briefly  
2   state what Amoco seeks in the two cases it has filed with  
3   the Division?

4           A.    Yes, Amoco is seeking an order to pool all the  
5   mineral interests from the surface to the base of the  
6   Pictured Cliffs formation in Section 12 of 29 North --  
7   Township 29 North, Range 13 West, in the following manner:  
8   The west half forming a 320-acre gas spacing and proration  
9   unit for any and all pools developed on 320-acre spacing  
10   within said vertical extent, which presently includes only  
11   the Basin-Fruitland Coal Gas Pool, and the southwest  
12   quarter to form a standard 160-acre spacing and proration  
13   unit for any and all formations and/or pools developed on a  
14   160-acre spacing within said vertical extent, which  
15   presently includes but is not necessarily limited to the  
16   undesignated West Kutz-Fruitland Sand Pool and the  
17   Undesignated West Kutz-Pictured Cliffs Pool.

18               We also would like to consider the cost of  
19   drilling and completing said well and the allocation of the  
20   cost thereof, as well as actual operating costs and charges  
21   for supervision and the designation of Amoco as the  
22   operator of the well and a charge for risk involved in  
23   drilling the well.

24               We are also seeking an order pooling all mineral  
25   interests from the surface to the base of the Pictured

1 Cliffs formation in the northwest of Section 12 of Township  
2 29 North, Range 13 West, forming a standard 160-acre gas  
3 spacing and proration unit for any and all formations in  
4 pools developed on 160-acre spacing within said vertical  
5 extent, which presently includes but not limited to the  
6 Undesignated West Kutz-Fruitland Sand Pool and the  
7 undesignated West Kutz-Pictured Cliffs Pool. The unit to  
8 be dedicated is a single well, our proposed Burnham Gas Com  
9 A Number 1.

10 We also would like to be considered today, the  
11 cost of drilling and completing said well and the  
12 allocation of the cost thereof, as well as actual operating  
13 costs and charges for supervision, and the designation of  
14 Amoco as the operator of the well, and a charge for risk  
15 involved in drilling the well.

16 Q. Ms. Jenkins, you're familiar also with the  
17 Applications filed by Richardson Operating Company, are you  
18 not?

19 A. Yes, I am.

20 Q. And are those Applications, to your  
21 understanding, Applications to force-pool the same acreage  
22 and designate Richardson as the operator of those wells?

23 A. Yes, that's my understanding.

24 Q. Have you prepared exhibits for presentation here  
25 today?

1 A. Yes, I have.

2 Q. And are these exhibits included in the exhibit  
3 booklet that has been distributed for Amoco?

4 A. Yes.

5 Q. Let's go to that booklet, and I'd ask you to  
6 first just identify the document behind the first tab in  
7 that booklet.

8 A. Yes, the first page is simply a copy of the  
9 Application that was submitted to the Director of the New  
10 Mexico Oil Conservation Division from J.W. Hawkins,  
11 describing the Application.

12 Q. Okay. And the second page behind that first tab  
13 is what?

14 A. Is the list of names and addresses of the  
15 parties, the working interest in the Burnham Gas Com A  
16 Number 1, to which a copy of the Application was sent  
17 certified.

18 Q. And that includes Richardson Production Company;  
19 is that right?

20 A. Yes, it does.

21 Q. Behind that there is another page, "Addressee  
22 List". What is that?

23 A. That's an addressee list showing the names and  
24 addresses of the working interest owners within the  
25 drilling and spacing unit for our proposed Burnham Gas Com

1 B Number 1.

2 Q. And again, that was sent to Richardson Production  
3 Company?

4 A. That is correct.

5 Q. And behind that you have copies of a certificate  
6 showing that this Application was provided to these  
7 individuals by certified mail, return receipt requested?

8 A. That is correct.

9 Q. Let's go to the tab identified as "Ownership" in  
10 the Amoco booklet. Will you refer to that and then go to  
11 the first document behind that tab, identify that and  
12 review it for the Examiner?

13 A. Okay. The first page is simply a copy of a Form  
14 C-102, which is State of New Mexico, Oil Conservation  
15 Division, Well Location and Acreage Dedication Plat,  
16 showing the proposed location of Amoco's Burnham Gas Com A  
17 Number 1, and the proposed spacing unit for that well,  
18 being the northwest quarter of Section 12.

19 Q. Does Richardson also propose a well on this 40-  
20 acre Pictured Cliff spacing unit?

21 A. Yes, they do.

22 Q. And what is the location of the well they are  
23 proposing?

24 A. It's my understanding they are proposing a well  
25 to be located within 200 feet of 1470 feet from the north

1 line and 1500 feet from the west line of Section 12.

2 Q. So that could essentially be at the same location  
3 or close thereto, to the one you are proposing?

4 A. That's correct.

5 Q. At the present time, does Amoco operate the wells  
6 in the northwest quarter of Section 12?

7 A. Yes, sir, they do.

8 Q. Does the location being proposed by Richardson  
9 fall in close proximity to currently operated Amoco wells?

10 A. Yes, it does.

11 Q. Would in fact the Richardson proposal be possibly  
12 located on the same well pad as existing Amoco Dakota  
13 wells?

14 A. It appears that way, yes.

15 Q. Let's go to the next page in this exhibit. Would  
16 you identify that, please?

17 A. Yes, this is a copy of the Exhibit A which was  
18 attached to the proposed Amoco -- the operating agreement  
19 that Amoco proposed to use to govern operations for the  
20 Burnham Gas Com A Number 1, and it sets forth the names and  
21 addresses of all working interest owners within that  
22 spacing unit and their respective working interests  
23 therein.

24 Q. So we're talking here about just the northwest  
25 quarter of Section 12 in the Pictured Cliffs?

1           A.    That's correct.

2           Q.    And what does Amoco -- How much of the working  
3 interest ownership does Amoco own in that 160-acre tract?

4           A.    Amoco owns 83.38125-percent working interest.

5           Q.    Do you know what Richardson owns at this time in  
6 this 160-acre tract?

7           A.    We -- At the time we did title, we showed them to  
8 own 2.76979-percent working interest in the tract.

9           Q.    Is it possible that they have acquired additional  
10 interests since this exhibit was prepared?

11          A.    Sure.

12          Q.    Have other interest owners shown on this exhibit  
13 agreed to participate with Amoco?

14          A.    Yes, the -- Manon Markham McMullen has signed an  
15 operating agreement and AFE for this well.

16          Q.    And that's the only other interest owner shown on  
17 this Exhibit A that has signed the AFE or agreed to  
18 participate in this Pictured Cliffs well with you?

19          A.    That is correct.

20          Q.    Let's go to the next page. Could you identify  
21 that, please?

22          A.    Yes, this is State of New Mexico, Oil  
23 Conservation Division, Form C-102, Well Location and  
24 Acreage Dedication Plat, showing the proposed location of  
25 Amoco's Burnham Gas Com B Number 1, and also depicting the

1 spacing units for the Pictured Cliffs, being the southwest  
2 quarter of Section 12, and the spacing unit for the  
3 Fruitland Coal formation, being the west half of Section  
4 12.

5 Q. This well is to be completed in both those  
6 formations?

7 A. That is correct.

8 Q. Has Richardson also filed an application seeking  
9 to drill a well in the southwest of Section 12 to be  
10 completed in both formations?

11 A. Yes, they have.

12 Q. What is the location that is being proposed by  
13 Richardson?

14 A. The proposed location is in 200 feet of 870 feet  
15 from the south line and 1180 feet from the west line of  
16 Section 12.

17 Q. So again, this could be essentially at the same  
18 location being proposed by Amoco?

19 A. Yes.

20 Q. And again, could this well at that location be on  
21 an existing well pad on which Amoco currently operates a  
22 Dakota well in the southwest of Section 12?

23 A. Yes.

24 Q. Let's go to the next page. It's marked Exhibit

25 A. Would you identify this, please?



1           A.    Yes, this is a copy of the Exhibit A that was  
2           attached to the operating agreement that Amoco sent to all  
3           working interest owners for our proposed Burnham Gas Com B  
4           Number 1, and it shows the names and addresses of all the  
5           working interest owners in the Pictured Cliffs formation,  
6           being the southwest quarter unit, and their ownership in  
7           the Fruitland Coal, the west half of Section 12.

8           Q.    What does Amoco own in the southwest quarter?

9           A.    Fifty percent.

10          Q.    And do you know what Richardson owns?

11          A.    Our records at the time they were checked showed  
12          them to own 8.33 percent.

13          Q.    And again, that number may have increased and you  
14          wouldn't know it?

15          A.    Yes.

16          Q.    What about a west-half unit? What is Amoco's  
17          ownership in a west-half spacing unit?

18          A.    66.69062 percent.

19          Q.    And the last figure you had on the Richardson  
20          ownership in a west-half unit was what?

21          A.    5.55249 percent.

22          Q.    Now, in the cases that have been filed by Amoco,  
23          is Amoco seeking an order pooling all of the interests as  
24          shown on the two Exhibit A's that have just been reviewed  
25          by you?

1 A. Yes.

2 Q. Let's go to the portion of this exhibit that is  
3 behind the tab marked "Correspondence". Could you identify  
4 that, please?

5 A. Yes, the first page is -- shows just relevant  
6 oral and written communications between Amoco and other  
7 working interest owners, regarding our proposed Burnham Gas  
8 Com A Number 1.

9 Q. And was this exhibit prepared by you?

10 A. Yes.

11 Q. This summary?

12 A. Yes, sir.

13 Q. When was the first contact between the parties  
14 concerning the drilling of a well in the northwest quarter  
15 of Section 12?

16 A. Well, Amoco sent out its initial well proposal by  
17 a letter dated February 14th, 1995.

18 Q. And is it possible that the parties could have  
19 been in negotiation prior to this time, or is it not?

20 A. Sure.

21 Q. When did you first start working on this area  
22 in -- portion of the San Juan Basin?

23 A. July of 1993.

24 Q. And if there had been communications between the  
25 parties prior to July of 1993, you wouldn't be aware of

1 those?

2 A. That's correct.

3 Q. Are you aware of any proposal for farm out  
4 between the parties of the acreage involved in this case?

5 A. Yes, I recall Richardson requesting a farmout of  
6 Amoco's acreage in this section. I think it may have been  
7 late 1993.

8 Q. And were you involved with that?

9 A. Yes.

10 Q. And what was Amoco's response to the 1993 farmout  
11 request?

12 A. Amoco declined their request.

13 Q. This listing of contacts between the parties  
14 concerning the development of the northwest quarter of  
15 Section 12, this includes some written correspondence?

16 A. Yes, sir.

17 Q. And it also includes some telephone  
18 conversations?

19 A. That's correct.

20 Q. If you would -- I'd like to direct your attention  
21 to the entry dated March 7, 1995.

22 A. Yes.

23 Q. That indicates that you had contacted Richardson  
24 and requested a copy of the operating agreement?

25 A. That they proposed on their well.

1 Q. Yes.

2 A. Yes.

3 Q. Have you ever received that?

4 A. No, sir.

5 Q. Is this, to the best of your knowledge, a  
6 complete listing of the contacts between the parties  
7 concerning the development of the northwest quarter of 12?

8 A. Yes, sir, it is.

9 Q. All right, let's go to the document behind that  
10 page. Could you tell me what that is, please?

11 A. Yes, it's just a copy of my letter to the working  
12 interest owners, proposing our Burnham Gas Com A Number 1.

13 Q. And that's the February 14, 1995, letter?

14 A. Right.

15 Q. And behind that -- ?

16 A. -- is just a list of the names and addresses of  
17 the working interest owners that this letter was sent to.

18 Q. And again, this shows that the letter was sent to  
19 Richardson Production Company?

20 A. Yes, sir.

21 Q. The next document in that page is a summary  
22 sheet, again. Was this prepared by you?

23 A. Yes, sir.

24 Q. And basically what is this?

25 A. It's simply a time line of, again, relevant oral

1 and written communications between Amoco and any other  
2 working interest owners within the spacing unit.

3 Q. Other than the general testimony that you  
4 previously presented concerning a farmout agreement, since  
5 you've been working on this area, is this a complete  
6 listing of the contacts between the parties concerning the  
7 drilling of wells on this acreage?

8 A. Yes.

9 Q. Behind that, again, is a copy of the first letter  
10 that was sent?

11 A. That's correct.

12 Q. And the last -- the next page is what?

13 A. Is the names and addresses of the parties that  
14 this February 14th, 1995, letter was sent to.

15 Q. And again, this letter shows it was sent to  
16 Richardson Production Company?

17 A. That's correct.

18 Q. Let's go to the next letter, dated March 13,  
19 1995.

20 A. Okay.

21 Q. Could you tell me what this is?

22 A. Well, Amoco's original well proposal -- in my  
23 cover letter dated February 14th, 1995 -- was to drill the  
24 Burnham Gas Com B Number 1 in the southwest corner of  
25 Section 12 as a Pictured Cliffs well only.

1           After receiving a proposal from Richardson, an  
2           evaluation showed that probably the most effective way to  
3           drill and complete this well would be to complete it in the  
4           Pictured Cliffs and the Fruitland Coal formation and  
5           downhole commingle it.

6           So the March 13th letter is a resubmission of our  
7           proposal to amend it to include a completion in the  
8           Fruitland Coal formation.

9           Q.    And that was then sent to Richardson, was it not?

10          A.    Yes, sir.

11          Q.    Ms. Talbot [Jenkins], is the documentation you  
12          have just reviewed, to the best of your knowledge, a  
13          complete summary of the efforts which have been made to  
14          reach voluntary agreement with Richardson and others for  
15          the development of this acreage?

16          A.    Yes, sir, it is.

17          Q.    If this Application is granted, does Amoco  
18          Production Company request to be designated the operator of  
19          each of the wells involved in these consolidated cases?

20          A.    Yes, they do.

21          Q.    Were the portions of Amoco Exhibit 1, the exhibit  
22          booklet which you have just reviewed -- been prepared by  
23          you or compiled under your direction?

24          A.    Yes, they have.

25          MR. CARR:   Mr. Stogner, at this time we move the

1 admission of the portions of Amoco's Exhibit 1 behind tabs  
2 "Application", "Ownership" and "Correspondence", and we  
3 move their admission into evidence.

4 EXAMINER STOGNER: That portion of Exhibit 1 --  
5 Are there any objections before --

6 MR. KELLAHIN: No objection.

7 EXAMINER STOGNER: That portion of the exhibit  
8 under "Application", "Ownership" and "Correspondence" will  
9 be admitted into evidence at this time.

10 MR. CARR: And that concludes my direct  
11 examination of Ms. Jenkins.

12 EXAMINER STOGNER: Thank you, Mr. Carr.

13 Mr. Kellahin, your witness.

14 CROSS-EXAMINATION

15 BY MR. KELLAHIN:

16 Q. Ms. Jenkins, if you'll turn with me to your  
17 exhibit book and look behind the "Ownership" tab, and  
18 behind the first plat, when we look at your division of  
19 interest for the northwest quarter of 12, you've testified  
20 that Manon McMullen has committed on a voluntary basis that  
21 percentage to Amoco?

22 A. Yes, sir.

23 Q. When did that occur?

24 A. I'm not exactly sure the date we received it, but  
25 we received a signed copy of an AFE, an operating

1 agreement, from Manon Markham McMullen.

2 Q. Was that before or after the February 14th letter  
3 that you sent to those parties?

4 A. After.

5 Q. All right. Was it before or after the filing of  
6 the compulsory pooling Application by Amoco for this well?

7 A. I don't recall exactly when we received it. I  
8 think it may have been -- Actually, I don't recall if it  
9 was before or after.

10 Q. Other than that interest, have you been able to  
11 persuade any of these other interest owners to commit their  
12 interest to an Amoco-operated well for this spacing unit?

13 A. No, sir.

14 Q. When we look at your percentage for the Amoco  
15 interest, does that represent a leasehold position you had  
16 in this tract?

17 A. Yes, sir.

18 Q. All right. It doesn't represent the  
19 consolidation of interests pursuant to a well proposal,  
20 then?

21 A. Right.

22 Q. This is lease acquisition?

23 A. That's correct.

24 Q. So when you started making this well proposal,  
25 you already had that percentage?



1 A. That's correct.

2 Q. Okay. If you'll turn two more pages and if  
3 you'll look at the Exhibit A that's appended to the  
4 division of interest you have provided for the second well,  
5 which is the PC-Fruitland Coal combination --

6 A. Right.

7 Q. -- I notice that Manon McMullen has got an  
8 interest in this particular well and in this spacing  
9 configuration, but you did not indicate whether that party  
10 had agreed to participate on a voluntary basis. What is  
11 the status?

12 A. I didn't indicate it because she has not  
13 committed as to this tract.

14 Q. So as to this spreadsheet for this well and these  
15 two spacing units, none of these interest owners that you  
16 solicited have agreed to participate with Amoco?

17 A. That is correct.

18 Q. Am I correct in understanding that the basic  
19 Amoco percentage is a leasehold-derived percentage, and it  
20 doesn't represent a consolidation of interest based upon a  
21 well proposal by Amoco?

22 A. That's correct.

23 Q. Okay. When we turn to the correspondence, your  
24 well proposals are the February 14th letters?

25 A. Yes, sir.

1           Q.    This looks to be a file copy of a letter. Did  
2           you retain a copy of the letter you actually sent that  
3           shows the Amoco letterhead?

4           A.    No, I did not.

5           Q.    To the best of your knowledge, this letter  
6           correctly conforms to the letter you had printed and issued  
7           and sent?

8           A.    Absolutely.

9           Q.    Okay. When you look at the contents of the  
10          letter, was it on your own information and belief that you  
11          advised these interest owners in the last paragraph that,  
12          "Because we must drill this well as a 'package' with five  
13          other PC wells in order for it to be economic, we will  
14          proceed to initiate force-pooling measures to ensure the  
15          timely consolidation of all interests"?

16          A.    What was your question?

17          Q.    Did that come from you?

18          A.    Yes.

19          Q.    Upon what inform- --

20          A.    I wrote that.

21          Q.    Ma'am?

22          A.    I wrote that.

23          Q.    Yes, ma'am. And did you come to that conclusion  
24          on your own?

25          A.    The fact that we needed to drill all of them to

1 be economic came from the engineer.

2 Q. Which engineer?

3 A. Greg Grotke.

4 Q. How do you spell his last name? It's Grotke?

5 A. G-r-o-t-k-e.

6 Q. And he pronounces it -- ?

7 A. Grotke.

8 Q. Grotke. Is Mr. Grotke the engineer that you  
9 dealt with in terms of developing these two wells plus the  
10 other five that made the package?

11 A. Yes, sir.

12 Q. And was it based upon his representations to you  
13 about packaging these five wells together to make them  
14 economic, that you made this statement in this letter?

15 A. Yes.

16 Q. The AFE that's attached to this letter --

17 A. Yes.

18 Q. -- does that represent your work product?

19 A. No, sir, Mr. Grotke's.

20 Q. Mr. Grotke, in fact, generated that AFE, did he  
21 not?

22 A. That's correct.

23 Q. Is that something that he does within Amoco, to  
24 generate AFEs for this type of prospect?

25 A. Yes.

1 Q. At the time he submitted these two AFEs to you,  
2 each AFE proposed a single PC-completed well, did he not?

3 A. That's correct.

4 Q. What is the current status of the other three PC  
5 wells that are in Mr. Grotke's package?

6 A. We are still -- Some of them, the interests have  
7 been consolidated; some of them, they haven't.

8 Q. Are any of the other three subject to compulsory  
9 pooling applications before the Division at this point?

10 A. One is, the one that we've just continued today.

11 Q. The 11,245 case, I think it was?

12 A. Yes.

13 Q. All right. That well in Section 14 is part of  
14 this package?

15 A. Yes.

16 Q. All right. What is the status of the other two  
17 proposals?

18 A. The other two wells, I think we own a 100-percent  
19 interest in one of them, and another one we are negotiating  
20 a purchase of an interest.

21 Q. Is Mr. Grotke still involved in this project?

22 A. Yes.

23 Q. When we look at the first part of the display  
24 book and look behind the tab that says "Application" --

25 A. Uh-huh.

1           Q.    -- there is Mr. Hawkins' -- or a letter that is  
2 over Mr. Hawkins' signature, dated March 9th. Do you see  
3 that?

4           A.    Yes, sir.

5           Q.    Between March 14th and March 9th, did you have  
6 any written correspondence to Richardson with regards to  
7 either of these two well proposals?

8           A.    Between March 14th and March 9th?

9           Q.    I'm sorry, I misspoke. It's April 14th, the date  
10 of your first proposal.

11          A.    February 14th?

12          Q.    I'm still not getting it correct. The February  
13 14th date --

14          A.    Okay.

15          Q.    -- and the March 9th date, between those two  
16 dates did you have any written correspondence with  
17 Richardson about your well proposals?

18          A.    Other than the February 14th letter?

19          Q.    Yes, ma'am.

20          A.    We had no other written communication, as I  
21 remember.

22          Q.    Okay.

23          A.    Oh, I take that back.

24          Q.    Okay.

25          A.    We did have a letter to Richardson. I don't

1 recall the date of it.

2 Q. Is that contained in this package?

3 A. No.

4 Q. Would that be a letter over your signature on  
5 March 7th of 1995?

6 A. That sounds right.

7 Q. All right. Let me show you --

8 A. Okay.

9 Q. -- this document.

10 All right, have you seen the document?

11 A. Yes.

12 Q. Do you recognize that document?

13 A. Yes, I do.

14 Q. What does it purport to represent?

15 A. It tells Richardson that we did not have any  
16 interest in any type of sale or exchange of any interest at  
17 this time.

18 Q. Is that your signature? Is that --

19 A. Yes, sir.

20 Q. -- the letter you sent?

21 A. Yes, sir.

22 MR. KELLAHIN: Mr. Examiner, this letter is not  
23 yet marked as an exhibit.

24 To keep the record straight, with Mr. Carr's  
25 concurrence, it is contained in the package of exhibits

1 that our land person will testify to, and if we may simply  
2 document it by its date I think the record might stay  
3 straight if we do that.

4 EXAMINER STOGNER: Okay, why don't we do that?  
5 You are planning on offering this as an exhibit later on?

6 MR. KELLAHIN: Yes, sir, but I want to show it to  
7 you now and discuss it with Ms. Jenkins.

8 EXAMINER STOGNER: Is this my copy?

9 MR. KELLAHIN: Yes, sir.

10 EXAMINER STOGNER: Thank you.

11 Q. (By Mr. Kellahin) All right. Other than the  
12 March 7th letter that I've just shown you, there was no  
13 other written correspondence from you to Richardson within  
14 the time frame that I've described?

15 A. Right.

16 Q. You testified in response to Mr. Carr that you  
17 had a number of these photocopies of the green cards,  
18 showing that these various parties had been sent notice of  
19 Mr. Hawkins' application for compulsory pooling?

20 A. Yes, sir.

21 Q. Is that something that you take care of?

22 A. No, sir, Mr. Hawkins took care of those.

23 Q. Do you know on what particular date the March 9th  
24 letter was sent to these other interest owners?

25 A. What day the letter was mailed?

1 Q. Yes, ma'am.

2 A. I don't know that.

3 Q. The two well proposals that you have sent on  
4 February 14th, one was for a PC-alone well in the northwest  
5 quarter of 12, right?

6 A. Yes.

7 Q. And the second one you proposed was a PC-stand-  
8 alone well in the southwest quarter of 12; is that not  
9 correct?

10 A. That's correct.

11 Q. When you look at Mr. Hawkins' application, he's  
12 applied for compulsory pooling of a coal gas spacing unit  
13 in the west half of Section 12 for a well that you had not  
14 yet proposed; is that not true?

15 A. Not for a well that we had not proposed, but for  
16 a completion in a well that we had proposed in a second  
17 formation.

18 Q. And in a spacing unit you have not yet proposed?

19 A. That's correct.

20 Q. Did Mr. Grotke come to you originally with his  
21 proposals on the AFEs and the prospect for this package of  
22 five wells?

23 A. Yes.

24 Q. And they were individual PC-alone wells, were  
25 they not?



1           A.    Yes.

2           Q.    Did you have any conversations or discussions  
3 with Mr. Grotke about the inclusion of the coal gas in  
4 either one of these wells?

5           A.    Yes, I did.

6           Q.    All right. And is that a basis for the change,  
7 then, for adding the coal in the well in the southwest  
8 quarter of 12?

9           A.    I'm not sure what you're asking.

10                  Actually, I think the basis of the change was,  
11 after we received Richardson's AFE we thought that's  
12 probably a good idea, so we decided that it would be best  
13 to complete it in both formations.

14           Q.    The idea, then, for taking one of these wells and  
15 commingling it for a coal gas well with the PC generated  
16 with Richardson, did it not?

17           A.    I don't know what you mean when you say  
18 "generated". We contemplated doing it earlier, before  
19 Richardson did.

20           Q.    Richardson formally proposed it to you first?

21           A.    Yes.

22           Q.    Okay. And in response to that proposal, Mr.  
23 Grotke concurred and altered his proposal?

24           A.    Yes.

25           Q.    When you received Richardson's proposal for these

1     wells, did they come to you?

2             A.     Yes, via fax.

3             Q.     Okay. And as part of that process, then, how did  
4     you disseminate that information in order to generate a  
5     response from your company?

6             A.     I took it down to Mr. Grotke to review.

7             Q.     All right. Again, this is his project as an  
8     engineer, and he got that information?

9             A.     That's correct.

10            Q.     To what extent is Mr. Hawkins involved in any of  
11    this at this point?

12            A.     At this point we may have given him information,  
13    but as far as evaluation, he's not involved.

14            Q.     Okay. When we look at your February 14th letter,  
15    apart from saying that you'll proceed to initiate  
16    compulsory pooling, did you provide these parties with any  
17    indication of the time frame in which they would have to  
18    respond to your proposal?

19            A.     No.

20            Q.     Did you discuss with Mr. Hawkins when to initiate  
21    compulsory pooling?

22            A.     At the time the letter was sent out, no.

23            Q.     On the March 9th?

24            A.     His March 9th letter?

25            Q.     Yes, ma'am.

1           A.    Yeah, but I'm saying at the time that the  
2           original proposal went out, we had not decided -- we were  
3           going to wait till the appropriate amount of time had  
4           passed.

5           Q.    In response to Richardson's proposal for these  
6           two wells, what conclusion did Mr. Grotke come to?

7           A.    Ask that again.

8           Q.    Yes, ma'am. The proposals from Richardson to  
9           Amoco --

10          A.    Uh-huh.

11          Q.    -- came through you --

12          A.    Right.

13          Q.    -- were disseminated to him?

14          A.    Yes.

15          Q.    What, if any, action did he communicate to you in  
16          response to their request?

17          A.    The initial reaction is to go through the cost  
18          and see, you know, how they compared to ours and evaluate  
19          that.

20          Q.    Other than a cost comparison analysis, did you  
21          have any other discussion with Mr. Grotke about any other  
22          factor or component in his decision about participating  
23          with Richardson or not?

24          A.    Well, since we initially proposed the well and  
25          because we had a majority interest, that, to us, was a

1 factor in determining whether or not we wished to proceed  
2 to try to be operator or if Richardson should be operator.

3 Q. Okay. The Richardson AFEs were lower than the  
4 Amoco AFEs, were they not?

5 A. Yes.

6 Q. Okay. Other than you having a larger interest  
7 and having proposed the well first, were there any other  
8 factors in your decision about rejecting Richardson as the  
9 operator?

10 A. Well, we wanted to compare the AFEs, and even  
11 though the bottom lines were different -- Amoco's was  
12 higher -- we felt there were some costs that may not have  
13 been built into their AFEs, that were necessary to do the  
14 project that they were proposing.

15 Q. Are you speaking from your own examination or  
16 from information given you by other Amoco employees?

17 A. Information given to me by other Amoco employees.

18 Q. And who would that employee be?

19 A. Greg Grotke.

20 Q. All right, no one else?

21 A. No.

22 Q. I have discovered another copy, Ms. Jenkins, of  
23 the letter I showed the Examiner. It's the March 7th  
24 letter.

25 A. Uh-huh.

1           Q.    It states on the bottom of that letter in the  
2           last paragraph that you represent that you're going to  
3           respond to their proposal, does it not?

4           A.    Yes.

5           Q.    What does it say?

6           A.    It says, "With respect to the parties' respective  
7           AFEs, Amoco will also advise Richardson in writing in the  
8           near future with regard to Amoco's position."

9                   And you never did that, did you?

10          A.    Yes, we did.

11          Q.    Where's the letter that responds to that?

12          A.    We sent them a certified copy of our application  
13          from -- letter dated March 9th, from Bill Hawkins.

14          Q.    The response was an application for compulsory  
15          pooling?

16          A.    Yes.

17                   MR. KELLAHIN:  No further questions.

18                   EXAMINER STOGNER:  Mr. Carr, any redirect?

19                   MR. CARR:  I have no questions, no redirect.

20                   EXAMINER STOGNER:  While he's reviewing that, I  
21          do have a couple of questions.

22                                   EXAMINATION

23          BY EXAMINER STOGNER:

24                  Q.    On the Exhibit A's, the interest parties --

25                  A.    Yes.

1           Q.    -- you said that McMullen was the only one that  
2    had a signed partner- -- or a signed instrument at this  
3    point?

4           A.    Right, on one of the wells.

5           Q.    On one of the wells.

6           A.    Right.

7           Q.    Has there been any discussion with any of the  
8    others if you're expecting a signed one in the near future,  
9    or have they verbally committed to it yet?

10          A.    There has been discussions with other parties,  
11    but no verbal commitments to join.

12                We have had discussions with Kerr-McGee, who  
13    initially told us that they would farm out to Amoco, and I  
14    asked him if he was aware -- I know he got it, Kerr-McGee  
15    got a certified copy of the compulsory pooling  
16    application -- if he was aware that we were going through  
17    that.

18                And he said -- he said, No, I wasn't -- or he  
19    was, but he didn't even really even talk about that.

20                And I said, Well, do you wish to wait to see who  
21    becomes designated operator before you determine who you  
22    want to farm the interest out to?

23                And he said yes.

24          Q.    And that is the interest in the west half and  
25    southwest quarter, the Kerr-McGee that you're referring to?

1           A.    Yes.  And if you look -- they also -- Let's see.  
2   That's correct.

3           Q.    But they don't have interest in the northwest  
4   quarter of that section?

5           A.    I think they -- Yes, they do.  See, the interest  
6   of Flag-Redfern Oil Company?

7           Q.    Yes.

8           A.    They acquired that interest.  At the time that  
9   exhibit was prepared, there was not an assignment of record  
10   from Flag-Redfern to Kerr-McGee.

11                   In my discussions with Kerr-McGee on the other  
12   section, he did tell me that they did own that Flag-Redfern  
13   interest and sent me a copy of the assignment, and just  
14   this copy of the Exhibit A has not been revised to reflect  
15   that.

16           Q.    Are there any other interests that have had  
17   similar exchanges or acquisitions or --

18           A.    We did have a discussion with Rod -- it says  
19   Robert Allen Markham, and after discussions with him I  
20   believe his name is Roderick Allen Markham.  Initially he  
21   had discussions with Mr. Grotke and with me.  And his  
22   discussion with me was, Well, what terms would Amoco take a  
23   farmout on?

24                   And I had not gotten back with him on that  
25   because of all the other circumstances, not knowing who

1 would eventually be operator and drill the well.

2 EXAMINER STOGNER: Okay, I have no other  
3 questions of this witness.

4 Mr. Carroll, do you?

5 MR. CARROLL: Yes, Mr. Examiner.

6 EXAMINATION

7 BY MR. CARROLL:

8 Q. Ms. Jenkins, this March 7th, 1995, letter, with  
9 whom did you consult when you replied to Richardson that  
10 Amoco has no interest in any type of sale or exchange?

11 A. This was simply a letter to -- If you'll look  
12 over at our correspondence, under the "Correspondence" on  
13 the exhibit, you'll see February 23rd, 1995, after  
14 Richardson received Amoco's AFE, Cathleen Colby called Mr.  
15 Grotke, and according to Mr. Grotke, that Cathleen  
16 expressed Richardson's opinion that our costs were too high  
17 and asked if we would be willing to trade some of our  
18 acreage in this spacing unit for some other acreage in the  
19 area.

20 And Mr. Grotke said he would take that under  
21 consideration. And we looked at some other possi- -- some  
22 areas.

23 And this letter is to respond to her that we are  
24 not interested in any trade of acreage, not that we were  
25 not interested in any negotiations of an operating



1 agreement for the drilling of this well.

2 Q. So you and Mr. Grotke, or Mr. Grotke, determined  
3 that Amoco had no interest?

4 A. In a trade of --

5 Q. In a sale or exchange?

6 A. -- this acreage -- or sale, whatever, that we  
7 were not willing -- we didn't want to do any trade. We  
8 weren't saying that we didn't want to negotiate in good  
9 faith a joint operating agreement for Amoco to operate the  
10 well.

11 Q. All right. I guess I don't understand here.  
12 According to this letter it appears, from what you just  
13 said, that you and Mr. Grotke had the authority to turn  
14 down an offer from Richardson but you didn't have the  
15 authority to accept on behalf of Amoco.

16 A. I'm not sure what you're asking.

17 Q. In the first sentence, in the first paragraph --

18 A. Uh-huh.

19 Q. -- you turned down Richardson's offer for a sale  
20 or exchange --

21 A. Uh-huh.

22 Q. -- and then in the last sentence of that  
23 paragraph, you say if there's more discussions that follow  
24 any offer, acceptance by Amoco will have to be by somebody  
25 other than you or Mr. Grotke.

1           A.    Uh-huh.  Yes, we have the authority to decline  
2           any trade, but we don't have the authority to bind the  
3           company to some sort of trade.

4           Q.    And who would be the person above you that would  
5           have the authority to bind the company?

6           A.    An attorney-in-fact.

7           Q.    And who would that be?

8           A.    We have several.

9           Q.    Is Mr. Hawkins an attorney-in-fact?

10          A.    No, sir.

11          Q.    Who would be naturally the person you would ask  
12          to bind the company?

13          A.    My immediate supervisor, John Hashe, who's a land  
14          manager, is an attorney-in-fact for Amoco.

15          Q.    So I get this clear again, you have the authority  
16          to turn down offers from other companies on behalf of  
17          Amoco, but you don't have authority to accept offers from  
18          other companies?

19          A.    Yes.

20               MR. CARROLL:  Okay, thanks.  That's all I have.

21               EXAMINER STOGNER:  Any other questions?

22               You may be excused.

23               Mr. Carr?

24               MR. CARR:  At this time I call Mr. Bill Hawkins.

25               EXAMINER STOGNER:  Mr. Carr?

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BILL HAWKINS,

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

DIRECT EXAMINATION

BY MR. CARR:

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

A. Bill Hawkins.

Q. Where do you reside?

A. In Denver, Colorado.

Q. By whom are you employed and in what capacity?

A. Amoco Production Company as a petroleum engineer.

Q. Mr. Hawkins, have you previously testified before this Division and had your credentials as a petroleum engineer accepted and made a matter of record?

A. Yes, I have.

Q. Are you familiar with each of the four Applications filed in these consolidated cases?

A. Yes, I am.

Q. Are you familiar with the subject acreage?

A. Yes.

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

EXAMINER STOGNER: Are there any objections?

MR. KELLAHIN: No objection.

EXAMINER STOGNER: Mr. Hawkins is so qualified.

1 Q. (By Mr. Carr) Mr. Hawkins, have you prepared  
2 certain exhibits for presentation here today?

3 A. Yes, I have.

4 Q. Let's go to the material contained behind the tab  
5 "Well Cost" in Amoco's Exhibit Number 1.

6 A. Okay.

7 Q. Would you identify the first document behind this  
8 tab?

9 A. Yes, the first document behind the tab "Well  
10 Cost" is the AFE that Amoco submitted on the Burnham Gas  
11 Com A Well Number 1. It's for a Pictured Cliffs completion  
12 in the -- I believe it's the northwest quarter of Section  
13 12.

14 Q. And this is the AFE that was submitted to other  
15 interest owners in the acreage?

16 A. That's correct. The AFE here just at the bottom  
17 of the column of numbers shows an estimated dryhole cost of  
18 \$90,160, and a gross completion cost of \$216,260.

19 Q. And this, as it indicates, was prepared by Greg  
20 Grotke?

21 A. That's correct.

22 Q. Who is Mr. Grotke?

23 A. Greg Grotke is a petroleum engineer with Amoco,  
24 as well. His responsibility is primarily to assist in the  
25 drilling programs that we're putting forth in 1995.

1 Q. And do you work with Mr. Grotke on a regular  
2 basis?

3 A. Yes, I do.

4 Q. And in what respect?

5 A. Generally, I attend the drilling meetings that  
6 are discussing our drilling plans and provide consultation  
7 on regulatory affairs, when we may need some special type  
8 of relief.

9 Q. Let's go to the next document behind this tab.  
10 What is this?

11 A. Again, this is an AFE for the Burnham Gas Com B  
12 Well Number 1. It's identical to the A Number 1. It's a  
13 Pictured Cliffs well to be located in the southwest quarter  
14 of the section.

15 Q. And these totals are identical to the totals on  
16 the previous AFE; is that correct?

17 A. Yes, they are.

18 Q. Was this AFE submitted to other interest owners  
19 in the affected acreage?

20 A. Yes, it was.

21 Q. This AFE was for only a Pictured Cliffs  
22 completion in the southwest quarter of Section 12, was it  
23 not?

24 A. That's correct.

25 Q. All right. Now, let's go to the next AFE, and

1 this one, I believe, is in two parts, is it not?

2 A. Yes, it is. This is a -- first page of the AFE,  
3 just followed by the second page.

4 The first page is again for the Burnham Gas Com B  
5 Well Number 1. That's the well in the southwest quarter.

6 When Amoco decided to resubmit an AFE to amend  
7 our proposal to include the Fruitland, we broke this AFE  
8 into two parts. The first part would be the portion that  
9 would be charged to the PC owners, that being \$45,080 for  
10 gross dryhole and \$127,380 for completion.

11 If we turn to the next page, we'll get the  
12 Fruitland portion of that AFE: gross dryhole \$45,080, and  
13 gross completion \$133,380.

14 So you would need to total those two up to get a  
15 total cost for the well.

16 Q. And was this AFE, that reflected completing the  
17 well in both the Fruitland and Pictured Cliffs, also  
18 submitted to those interest owners who are -- those  
19 interest owners in the affected acreage?

20 A. Yes.

21 Q. Now, let's move to the next page.

22 A. Okay.

23 Q. What is this?

24 A. This page is a comparison of the AFEs that were  
25 submitted by Richardson and Amoco for the well to be

1 located in the northwest quarter of Section 12. It's the  
2 Pictured Cliffs well, and we have named that well --

3 MR. KELLAHIN: I have an objection here, Mr.  
4 Examiner.

5 THE WITNESS: -- the Burnham Gas Com A 1.

6 EXAMINER STOGNER: Yes?

7 MR. CARR: Just a minute.

8 MR. KELLAHIN: Mr. Examiner, I object. There's  
9 no proper foundation laid for this witness to qualify as an  
10 expert in comparing AFEs. And in fact, Ms. Jenkins just  
11 testified it was Mr. Grotke who had made this analysis and  
12 had come to the conclusion.

13 So there's no foundation yet laid that Mr.  
14 Hawkins has the requisite expertise to reach conclusions  
15 about comparisons.

16 EXAMINER STOGNER: Mr. Carr?

17 MR. CARR: I would note, Mr. Stogner, that we  
18 have qualified Mr. Hawkins in the past as an expert in  
19 petroleum engineering.

20 I'd be happy to ask him some questions that  
21 relate to his experience with AFEs, if that would satisfy  
22 Mr. Kellahin, but he didn't object when we qualified him  
23 initially. And I'll be happy to have Mr. Hawkins testify  
24 that he works with them regularly, that he evaluates them  
25 as part of his daily work and that he has looked at the

1 AFEs for both of the wells that are involved, if that is  
2 what would be desired.

3 EXAMINER STOGNER: Mr. Kellahin?

4 MR. KELLAHIN: I'm not going to suggest to Mr.  
5 Carr how he try his case. I am telling the Division that I  
6 have an objection because he's not laid a proper  
7 foundation. It's up to him to figure out what he's going  
8 to do.

9 MR. CARR: I would just note that in that regard  
10 I will ask those questions of Mr. Hawkins. But when Mr.  
11 Kellahin had no objections to the qualifications of Mr.  
12 Hawkins in the past, we have explained in detail what his  
13 work has entailed, but I will ask those questions.

14 EXAMINER STOGNER: Mr. Carr, if you would begin  
15 to lay a brief foundation for the record.

16 Q. (By Mr. Carr) Mr. Hawkins, have you reviewed the  
17 AFEs that have been submitted by Amoco to Richardson and  
18 other interest owners concerning the wells that are the  
19 subject of this hearing?

20 A. Yes, I have.

21 Q. Have you also reviewed the AFEs that have been  
22 provided by Richardson to you concerning the wells that are  
23 located on the property which is the subject of this  
24 hearing?

25 A. Yes, I have.



1 Q. Now, in your work -- When did you first become  
2 employed as a petroleum engineer?

3 A. In June of 1974.

4 Q. And by whom were you employed?

5 A. Amoco Production Company.

6 Q. And what was your position with Amoco at that  
7 time?

8 A. Petroleum engineer.

9 Q. And where were you working?

10 A. In Lafayette, Louisiana.

11 Q. And what were the duties that you were assigned  
12 at that time?

13 A. As a production operations engineer my job was to  
14 assist in implementation of drilling programs and to  
15 monitor production from producing wells, recommend  
16 completion or recompletion or workover that might be  
17 necessary to improve production.

18 Q. Were you ever called upon in that role to review  
19 AFEs?

20 A. Yes.

21 Q. Were you called upon in that role to ever prepare  
22 an AFE?

23 A. Yes.

24 Q. And how many AFEs have you prepared in your  
25 career, since you first went to work with Amoco?

1           A.    I don't have an exact number, but I would say  
2   it's on the order of a dozen or so.

3           Q.    And after your initial assignment, you have held  
4   various engineering positions with Amoco at all times  
5   thereafter?

6           A.    Yes.

7           Q.    And in all of those positions have you been  
8   called upon to be familiar with AFEs?

9           A.    Yes.

10          Q.    And are you familiar with what goes into the  
11   preparation of an AFE?

12          A.    Yes, I am.

13          Q.    When you look at an AFE, do you know what the  
14   items in an AFE are intended to represent?

15          A.    Yes.

16          Q.    When you looked at the AFEs that were submitted  
17   in this case by Richardson, were you aware of what they  
18   were representing to Amoco as the costs that were going to  
19   be incurred for various items?

20          A.    Yes.

21          Q.    In your expertise, do you understand an AFE when  
22   you receive one?

23          A.    Yes.

24          Q.    And are you called upon to look at an AFE and  
25   evaluate whether or not it's appropriate for your company

1 to participate in the well?

2 A. In my present position I am not required to do  
3 that, but I have done that in the past.

4 MR. CARR: I would tender Mr. Hawkins as a  
5 competent witness to review AFEs for wells proposed in the  
6 San Juan Basin.

7 MR. KELLAHIN: Same objection, Mr. Examiner.

8 EXAMINER STOGNER: May I ask why, Mr. Kellahin?

9 MR. KELLAHIN: Yes, sir, he's not specifically  
10 tied the Amoco AFEs in this particular matter to his  
11 personal knowledge and review. If Mr. Carr asked that  
12 question, I did not hear the answer.

13 He has shown a general reference as a petroleum  
14 engineer to have personally prepared perhaps a dozen AFEs,  
15 and I have yet to hear that he had any detailed involvement  
16 with regards to the preparation of Amoco's AFEs as to these  
17 two specific wells.

18 And for that reason, I object.

19 MR. CARR: You know, Mr. Stogner, we can sit here  
20 all afternoon, but the fact is, we're not offering Mr.  
21 Hawkins' testimony as a person who prepared the AFE.

22 We have qualified him as someone who can look at  
23 the AFE and evaluate it, and we've shown that he has the  
24 experience and expertise to do that. And I've laid a  
25 proper foundation, and I'd like to let Mr. Hawkins go

1 forward and present our case.

2 But we can sit here and argue this stuff all  
3 afternoon if that's what Mr. Kellahin wants. But I would  
4 submit to you I have laid a proper foundation, and Mr.  
5 Hawkins is a qualified witness to review this Exhibit.

6 EXAMINER STOGNER: Mr. Carr, I'm going to allow  
7 your questioning to continue, and I'm going to overrule  
8 your objection, Mr. Kellahin.

9 Mr. Carr?

10 Q. (By Mr. Carr) Mr. Hawkins, can you identify the  
11 page that at the top in the Amoco exhibit book is entitled  
12 "AFE Comparison"?

13 A. Yes.

14 Q. Did you prepare this exhibit?

15 A. Yes, I did.

16 Q. And what did you look at in preparing the  
17 exhibit?

18 A. I looked at the AFEs that were submitted both by  
19 Richardson Operating Company and Amoco for the Burnham Gas  
20 Com A Well Number 1 and identified the significant  
21 differences between those two AFEs in terms of costs.

22 Q. What was the total cost reflected on the AFE of  
23 the Richardson Operating Company AFE for the Burnham Gas  
24 Com A Number 1 well?

25 A. I show it here as \$152,117.

1           A.     \$43,000.

2           Q.     Can you tell me whether or not the Amoco \$43,000  
3     figure, in your estimate, is what the current cost for  
4     stimulation would be today?

5           A.     It would depend somewhat on the stimulation that  
6     we're proposing. In this case, we've looked at the types  
7     of stimulations that we would be using for the Burnham Gas  
8     Com A 1, and recently our costs are in fact more on the  
9     order of the Richardson estimate, \$24,000.

10           So I would say that we would expect to be able to  
11     stimulate this well for a cost of about \$24,000.

12           Q.     Looking at the recent stimulation costs for wells  
13     of this nature, you said they've come down. Over what  
14     period of time?

15           A.     We've been looking at trying to reduce costs of  
16     fracture stimulations over the last year. And in fact,  
17     over about the last six months we've seen stimulation costs  
18     come down to the \$20,000-to-\$24,000 range on our recent  
19     Ruth well completion and -- I believe there's one more.  
20     I'd have to look up the name of the well.

21           Q.     When was the Ruth well actually completed?

22           A.     February of 1994.

23           Q.     And so is it appropriate to assume the  
24     stimulation figure reflected by the Richardson AFE to be  
25     more in line with what the actual cost would be?

1 A. Yes.

2 Q. What about the entry for compressor charges?

3 A. We could not identify any cost for compressor for  
4 the Richardson well. We believe the well will need a  
5 compressor to produce efficiently, lower the surface  
6 pressure. In fact, we believe that the Richardson wells  
7 that are in the area use compressor as well.

8 So we've estimated the cost for that compressor  
9 to be \$30,000.

10 Q. Is that \$30,000 in line with the costs associated  
11 with installing compression on similar wells currently  
12 operated by or completed by Amoco?

13 A. Yes.

14 Q. All right, there's an item called "Contingency"  
15 where there's a difference. Could you tell me how Amoco  
16 comes forward with a contingency item in an AFE?

17 A. Well, our contingency is based on 15 percent.  
18 It's an estimated contingency that would reflect any number  
19 of problems you might incur or just some differences in  
20 actual costs.

21 Q. And so that is the actual figure that you use  
22 across the board, or the way you derive a contingency  
23 figure within Amoco?

24 A. That's correct.

25 Q. If you were successful in this case and submitted

1 an AFE with an order approving the pooling of the acreage  
2 and designating Amoco the operator, would the stimulation  
3 charges in that AFE be adjusted to reflect the most recent  
4 costs?

5 A. Yes, they would.

6 Q. Now let's go to the next page, "AFE Comparison,  
7 Burnham Gas Com B Number 1 Well". Do you see that?

8 A. Yes.

9 Q. Have you reviewed the AFEs, both of Amoco and  
10 Richardson Operating Company, for the wells that are being  
11 proposed in the southwest quarter of Section 12?

12 A. Yes, I have.

13 Q. And does this exhibit, like the page before it,  
14 compare to certain cost differences reflected in those  
15 AFEs?

16 A. Yes.

17 Q. How much was the Amoco AFE in excess of the  
18 Richardson Operating Company AFE?

19 A. \$66,781.

20 Q. Again, you have identified three areas where  
21 there is a difference in the two AFEs; is that correct?

22 A. That's correct.

23 Q. Let's go to the bottom one, the contingency.  
24 Again, that is a 15-percent charge for gross well costs,  
25 and that's how the Amoco \$34,000 figure is obtained; is

1 that right?

2 A. That's right.

3 Q. And we go, then, up the list, the compressor cost  
4 again. You don't find compressor charge in the Richardson  
5 AFE, and you have estimated \$30,000 would be necessary for  
6 the Amoco well?

7 A. Yes.

8 Q. As to stimulation, would you review that, please?

9 A. Again, we've looked at the Richardson cost of  
10 \$48,000 and Amoco's estimated cost, \$70,000.

11 We compared back with our recent Ruth completion,  
12 which was a Fruitland and PC downhole commingled with both  
13 zones requiring fracture-stimulation, and the total cost  
14 for that was about \$48,000.

15 So I think we would be able to stimulate this  
16 well and use that same \$48,000 cost.

17 Q. And if you were successful in this case and  
18 required to submit an estimate of well costs with an order  
19 to those nonparticipating interest owners, is it correct  
20 that Amoco would use the most recent current stimulation  
21 figure?

22 A. Yes.

23 Q. Now, these are just AFEs, these are just  
24 authorities for expenditure?

25 A. That's correct.



1 Q. They're estimates; is that correct?

2 A. They are estimates.

3 Q. Are the actual charges that the non-operator  
4 would have to bear, the non-joining operator, would be a  
5 share of the actual expenses?

6 A. That's correct.

7 Q. Let's go to the information behind the tab called  
8 "Overhead and Risk".

9 A. Okay. I've prepared an exhibit here entitled  
10 "Compulsory Pooling", and it has the two remaining items I  
11 think we need to settle on today.

12 The charge for supervision, which is an overhead  
13 charge, we've shown -- These are the dollar figures that  
14 were included on the operating agreement that was submitted  
15 to Richardson, drilling overhead of \$3582 a month and  
16 producing well rate of \$498 a month.

17 Q. Mr. Hawkins, how do these figures compare with  
18 the *Ernst & Young* survey figures for wells to this depth in  
19 this area?

20 A. The -- We've looked at the recent *Ernst & Young*  
21 figures, and the drilling costs are -- our costs are  
22 actually lower than the *Ernst & Young* figures. I believe  
23 they're -- I have something here to look at, let me just  
24 refresh my memory.

25 Drilling well rate is close to \$5000 per month,

1 and the producing well rate by *Ernst & Young* is about \$412  
2 to \$450 for a median figure. And our suggested cost or  
3 overhead was \$498.

4 Q. Do you request that the figures set forth on this  
5 exhibit be incorporated into any order resulting from this  
6 hearing?

7 A. Yes, we would. And in fact, we would ask that  
8 the supervision -- the overhead rates allow to escalate  
9 according to a COPAS escalation factor each year.

10 Q. Is that COPAS escalation factor included with the  
11 accounting attachment to the operating agreement which has  
12 been prepared for this property?

13 A. Yes, it is. On the page just behind this  
14 "Compulsory Pooling" page there's a copy of the COPAS, on  
15 the page that discusses overhead charges. And you can see  
16 about halfway down the page the same charges that I've  
17 identified.

18 And down at the bottom of the page, under  
19 paragraph A (3), it says these rates would be adjusted on  
20 the first day of April, following the effective date of the  
21 agreement being signed.

22 And it identifies the escalation factor as the  
23 increase or decrease in the average weekly earnings of  
24 crude petroleum and gas production workers for the last  
25 calendar year. And that number is published regularly. Or

1 annually, I should say.

2 Q. Mr. Hawkins did you review the Applications that  
3 were filed by Richardson seeking compulsory pooling in each  
4 of these cases?

5 A. Yes.

6 Q. Did you see the risk penalties that were being  
7 sought in each of those Applications to be assessed against  
8 any interest owner who wasn't voluntarily in the well?

9 A. Yes, I did.

10 Q. And do you recall what those were?

11 A. Yes, they were 200 percent.

12 Q. Do you disagree with assessing the maximum  
13 penalty authorized by this Division --

14 A. No, I do not.

15 Q. -- against any nonparticipating interest owner,  
16 no matter who prevails?

17 A. No, that's right, I do not.

18 Q. And what are you recommending as the appropriate  
19 risk penalty to be assessed if Amoco is successful in this  
20 matter?

21 A. For the Fruitland Coal, costs for that portion of  
22 the well, in the Burnham Gas Com B well, 156 percent, which  
23 I believe is the standard that the NMOCD has been using  
24 over the last few years.

25 For the Pictured Cliffs well and completion in

1 the Burnham Gas Com B well, the 200-percent figure.

2 Q. And why should we assess a penalty in this case  
3 if someone is not participating in the well?

4 A. Well, the parties who are paying for the well  
5 obviously are taking all of the risk for this.

6 The risks that would be involved, obviously,  
7 would include not only costs and maybe potential trouble in  
8 drilling the well, but also some geologic risks associated  
9 with making economic wells.

10 Q. In your opinion, is it possible that any of the  
11 wells that are involved in this hearing could be drilled  
12 and in fact would not be an economic success?

13 A. Yes, I think that could be.

14 Q. Does Amoco request to be designated operator of  
15 each of the proposed wells?

16 A. Yes.

17 Q. In your opinion, will approval of this  
18 Application and designation of Amoco as operator and the  
19 drilling of development of these tracts as Amoco has  
20 proposed be in the best interest of conservation, the  
21 prevention of waste and the protection of correlative  
22 rights?

23 A. Yes.

24 Q. Were the portions of the exhibit book behind the  
25 last two tabs prepared by you or compiled under your

1 direction?

2 A. Yes, they were.

3 MR. CARR: At this time, Mr. Stogner, we move the  
4 admission into evidence of the material behind the last two  
5 tabs in Amoco Exhibit 1.

6 EXAMINER STOGNER: Are there any objections?

7 MR. KELLAHIN: No objection, Mr. Examiner.

8 EXAMINER STOGNER: The last two tabs under  
9 Exhibit 1 of Amoco will be admitted into evidence at this  
10 time.

11 MR. CARR: And that concludes my direct  
12 examination of Mr. Hawkins.

13 EXAMINER STOGNER: Thank you, Mr. Carr.

14 Mr. Kellahin, your witness.

15 MR. KELLAHIN: Thank you, Mr. Examiner.

16 CROSS-EXAMINATION

17 BY MR. KELLAHIN:

18 Q. Mr. Hawkins, as part of your risk analysis for  
19 your last statements to Mr. Carr, did you examine the  
20 production or the productivity of any of the Pictured Cliff  
21 wells within a mile of either of these two proposed wells?

22 A. Yes, I have.

23 Q. As part of your risk analysis for the coal gas  
24 well in the southwest portion of the section, did you, for  
25 that reservoir, examine for the location and productivity

1 of any coal gas wells within a mile of that area?

2 A. I did not look at any Fruitland Coal well.

3 Q. How far do we have to go from either of these two  
4 well proposals to have a Pictured Cliff well that is  
5 operated by Amoco?

6 A. Pretty far. The unit to the south is operated by  
7 BHP. The wells that are immediately next door, I know  
8 Richardson has some operations in the Pictured Cliffs. I'm  
9 not sure how far our wells -- how far we'd have to go.  
10 However, we do operate probably over 1000 Pictured Cliffs  
11 wells.

12 Q. As part of your analysis and comparison of the  
13 AFEs, did you also look into Mr. Grotke's conclusion about  
14 the economics in packaging five of these PC well proposals  
15 as a package?

16 A. My understanding on that is that we were trying  
17 to improve the economics by including five Pictured Cliffs  
18 wells to be drilled as a package, or six, and that was --  
19 Really, the key there is to make these wells the most  
20 economic ventures that we can.

21 Q. My question for you: Does Amoco's AFE, as we see  
22 it in the exhibit book, recommend the economic advantage  
23 that Mr. Grotke perceived by packaging five PC wells  
24 together?

25 A. I believe it does.

1 Q. That was his method?

2 A. That was one of the things he was looking at to  
3 drive the cost down, that's correct.

4 Q. Okay. As part of your analysis, did you attempt  
5 to authenticate the reliability of his AFEs by looking for  
6 PC wells that you had drilled and operated recently, to see  
7 what actual costs did in comparison to his proposed AFE  
8 costs?

9 A. Yes, I did.

10 Q. And as a result of that, what did you conclude?

11 A. Well, I concluded that the recent PC wells that  
12 we have drilled have been deeper than this. These are  
13 about 1200-foot wells. So it would be difficult to take a  
14 recent cost of a well such as the Ruth well and make a  
15 direct analogy to what's being proposed here.

16 The Eva Lou well and the Ruth well are wells that  
17 are drilled to the PC and Fruitland. The costs for those  
18 wells is on the order of \$300,000. However, they are  
19 typically about 3000, 3500 feet deep. So I would say that  
20 a typical PC well has been a little bit more expensive than  
21 what we're proposing here.

22 Q. So as part of your background and analysis, you  
23 have actually looked at actual costs for PC wells to see  
24 how they compare to this AFE?

25 A. Right.

1 Q. All right. Let's turn, then, to the first page  
2 of the "Well Cost" tab --

3 A. Okay.

4 Q. -- in your exhibit book, and just for  
5 illustration, let's start there. This is the one up in the  
6 northwest quarter, and it's the PC stand-alone; is that  
7 correct?

8 A. That's correct.

9 Q. What have you concluded to be the method by which  
10 the drilling costs have been calculated? Is this a day  
11 rate or a footage rate or some combination?

12 A. It is a -- what I would say a combination rate,  
13 that is -- includes the cost of a -- in this case, a coiled  
14 tubing unit.

15 Q. All right, a coiled tubing unit?

16 A. That's correct.

17 Q. And what will that do?

18 A. Well, we're trying to use some new technology,  
19 some new drilling technology, to reduce the cost of  
20 drilling shallow wells such as this. And one of the things  
21 we're looking at are some recent slimhole completions that  
22 have been drilled and have been -- have had articles  
23 written on them by Shell Oil.

24 Q. So I'm clear, what does the coiled tubing mean?

25 A. Well, coiled tubing is simply a spool of tubing



1 that can be used to lower the drill bit into the well and  
2 to -- or you could use it as a workover mechanism to  
3 displace fluids up and down the wellbore.

4 Q. Do the cost components of the two AFEs proposed  
5 by Amoco include the application of that technique to these  
6 wells?

7 A. Yes, they do.

8 Q. You've made reference to slimhole technology.  
9 Define that for me.

10 A. I would say it is using wellbores that are  
11 smaller than, say, 4-1/2-inch casing.

12 Q. Mr. Grotke was anticipating using 2 7/8, if I'm  
13 not mistaken. Do you have any information contrary to  
14 that?

15 A. Yeah, I do. I was checking with him this morning  
16 on exactly what we were planning on.

17 For these wells we were planning on using 3-1/2-  
18 inch casing, drilling a 4-3/4-inch hole with 3-1/2-inch  
19 casing, and then running 2-3/8-inch tubing inside that.

20 Q. All right. So the 2-3/8-inch tubing goes inside  
21 all that configuration?

22 A. Right.

23 Q. All right. Is that an acceptable method for  
24 completing a PC well with the addition of the Coal?

25 A. We think that it can be done, and we think that

1 it will be -- It's something that's new, and so we're going  
2 to have to try it out.

3 Q. Have you done it anywhere?

4 A. We have not.

5 Q. This is an experiment in this project?

6 A. Well, I don't know if I'd call it an experiment.  
7 It had been done by drilling companies, and I think that we  
8 would be using a drilling company that would be familiar  
9 with this. So in that respect --

10 Q. We don't have a field example in the PC, in the  
11 San Juan Basin, where this has been done?

12 A. We have not.

13 Q. In terms of the compression, there's an item of  
14 difference here for the Examiner's consideration. I want  
15 to understand what you and Mr. Grotke have anticipated in  
16 terms of compression and the cost.

17 A. Okay.

18 Q. Are you anticipating buying a new compressor and  
19 sharing that cost with the operators, or are you going to  
20 rent it or lease it to the other working interest owners?  
21 What's the concept?

22 A. My understanding is the concept that it would be  
23 purchased and it would be owned by the working interest  
24 owners of the well.

25 Q. All right. So all working interest owners,

1 including Amoco, take the same method to compensate or pay  
2 for the compressor, and it's to be a new compressor?

3 A. As far as I understand.

4 Q. All right. I'm curious about the overhead rates.  
5 You've got some proposed overhead rates in here.

6 Does Amoco charge the working interest owners for  
7 items in addition to the overhead that represent  
8 reimbursements for what I would characterize to be a  
9 district office charge?

10 A. I think we charge the direct salaries of  
11 supervisors in the field, and all others are charged as an  
12 overhead rate.

13 Q. All right. So when we --

14 A. Excuse me, I mean -- not all others. But the  
15 other salaries and other costs would be included within  
16 some type of overhead charge.

17 Q. All right, and that is an overhead charge  
18 attributable back to the wellhead, in addition to the  
19 overhead charges we talked about that are normally in these  
20 pooling orders?

21 A. I -- Well, we would treat it as a direct charge.

22 Q. That's what I'm saying. You and I are saying the  
23 same thing.

24 A. Okay.

25 Q. It's a direct charge, which means it will be in

1 addition to --

2 A. -- to the overhead charge.

3 Q. -- this overhead number?

4 A. That's correct.

5 Q. Do you know what that direct charge would be for  
6 these two wells?

7 A. I don't know specifically what that portion of  
8 the direct charge would be. I think we could make some  
9 estimates as to what direct charges might be.

10 Q. If I estimated it was about \$300 for each of  
11 these wells for direct costs, would that be a fair  
12 estimate?

13 A. That would probably be on the order that we would  
14 look at, but I think we would anticipate there would be  
15 some other direct charges that might be necessary against  
16 these wells, that would be in excess of that.

17 Q. Did you and Mr. Grotke price out the compressor?

18 A. I did not price out the compressor. I just asked  
19 him what was the price of the compressor.

20 Q. He's only got \$30,000 down here for a compressor.

21 A. That's right.

22 Q. Do you have a bid or a price for a compressor at  
23 \$30,000?

24 A. I do not know.

25 Q. When we look at the drilling portion of the AFE,

1 the \$36,000, now, how is that to be determined? Is that a  
2 daily rate or a footage rate?

3 A. I don't think that that is a daily rate or a  
4 footage rate. I think it is a charge for the coiled tubing  
5 unit services. I know that we are expecting to be on the  
6 rig about two days, but I'm not -- I couldn't tell you that  
7 that was a footage rate. I don't think that's the way  
8 that's set up with the coiled tubing unit.

9 Q. The anticipated drilling time is two days?

10 A. The time that we would be on the well for --  
11 actually drilling the hole, would be about two days.

12 We would have another day for surface pipe, and  
13 then we would have some completion which would occur in the  
14 future, after we moved these coiled tubing units off.

15 Q. The stimulation, you've re-examined that issue  
16 with Mr. Grotke and you agree that the Richardson AFE in  
17 terms of stimulation is more likely to be current than  
18 your?

19 A. Yes.

20 Q. Okay. The completion portion of the costs,  
21 what -- If I'm looking at the right AFE calculation for  
22 this well, it appears as if your completion rig costs are  
23 about \$3100?

24 A. I'm not sure where you're looking.

25 Q. Well, perhaps it's easier to ask you the direct

1 question: What costs do you attribute to completion for  
2 this well?

3 A. The completion would include setting the tubing,  
4 the -- some of the wellhead connections and the surface  
5 equipment. We also have some cementing, so -- I mean,  
6 there's a -- We've got a breakdown here that, you know,  
7 identifies the majority of these items.

8 Admittedly, they are, you know, kind of a line-  
9 item number, but I don't believe that the -- there's much  
10 difference in most of the completion costs, other than the  
11 stimulation, as compared to what Richardson had proposed.

12 Q. Do you anticipate that either one or both of  
13 these wells are going to be hooked into your Jupiter  
14 computer well automation system?

15 A. I suspect that they will be, yes.

16 Q. And what is the approximate cost per well to  
17 participate on that system?

18 A. I don't really know what that cost is.

19 Q. Describe for me the completion technique that you  
20 and Mr. Grotke anticipate for the downhole commingling of  
21 the well that will be the downhole commingled well.

22 A. Can you say that again?

23 Q. Yes, sir, perhaps I'm ahead of myself.

24 Do you and Mr. Grotke propose that the well in  
25 the southwest quarter, to access both the PC and the coal

1 gas, is going to be a downhole commingled well?

2 A. Yes.

3 Q. It's not going to be a dual?

4 A. That's right.

5 Q. All right. How will you complete it for downhole  
6 commingling production?

7 A. It will be completed with both zones being  
8 perforated and fracture stimulated through the 3-1/2-inch  
9 casing and then producing up through a single string of  
10 tubing.

11 And in fact, there may be gas produced up the  
12 annulus of the tubing and the liquids produced up the  
13 tubing through a beam lift.

14 So I haven't had a -- you know, a lot of  
15 discussion with him on exactly what that method would look  
16 like, other than I would assume we would be lifting the  
17 liquids that we anticipate out through the tubing and then  
18 producing gas maybe up through the annulus.

19 Q. Do you and Mr. Grotke plan to apply the coiled  
20 tubing and the slimhole technology to the other three wells  
21 in the five-well project?

22 A. That's my understanding, yes, that this would be  
23 used, move the coiled tubing from one location to the next  
24 to drill those and kind of save on some of the move-in/  
25 move-out costs, et cetera.

1           Q.    Okay.  If the Examiner awards operations to  
2   Richardson and you only have three wells left in your  
3   package, do you have other PC wells that you could add to  
4   the economic package to go forward with your project?

5           A.    I would anticipate that there would be some, but  
6   I couldn't identify them to you today.

7           MR. KELLAHIN:  Thank you, Mr. Examiner, I have no  
8   other questions.

9           EXAMINER STOGNER:  Any redirect, Mr. Carr?

10          MR. CARR:  No redirect.

11          EXAMINER STOGNER:  Any questions, Mr. Carroll?

12          MR. CARROLL:  No.

13                               EXAMINATION

14   BY EXAMINER STOGNER:

15          Q.    On the overhead charges, Mr. Hawkins --

16          A.    Yes.

17          Q.    -- charge for risk, Fruitland Coal 156, Pictured  
18   Cliffs 200, if this well is drilled and dual- -- I'm sorry,  
19   downhole commingled -- should it get two risk penalties,  
20   one for each completion, or just one risk penalty for the  
21   completion of the well?

22          A.    I guess what we anticipated is, since we were  
23   able to identify costs associated with the Fruitland  
24   portion of the well and the costs associated with the  
25   Pictured Cliffs portion of the well, that you could apply



1 two risk factors, and we would have anticipated the  
2 Division would want to use the 156-percent risk for the  
3 Fruitland.

4 I think we would be receptive of, you know, one  
5 of risk factor for the whole well, if that's the way the  
6 Division desired to issue the order.

7 And I would ask that that be the 200-percent, as  
8 opposed to the 156.

9 Q. And the production would be broke out, I would  
10 assume --

11 A. That's correct.

12 Q. -- somehow?

13 Although I understand the New Mexico Oil and Gas  
14 Association is making a proposal that that not be true  
15 anymore, so that could affect how this outcome comes out.  
16 That's a different story.

17 Again, could you tell me what the contingencies  
18 would consist of, roughly?

19 A. Well, I can tell you that it's really designed to  
20 cover anything that might not happen according to our  
21 drilling plan, such as some potential problems that would  
22 cause, you know, spending a little more money on an extra  
23 day with the rig out there, or some additional costs over,  
24 you know, the mud or sand or cement or anything that we,  
25 you know, didn't estimate right on the dot.

1           You know, right now I think we're just assuming  
2           that the 15 percent is a reasonable estimate of the  
3           contingencies that would be needed to be covered.

4           Q.    How do I get the contingency for the Burnham Gas  
5           Com A well Number 1, \$28,000? Which figures do I add into  
6           that?

7           A.    Well, the way I got it, I had to back into it,  
8           because it's 15 percent of the total costs before you add  
9           the \$28,000.

10           If you take \$216,000 and subtract the contingency  
11           out, you get -- I don't have my calculator with me, but you  
12           get about \$188,000.

13           And if you take 15 percent of that, you'll get  
14           pretty close to \$28,000. That's probably rounded off.

15           Q.    So that's 15 percent of the total over what?

16           A.    It's 15 percent of the total costs, before you --  
17           I mean, you have to back it out of the \$216,000, the  
18           contingency portion, to calculate 15 percent of that number  
19           prior to the contingency.

20           EXAMINER STOGNER: Okay. Any other questions of  
21           Mr. Hawkins?

22           MR. CARR: No questions.

23           MR. KELLAHIN: I have a follow-up question, if I  
24           may, Mr. Examiner.

25           EXAMINER STOGNER: Mr. Kellahin?

## FURTHER EXAMINATION

BY MR. KELLAHIN:

Q. Mr. Stogner was talking to you about the commingling, the downhole commingling.

I don't see anything in the Application or in the advertisement by which Amoco seeks approval to downhole commingle that well, Mr. Hawkins; is that correct?

A. That's correct, it will require a future application.

Q. Will that application be consistent with the methodology that Amoco and Meridian and Richardson have used for the coal gas PC allocations? Are you familiar with that process?

A. I am familiar with that. We are looking at alternatives to that allocation method.

We have not evaluated exactly what that allocation would be in this area, but it may very well be exactly the one you're describing where you project what the Pictured Cliffs should be, and then any production in excess of that is allocated to the Fruitland.

Q. All right. You've not yet commenced that process --

A. That's correct.

Q. -- with regards to these two wells?

A. That's correct.

1 Q. I mean, this one well?

2 A. That's correct.

3 MR. KELLAHIN: Thank you.

4 EXAMINER STOGNER: Any other questions of Mr.  
5 Hawkins?

6 He may be excused.

7 Let's take a 20-minute recess from this one. In  
8 the meantime, during this recess, I'm going to call the  
9 nomenclature case, 11,272.

10 (Thereupon, a recess was taken at 3:09 p.m.)

11 (The following proceedings had at 3:35 p.m.)

12 EXAMINER STOGNER: Hearing will come to order at  
13 this time.

14 Mr. Kellahin?

15 MR. KELLAHIN: Mr. Examiner, I'd like to call my  
16 first witness, Ms. Cathy Colby. She spells her last name  
17 C-o-l-b-y.

18 CATHLEEN COLBY,

19 the witness herein, after having been first duly sworn upon  
20 her oath, was examined and testified as follows:

21 DIRECT EXAMINATION

22 BY MR. KELLAHIN:

23 Q. Ms. Colby, for the record would you please state  
24 your name and occupation?

25 A. My name is Cathleen Colby. I'm a certified

1 professional landman.

2 Q. You're going to have to keep the volume of your  
3 voice up. The microphone doesn't help you; that's for the  
4 court reporter. And we've got the hum of the air  
5 conditioner in here, so you really have to shout at us.

6 A. Okay.

7 Q. On prior occasions, have you testified before  
8 this agency?

9 A. No, I have not.

10 Q. Summarize for us, if you will, briefly, your  
11 educational background that qualified you as a professional  
12 petroleum landman.

13 A. I have a degree from the University of Colorado,  
14 Denver, in mineral land management.

15 Q. In what year did you obtain that degree?

16 A. In 1986.

17 Q. And subsequent to that, have you worked in that  
18 professional field?

19 A. Yes, I have. I've worked in the oil and gas  
20 business since 1979. I have worked in the capacity of a  
21 landman most of that time and -- continuously to current.

22 Q. And what is your employment with the Applicant,  
23 Richardson Operating Company?

24 A. I am the land manager at Richardson Operating  
25 Company.

1           Q.    All right.  If there are land transactions to  
2 negotiate on behalf of Mr. Richardson and his company, you  
3 are the person; is that not true?

4           A.    I am one of the people within the company that  
5 conducts negotiations.

6           Q.    Insofar as we deal with land transactions for  
7 this particular area that involves either the coal gas or  
8 the PC gas within this particular section or in this  
9 particular area, are you the person with that  
10 responsibility?

11          A.    There are two people within the company that  
12 conduct negotiations in this area.

13          Q.    Okay.  And have you conducted the negotiations  
14 for these proposals by Richardson for operation over these  
15 two wells?

16          A.    Yes, I have.  I've been the one that's handled  
17 all of the negotiations in the entire Section 12.

18               MR. KELLAHIN:  Mr. Examiner, we tender Ms. Colby  
19 as an expert petroleum landman.

20               EXAMINER STOGNER:  Any objections?

21               MR. CARR:  No objection.

22               EXAMINER STOGNER:  Ms. Colby is so qualified.

23          Q.    (By Mr. Kellahin)  Ms. Colby, let's orient the  
24 Examiner to this particular area.  And to help you do so, I  
25 have put a photograph on the display board.

1           With Mr. Carr's indulgence, we will have this  
2 duplicated after the hearing, Mr. Examiner. It represents  
3 our only copy at this point.

4           It is marked as Applicant -- Richardson Operating  
5 Company, as Applicant Exhibit 1.

6           For the record, before we start talking about the  
7 display, describe for me the source of the photograph.

8           A. I obtained this photograph from the U.S.  
9 Department of Agriculture.

10          Q. All right, and what is the vintage of the  
11 photograph?

12          A. It was taken in 1991.

13          Q. Have you utilized it in your work and bid on the  
14 surface of this area to a sufficient extent that you can  
15 determine whether this photograph is accurate and correct  
16 at the time it was taken?

17          A. Yes, sir, I have. And it appears to be accurate.

18          Q. All right. And for your purposes, then, did you  
19 prepare the overlay that's on the display?

20          A. Yes, I did.

21          Q. If you'll take the pointer and approach the  
22 exhibit, let's identify for the Examiner some of the  
23 identifying features in this area.

24                 And perhaps it's easiest if you'll block me --

25          A. Okay.

1 Q. -- stand in front of me and orient the Examiner  
2 so that Mr. Carr may also see.

3 First of all, let's find Mr. Tom Dugan's house.  
4 Everybody knows where his house is, and I think if we find  
5 it on the display it might help everybody. Show us where  
6 it is and how you've identified it.

7 A. You can tell by the general shape of the  
8 structure that that's where it is. This is South Side  
9 River Road, this is the dirt road that goes right up into  
10 the Dugan residence.

11 EXAMINER STOGNER: I'll tell you what, Mr.  
12 Kellahin. On this photograph, which measures about --  
13 what, four by four? -- there's a red square --

14 THE WITNESS: Yes.

15 EXAMINER STOGNER: -- and that square denotes  
16 Section 12.

17 THE WITNESS: Yes.

18 EXAMINER STOGNER: And then that square is  
19 divvied up into four equal parts, being the northeast,  
20 northwest, southwest and southeast quarters?

21 THE WITNESS: Yes.

22 EXAMINER STOGNER: And you have an overlay on the  
23 west half essentially?

24 THE WITNESS: That's true.

25 EXAMINER STOGNER: And you were pointing at Mr.



1 Dugan's house over on the northeast -- southwest of the  
2 northeast; is that correct?

3 THE WITNESS: That's correct.

4 EXAMINER STOGNER: Okay, let's reference the  
5 quarter sections, if you would.

6 I'm sorry, Mr. Kellahin. Go ahead.

7 Q. (By Mr. Kellahin) Have you accurately determined  
8 the location of the section as it's displayed on the  
9 photograph?

10 A. Yes, the overlay is a photocopy of the surface  
11 ownership map obtained from the County Assessor's office,  
12 and the tracts are easily identified.

13 Q. All right. In terms of subdividing Section 12,  
14 then, what did you do with the overlay?

15 A. I marked on the overlay the drilling blocks that  
16 would apply to PC wells, and I located the two existing  
17 Dakota wells and drew the 200-foot radius around each of  
18 those existing wells.

19 Q. Insofar as the surface use is concerned, for the  
20 Richardson proposal, you have targeted an area within a  
21 200-foot radius of a certain point, have you not?

22 A. That is correct.

23 Q. How have you identified each of those starting  
24 points on the display? The center of the 200-foot-radius  
25 circle is where?

1           A.    On the existing Dakota well.

2           Q.    All right.  And what is the purpose to scribe an  
3 area with a 200-foot radius around that particular well in  
4 each instance?

5           A.    Our proposal is to locate our wells on the  
6 existing pads, to minimize surface disturbance.  This is a  
7 common practice in the area.  We have a well in the  
8 southeast quarter, our 12-2 well, where we share a pad with  
9 Conoco.

10                   Over in Section 7, over here, we have another  
11 well where we share a pad in close proximity with Amoco.

12                   That's why we haven't given exact footages in our  
13 proposal, but we would like to work anywhere in this area  
14 where it works out for the existing -- to be next to the  
15 existing wells.

16           Q.    All right, and if the Examiner should approve  
17 Richardson as the operator, then you'll have that exact  
18 location staked, and that staking information, then, would  
19 be part of the approval process, and we would specifically  
20 know where the well would be?

21           A.    That is correct.

22           Q.    All right.  Let me ask you to return to your  
23 seat.

24                   Are you familiar with the operations of  
25 Richardson and Amoco within this particular area?

1           A.    Yes, I am.

2           Q.    And have you made a search of information and  
3 taken that information and reduced it to a display form?

4           A.    Yes, I did, and that is marked Exhibit 2.

5           Q.    Describe for us how you prepared Exhibit 2.

6           A.    We have a base map that was put together by a  
7 consulting geologist, and on that map more current wells  
8 have been noted.

9                   The Pictured Cliffs wells are identified by  
10 purple color, the existing Fruitland Coal wells are  
11 identified in turquoise, Richardson Operating Company wells  
12 are identified with a yellow circle. Amoco wells do not  
13 appear in this area.

14          Q.    When we look at the display, if we start in the  
15 northwest corner, count down one row of sections from the  
16 top and count over one row from the left. You'll get to  
17 Section 12?

18          A.    That is correct.

19          Q.    All right. The color code indicates yellow for  
20 what, now?

21          A.    Yellow are Richardson Operating Company-  
22 operated -- or wells that we've drilled.

23          Q.    All right. How far away do you have to go, based  
24 upon your search, before you find an Amoco-operated PC  
25 well?

1           A.    My check on *Dwight's* indicated that the closest  
2   Amoco-operated well was over six miles away.

3           Q.    Can you identify for us examples on this  
4   illustration of where a PC well has been put on the same  
5   pad with either a Mesaverde or a Dakota well?

6           A.    Well --

7           Q.    How would that be illustrated?

8           A.    Where the wells are spotted together.

9           Q.    When we look at Section 12 in the east half of  
10   the section, what has occurred in terms of the PC  
11   development in the east half of this section?

12          A.    Richardson Operating Company has drilled two  
13   wells that produce from the Pictured Cliffs formation. One  
14   of them is also a downhole commingled Fruitland Coal  
15   producer.

16          Q.    All right. Let's put that display aside and  
17   let's look specifically, then, at each of the spacing units  
18   accompanied by your calculation of the various interest  
19   owner percentages.

20                If you'll start with Exhibit Number 3, identify  
21   for us what we're looking at, and then I'll ask you some  
22   questions.

23          A.    The entire map shows the west half of Section 12.  
24   The spacing unit for the well that Richardson has proposed  
25   is -- the Pictured Cliffs spacing unit is the portion that

1 is colored.

2           There is a -- two leases have been contributed.  
3 One is a fee lease owned by Amoco. The other is a federal  
4 lease owned by Richardson, Christmann, Markham, McMullen,  
5 Redfern and Kerr-McGee.

6           Q. All right. When we look at Exhibit 3, then,  
7 we're looking at the PC portion for the spacing unit, which  
8 would consist of the southwest quarter of 12?

9           A. That is correct.

10          Q. Have you tabulated a breakout of the working  
11 interest ownership percentages and the identify of those  
12 percentages that correspond to this spacing unit?

13          A. Yes, I have.

14          Q. How will we find that?

15          A. That's on the next page.

16          Q. All right. Starting at the top, then, you've  
17 listed Richardson and then you've shown the following  
18 interest owners?

19          A. That's correct.

20          Q. And are you satisfied that this information is  
21 true and accurate?

22          A. Yes, to my best ability, I think it is correct.

23          Q. All right. Let's turn now to the next spacing  
24 unit.

25                 When we look at Exhibit 4, what are we looking at

1 here?

2 A. This is the same wellbore that we were just  
3 looking at, but it is the ownership of the Fruitland Coal  
4 formation. The spacing unit is the entire west half of  
5 Section 12.

6 Q. In addition to the information shown on the first  
7 page of that display, what have you appended to that  
8 exhibit?

9 A. The ownership of the -- division of ownership of  
10 everyone in the spacing unit.

11 Q. Okay. Let's go to the next one. If you look at  
12 Exhibit 5, what are we looking at here?

13 A. This is the second well that Richardson has  
14 proposed. It is a Pictured Cliffs formation well. The  
15 spacing unit consists of the northwest quarter of Section  
16 12.

17 Q. And again, have you followed the same method and  
18 attached to the first page of this display a breakout of  
19 the working interest identity and their percentages?

20 A. Yes, I have.

21 Q. Okay. Let me direct your attention to Exhibit  
22 Number 6.

23 Before we talk about the details of Exhibit 6,  
24 describe what is contained within the package of documents  
25 that we have collectively identified as Exhibit 6?

1           A.    The first page of Exhibit 6 is a chronology of  
2 events that pertain to the west half of Section 12.

3                   Attached to it are backup support. If a letter  
4 is referred to, the copy of the letter is attached.

5                   I did not attach executed AFEs here. Those are  
6 included in another exhibit that we will look at later.

7           Q.    All right. So your method in preparing Exhibit  
8 Number 6 was to prepare a chronology, and for each major  
9 event in the chronology you have attached the written  
10 documentation that supported that entry?

11           A.    That is correct.

12           Q.    Using this as a guide or a reference, let me have  
13 you relate to us how you have gone about your efforts to  
14 consolidate interest owners in their participation with  
15 Richardson for these wells.

16                   What is your first effort in this area to acquire  
17 the interest or the participation of other parties for an  
18 operation by Richardson?

19           A.    When we're speaking specifically of the west half  
20 of Section 12, in January of 1993 Richardson made a  
21 proposal to Amoco requesting a farm-in of their acreage.  
22 It was a large multi-well drilling package. We were  
23 requesting 30 days between wells.

24                   Of the 3500 acres requested, the west half of  
25 Section 12 was included.

1 Q. Why were you seeking to do that?

2 A. We had been -- In November and December of 1992,  
3 we had just drilled seven wells to the east of here, and  
4 this was an area that we were systematically and carefully  
5 trying to develop. We were very interested in the area,  
6 and we were making efforts to continue drilling wells based  
7 on our geology.

8 Q. Were these Pictured Cliffs wells or wells from  
9 some other formation?

10 A. The first seven wells that we drilled were  
11 Fruitland Coal wells.

12 Q. How did you continue with that effort, then?

13 A. In November of 1993, another letter went to Amoco  
14 -- Well, a phone call was made first, asking the  
15 availability.

16 We contacted Amoco and all the other owners and  
17 -- or the majority of the owners in the west half of  
18 Section 12, and we were told by everybody that the acreage  
19 was available, they would like to see a proposal in writing  
20 and that the preference would be to offer several different  
21 alternatives.

22 It was early December that letters went out to  
23 everybody that owned an interest in the west half of  
24 Section 12.

25 Q. Summarize for us your efforts with respect to



1 Amoco during this period as you attempt to acquire  
2 participation for a Richardson-operated project.

3 A. I made a follow-up call to Amoco and talked to  
4 Mrs. Jenkins, inquiring of Mrs. Jenkins -- inquired about  
5 the review of our proposal. She said it was under review  
6 and that -- She said she would get back to me.

7 Q. What then transpired in your efforts to pursue  
8 cooperation by Amoco so that you, on behalf of Richardson,  
9 could drill and operate PC wells in Section 12?

10 A. Richardson became involved in litigation with  
11 Amoco in another state, and we were advised by our attorney  
12 to cut off all communications with Amoco. So I did not  
13 pursue our proposal.

14 Q. All right. Was that other dispute resolved?

15 A. It was resolved in settlement.

16 Q. All right. At -- When was that resolved, and  
17 when did you then commence any efforts to further acquire  
18 interest in this area?

19 A. I believe it was resolved in August of 1994.

20 Q. When, then, did you next commence efforts to  
21 acquire additional interests within this particular area?

22 A. I had been talking to the other owners  
23 continuously.

24 In January of 1994 I was successful in buying the  
25 interest of J. Harvey Herd. In October of 1994 I was able

1 to buy the interest of the estate of John J. Redfern, Jr.  
2 And I had ongoing conversations with the other owners  
3 within the spacing units.

4 Q. All right. Did you receive a well proposal from  
5 Amoco that was dated February 14th of 1995 for two wells in  
6 the west half of Section 12?

7 A. Yes, we got two letters proposing two Pictured  
8 Cliff wells.

9 Q. What, if anything, did you do in response to  
10 receiving those proposals?

11 A. I -- One of the things I did was to give the  
12 proposals -- well proposals and the AFEs to Mr. Richardson  
13 for review.

14 Q. As a result of that review, did you have any  
15 other contacts with Amoco?

16 A. Yes, I did. We knew that their AFEs were high  
17 after reviewing them. We also, from past experiences, knew  
18 what it was like to be a non-operator in a well that Amoco  
19 operates.

20 Q. What was that like?

21 A. Their operating costs are very high. That's --  
22 We had managed to --

23 MR. CARR: I'm going to object to this. There's  
24 no foundation for this witness as a land person being able  
25 to make statements as to whether or not well costs are high

1 or not, and --

2 MR. KELLAHIN: I'm asking her for information,  
3 for the background for her statement as to why she believed  
4 she could not reach a settlement with Amoco for them, for  
5 Amoco, to operate a well.

6 I think it's proper for this land witness to  
7 testify on the basis for her belief concerning her  
8 negotiations with Amoco, Mr. Examiner.

9 MR. CARR: I don't think she's qualified to make  
10 a statement about whether AFE costs were high or not, Mr.  
11 Stogner.

12 I'm not going to keep us here all afternoon.  
13 I'll withdraw the objection.

14 EXAMINER STOGNER: Thank you, Mr. Carr.  
15 Mr. Kellahin?

16 Q. (By Mr. Kellahin) As a result of the AFEs being  
17 high and the operating costs for Amoco being high, what  
18 then did you do?

19 A. Our first choice is to continue our systematic  
20 development in the area. That's what we had been working  
21 toward.

22 When it appeared that -- Currently, at the time  
23 we got the Amoco AFEs, we did not feel that we had a  
24 standing, a large enough standing to submit -- You know,  
25 that's why we had not yet submitted well proposals and AFEs

1 to the other parties.

2 So when we didn't think we had the opportunity to  
3 operate, our first -- our reaction was to -- let's see if  
4 we can get out of this section from being -- to avoid being  
5 in a well with Amoco.

6 And I called Amoco and asked them, I said, We are  
7 not happy with our past experiences, we're not happy with  
8 the AFEs we got. May we trade out? Would you be inclined  
9 to discuss trading acreage?

10 Q. With whom did you speak when you had that  
11 conversation?

12 A. I spoke with Greg Grotke. He's not the first one  
13 I called.

14 Originally, I called Ms. Jenkins; she was out of  
15 town.

16 I called John Hashe, who was the attorney-in-fact  
17 that signed the operating agreement. He was out for  
18 several days.

19 So I called Greg Grotke because his name was on  
20 the AFE.

21 Q. And what if any response did you receive from Mr.  
22 Grotke with regards to that option?

23 A. He was very enthusiastic about the proposal, or  
24 the idea, and said, Let me check and see what we own in the  
25 area and I'll get back with you.

1 Q. All right. What happened then?

2 A. In my discussions with the other owners in the  
3 spacing unit, we were able to come up with an agreement  
4 acceptable to all parties where they would sell a part of  
5 their interest to Richardson that would allow Richardson to  
6 increase its interest, large enough that we felt that we  
7 could send out an AFE and well proposal.

8 We prepared AFEs for two wells, one a Pictured  
9 Cliffs, the other a Pictured Cliffs-Fruitland Coal downhole  
10 commingle, and faxed copies, followed up hard copies in the  
11 mail to people.

12 Q. Did Richardson's proposal to Amoco include a  
13 proposal concerning the coal gas reservoir in the west half  
14 of Section 12?

15 A. Yes, it did. The Fruitland Coal, you're allowed  
16 to drill in the southwest or northeast. Our southwest  
17 proposed well was a downhole commingle Pictured Cliff-  
18 Fruitland Coal.

19 Q. Your chronology then goes on and describes your  
20 further discussions and negotiations with Amoco and other  
21 parties?

22 A. Yes, it does.

23 Q. All right. Did you receive any response from  
24 Amoco concerning your AFE proposal that you sent to them on  
25 March 6th?

1           A.    We got a letter in the fax, followed up by a hard  
2   copy on March the 7th, which was a response to two things.

3                    It closed all negotiations to the acreage trade,  
4   possible acreage trade, we had previously discussed.

5                    And it said that they would respond to us soon in  
6   writing regarding our well proposals.

7           Q.    What's the next thing you received from Amoco?

8           A.    We received a copy of Amoco's Application for  
9   force-pooling.

10          Q.    Let's turn to the next topic.  If you'll look  
11   with me at Exhibit Number 7, identify and describe for me  
12   what is presented to the Examiner in Exhibit Number 7.

13          A.    Exhibit Number 7 is Richardson's proposed  
14   operating agreement for the well to be located in the  
15   southwest quarter of Section 12.

16          Q.    And Exhibit Number 8?

17          A.    Exhibit Number 8 is a similar operating  
18   agreement, however it covers the Pictured Cliffs formation  
19   only, for the well to be located in the northwest quarter  
20   of Section 12.

21          Q.    Have you also compared Amoco's proposed operating  
22   agreements to the Richardson proposed operating agreements?

23          A.    Yes, I have.

24          Q.    As a result of that comparison conducted by you,  
25   can you summarize what are the major differences, if any,

1 between you and Richardson -- I'm sorry, between you and  
2 Amoco?

3 A. In most cases, Richardson has kept to the  
4 standard AAPL Model Form 610, the 1989 version.

5 Amoco has amended their operating agreement in  
6 areas that Richardson would rather not agree to such  
7 amendments.

8 Q. Can you summarize for me in a brief fashion what  
9 the major points are of difference in your examination of  
10 the operating agreements?

11 A. If you look on page 5 of the operating agreement,  
12 under Article V., D-8, there is a standard provision that  
13 upon request of any consenting party, the operator will  
14 furnish estimates of current and cumulative costs incurred  
15 for the joint account. Amoco has deleted this provision.

16 Q. All right. Any other points of major difference?

17 A. On page 6, the standard provision is, once that a  
18 procedure has been proposed, that there is 90 days after  
19 expiration of the notice period in which to commence  
20 operations.

21 Amoco has amended that to read 60 days, which we  
22 feel in a case where there's federal acreage, there are  
23 often additional requirements on the federal application  
24 for permit to drill that require more than 60 days.

25 Q. All right. Other items?

1           A.    On page 7, Amoco has made a footnote to refer to  
2   a page 7-A. We did not get a copy of a page 7-A, so we  
3   don't know what that provides.

4           Q.    All right, what else?

5           A.    On page 8 -- Oh, there's a few -- a couple of  
6   small typos on the Amoco operating agreement, on page 8 at  
7   the bottom, which we would want clarification on before we  
8   accepted the verbiage.

9           Q.    All right.

10          A.    On page 9 -- The standard operating agreement  
11   allows for a response of an election within a 24-hour  
12   period of time if a rig is on location.

13                Amoco has added that they -- that that 24-hour  
14   response period is not to include Saturdays, Sundays or  
15   legal holidays, which can be expensive.

16          Q.    When you examine these kinds of documents as a  
17   landman, are these matters of significance, important to  
18   you in determining whether you recommend to Mr. Richardson  
19   that he sign or not sign an operating agreement?

20          A.    Well, they are, because -- Say, for instance in  
21   the case of having a rig on standby over a weekend, could  
22   cost several thousand dollars, where a telephone call to  
23   somebody at home can get an answer and you can proceed with  
24   your operation or procedure.

25          Q.    What have you recommended to Mr. Richardson with



1 regards to his execution of the Amoco joint operating  
2 agreement?

3 A. As written, it would not be acceptable.

4 Q. All right. Let's go to your efforts to  
5 consolidate the interest owners that were otherwise not  
6 committed between the parties when these proposals  
7 commenced.

8 If you'll look at Exhibit Number 9, let's go  
9 through that tabulation.

10 A. Okay. On April the 7th, I got a call from a  
11 landman at Kerr-McGee. He expressed to me that he had just  
12 talked to -- he had just called the landman at Amoco and  
13 was going to tell us the same thing, which was that Kerr-  
14 McGee was making a voluntary election to make assignment of  
15 their interest to whichever party the OCD recommended would  
16 be the operator of the two spacing units.

17 Q. Apart from the Kerr-McGee interest, where that  
18 party decided to stand on the sidelines, have you been  
19 successful in your efforts to consolidate all the remaining  
20 uncommitted working interest owners, to participate with  
21 Richardson?

22 A. Yes, I have. I have executed AFEs from all other  
23 parties, excluding Amoco.

24 Q. All right. Do -- Ms. Jenkins says she had an AFE  
25 signed by a man in Markham McMullen. Do you have an AFE

1     executed by that same party?

2           A.    Yes, I do, and I was totally unaware that there  
3     might be another executed AFE.

4           Q.    All right. That lady has committed to both of  
5     you.

6           Okay. Apart from her interests, do you have all  
7     the rest all of these interests committed to you?

8           A.    Yes, I do.

9           Q.    All right. And is that what is shown when we  
10    look at Exhibit 9 in terms of a tabulation of that  
11    information?

12          A.    Yes, sir.

13          Q.    The method for preparing this is to show the  
14    Richardson AFE number at the top of the column for this  
15    well?

16          A.    That is the dollar amount that Richardson's  
17    AFE --

18          Q.    And below that you show the interest committed to  
19    Richardson and the percentages?

20          A.    That is correct.

21          Q.    And then below that you show the Amoco and the  
22    Amoco percentages?

23          A.    That is correct --

24          Q.    All right.

25          A.    -- per spacing unit interest.

1 Q. Attached to that, what have you appended?

2 A. There are copies of the executed AFEs.

3 Q. All right, let's turn now to Exhibit Number 10.

4 When we look at this tabulation, this is for what  
5 well?

6 A. This tabulation is for the well proposed in the  
7 northwest quarter, Pictured Cliffs.

8 Q. All right. Have you followed the same  
9 methodology as you used for Exhibit 9, when you prepared  
10 Exhibit 10?

11 A. Yes, I did.

12 Q. All right. And are you showing the same parties  
13 committed to you concerning this well?

14 A. Yes, sir.

15 Q. All right. To the best of your knowledge, other  
16 than Kerr-McGee, are there any other interest owners that  
17 are uncommitted to either you or Amoco?

18 A. No, there are not.

19 Q. With regards to the well proposal, is there a  
20 difference between the operators concerning the overhead  
21 rate proposed?

22 A. Yes, there is. Richardson's proposed operating  
23 agreement provides for \$450 a month overhead.

24 The Amoco operating agreement provides for \$500 a  
25 month overhead.

1 Q. All right. And what is the drilling well rate on  
2 a monthly basis? Do you remember that number?

3 A. Richardson proposes \$3500 drilling rate.

4 Q. All right. Do you propose the Examiner, should  
5 he enter a pooling order that allows Richardson to operate,  
6 that he utilize your proposed overhead rates of \$450 and  
7 \$3500?

8 A. Yes, I do.

9 MR. KELLAHIN: That concludes my examination of  
10 Ms. Colby.

11 We move the introduction of her Exhibits 1  
12 through 10.

13 EXAMINER STOGNER: Are there any objections?

14 MR. CARR: No objection.

15 EXAMINER STOGNER: Okay, Exhibits 1 through 10  
16 will be admitted into evidence.

17 I'm assuming that you'll provide us a scaled-down  
18 copy of Exhibit 1?

19 MR. KELLAHIN: Yes, sir.

20 EXAMINER STOGNER: A wallet-size photo?

21 MR. KELLAHIN: Any size you like.

22 EXAMINER STOGNER: Okay. Mr. Carr, your witness.

23 CROSS-EXAMINATION

24 BY MR. CARR:

25 Q. Ms. Colby, let's look at Exhibit Number 1.

1           If I understand this exhibit, what you're  
2     testifying to is that if Richardson is successful, that the  
3     wells will in fact be located on the existing well pads in  
4     the west half of that section?

5           A.     That is what our proposal is.

6           Q.     And that those wells would then be located, then,  
7     on the pads that were constructed by Amoco for the drilling  
8     of Dakota wells in that acreage?

9           A.     They would be on the existing well pads and  
10    within a distance to minimize any interference with Amoco's  
11    current operations.

12          Q.     Have you staked a location out there yet?

13          A.     No, we have not.

14          Q.     Do you know that the Amoco-proposed location has  
15    in fact been staked? Did you know that?

16          A.     No, I did not.

17          Q.     In essence, though, we're all proposing to drill  
18    the wells at approximately the same location; isn't that  
19    right?

20          A.     Well, Amoco's footages proposed were very close  
21    to their existing wells, 28 feet, 52 feet away. We're  
22    proposing to get a distance much greater than that.

23          Q.     Are you, or are you just proposing to be anywhere  
24    within that 200 radius?

25          A.     We're proposing a location that would work for

1 all parties.

2 Q. And you're saying -- Is it your testimony that  
3 the Amoco location will not?

4 A. I don't know about the Amoco location.

5 Q. Is there, to your knowledge, any disagreement  
6 between the parties as to where these wells should be  
7 drilled? Is that an issue in this case?

8 A. I don't believe geologically that it's an issue.

9 Q. Okay, I'm just trying to find out what we're not  
10 going to be fighting about.

11 A. Okay.

12 Q. If we look at Exhibit Number 2, was this plat  
13 prepared by you?

14 A. Yes, sir.

15 Q. And basically this shows Fruitland Coal and  
16 Pictured Cliffs development in the portion of the Basin  
17 that's at issue in this case; is that right?

18 A. Yes, sir.

19 Q. You would agree with me, would you not, that  
20 Amoco, in fact, operates hundreds of Pictured Cliff wells  
21 in the Basin?

22 A. I believe they do. I don't know for a fact.

23 Q. But they have drilled a number of wells in the  
24 Basin? You would agree with me that Amoco has, correct?

25 A. I believe so.

1           Q.    We're not making a suggestion here that, if Amoco  
2   should prevail, that they don't have the ability to drill  
3   the Pictured Cliff in the Fruitland-Pictured Cliff well?  
4   That's not what you're suggesting, is it?

5           A.    I'm not suggesting anything.

6           Q.    And you're not suggesting that they don't have  
7   the ability to produce and to operate the well if they were  
8   awarded the operatorship in this proceeding?

9           A.    This map is a mere representation of the wells  
10   that Richardson has drilled, and I tried -- I attempted to  
11   show the progression of our activity in this immediate area  
12   while I was putting together that information.

13                I attempted to also represent Amoco's current  
14   operations or drilling in the immediate area, and was  
15   unable to find some.

16                That's the extent of what I tried to represent on  
17   this map.

18           Q.    And when you say Amoco's operations, you were  
19   limiting that to Pictured Cliffs and Fruitland Coal, were  
20   you not?

21           A.    That's correct.

22           Q.    Because if we go in the nine sections around the  
23   area of interest, there are a number of squares, are there  
24   not?

25           A.    Right, Dakota wells.

1 Q. And how does that compare to the total cost shown  
2 on the Amoco Corporation AFE?

3 A. Our AFE was for \$216,260.

4 Q. And the total difference?

5 A. \$64,143.

6 Q. So Amoco's AFE was \$64,143 higher than the  
7 Richardson?

8 A. That's correct.

9 Q. Were you able to, looking at these two AFEs,  
10 identify areas where there were significant differences in  
11 the amount being suggested for various items in the  
12 drilling of these wells?

13 A. Yes, I was. There are a number of differences  
14 between the two AFEs, so it's difficult to compare line  
15 items.

16 But the three most obvious differences that  
17 seemed to make up this difference to me are identified  
18 below, that being primarily the cost for stimulation, the  
19 compression costs and the contingency costs.

20 Q. All right, let's go to the stimulation portion of  
21 the AFEs. What did the Richardson AFEs propose for  
22 stimulation costs?

23 A. Richardson's AFE was for \$24,000 for a  
24 stimulation.

25 Q. And for Amoco?



1 is that right?

2 A. Oh, you could put it another way. You could say  
3 that if Richardson was selected to operate these two  
4 proposed wells, that Amoco would be the only one that would  
5 not be supportive.

6 Q. Has Kerr-McGee agreed to participate in the well?

7 A. They have agreed to assign their interests to  
8 whichever operator the Commission chooses.

9 Q. So it is your opinion that there is no need to  
10 include them in the pooling action?

11 A. That is correct.

12 Q. If they decline to assign later, then of course  
13 that interest would be outstanding as to Richardson, and  
14 you'd have to come back and pool them again?

15 A. Yes.

16 Q. In the southwest quarter, with all the interest  
17 owners committed to Richardson that are not committed to  
18 Amoco, we have a 50-50 split in the working interest  
19 ownership; is that not right?

20 A. For the Pictured Cliffs, that is correct.

21 Q. And if we go to the west-half unit for the  
22 Fruitland Coal and we credit everything in the west-half  
23 unit to Richardson that isn't committed to Amoco, Amoco has  
24 66.6 percent and Richardson has the balance of that --

25 A. That is correct.

1 Q. -- which would be 33 percent, with some  
2 percentage fraction after that?

3 A. That is correct.

4 Q. And if we go to the northwest quarter, based on  
5 your numbers, and credit all interests other than Amoco to  
6 Richardson, Amoco still has 83.38 percent of the working  
7 interest in the tract?

8 A. That is correct.

9 Q. And if they didn't participate in the northwest  
10 quarter, you would be carrying them to the tune of 83.38  
11 percent?

12 A. That is correct.

13 Q. And that is a decision that Richardson believes  
14 is an appropriate decision, based on their knowledge of the  
15 area?

16 A. Yes.

17 Q. And the risk involved in the well?

18 A. Yes.

19 Q. If we take a look at your Exhibit Number 6, this  
20 is a chronology similar to that provided by Ms. Jenkins  
21 concerning the contacts between the parties concerning the  
22 development of the acreage; is that right?

23 A. Yes, sir.

24 Q. And if I look at the first three entries on this  
25 exhibit, November, 1993, through December, 1993 --

1           A.     January, 1993?

2           Q.     I'm sorry, January, 1993, through December, 1993,  
3     those were negotiations for a property exchange; is that  
4     right?

5           A.     They were actually more than a property exchange.  
6     They weren't a property exchange at all.

7           Q.     They were all involved with acquisition of  
8     property rights, as opposed to proposing the drilling of  
9     any particular well; is that not fair?

10          A.     Yes, I confused your term "property exchange"  
11     with "acreage trade".

12          Q.     And my "property exchange" term was probably  
13     confusing.

14                 But prior to December of 1993, those all talked  
15     about property or exchanges or acquisitions, as opposed to  
16     drilling of wells?

17          A.     Right -- Well, no, because we did offer to farm  
18     out. That's a proposal to drill a well.

19          Q.     Did you propose any particular well location?

20          A.     No.

21          Q.     If we take the December, 1993, date and we go  
22     down to, I guess, February of 1995, I thought I understood  
23     you to say you had been instructed by legal counsel not to  
24     communicate with Amoco; is that right?

25          A.     Yes.

1           Q.    So we have a 14-month break in the negotiations  
2   on this property that were the result of some other dispute  
3   not related to this tract; is that correct?

4           A.    That's correct.

5           Q.    And then you received -- That long silence was  
6   broken 14 months after it terminated, when you got a  
7   specific well proposal from Amoco?

8           A.    Yes.

9           Q.    Okay.  If I look at the operating agreements that  
10  are your Exhibits 7 and 8, do you recall receiving a  
11  request from Ms. Jenkins for a copy of the operating  
12  agreement on March 7th of this year?

13          A.    I recall her testifying that earlier today.  I do  
14  not recall a conversation where she asked for an operating  
15  agreement.

16                   I do know that in our well proposals we  
17  specifically said that operating agreements would be  
18  furnished upon written request by any party.

19          Q.    To your knowledge, was a copy of the operating  
20  agreement that Richardson was proposing ever provided Amoco  
21  prior to this time?

22          A.    No.

23          Q.    Now, when you got the -- You received an  
24  operating agreement from Amoco, did you not?

25          A.    Yes, we did.

1 Q. And did you receive that on or about February the  
2 16th, as reported or testified to by Ms. Jenkins and as  
3 shown on her chronology?

4 A. The operating agreement was attached to their  
5 well-proposal AFE.

6 Q. And would that have also contained in that  
7 operating agreement their overhead and administrative  
8 costs?

9 A. Yes.

10 Q. And was it after that date that you actually  
11 filed for hearing and announced what your overhead and  
12 administrative costs would be for a well on this tract?

13 A. Yes, it was.

14 Q. So your operating costs or your overhead costs  
15 were less, but they were proposed and developed a month  
16 after you had received those from Amoco?

17 A. That is correct. And in addition, they're the  
18 same that we use on our wells in the east half of Section  
19 12.

20 Q. And when you proposed them, you already knew what  
21 the Amoco proposal was and that you had conflicting  
22 proposals; isn't that right?

23 A. Yes.

24 Q. Okay. Now, I believe you said that you reviewed  
25 this operating agreement for Mr. Richardson; is that

1 correct?

2 A. Yes, sir.

3 Q. And that there were certain matters in the  
4 operating agreement that were unacceptable to you?

5 A. Yes, sir.

6 Q. Now, you were concerned about Article V., D-8.  
7 That was one of the things you identified; isn't that  
8 right?

9 A. Yes.

10 Q. You also indicated there was a missing page?

11 A. Yes.

12 Q. Did you contact Amoco to discuss the provisions  
13 of Article V., D-8?

14 A. No, I didn't. When we got that, we were told  
15 that Amoco would respond in writing to our AFE and well  
16 proposal.

17 The next thing we got was notification by a copy  
18 of a letter to the Commission that we were being force-  
19 pooled. We felt that we were put in an adversarial  
20 position.

21 Q. And my question was, you didn't contact Amoco  
22 about any of the provisions in this agreement with which  
23 you disagreed?

24 A. We had no contact with Amoco from that point.

25 Q. There was a missing page. You decided not to

1 call them and ask that they send you the missing page?

2 A. That's correct.

3 Q. And wouldn't that be a normal procedure for you  
4 in evaluating an agreement with another company that you  
5 might be in some sort of a joint venture with?

6 A. It depends on if we're in an adversarial position  
7 or not, whether I make contact with them.

8 Q. Had your attorneys told you not to communicate  
9 with Amoco about the operating agreement?

10 A. Our attorney, Mr. Kellahin, had advised that we  
11 not communicate with Amoco.

12 Q. And if you've been advised by your counsel not to  
13 talk to Amoco about this development for 14 months in 1993  
14 and 1994 and again since this proceeding developed, is it  
15 your position that you're trying to voluntarily negotiate  
16 something with Amoco?

17 MR. KELLAHIN: Objection, that's argumentative,  
18 Mr. Examiner. Come on.

19 MR. CARR: I think the dates and the testimony of  
20 this witness will show whether or not there, in fact, was a  
21 Richardson good-faith effort to reach an agreement with  
22 Amoco --

23 MR. KELLAHIN: If he wants to make his argument,  
24 he may do so at closing and not with my witness, with  
25 argumentative questions, Mr. Examiner.

1 EXAMINER STOGNER: Do you want to restate the  
2 question, Mr. Carr?

3 Q. (By Mr. Carr) I want to be sure that I  
4 understood you. You were told by your counsel not to  
5 discuss the operating agreement with Amoco?

6 A. No, I meant to say, if I didn't say it clearly,  
7 that we were told by our counsel not to discuss the --  
8 anything with Amoco once we had received the letter  
9 informing us that we were going to be force-pooled. At  
10 that point, all voluntary negotiations did stop.

11 Q. At this point in time, no matter what happens in  
12 this hearing, is it Richardson's position that voluntary  
13 negotiations are over?

14 A. We would like to voluntarily make a satisfactory  
15 arrangement with Amoco before we stop talking to Amoco.

16 I told Greg Grotke that we would very much like  
17 for Amoco to participate, and we still are of that belief  
18 today.

19 Q. And how could we accomplish that if you've been  
20 instructed not to talk?

21 A. Well, that's why we're here.

22 Q. I have no further --

23 A. Amoco requested --

24 Q. I have no further questions.

25 A. -- that we talk before the Commission. That's



1     why we're here.

2           Q.     And that's the only place it's your understanding  
3     that you may negotiate this or talk about it?

4           A.     As I said, we felt that we were put in an  
5     adversary position when Amoco sent us notice that we were  
6     being force-pooled.

7           Q.     And my question is, does that mean that there is  
8     no hope at this point for the parties to talk to each  
9     other?

10           MR. KELLAHIN:  Objection, Mr. Examiner.

11           MR. CARR:  I'm just --

12           MR. KELLAHIN:  It's irrelevant at this point.

13           MR. CARR:  I am inquiring -- I don't think it is  
14     irrelevant.

15                   Parties reach voluntary agreement after pooling  
16     orders are entered all the time, and my inquiry is whether  
17     or not the door has been closed and stays closed.

18           MR. KELLAHIN:  Witness has already responded to  
19     Counsel, Mr. Examiner.

20           EXAMINER STOGNER:  I believe she already has.

21           MR. CARR:  That the door is closed?  Is that what  
22     I --

23           EXAMINER STOGNER:  I believe that she's already  
24     answered the question.

25           MR. CARR:  All right, I have no further questions

1 of this witness.

2 EXAMINER STOGNER: Any redirect?

3 MR. KELLAHIN: No, sir.

4 EXAMINER STOGNER: Mr. Carroll?

5 I don't believe I have any questions at this  
6 point either.

7 MR. KELLAHIN: I'd like to call my next witness,  
8 Mr. Examiner. My next witness is Mr. David Richardson.

9 DAVID B. RICHARDSON,  
10 the witness herein, after having been first duly sworn upon  
11 his oath, was examined and testified as follows:

12 DIRECT EXAMINATION

13 BY MR. KELLAHIN:

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

16 A. David Richardson. I'm a petroleum geologist. I  
17 am the owner of Richardson Operating Company.

18 Q. And where do you reside, sir?

19 A. Cherry Hills Village, Colorado.

20 Q. Summarize for us your education.

21 A. I obtained a bachelor of science from the -- in  
22 geology, from the University of Oklahoma in 1978.

23 Q. Describe for us -- Give us a quick summary of  
24 Richardson Operating Company.

25 A. It was formed in -- initially in 1980. I was an

1 employee of Amoco briefly, and Western Geophysical.

2 I started my own company in 1980 as Richardson  
3 Oil Company. It evolved into Morgan-Richardson Operating  
4 Company, and I subsequently purchased the entire company in  
5 1990.

6 Q. Describe for us your geologic play in the  
7 Pictured Cliff and the Fruitland Coal Gas Pool in the San  
8 Juan Basin of New Mexico.

9 A. Initially, we drilled approximately 20 wells,  
10 about 30 miles southeast of this area in the Largo Canyon  
11 area.

12 In 1992 we obtained a farmout and drilled seven  
13 wells in the Fruitland Coal, shallow wells, approximately  
14 1500 feet, just east of the prospect area. All the time we  
15 had been moving further west to our current location.

16 Q. What's the vintage of your development in the  
17 east half of this Section 12 we've been discussing?

18 A. Recently, it's been in 1994.

19 Q. As a geologist and as a CEO of your own company,  
20 do you also employ other geologists to provide you  
21 information and to consult with you about how to further  
22 develop the Pictured Cliffs?

23 A. Yes, I do.

24 Q. And are we about to look at some of that type of  
25 information?

1 A. Yes, we are.

2 Q. Is this the same kind of information that you  
3 would use to develop these wells in these well locations,  
4 regardless of a dispute with Amoco?

5 A. Yes.

6 Q. If you're making decisions in this area for  
7 drilling wells, then this is the type of information you  
8 look at?

9 A. Yes.

10 Q. Do you drill these wells for your own company, or  
11 are you doing this in some kind of promotional prospect  
12 with other people's money?

13 A. No, I don't take investors; I drill with my own  
14 money.

15 Q. Let's turn to Exhibit A.

16 A. Okay.

17 Q. I'm sorry, I --

18 A. Exhibit 11.

19 Q. -- misidentified the exhibit.

20 Exhibit 11, it's the cross-section, if you'll  
21 unfold that before you.

22 I think it may be useful to just show all three  
23 displays at the same time, Mr. Richardson. I think it will  
24 help us. If you'll unfold Exhibit 11, and then let's use  
25 Exhibit 12 and 13 by which to understand what you're trying

1 to do.

2 A. Okay.

3 Q. Have you independently reviewed this  
4 information --

5 A. Yes.

6 Q. -- in terms of its geology?

7 A. Yes, I have.

8 Q. And based upon that review, you have come to your  
9 own conclusions and recommendations?

10 A. Yes.

11 MR. KELLAHIN: At this time, Mr. Examiner, we  
12 tender Mr. Richardson as an expert petroleum geologist.

13 EXAMINER STOGNER: Are there any objections?

14 MR. CARR: I have no objection.

15 EXAMINER STOGNER: Mr. Richardson is so  
16 qualified.

17 Q. (By Mr. Kellahin) In this area, let's take  
18 Exhibit 11 and have you show us the line of cross-section,  
19 insofar as it affects Section 12 --

20 A. Okay.

21 Q. -- so the Examiner can see where these well logs  
22 relate to the surface.

23 A. Okay, you should probably refer to either Exhibit  
24 12 and 13 to look at where the cross-section goes.

25 Starting from the left-hand side, A', it's --

1 Let's see, if you look on the Exhibit 12, you see A' is in  
2 the southeast quarter. That's a well -- a Richardson  
3 Operating Company, 12-1 well, that is a Pictured Cliffs  
4 well we drilled in March of 1994.

5 And the northeast quarter is a commingled  
6 Fruitland Coal and Pictured Cliffs well.

7 As you go further to the west, now, you get into  
8 an Amoco Dakota well, and in the southwest quarter is  
9 another Dakota well operated by Amoco.

10 Q. Did you use this type of information when you  
11 developed your prospect and drilled your wells in the east  
12 half of this section?

13 A. Yes, I did.

14 Q. Give us a sense of the relationship between the  
15 coal that's productive in your well and the Pictured Cliff  
16 that is productive in that well. If we look at the cross-  
17 section, can you show us where the vertical relationship is  
18 in those two reservoirs?

19 A. Yes, in our two wells it's located between 1400  
20 and 1550 feet. There's a separation of about 10 feet of  
21 shale between the two zones.

22 Q. What is your recommendation for the development  
23 of the west half of Section 12, the disputed spacing units?

24 A. In the west half of Section 12, I feel, in the  
25 northwest quarter, because of the spacing of the Fruitland

1 Coal on 320s, that should be a Pictured Cliffs well. In  
2 the southwest quarter it should be a commingled Fruitland  
3 Coal and Pictured Cliffs test.

4 Q. Describe for us how you reached the conclusion  
5 to make the coal gas well the one in the southwest quarter.

6 A. That's state spacing.

7 Q. All right. Other than the state spacing, is  
8 there a geologic difference that matters when you compare  
9 those two 160s?

10 A. No.

11 Q. So you could stay on pattern with the rule and  
12 still maximize your geologic objective in the coal?

13 A. Yes.

14 Q. Describe for us the isopachs. When we look at  
15 Exhibit 12, you have isopached what, sir?

16 A. This is the Fruitland Coal in the entire section.

17 Q. Do you find that there is sufficient coal  
18 thickness in this coal that it has been productive in the  
19 east half?

20 A. Yes.

21 Q. Describe for us the kind of rates that you're  
22 getting in the east half of the section in the coal.

23 A. Approximately 600 MCF a day, and I believe 40  
24 barrels of water. That's commingled between the Pictured  
25 Cliffs and the Fruitland Coal.

1 Q. All right. So as an operator, in addition to  
2 being a geologist, there is a water component to deal with  
3 here?

4 A. Yes, there is.

5 Q. In what reservoir?

6 A. Both of them.

7 Q. All right. When you look at the isopach for the  
8 Pictured Cliff, Exhibit Number 13, what does it show you in  
9 terms of well locations?

10 A. Again, it shows that Pictured Cliffs is --  
11 throughout the section, it varies between 30 and 45 feet in  
12 thickness, but we could expect the same Pictured Cliffs in  
13 the west half of the section as the east half.

14 Q. In terms of risk, Mr. Richardson, can you  
15 quantify the degree of risk for the Pictured Cliffs wells  
16 in this area?

17 A. Geologically, very, very small, less than five  
18 percent.

19 Q. In terms of the geologic risk involved with the  
20 Coal side, what is the geologic risk involved there?

21 A. Very, very small again, less than five percent.  
22 Maybe less than one percent.

23 Q. In terms of a percentage, the Examiner is  
24 required under the pooling procedures to make a decision  
25 about risk, and he has the authority to award a risk factor



1 penalty --

2 A. Yes.

3 Q. -- to be applied against any working interest  
4 owner which elect not to participate under the pooling  
5 order. Do you understand that concept?

6 A. Yes.

7 Q. Within that concept and within those percentages,  
8 the Division has a maximum of 200 percent.

9 A. Yes.

10 Q. Within that range, do you have a recommendation  
11 to the Examiner of where you would place that risk if you  
12 are allowed to operate these two wells?

13 A. I would say less than 200 percent.

14 Q. All right. Can you more specifically recommend  
15 to him what you would propose?

16 A. 150 percent.

17 Q. And that would be in addition to the cost  
18 attributable?

19 A. Yes.

20 Q. And would that be a number that you would apply  
21 to both reservoirs?

22 A. Yes.

23 Q. All right. And that is a recommendation with  
24 knowledge that your original application had asked for the  
25 maximum?

1 A. Yes.

2 Q. Okay. In reflection and in review, you say 150  
3 percent is appropriate?

4 A. Yes.

5 Q. In your capacity as president of your company,  
6 did you examine and review Amoco's proposal for their two  
7 wells?

8 A. Yes.

9 Q. In their two proposals, the February 14th  
10 letters, those proposals specified only completions in the  
11 Pictured Cliff formations, did it not?

12 A. Yes.

13 Q. Was that an issue of concern to you?

14 A. Yes, it was.

15 Q. And why was that?

16 A. We were leaving significant reserves behind pipe.

17 Q. And what would you do?

18 A. Commingle both zones and produce them at the same  
19 time.

20 Q. Other than the well proposal itself, in terms of  
21 the formations it accessed, did you have any disagreement  
22 with regards to any other portion of their proposal?

23 A. Yes, I did.

24 Q. What ultimately did you conclude to do about  
25 their proposal?

1           A.    I could not participate on a voluntary basis.

2           Q.    And for what reasons, sir?

3           A.    Several reasons. The first one, probably the  
4 most important to me, is, we are currently developing this  
5 area, we have two wells in the same section. It's a  
6 residential and commercial area; it's a difficult area to  
7 work.

8                   We have experience with the landowners, with Mr.  
9 Dugan, several doctors live in there. It's not easy, but  
10 we've done it, and we've had good rapport with them. And  
11 we feel as though we're qualified, we've been successful  
12 dealing with them and minimizing the disturbance of the  
13 area.

14          Q.    When you received the Amoco proposal, it included  
15 a proposed AFE for their wells, did it not?

16          A.    Yes.

17          Q.    Did you have any reaction to their proposal in  
18 terms of their costs?

19          A.    Yes, I did.

20          Q.    How did you go about analyzing that information?

21          A.    Through wells that we had actually drilled next  
22 door.

23          Q.    For your own information, you had that data?

24          A.    Yes, we not only had an AFE, we had actual cost.

25          Q.    And how did their AFE compare to your actual cost

1 experience in the adjoining spacing units?

2 A. Significantly higher.

3 Q. In addition to your own judgment on those  
4 matters, do you employ engineers and consultants that have  
5 expertise in that area to make those kinds of judgments and  
6 recommendations to you?

7 A. Yes, I do.

8 Q. And did you do that in this case?

9 A. Yes, I did.

10 Q. And were those recommendations consistent with  
11 your own conclusion?

12 A. Yes, they were.

13 Q. Other than the AFE proposed by Amoco, were there  
14 any other aspects about their proposal that caused you to  
15 reject their proposal?

16 A. Their overhead costs and their operating costs  
17 were significantly higher than ours.

18 Q. And how do you know that, sir?

19 A. Our own experience with them in the past on  
20 several projects. I've been involved with Amoco before.

21 Q. What do you propose to do if the Division allows  
22 you to operate these wells, Mr. Richardson?

23 A. Well, we maintain one overhead cost, we don't  
24 charge a district expense, we don't charge vacations,  
25 sicknesses. It's one expense, one overhead cost.

1 Q. In terms of having the impact of your cost  
2 proposal compared to the Amoco impact of cost proposals,  
3 have you retained the assistance of an expert in that area?

4 A. Yes, we have.

5 Q. And what's the name of the lady that's done the  
6 consulting work for you to make that comparison?

7 A. Dana Delventhal.

8 Q. And Ms. Delventhal has experience, based upon  
9 your knowledge, in providing you with that kind of  
10 information?

11 A. Yes, she has.

12 Q. And has her work in the past proved to be  
13 accurate and reliable, based upon your knowledge and  
14 experience?

15 A. Yes, it has.

16 MR. KELLAHIN: That concludes my examination of  
17 Mr. Richardson.

18 We move the introduction of his exhibits, which  
19 are marked 11, 12 and 13.

20 EXAMINER STOGNER: Are there any objections?

21 MR. CARR: No objection.

22 EXAMINER STOGNER: Exhibits 11, 12 and 13 will be  
23 admitted into evidence.

24 Thank you, Mr. Kellahin.

25 Mr. Carr, your witness.

1 MR. CARR: I have no questions of this witness.

2 EXAMINER STOGNER: Mr. Kellahin, what's your  
3 other two witness's expertise?

4 MR. KELLAHIN: Dana Delventhal is an expert in  
5 drilling AFES and actual costs, and she has analyzed the  
6 two AFES for you, and she has a comparison to demonstrate  
7 the cost components and has reached some engineering  
8 conclusions to demonstrate that there is substantially  
9 prolonged life and additional recovery if Richardson  
10 operates, and that's the purpose of her testimony.

11 EXAMINER STOGNER: I was just -- You have an  
12 engineer and --

13 MR. KELLAHIN: And Mr. Rod Markham is one of the  
14 interest owners, which both sides were attempting to obtain  
15 his consent, and he is here as a third party to testify as  
16 to his preference in terms of an operator.

17 EXAMINER STOGNER: Okay, I just wanted to see  
18 where we're heading on that.

19 Do you have any questions of this witness?

20 MR. CARROLL: No, I don't.

21 EXAMINER STOGNER: I don't at this time either,  
22 unfortunately -- fortunately.

23 Let's take a ten-minute recess.

24 (Thereupon, a recess was taken at 4:33 p.m.)

25 (The following proceedings had at 4:50 p.m.)

1 EXAMINER STOGNER: Hearing will come to order.

2 Mr. Kellahin?

3 MR. KELLAHIN: Mr. Examiner, at this time I'd  
4 like to call Ms. Dana Delventhal. She spells her last name  
5 D-e-l-v-e-n-t-h-a-l.

6 DANA L. DELVENTHAL,

7 the witness herein, after having been first duly sworn upon  
8 her oath, was examined and testified as follows:

9 DIRECT EXAMINATION

10 BY MR. KELLAHIN:

11 Q. Ms. Delventhal, for the record would you please  
12 state your name and occupation?

13 A. Dana Delventhal, and I'm a consulting petroleum  
14 engineer.

15 Q. On prior occasions have you testified in that  
16 capacity as a consulting engineer before this agency?

17 A. Yes, I have.

18 Q. And where do you reside?

19 A. In Farmington, New Mexico.

20 Q. Summarize for us your employment experience.

21 A. I'm a 1981 graduate of the New Mexico Institute  
22 of Mining and Technology.

23 I've worked in the petroleum industry out of  
24 Farmington, New Mexico, since that time, and I've currently  
25 had our own consulting company since 1985.

1 Q. As part of your consulting work, do you on a  
2 regular basis make cost analyses and recommendations for  
3 your clients for the drilling of Pictured Cliffs and  
4 Fruitland Coal gas wells?

5 A. Yes, I do.

6 Q. How do you go about preparing yourself to make  
7 that type of analysis?

8 A. We're active in the drilling and completion of  
9 wells, so we have actual cost experience. We also  
10 participate in the drilling and completion of wells and  
11 evaluations of such.

12 Q. Are you familiar with the drilling mechanics and  
13 the various elements and components for drilling a single-  
14 completion PC well and/or a PC well that's commingled with  
15 the coal gas?

16 A. Yes, sir.

17 Q. As part of your consulting work, do you also make  
18 cost comparison analysis using the kinds of things that Mr.  
19 Grotke and Mr. Hawkins did?

20 A. Yes, we do evaluate different completion methods,  
21 methodology and costs associated with such, so that when we  
22 do make a recommendation for the drilling of a well, that  
23 we have picked the optimum method.

24 Q. So when Mr. Hawkins talked about Amoco's proposal  
25 that this well might be a slimhole candidate, you



1 understood what that all meant?

2 A. Yes, sir.

3 Q. And when he talked about the use of a coiled-  
4 tubing procedure for this well in terms of the way it was  
5 equipped, that meant something to you?

6 A. Yes, sir.

7 Q. As part of that consulting work with that  
8 background of experience and knowledge, did you perform  
9 such services for Mr. Richardson?

10 A. Yes, I do make recommendations.

11 Q. And have you made an analysis of the data by  
12 which to make such a recommendation to Mr. Richardson?

13 A. Yes, sir.

14 MR. KELLAHIN: We tender Ms. Delventhal as an  
15 expert petroleum engineer with expertise in analyzing and  
16 reviewing and comparing AFES with actual well costs.

17 EXAMINER STOGNER: Any objections?

18 MR. CARR: No objection.

19 EXAMINER STOGNER: Ms. Delventhal is so  
20 qualified.

21 Q. (By Mr. Kellahin) Before we get into the parts  
22 of your documents, let me ask you your impressions and  
23 conclusions about the type of well program that Amoco has  
24 proposed, as related to the Examiner through Mr. Hawkins's  
25 testimony.

1           A.   It's interesting. Slimhole completions have been  
2   used in the PC in the San Juan Basin extensively since the  
3   Fifties. Generally, it's a completion method designed for  
4   low-ultimate-recovery gas reservoirs which are dry, in an  
5   effort to save initial investment and therefore be able to  
6   justify completing those reserves.

7           The problem that I see with that technology as  
8   applied in this case is that, one, generally slimholes were  
9   drilled with conventional drilling rigs or drilling  
10   technology. The coiled tubing is somewhat new, and there  
11   are some risks associated. If you had a very high cost  
12   savings to offset such risks, it might be worth  
13   contemplating.

14           And the second problem in this area, generally  
15   Pictured Cliffs wells are dry, oftentimes not even  
16   requiring surface separation. However, in this area the  
17   Pictured Cliffs is for the most part fairly water-  
18   productive, and a slimhole completion would not facilitate  
19   the natural flow of this type of well.

20           Q.   As that program was described through Mr.  
21   Hawkins's testimony as to Amoco's proposal, do you have an  
22   opinion as to whether that well could be constructed in  
23   that fashion?

24           A.   I see several problems, the worst problem being  
25   that 3-1/2-inch casing with 2-3/8-inch tubing, both strings

1 being standard, will not fit.

2 Q. What would the operator have to do?

3 A. Well -- Let me figure out the numbers here. The  
4 drift diameter of 3 1/2 is roughly 2.9 inches. The OD of 2  
5 3/8 standard tubing at the coupling is over 3 inches. The  
6 one option would be to mechanically slim down those  
7 couplings. But then you have a risk of tubing failure.

8 Then again, the natural flow of these wells --  
9 They're not an artificial lift, they're capable of flowing  
10 this water production on compression. The annular space  
11 would be negligible, and you would lose quite a bit of lift  
12 capacity, even if you machined down the couplings.

13 Q. Have you proposed to Mr. Richardson how this  
14 particular well ought to be drilled and completed?

15 A. I would drill and complete it as a standard gas  
16 well.

17 Q. Have you previously testified before the agency  
18 concerning the downhole commingling allocation formula and  
19 the approval of downhole commingling for the PC and the  
20 coal gas for the well in the other half of this same  
21 section?

22 A. Yes, I have.

23 Q. That was your work, and you testified before this  
24 agency?

25 A. Yes.

1           Q.    Have you performed a similar analysis for this  
2 well in the west half of the section?

3           A.    Yes, I have.

4           Q.    And do you have recommendations for the Examiner  
5 about the downhole commingling procedure for this well?

6           A.    Yes, I recommend that it be downhole commingled  
7 and that the engineering data will substantiate that.

8           Q.    All right. Let's start with the well-comparison  
9 work that you have done in terms of comparing well costs,  
10 as proposed by the two operators.

11                   If you'll start with what we've marked as Exhibit  
12 Number 15.

13           A.    Okay, the AFE comparison that we have before us  
14 is a comparison of the Richardson AFE and the Amoco AFE,  
15 much as Mr. Hawkins has done.

16                   I've also added the one other additional column  
17 of Richardson's actual spending. I guess we're all aware  
18 that AFEs can be inaccurate, and our first concern when we  
19 received the Amoco AFE was that perhaps our AFE was not in  
20 line.

21                   What I've got on the first column -- and I'll be  
22 as concise as possible -- if you look at the total at the  
23 bottom, the Richardson AFE for the stand-alone Pictured  
24 Cliffs well is roughly \$152,000.

25                   Our actual 12 Number 1 Pictured Cliffs well,

1     which is within a half a mile, actual costs came in at  
2     \$123,000. So we were roughly 20 percent under budget.

3             As Mr. Hawkins pointed out, our AFE did not  
4     include capital compression costs and theirs did, in the  
5     amount of \$30,000.

6             Q.     What did you do to reconcile that difference?

7             A.     To put everything on as fair a basis as possible,  
8     we subtracted out the \$30,000 from their AFE estimate. If  
9     you take \$30,000 from their original \$216,000, you see the  
10    comparison at \$186,000, under Amoco's scenario.

11            Again, I assumed that their AFE was diligently  
12    prepared and that they feel that they can drill and  
13    complete a coiled-tubing-type completion for that type of  
14    money.

15            Based off of the AFE differential, there's a 22-  
16    percent differential. But comparing our actual costs to  
17    their AFE costs, their AFE is about 51 percent higher. And  
18    I would have liked to have had some comparison of the  
19    actual spending of an Amoco-drilled coiled tubing, but that  
20    information wasn't available.

21            Q.     When we look at the bottom line on Exhibit 15,  
22    the \$186,000 attributable to the Amoco already has the  
23    \$30,000 compression cost deleted from their AFE?

24            A.     That's correct, so that we're comparing apples  
25    with apples.

1 Q. Okay. Let's go through this in terms of major  
2 items of difference to you as an expert.

3 When you look at the drilling portion, you get  
4 down to the subheading B. It says "Drilling". And looking  
5 through those components, there's a subtotal?

6 A. Correct. The largest areas of difference are  
7 between the drilling costs in which their estimate is  
8 roughly \$45,000, and our drilling cost history shows around  
9 \$18,000.

10 Our drilling rig, generally we get on a footage  
11 basis, so it's essentially risk-free to the working  
12 interest owners.

13 Q. Show us other items of major difference.

14 A. The downhole completion, which I think now we've  
15 come to agreement that that \$20,000 differential -- Perhaps  
16 their AFE has been overstated or they're agreeing now that  
17 they can complete and stimulate less expensively.

18 Q. As you have analyzed the comparisons of AFEs,  
19 have you itemized completion rig cost factors?

20 A. As well as we could. Again, the actual  
21 categorization off of the AFEs is a bit subjective. I put  
22 them in as best we could, and some detail is not there.

23 But yes, there is a completion day work figure on  
24 their AFEs.

25 Q. In the comments section on the far right side of

1 the comparison, you have made various notes at other points  
2 to identify for the Examiner matters of difference.

3 A. They're definitely matters of concern to us. The  
4 day work figure of \$2100 does not allow much time. And  
5 again I assume that they've been diligent, but our  
6 experience has been that some of these costs are probably  
7 going to be significantly higher.

8 Q. Describe -- Mr. Hawkins addressed the contingency  
9 method used by Amoco, and I think you heard that testimony.  
10 You have looked at the contingency components of the  
11 components of the AFEs, and you have them analyzed on this  
12 exhibit, do you not?

13 A. That's correct.

14 Q. Describe for us what you have concluded.

15 A. Generally, the 15-percent contingency used by  
16 Amoco is not unusual in the industry in general.  
17 Generally, it's based off of a percentage.

18 Again, those contingencies have a tendency to  
19 materialize during the drilling and completion of wells.

20 Generally through Richardson and the AFEs we  
21 generate and our charges, we don't use as high of a  
22 contingency basis. We try to actually categorize those  
23 anticipated costs ahead of time. So our contingencies are  
24 less. But basically, it's the bottom line on the AFE that  
25 matters.

1           Q.    The Examiner is here to listen to recommendations  
2   on how to decide matters of difference by which he can  
3   ultimately decide who operates.  Is there a difference  
4   between this AFE that is a difference to you?

5           A.    Yes, actually there's a large matter of  
6   difference, both to the working interests and to the  
7   royalty owners.

8                   Generally, both the -- the economics of the  
9   project and the ultimate recovery are tied to the initial  
10   investment and the overhead charges throughout the life of  
11   the well, and in this case it's significantly different.

12          Q.    And in a later display, you have attempted to  
13   calculate or to quantify the magnitude of that difference  
14   in terms of its effect on the life of the wellbore and on  
15   ultimate gas recovery?

16          A.    That's correct.  And the other thing I would like  
17   to bring out is that basically my assumptions and my  
18   comparisons and the differentiation between operating and  
19   drilling these wells, I've held both the risk and the well  
20   results constant between ROPCO and Amoco.

21                   I am concerned, if they should pursue a coiled-  
22   tubing-type completion, that there should be additional  
23   risk factors assigned into there, versus a standard gas  
24   well typical completion.

25          Q.    Let's turn to Exhibit 16 and have you describe



1     what you've done when you have made a comparison for the  
2     well in the southwest quarter of 12.

3             A.     This comparison is identical in scope to the  
4     first, except for this is for the well in the southwest  
5     quarter, which is assumed to be a commingled Pictured Cliff  
6     Fruitland Coal well.

7             The only other item of note is, with Amoco's  
8     proposal, if for some reason their well did not qualify or  
9     they were not able to get downhole commingling requirements  
10    met, they would not be able to dual complete in 3-1/2-inch  
11    casing.

12            It's been our philosophy to go ahead and set  
13    casing large enough for a dual completion so that if such  
14    were the case, we would not have to eliminate the Fruitland  
15    Coal side of the completion.

16            Q.     When you look at the components of difference in  
17    this comparison, describe for us what they are.

18            A.     Generally, the components of difference are  
19    fairly similar.

20            We have a difference in our drilling estimates.  
21    Again, we use a standard footage rate.

22            The completion again is different.

23            And there's contingency money, you know, that  
24    varies, much like the first completion.

25            Q.     When you get to the bottom line and you take off

1 the compression costs for the Amoco AFE, what is still the  
2 net difference?

3 A. There's still quite a significant difference.  
4 Generally, our AFE was for \$194,000. The dual within half  
5 a mile, the actual well costs came in at \$177,000. We were  
6 10 percent under budget.

7 Their AFE is for roughly \$231,000.

8 So based off of the AFE values, they're 20  
9 percent higher. And based off of actual experienced  
10 drilling costs, they vary by 31 percent.

11 Q. In your opinion, will compression be required in  
12 this well?

13 A. We anticipate that it is.

14 Q. In order to take that cost factor into  
15 consideration in the AFEs, have you analyzed the net result  
16 of the inclusion of compression?

17 A. Yes, I have. Compression, we deem, will be  
18 required. Generally, it's not in the original AFE because  
19 we're not sure of the size or what size of compressor would  
20 be needed.

21 Generally, we'll rent a compressor for the first  
22 few months' worth of production on the well and then size  
23 after at that point.

24 Q. Is it a flaw in the Richardson AFEs not to have  
25 an item for compression?

1           A.    I don't believe so. The operating agreement has  
2           spending authorities, and each working interest owner would  
3           have their fallbacks through the operating agreement, if we  
4           were to AFE for compression at a later date.

5           Q.    Under different case examples, have you assumed  
6           compression for this well for both costs by either operator  
7           and shown the impact of the total well cost, of ultimate  
8           recovery?

9           A.    I have. What I've tried to do is make an  
10          economic comparison and see what the results are to the  
11          working interest owners as far as value, and secondly to  
12          the royalty owners as far as ultimate recovery, should  
13          ROPCO operate, versus Amoco operating.

14                I'm sure everybody realizes the number of  
15          variables is tremendous, so I've tried to keep everything  
16          as constant as possible and --

17          Q.    Have you reduced that information to an exhibit  
18          form?

19          A.    Yes, I've reduced what information I have onto  
20          Exhibit Number 17.

21          Q.    All right, let's look at that and have you  
22          describe for us how you've organized the display, and then  
23          we'll talk about the parameters, and then the assumptions  
24          and finally the conclusions.

25          A.    Okay. Basically, the display is set up to show a

1 comparison on the Pictured Cliffs well versus the  
2 commingled Pictured Cliffs and Fruitland, so that  
3 essentially any variances would be added.

4 I've listed at the top the assumptions as far as  
5 reservoir parameters, economic parameters. And as you can  
6 see, I've kept them constant between ROPCO and Amoco. In  
7 essence, I've assumed that Amoco is on budget, ROPCO is on  
8 budget, that the well's productivity and decline rates are  
9 identical, in essence, for giving any fact as far as the  
10 different wellbore configurations, and held everything  
11 constant on that side --

12 Q. Do you have a --

13 A. -- the only differentiation being the  
14 differentiation between capital investment and operating  
15 costs over the life of the wells.

16 Q. So the Examiner understands how you've gone about  
17 this, describe for us how you've come up with your  
18 recoverable gas reserve number that you've put into the  
19 calculation.

20 A. The recoverable reserves are calculated based off  
21 of initial gas rates and decline rates and economic limit.

22 The last page, Appendix Number 1, shows our  
23 assumption on operating costs, and they have a significant  
24 impact, and I want to be straightforward on what those  
25 assumptions are.

1           Basically, the overhead -- standard overhead rate  
2 varies by only \$50 per month. Generally there's a pumper  
3 charge.

4           The charge for compression, depending on the  
5 method each operator chooses to incorporate those expenses,  
6 varies, and I've got the figures used.

7           And then we've also added in the additional  
8 overhead charges that Amoco normally would associate with  
9 their wells. And I used \$300, and Mr. Hawkins said that  
10 may be conservative. I don't know. But for the purposes  
11 of this exhibit, we felt \$300 was a reasonable estimate.

12          Q. All right. How did you handle the potential  
13 variable of the compression cost component?

14          A. What I assumed was several cases. I was not sure  
15 how Amoco would propose their compression, whether they  
16 were going to compress the two wells through one compressor  
17 or whether they were going to buy them or lease them or  
18 rent them.

19                So just to be safe I ran several cases and --

20          Q. Let's show the Examiner one. Let's pick an  
21 example and show him the method, and then he can satisfy  
22 himself if he wants to apply any of these other case  
23 examples.

24          A. Okay, starting on the first page with A, this  
25 would be the stand-alone Pictured Cliff wells.

1           The Case 1 would be where ROPCO and Amoco were to  
2 rent a compressor. And what -- Each case has certain  
3 criteria and certain values shown for the ROPCO case, and  
4 then the Amoco case with the same fixed variables, just  
5 changing those -- the fixed constants being the same,  
6 changing the variables, and the variance being the  
7 difference.

8           Under the rental it shows that over the life of  
9 the well, we would extend the life by about four years and  
10 recover --

11           Q.   Where do you see that? The second entry down?

12           A.   Correct, the life of the project at the economic  
13 limit. Whereas ROPCO's well was 19 years, one month,  
14 Amoco's was 15 years, one month. Therefore, ROPCO  
15 operating would extend it approximately four years.

16           Q.   In addition to the extended four-year life of  
17 production by Richardson, what is your estimate of the  
18 additional gas recovered if they operate?

19           A.   Under the same scenario, it would be roughly  
20 149,000 MCF.

21           Q.   All right, let's turn to see how you handle the  
22 Pictured Cliffs and Fruitland combined, that type of  
23 completion.

24           A.   Okay. I might mention that Case 2 is assuming  
25 that the compressors are purchased and financed.

1           And Case 3 assumes that we buy used compressors.

2           And again, in those two cases, the variance  
3   between the two is still to the favor of ROPCO, roughly two  
4   years, eight months, and 42,000 MCF.

5           Q.   Amoco's AFE used \$30,000 for the cost of a  
6   compressor?

7           A.   Yes, and again I'm not sure where their number  
8   has come from, assuming that's a purchase price.

9           Generally, these wells produce a combined initial  
10   rate of anywhere from 600 to 800 MCF per day, and the  
11   pressure in those lines out there, it's high-pressure sales  
12   lines.

13           Generally, it's the type of compressor you would  
14   need for that. And we've gotten bids for that, would run  
15   around \$85,000 new.

16           Generally, we attempt to get used equipment, but  
17   \$85,000 would be a new price.

18           Q.   All right. Let's see how you've analyzed the  
19   comparison when we deal with a Fruitland Coal Gas-PC  
20   combination.

21           A.   Again, I've used the same cases, the same  
22   assumptions, but this analysis labeled B is for the  
23   commingled well, and it assumes that it qualifies for  
24   downhole commingling, and that's the completion method.

25           Basically, the variance here is again to the

1 favor of ROPCO, roughly 146,000 MCF under, you know, the  
2 Case 1 assumption, and 41,000 MCF under Cases 2 and Cases  
3 3, again extending the life nearly three years for the  
4 well.

5 So for the total two-well project that we're  
6 looking at, the incremental reserves is -- well, nearly  
7 300,000 MCF under one scenario, and if you take the  
8 conservative view it's roughly 82,000, 83,000 MCF.

9 Q. Do you have an opinion as to whether it's  
10 appropriate for this case to be decided based upon a  
11 difference in AFE costs as proposed by the two different  
12 operators?

13 A. I think the basis for any well being drilled is  
14 to drill it as efficiently as possible and recover the most  
15 reserves as economically possible.

16 If the numbers proposed by Amoco are their true  
17 belief on the cost of their wells and we've established  
18 some of the operating costs, it would be to their advantage  
19 as well as the other working interest owners and royalty  
20 owners to elect Richardson as operator.

21 Q. Let's turn to Exhibit 18. Identify and describe  
22 for me what you're showing here.

23 A. The rest of my exhibits pertain to the request  
24 for downhole commingling of the Pictured Cliff and  
25 Fruitland Coal.



1           Again, it's critical to get that prior approval,  
2 especially in this case. Otherwise, the Fruitland Coal  
3 reserves would perchance be left behind pipe.

4           And secondly, certainly in Amoco's case, they  
5 would have to have that approval before they could drill.

6           Exhibit Number 18 is the nine-section plat which  
7 shows the Fruitland Coal spacing unit in the west half of  
8 12 and shows the offset wells and their owners. This is  
9 what was used for notification purposes for the downhole  
10 commingling application.

11          Q. All right. Let's turn to Exhibit 19 now, Ms.  
12 Delventhal, and have you describe this exhibit.

13          A. Exhibit 19 shows some economic criteria for why a  
14 commingled completion is preferable, as opposed to drilling  
15 two stand-alone wells or completing a separate Fruitland  
16 Coal formation.

17               The first page shows the assumptions as far as  
18 the economic criteria and gas rates, et cetera. For this  
19 case, we assumed that we purchased a compressor at our bid  
20 price and financed it.

21               And the second page shows, as Part A, the  
22 Pictured Cliffs well stand-alone economics. As you can  
23 see, the profit-to-investment ratio is nearly 12. It's a  
24 good project. The well life is 26-some years, and we  
25 should recover just under 2 BCF.

1           The Fruitland Coal, if we were to drill a stand-  
2 alone well, is barely economic. The profit-to-investment  
3 ratio is less than one, and it has roughly a 10-year well  
4 life. It is unlikely, if an operator were choosing  
5 projects, that this well would be drilled separately during  
6 this environment.

7           Part C is the economics of the commingled well.  
8 Under the commingled scenario, the profit-to-investment  
9 ratio is nearly 14, recoverable reserves are now roughly  
10 2.8 BCF. Therefore, you've recovered roughly .8 BCF of  
11 Fruitland Coal reserves, whereas if you drilled it stand-  
12 alone, you were recovering under 600,000.

13           So by commingling the two together, your  
14 incremental recovery versus the separate completions is  
15 nearly 300,000 MCF.

16           Q.    Would it have been a mistake to drill the west  
17 half of the section with two stand-alone PC wells, without  
18 trying to get the coal gas production?

19           A.    Again, if that had occurred, if both had been  
20 developed and the Fruitland Coal formation owners wished to  
21 develop their reserves, they would be looking at stand-  
22 alone Fruitland Coal economics.

23           I would doubt that either Amoco or Richardson or  
24 any other operator in the San Juan Basin right now would  
25 drill the well under that case. In essence, those reserves

1 would not be developed at this time.

2 Q. In your opinion, for the coal gas reserves in the  
3 west half of the section, then, it's most prudent to  
4 develop those with one of these wellbores being a  
5 commingled wellbore?

6 A. That's correct. And should -- for either  
7 bottomhole pressure reasons or if it for some reason did  
8 not qualify it to be commingled, then a dual completion  
9 would be your next alternate. But you would definitely  
10 develop those reserves at the same time.

11 Q. All right. Let's turn to Exhibit 20 and have you  
12 give us a short summary on the wellbore diagram.

13 A. Like I said, there's no new science at all to the  
14 proposal of ROPCO and how we drill these wells out here,  
15 just a standard gas well: Set 7-inch surface casing, and  
16 then we set 4 1/2 or 5 1/2 casing down to about 1630 feet.

17 The formations range from about 1420 to 1485 foot  
18 in depth.

19 We use a standard completion method. We  
20 circulate cement to surface if possible, perforate and test  
21 each zone to gather the data we need for the downhole  
22 commingling, run open-ended tubing and place it on line.

23 Q. Let's turn to Exhibit 20.

24 Is there any pressure differential of concern  
25 estimated between the Fruitland Coal and the PC that would

1 preclude the downhole commingling of production in these  
2 two reservoirs?

3 A. No, actually the bottomhole pressure data that  
4 we've gathered in the area shows that the area is fairly  
5 depleted, that the reservoir pressure is quite similar  
6 between both the Fruitland Coal and the Pictured Cliffs and  
7 ranges between about 210 and 240 p.s.i.

8 Q. Have you also analyzed the gas analysis to  
9 determine whether the gas components and constituents in  
10 this specific area are compatible if the formations are  
11 commingled?

12 A. Yes, I have, and I've included as Exhibits Number  
13 22 and Number 23 actual chromatograph analysis of a  
14 Pictured Cliffs well and a Fruitland Coal well --

15 Q. With what conclusion?

16 A. -- both within a mile. And the gas is  
17 compatible.

18 Q. All right, let's turn to the allocation formula.  
19 If you'll look at Exhibit 24, which is the last of your  
20 exhibits, give us a summary of your method and your  
21 conclusions.

22 A. I've included this so that all the operators  
23 would know the general procedure that ROPCO would propose.  
24 Again, it's a fairly standard allocation formula, applied  
25 to Fruitland Coal-Pictured Cliffs commingled wells in the

1 area.

2 Because the Pictured Cliffs is an established  
3 pool and a good -- ultimate recovery numbers can be  
4 calculated in the area, the allocation formula is based on  
5 a difference method, whereas you calculate the PC reserves  
6 and additional reserves are allocated to the Fruitland  
7 Coal.

8 I've included the standard calculation. The  
9 numbers will change based on actual reservoir pressures and  
10 actual test rates, but the allocation method is at least  
11 outlined.

12 Q. Is this the method that you utilized when you  
13 made your presentation to the Division for the commingled  
14 well that's in the east half of the spacing unit --

15 A. Yes, sir.

16 Q. -- or east half of the section?

17 MR. KELLAHIN: All right, that concludes my  
18 examination, Mr. Examiner, of Ms. Delventhal.

19 We move the introduction of her Exhibits 15  
20 through 24.

21 MR. CARR: No objection.

22 EXAMINER STOGNER: 15 through 24 Exhibits of  
23 Richardson will be admitted into evidence at this time.

24 Thank you, Mr. Kellahin.

25 Mr. Carr, your witness.

## CROSS-EXAMINATION

BY MR. CARR:

Q. Ms. Delventhal, you previously worked for Amoco?

A. Yes, I did.

Q. And you are familiar with their operations in the San Juan Basin because you worked for them and also because you are a consultant active in the Basin; is that not fair to say?

A. Yes, sir.

Q. You do know that Amoco has drilled a number of Pictured Cliffs wells throughout the San Juan Basin?

A. A number of standard PC wells, yes.

Q. And they operate and produce a number of Pictured Cliffs wells in the Basin?

A. Uh-huh.

Q. They also have drilled and completed wells within the City of Farmington, haven't they?

A. Yes.

Q. Now, I gather from your testimony that you differ with the way they're proposing this well; is that fair to say?

A. Yes.

Q. Have you ever actually drilled a slimhole well with coiled tubing?

A. No.

1 Q. You can't say that it won't work, can you?

2 A. No, I didn't, and I didn't use any  
3 differentiation in risk or cost in my analysis either.

4 MR. CARR: That's all I have, thank you.

5 EXAMINER STOGNER: Any redirect, Mr. Kellahin?

6 MR. KELLAHIN: No further questions.

7 EXAMINATION

8 BY EXAMINER STOGNER:

9 Q. On Exhibit Number 24 -- that's the allocation  
10 formula -- this is essentially the basic things that have  
11 been concluded in the -- I guess a lot of Meridian; is that  
12 where you got this?

13 A. It's the similar -- yes, similar basis.

14 Q. Does Richardson have any commingled Pictured  
15 Cliffs-Fruitland Coal gas wells in that southern part of  
16 this area at this point, do you know?

17 A. We have one in the southeast -- or, excuse me, in  
18 the northeast of Section 12, within a half mile.

19 Q. Okay, and that one is downhole commingled?

20 A. Yes, sir.

21 Q. Similar allocation formula?

22 A. Correct.

23 Q. Was that a new drill or a recompletion?

24 A. It was a new drill.

25 EXAMINER STOGNER: Okay. Any other questions of

1 the witness?

2 Ms. Delventhal may be excused.

3 Mr. Kellahin?

4 MR. KELLAHIN: Mr. Examiner, the reference for  
5 that other offsetting commingling application, it's Case  
6 11,106. It's an October 13th, 1994, case.

7 I apologize for not having the order number, but  
8 that's the case number.

9 EXAMINER STOGNER: That was 11,106?

10 MR. KELLAHIN: Yes, sir.

11 EXAMINER STOGNER: Okay.

12 MR. KELLAHIN: Mr. Examiner, I have Exhibits 25  
13 and 26, which represent my certificate of notification for  
14 the compulsory pooling portion plus the downhole  
15 commingling portion of the case.

16 EXAMINER STOGNER: Thank you.

17 Mr. Kellahin?

18 MR. KELLAHIN: Mr. Examiner, Mr. Rod Markham, who  
19 is one of the working interest owners in each of these  
20 spacing units, has requested an opportunity to testify  
21 before you, and with your permission I will call him and  
22 sponsor him as a witness.

23 He's listed in all these tabulations as Roderick  
24 Allen Markham, I believe.

25 EXAMINER STOGNER: Okay, one and the same. Okay,



1 proceed.

2 RODERICK A. MARKHAM,

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

5 DIRECT EXAMINATION

6 BY MR. KELLAHIN:

7 Q. Mr. Markham, would you please state your name and  
8 occupation?

9 A. Rod Markham. I'm an independent oil and gas  
10 landman, whatever. Jack of all --

11 Q. Do you make -- I'm sorry, I didn't hear you.

12 A. Jack of all trades. I'm not a professional  
13 landman.

14 Q. Well, maybe by experience, Mr. Markham. We're  
15 going to find out.

16 You'll have to speak up, it's going to be heard  
17 to hear you.

18 Are you a working interest owner in the spacing  
19 units that are being proposed to be operated either by  
20 Amoco or Richardson?

21 A. That's correct.

22 Q. What type of experience do you bring with you in  
23 order to make decisions about what you wanted to do in  
24 terms of your interest?

25 A. Well, the -- Of course, the initial look is the

1 AFEs, and then past experience with the operator.

2 Q. Is this a type of decision that's new for you  
3 with this case?

4 A. No, sir.

5 Q. Do you make this kind of decision for yourself on  
6 a regular basis?

7 A. Yes, sir.

8 Q. And have you had to make this type of decision in  
9 the San Juan Basin concerning Pictured Cliffs wells?

10 A. Yes, sir.

11 Q. Have you been involved in a similar position with  
12 Amoco as an operator in other wells?

13 A. Not my interest, but my father's interest has  
14 been involved with Amoco in numerous wells, including the  
15 Dakota well on the same unit.

16 Q. And is that an interest and an involvement for  
17 which you have personal knowledge?

18 A. That's right, that's correct.

19 Q. What have you decided to do about committing your  
20 interest to either operator?

21 A. If Amoco operates, I don't know what we will do.  
22 If Richardson operates, I feel sure that we'll  
23 stay and participate for our interest.

24 Q. What information did you obtain in order to help  
25 you make a decision on what to do?

1           A.    Well, the AFEs, for one thing, that was -- Of  
2   course, that's the first look, is the AFEs. And we have  
3   drilled quite a few Pictured Cliffs wells and Fruitland  
4   Coal wells in the immediate vicinity, with BHP and Hallwood  
5   Petroleum, and we have information also on Richardson wells  
6   and Bob Bayless.

7                    So we've been involved in the Pictured Cliffs and  
8   Fruitland Coal wells.

9           Q.    Based upon that experience, what did you conclude  
10   about the AFE as proposed by Amoco?

11          A.    It was way too high.

12          Q.    What did you conclude about the AFE as proposed  
13   by Richardson?

14          A.    That was -- It was right in line with our  
15   experience with BHP.

16                   And we -- We're involved in the Gallegos Canyon  
17   unit, and BHP is the operator, and we have access to -- as  
18   part of the unit -- information, all of the wells that have  
19   been drilled, 60-some-odd wells that have been drilled on  
20   their well [sic], 30 recent wells.

21                   And we have the total well costs for all these  
22   wells, and the average is \$142,000. And these have been  
23   drilled since 1990. And we have drilled wells within the  
24   last year with them.

25          Q.    Your conclusion with regards to that component of

1 your decision was what, sir?

2 A. That Amoco was too high, that Richardson was  
3 basically right on the money, for what we would expect to  
4 complete these wells for, drill and complete.

5 Q. When you received the original Amoco proposals  
6 for the two PC wells in the west half of 12, what was your  
7 understanding of how those wells were to be drilled and  
8 completed?

9 A. From Amoco?

10 Q. Yes, sir.

11 A. Well, there wasn't enough information on the AFE  
12 to know. It's very gross information that you have here,  
13 and you can't deduce anything -- or I couldn't -- in  
14 comparison to, for instance, BHP and Bob Bayless and Tom  
15 Dugan and most other operators. It's just too big a  
16 numbers to pull things out of.

17 Q. What did you do in order to help overcome that  
18 difficulty?

19 A. I called Greg Grotke.

20 Q. Grotke, I think, is how you say his name.

21 A. Grotke. And frankly, my first -- the first thing  
22 I said to him is, Would you consider letting someone else  
23 operate? We didn't want Amoco operating the well. So I  
24 asked him if he would.

25 And he said -- He didn't say too much, he said

1 it's a pet project -- or -- It's a pet project of his, and  
2 they were trying to drill a bunch of wells at one time and  
3 save a whole lot of money.

4 Q. Did you ask him to describe for you the kind of  
5 well he proposed to drill under this plan?

6 A. Yes, and he started talking about the slimhole  
7 completion, the 2-7/8-inch production string and coiled  
8 tubing.

9 And I asked him also about the water, what do you  
10 do with the water production?

11 Oh, about the coal, I asked him about the coal.

12 And he said, Well, that's not -- that coal is  
13 not -- It's not relevant to this prospect.

14 And I said, Well, you know, we've been drilling  
15 wells out there, and they're commingling. Other wells,  
16 they're -- It's just happening all over the place out  
17 there.

18 And he said, Well, actually I haven't looked at  
19 the logs yet. And he said, My experience has been off  
20 northeast, I believe, in some other area.

21 Q. Did you ask him whether or not water as a  
22 component of production was an issue for these wells?

23 A. Yeah, water cost is a big issue, a big deal out  
24 here. And I asked him, What are you going to do with the  
25 water?

1           And he said, Well, these wells don't make hardly  
2 any water.

3           And they do. I mean, just look at the records,  
4 that's -- They do.

5           Q. Did you have any discussion with Mr. Grotke about  
6 his information level with regards to examinations of logs  
7 in this area?

8           A. He said he hadn't -- I said, I think it's five,  
9 ten feet, between the two -- between the base of the  
10 Fruitland Coal and the PC.

11           And he said, Well, actually I haven't looked at  
12 the logs yet.

13           That's what he told me.

14           Q. Approximately when did that conversation take  
15 place?

16           A. 2-17-95. And he called me back on 2-18-95.

17           Q. So this is after the well proposal is submitted  
18 to you?

19           A. Yes, sir.

20           Q. Did you have any other conversations with Mr.  
21 Grotke, other than the two that you have related?

22           A. That scared me. I just -- I -- I wasn't at all  
23 comfortable that they knew what they were doing. It was  
24 a -- I felt like it was an engineering prospect, an  
25 engineering project, and he was talking about completing

1 three to five wells in a day and all this stuff.

2 And I kept looking -- The bottom line on the AFE  
3 was greater than the other wells, and if they were doing  
4 this to save money they were taking the risk with 2-7/8-  
5 inch production, this is crazy. I mean, it's -- I just  
6 didn't want to have anything to do with the deal at that  
7 point.

8 Q. What have you decided to do with your interest?

9 A. It depends. It depends on -- I called Ms.  
10 Jenkins and asked if they would make us a proposal, because  
11 all we had was drill or -- you know, drill or be penalized.  
12 And I asked if they would give us a proposal, an alternate  
13 proposal to farm out or buy out.

14 And I also asked her if they would market our gas  
15 and also if they would make distribution on our, you know,  
16 burdens.

17 And she never called me back, never came back to  
18 me.

19 Q. In terms of your options, now, with regards to an  
20 election to participate, would you elect to participate if  
21 Amoco is awarded the operatorship of either or both of  
22 these cases?

23 A. I don't know, I don't know. I just don't know.

24 Q. What is your --

25 A. It's a good prospect, it's --

1 Q. What is your dilemma, Mr. Markham?

2 A. We've been involved with Amoco -- We're involved  
3 with Amoco right here in Dakota wells and in some Fruitland  
4 sand in the area.

5 The communication is not good with Amoco.  
6 They're nice -- Everybody's nice people, but you can't get  
7 an answer to anything. You get these oddball charges  
8 showing up on your bills, some of them just gigantic, and  
9 you try to find somebody to explain to you what they are,  
10 and it may take two months, literally, to get a response.  
11 And it can -- You can have seven or eight things going on  
12 at one time, and none of them resolved.

13 They start charging you plugging costs before  
14 you've ever signed an AFE to plug a well. They charge you  
15 overhead when a well is not being produced. It just hasn't  
16 been good for us.

17 Q. If Richardson is awarded the right to operate  
18 these wells, either both or one of them, what decision  
19 would you make if Richardson operated?

20 A. I think we would -- I think we would participate.

21 MR. KELLAHIN: Thank you, Mr. Examiner.

22 EXAMINER STOGNER: Mr. Kellahin.

23 Mr. Carr?

24 MR. CARR: We don't have any questions of this  
25 witness.



1 EXAMINER STOGNER: I don't have any questions of  
2 Mr. Markham myself, I believe.

3 At this time -- You may be excused.

4 At this time --

5 MR. KELLAHIN: That concludes our presentation.

6 EXAMINER STOGNER: -- if there are any recall of  
7 any witnesses at this time?

8 MR. CARR: No, sir.

9 EXAMINER STOGNER: So are we ready for closing  
10 statements?

11 MR. KELLAHIN: There are a few points I'd like to  
12 raise with you, Mr. Examiner, and I will attempt to be as  
13 concise as I can.

14 I would appreciate the opportunity to prepare a  
15 draft order for you so that those matters that I do not  
16 discuss with you now, I can make reference to in a proposed  
17 order, and then you can decide if they are of importance to  
18 you.

19 Mr. Carr and I have done hundreds of cases before  
20 you, Mr. Examiner, and it's now pushing six o'clock, and a  
21 lot of times these pooling cases fall into a common pattern  
22 where you can make some decisions just by following a set  
23 of pegs to hit with your hammer.

24 And sometimes it's appropriate to simply say all  
25 things are equal and the party with the greatest interest

1 ought to operate for no other reason than they perhaps have  
2 the greatest amount of dollars at risk. We've talked about  
3 this on numerous occasions.

4 And every so often, we have a case like this.  
5 And these cases are hard because they represent an effort  
6 by a majority working interest owner to do as little as  
7 possible in order to force-pool parties that don't want to  
8 be in their proposal. And that's what occurred here, Mr.  
9 Examiner.

10 Amoco is sleepwalking through the process. They  
11 have a majority interest, they send us a routine letter,  
12 which is not a request to participate, it's an ultimatum.  
13 They tell us that this is going to be under their terms,  
14 and if we don't, they're going to force-pool us.

15 Now, letters are hardly exchanged, and Mr.  
16 Hawkins is busy filing a pooling Application. And what he  
17 seeks to do is something that's not appropriate in this  
18 area. He's ahead of his project. He forgets to ask to  
19 pool the coal. It's included in his Application, but his  
20 land person never proposed it.

21 And you and Mr. Carr and I have argued a number  
22 of cases where it mattered to you that a proposal by an  
23 Applicant was different than the relief requested.

24 In this case, they -- Amoco had proposed two  
25 stand-alone PC wells, and yet they filed a pooling

1 application for a downhole commingled PC-Fruitland Coal  
2 well.

3 Those little differences matter.

4 It matters that Amoco didn't think to file for  
5 downhole commingling. It indicates a disregard for being  
6 thorough and complete.

7 Look at the AFE process that they went through.  
8 It again was sleepwalking through the process. Compare  
9 that AFE to the AFEs, the hundreds that you've seen, and  
10 how careful most of those are.

11 We asked a number of questions of importance  
12 about how that was put together. And the question you  
13 should have is the same question I have, is, Where is Mr.  
14 Grotke? Where is he? This is his project, his deal, his  
15 representation that he needed five wells to be economic.

16 And who comes to testify? It is not Mr. Grotke.

17 What we do here, though, is, Amoco sends Mr.  
18 Hawkins down here to describe a science project. He wants  
19 to use slimhole technology with some kind of coiled tubing,  
20 with my investors' money, to help them with their science  
21 project. They haven't done one of these in the San Juan  
22 Basin, and they want us to help pay for their science  
23 project.

24 I suspect Amoco's got a hundred-percent acreage  
25 position somewhere in the PC that they can go through this

1 project on their dollars and not ours.

2 The little guy matters.

3 And we have shown you a difference in the AFE  
4 costs in comparison to ultimate recoveries.

5 Dana has presented to you a thorough analysis,  
6 and I hope you will look at it again. She's shown you a  
7 differential by which the producing life of these wells can  
8 be extended at least four more years, with cost-efficient  
9 operation by my client.

10 It's easy for you to simply go down the checklist  
11 and say Amoco's got the bigger interest and let them  
12 operate. We think that is not the appropriate answer in  
13 this case. There are other ways for Amoco to go about  
14 their project.

15 I believe it's of significance to allow Mr.  
16 Richardson to operate this when he already has developed  
17 the other half of this section and where you have to go six  
18 miles away to find a PC well that Amoco has proposed.

19 There in fact are a number of things that are not  
20 of significance.

21 There is no significant difference in overhead  
22 rates.

23 There is no dispute about where to put the wells.  
24 Amoco has adopted our plan to commingle one of them. They  
25 realized very quickly that that was a good idea and adopted

1     what we wanted to do, and we ought to get credit for  
2     proposing that.

3                 What we ought not to do is be penalized by being  
4     pooled by Amoco. Small things matter.

5                 The last point: What to do about the risk factor  
6     penalty?

7                 I think Mr. Richardson's idea was just fine. Why  
8     not cost plus 150 percent? That's a level field for both  
9     interest owners in both pools. Let's use that.

10                Why make it complicated by making it 200 percent  
11     for one formation and 156 for the other? It doesn't make  
12     any sense.

13                Award us credit and an opportunity to operate  
14     because we have done a thorough job, we brought you the  
15     downhole commingling presentation and have made that a  
16     complete and thorough presentation.

17                Amoco, despite its effort to economically provide  
18     a five-well package, has provided to you a well proposal  
19     that's far in excess of what Richardson can do with a  
20     single well.

21                We may be the little guy, but maybe the little  
22     guy needs a turn.

23                Thank you.

24                EXAMINER STOGNER: Mr. Kellahin.

25                Mr. Carr?

1           MR. CARR: May it please the Examiner, I would  
2 agree with Mr. Kellahin that over the years we've been  
3 before you many times with opposing compulsory pooling  
4 applications.

5           What you can always count on when we come before  
6 you is, the person who doesn't have the evidence  
7 immediately starts trying to characterize the case as  
8 unique and something that you can't deal with by just  
9 hitting the pegs with a hammer and determining who should  
10 actually prevail.

11           You know better than any of us, Mr. Stogner, that  
12 now we're looking at a number of proposed compulsory  
13 pooling applications. They're coming into the Oil  
14 Commission daily.

15           And to deal with this, by a memorandum dated  
16 April the 5th, 1995, this month, the Division has defined  
17 what is considered relevant and pertinent evidence, and  
18 that which is considered irrelevant and unnecessary  
19 evidence. These are the pegs, these are the pegs that we  
20 can hit. We can show you why, with relevant and pertinent  
21 evidence, Amoco should prevail.

22           The question here, Mr. Stogner, is, Who should  
23 operate this well? Both parties want to do that. And the  
24 place you start, if we follow this Division's memorandum,  
25 is, we take a look at the ownership.

1           In the northwest quarter, Amoco has 83.38 percent  
2 of the working interest. In the southwest quarter, on a  
3 stand-alone basis we would have 50 percent, but in a west-  
4 half unit we 67 percent. So on that basis alone we can hit  
5 the peg.

6           If we look at the west half, we see although Mr.  
7 Richardson is operating in the east half of the section, we  
8 have two Dakota wells in the west half. They have nothing  
9 there, and they want to come and drill two additional wells  
10 on well pads that we have previously prepared.

11           The other thing -- The next peg that they in your  
12 memo suggest you should look at is, Who actually proposed  
13 the well?

14           Well, we can see that there were negotiations  
15 about exchanging property interests several years ago. But  
16 because of litigation and instructions from their counsel,  
17 they went silent until we actually proposed the well in  
18 February of this year.

19           And that is what started the process which has  
20 brought us here today. We submit to you on that front we  
21 also hit the peg.

22           I agree with Mr. Kellahin that overhead and  
23 administrative costs are really not an issue, that the  
24 actual well locations are not really an issue. And I  
25 submit that when you take a look at the evidence, you're

1 going to find that the differences in cost are really not  
2 an issue.

3 And what I'm suggesting there is, if you look at  
4 the exhibits that were presented by Mr. Hawkins and you  
5 take out compression, if you normalize stimulation costs as  
6 we have suggested will be done and told you will be done,  
7 and if you adjust the contingencies, you see the  
8 differences are not, in fact, significant.

9 We submit to you that when you apply the  
10 standards that this Division has announced, if you apply  
11 relevant, pertinent evidence to the issues before you, you  
12 come out on Amoco's side.

13 On the other hand, you can look at what  
14 Richardson did, and we can look at what is considered  
15 irrelevant or unnecessary evidence. And they talk about  
16 the operator's ability to drill a well or ability to  
17 produce and operate a well, previous disagreements with us.  
18 But those you have already defined as irrelevant.

19 We submit when you take the evidence presented,  
20 when you apply it to the standards announced by this  
21 Division, you will grant the Application of Amoco and that  
22 we will go forward and develop this acreage in a prudent  
23 and responsible fashion.

24 EXAMINER STOGNER: Thank you, Mr. Carr.

25 What's the date of the memorandum, Mr. Carr?



1 MR. CARR: April the 5th, 1995.

2 EXAMINER STOGNER: Is that signed by Mr. Catanach  
3 or Mr. LeMay?

4 MR. CARR: And both. Yes, and yes.

5 EXAMINER STOGNER: Is my name on there anywhere?

6 MR. CARR: No, it was just -- It was just by  
7 other people in the Division, but an issue by the Director.

8 EXAMINER STOGNER: Okay, I'll make administrative  
9 notice of that particular memorandum --

10 MR. CARR: Thank you, Mr. Examiner.

11 EXAMINER STOGNER: -- in this matter.

12 Mr. Kellahin, I believe you are aware of the  
13 memorandum that he was referring to?

14 MR. KELLAHIN: Yes, sir.

15 EXAMINER STOGNER: I'm going to request that both  
16 parties give me a rough draft, probably -- What? Two rough  
17 drafts?

18 MR. KELLAHIN: I'm assuming Mr. Carr will not  
19 agree with my draft.

20 EXAMINER STOGNER: Well, what I meant is, two  
21 rough drafts for each particular acreage --

22 MR. CARR: Correct.

23 MR. KELLAHIN: Yes, sir.

24 EXAMINER STOGNER: -- as opposed to one for all  
25 the acreage --

1 MR. CARR: Right.

2 EXAMINER STOGNER: -- if that makes sense.

3 MR. CARR: It does.

4 EXAMINER STOGNER: I'll let you guys set the time  
5 frame.

6 MR. KELLAHIN: Okay.

7 EXAMINER STOGNER: You can get back with me  
8 later.

9 MR. KELLAHIN: May we discuss it and let you know  
10 later?

11 EXAMINER STOGNER: That will be fine.

12 MR. KELLAHIN: All right, sir.

13 And with that, if there's nothing further in any  
14 of these cases, at this time I'll take them under  
15 advisement.

16 (Thereupon, these proceedings were concluded at  
17 5:53 p.m.)

18 \* \* \*

19

20


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25

I do hereby certify that the foregoing is  
a correct record of the proceedings in  
the Examiner hearing of Case Nos. 11243, 11244, 11246,  
heard by me on 29 April 1985.  
 Examiner  
Oil Conservation Division

11247

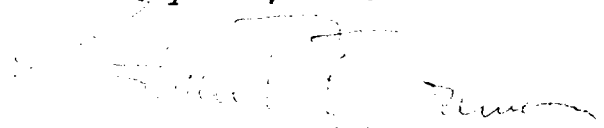
## CERTIFICATE OF REPORTER

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

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

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

WITNESS MY HAND AND SEAL May 7th, 1995.



---

STEVEN T. BRENNER  
CCR No. 7

My commission expires: October 14, 1998

1 Q. Those are Dakota wells?

2 A. Right.

3 Q. Would you agree with me that in excess of 20 of  
4 those wells in the offsetting nine sections are Amoco-  
5 operated Dakota wells?

6 A. I have no idea on the Dakota wells.

7 Q. Do you know if Amoco operates any Dakota wells  
8 within the nine sections offsetting the acreage?

9 A. I am aware of the two Dakota wells in the west  
10 half of Section 12 that Amoco operates.

11 Q. And do you have any idea of who any of those  
12 other Dakota wells are drilled or -- have been drilled or  
13 operated by?

14 A. I have not looked at any of the Dakota wells.

15 Q. Okay. So when we prepared this exhibit, we were  
16 only looking at certain formations, not all operations in  
17 this portion?

18 A. That is correct.

19 Q. If I look at your Exhibits 3, 4 and 5, it's  
20 essentially an ownership breakdown in the various spacing  
21 units that would be dedicated to the wells at issue in this  
22 case, right?

23 A. Yes, sir.

24 Q. And the only interest that you now say is not  
25 committed to Richardson is that of Kerr-McGee Corporation;

1 is that right?

2 A. Oh, you could put it another way. You could say  
3 that if Richardson was selected to operate these two  
4 proposed wells, that Amoco would be the only one that would  
5 not be supportive.

6 Q. Has Kerr-McGee agreed to participate in the well?

7 A. They have agreed to assign their interests to  
8 whichever operator the Commission chooses.

9 Q. So it is your opinion that there is no need to  
10 include them in the pooling action?

11 A. That is correct.

12 Q. If they decline to assign later, then of course  
13 that interest would be outstanding as to Richardson, and  
14 you'd have to come back and pool them again?

15 A. Yes.

16 Q. In the southwest quarter, with all the interest  
17 owners committed to Richardson that are not committed to  
18 Amoco, we have a 50-50 split in the working interest  
19 ownership; is that not right?

20 A. For the Pictured Cliffs, that is correct.

21 Q. And if we go to the west-half unit for the  
22 Fruitland Coal and we credit everything in the west-half  
23 unit to Richardson that isn't committed to Amoco, Amoco has  
24 66.6 percent and Richardson has the balance of that --

25 A. That is correct.

1 Q. -- which would be 33 percent, with some  
2 percentage fraction after that?

3 A. That is correct.

4 Q. And if we go to the northwest quarter, based on  
5 your numbers, and credit all interests other than Amoco to  
6 Richardson, Amoco still has 83.38 percent of the working  
7 interest in the tract?

8 A. That is correct.

9 Q. And if they didn't participate in the northwest  
10 quarter, you would be carrying them to the tune of 83.38  
11 percent?

12 A. That is correct.

13 Q. And that is a decision that Richardson believes  
14 is an appropriate decision, based on their knowledge of the  
15 area?

16 A. Yes.

17 Q. And the risk involved in the well?

18 A. Yes.

19 Q. If we take a look at your Exhibit Number 6, this  
20 is a chronology similar to that provided by Ms. Jenkins  
21 concerning the contacts between the parties concerning the  
22 development of the acreage; is that right?

23 A. Yes, sir.

24 Q. And if I look at the first three entries on this  
25 exhibit, November, 1993, through December, 1993 --

1           A.    January, 1993?

2           Q.    I'm sorry, January, 1993, through December, 1993,  
3   those were negotiations for a property exchange; is that  
4   right?

5           A.    They were actually more than a property exchange.  
6   They weren't a property exchange at all.

7           Q.    They were all involved with acquisition of  
8   property rights, as opposed to proposing the drilling of  
9   any particular well; is that not fair?

10          A.    Yes, I confused your term "property exchange"  
11   with "acreage trade".

12          Q.    And my "property exchange" term was probably  
13   confusing.

14                But prior to December of 1993, those all talked  
15   about property or exchanges or acquisitions, as opposed to  
16   drilling of wells?

17          A.    Right -- Well, no, because we did offer to farm  
18   out. That's a proposal to drill a well.

19          Q.    Did you propose any particular well location?

20          A.    No.

21          Q.    If we take the December, 1993, date and we go  
22   down to, I guess, February of 1995, I thought I understood  
23   you to say you had been instructed by legal counsel not to  
24   communicate with Amoco; is that right?

25          A.    Yes.

1           Q.    So we have a 14-month break in the negotiations  
2           on this property that were the result of some other dispute  
3           not related to this tract; is that correct?

4           A.    That's correct.

5           Q.    And then you received -- That long silence was  
6           broken 14 months after it terminated, when you got a  
7           specific well proposal from Amoco?

8           A.    Yes.

9           Q.    Okay.  If I look at the operating agreements that  
10          are your Exhibits 7 and 8, do you recall receiving a  
11          request from Ms. Jenkins for a copy of the operating  
12          agreement on March 7th of this year?

13          A.    I recall her testifying that earlier today.  I do  
14          not recall a conversation where she asked for an operating  
15          agreement.

16                   I do know that in our well proposals we  
17          specifically said that operating agreements would be  
18          furnished upon written request by any party.

19          Q.    To your knowledge, was a copy of the operating  
20          agreement that Richardson was proposing ever provided Amoco  
21          prior to this time?

22          A.    No.

23          Q.    Now, when you got the -- You received an  
24          operating agreement from Amoco, did you not?

25          A.    Yes, we did.



1 Q. And did you receive that on or about February the  
2 16th, as reported or testified to by Ms. Jenkins and as  
3 shown on her chronology?

4 A. The operating agreement was attached to their  
5 well-proposal AFE.

6 Q. And would that have also contained in that  
7 operating agreement their overhead and administrative  
8 costs?

9 A. Yes.

10 Q. And was it after that date that you actually  
11 filed for hearing and announced what your overhead and  
12 administrative costs would be for a well on this tract?

13 A. Yes, it was.

14 Q. So your operating costs or your overhead costs  
15 were less, but they were proposed and developed a month  
16 after you had received those from Amoco?

17 A. That is correct. And in addition, they're the  
18 same that we use on our wells in the east half of Section  
19 12.

20 Q. And when you proposed them, you already knew what  
21 the Amoco proposal was and that you had conflicting  
22 proposals; isn't that right?

23 A. Yes.

24 Q. Okay. Now, I believe you said that you reviewed  
25 this operating agreement for Mr. Richardson; is that

1 correct?

2 A. Yes, sir.

3 Q. And that there were certain matters in the  
4 operating agreement that were unacceptable to you?

5 A. Yes, sir.

6 Q. Now, you were concerned about Article V., D-8.  
7 That was one of the things you identified; isn't that  
8 right?

9 A. Yes.

10 Q. You also indicated there was a missing page?

11 A. Yes.

12 Q. Did you contact Amoco to discuss the provisions  
13 of Article V., D-8?

14 A. No, I didn't. When we got that, we were told  
15 that Amoco would respond in writing to our AFE and well  
16 proposal.

17 The next thing we got was notification by a copy  
18 of a letter to the Commission that we were being force-  
19 pooled. We felt that we were put in an adversarial  
20 position.

21 Q. And my question was, you didn't contact Amoco  
22 about any of the provisions in this agreement with which  
23 you disagreed?

24 A. We had no contact with Amoco from that point.

25 Q. There was a missing page. You decided not to

1 call them and ask that they send you the missing page?

2 A. That's correct.

3 Q. And wouldn't that be a normal procedure for you  
4 in evaluating an agreement with another company that you  
5 might be in some sort of a joint venture with?

6 A. It depends on if we're in an adversarial position  
7 or not, whether I make contact with them.

8 Q. Had your attorneys told you not to communicate  
9 with Amoco about the operating agreement?

10 A. Our attorney, Mr. Kellahin, had advised that we  
11 not communicate with Amoco.

12 Q. And if you've been advised by your counsel not to  
13 talk to Amoco about this development for 14 months in 1993  
14 and 1994 and again since this proceeding developed, is it  
15 your position that you're trying to voluntarily negotiate  
16 something with Amoco?

17 MR. KELLAHIN: Objection, that's argumentative,  
18 Mr. Examiner. Come on.

19 MR. CARR: I think the dates and the testimony of  
20 this witness will show whether or not there, in fact, was a  
21 Richardson good-faith effort to reach an agreement with  
22 Amoco --

23 MR. KELLAHIN: If he wants to make his argument,  
24 he may do so at closing and not with my witness, with  
25 argumentative questions, Mr. Examiner.

1 EXAMINER STOGNER: Do you want to restate the  
2 question, Mr. Carr?

3 Q. (By Mr. Carr) I want to be sure that I  
4 understood you. You were told by your counsel not to  
5 discuss the operating agreement with Amoco?

6 A. No, I meant to say, if I didn't say it clearly,  
7 that we were told by our counsel not to discuss the --  
8 anything with Amoco once we had received the letter  
9 informing us that we were going to be force-pooled. At  
10 that point, all voluntary negotiations did stop.

11 Q. At this point in time, no matter what happens in  
12 this hearing, is it Richardson's position that voluntary  
13 negotiations are over?

14 A. We would like to voluntarily make a satisfactory  
15 arrangement with Amoco before we stop talking to Amoco.

16 I told Greg Grotke that we would very much like  
17 for Amoco to participate, and we still are of that belief  
18 today.

19 Q. And how could we accomplish that if you've been  
20 instructed not to talk?

21 A. Well, that's why we're here.

22 Q. I have no further --

23 A. Amoco requested --

24 Q. I have no further questions.

25 A. -- that we talk before the Commission. That's

1     why we're here.

2           Q.     And that's the only place it's your understanding  
3     that you may negotiate this or talk about it?

4           A.     As I said, we felt that we were put in an  
5     adversary position when Amoco sent us notice that we were  
6     being force-pooled.

7           Q.     And my question is, does that mean that there is  
8     no hope at this point for the parties to talk to each  
9     other?

10           MR. KELLAHIN:  Objection, Mr. Examiner.

11           MR. CARR:  I'm just --

12           MR. KELLAHIN:  It's irrelevant at this point.

13           MR. CARR:  I am inquiring -- I don't think it is  
14     irrelevant.

15                   Parties reach voluntary agreement after pooling  
16     orders are entered all the time, and my inquiry is whether  
17     or not the door has been closed and stays closed.

18           MR. KELLAHIN:  Witness has already responded to  
19     Counsel, Mr. Examiner.

20           EXAMINER STOGNER:  I believe she already has.

21           MR. CARR:  That the door is closed?  Is that what  
22     I --

23           EXAMINER STOGNER:  I believe that she's already  
24     answered the question.

25           MR. CARR:  All right, I have no further questions

1 of this witness.

2 EXAMINER STOGNER: Any redirect?

3 MR. KELLAHIN: No, sir.

4 EXAMINER STOGNER: Mr. Carroll?

5 I don't believe I have any questions at this  
6 point either.

7 MR. KELLAHIN: I'd like to call my next witness,  
8 Mr. Examiner. My next witness is Mr. David Richardson.

9 DAVID B. RICHARDSON,

10 the witness herein, after having been first duly sworn upon  
11 his oath, was examined and testified as follows:

12 DIRECT EXAMINATION

13 BY MR. KELLAHIN:

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

16 A. David Richardson. I'm a petroleum geologist. I  
17 am the owner of Richardson Operating Company.

18 Q. And where do you reside, sir?

19 A. Cherry Hills Village, Colorado.

20 Q. Summarize for us your education.

21 A. I obtained a bachelor of science from the -- in  
22 geology, from the University of Oklahoma in 1978.

23 Q. Describe for us -- Give us a quick summary of  
24 Richardson Operating Company.

25 A. It was formed in -- initially in 1980. I was an

1 employee of Amoco briefly, and Western Geophysical.

2 I started my own company in 1980 as Richardson  
3 Oil Company. It evolved into Morgan-Richardson Operating  
4 Company, and I subsequently purchased the entire company in  
5 1990.

6 Q. Describe for us your geologic play in the  
7 Pictured Cliff and the Fruitland Coal Gas Pool in the San  
8 Juan Basin of New Mexico.

9 A. Initially, we drilled approximately 20 wells,  
10 about 30 miles southeast of this area in the Largo Canyon  
11 area.

12 In 1992 we obtained a farmout and drilled seven  
13 wells in the Fruitland Coal, shallow wells, approximately  
14 1500 feet, just east of the prospect area. All the time we  
15 had been moving further west to our current location.

16 Q. What's the vintage of your development in the  
17 east half of this Section 12 we've been discussing?

18 A. Recently, it's been in 1994.

19 Q. As a geologist and as a CEO of your own company,  
20 do you also employ other geologists to provide you  
21 information and to consult with you about how to further  
22 develop the Pictured Cliffs?

23 A. Yes, I do.

24 Q. And are we about to look at some of that type of  
25 information?

1           A.    Yes, we are.

2           Q.    Is this the same kind of information that you  
3 would use to develop these wells in these well locations,  
4 regardless of a dispute with Amoco?

5           A.    Yes.

6           Q.    If you're making decisions in this area for  
7 drilling wells, then this is the type of information you  
8 look at?

9           A.    Yes.

10          Q.    Do you drill these wells for your own company, or  
11 are you doing this in some kind of promotional prospect  
12 with other people's money?

13          A.    No, I don't take investors; I drill with my own  
14 money.

15          Q.    Let's turn to Exhibit A.

16          A.    Okay.

17          Q.    I'm sorry, I --

18          A.    Exhibit 11.

19          Q.    -- misidentified the exhibit.

20                Exhibit 11, it's the cross-section, if you'll  
21 unfold that before you.

22                I think it may be useful to just show all three  
23 displays at the same time, Mr. Richardson. I think it will  
24 help us. If you'll unfold Exhibit 11, and then let's use  
25 Exhibit 12 and 13 by which to understand what you're trying



1 to do.

2 A. Okay.

3 Q. Have you independently reviewed this  
4 information --

5 A. Yes.

6 Q. -- in terms of its geology?

7 A. Yes, I have.

8 Q. And based upon that review, you have come to your  
9 own conclusions and recommendations?

10 A. Yes.

11 MR. KELLAHIN: At this time, Mr. Examiner, we  
12 tender Mr. Richardson as an expert petroleum geologist.

13 EXAMINER STOGNER: Are there any objections?

14 MR. CARR: I have no objection.

15 EXAMINER STOGNER: Mr. Richardson is so  
16 qualified.

17 Q. (By Mr. Kellahin) In this area, let's take  
18 Exhibit 11 and have you show us the line of cross-section,  
19 insofar as it affects Section 12 --

20 A. Okay.

21 Q. -- so the Examiner can see where these well logs  
22 relate to the surface.

23 A. Okay, you should probably refer to either Exhibit  
24 12 and 13 to look at where the cross-section goes.

25 Starting from the left-hand side, A', it's --

1 Let's see, if you look on the Exhibit 12, you see A' is in  
2 the southeast quarter. That's a well -- a Richardson  
3 Operating Company, 12-1 well, that is a Pictured Cliffs  
4 well we drilled in March of 1994.

5 And the northeast quarter is a commingled  
6 Fruitland Coal and Pictured Cliffs well.

7 As you go further to the west, now, you get into  
8 an Amoco Dakota well, and in the southwest quarter is  
9 another Dakota well operated by Amoco.

10 Q. Did you use this type of information when you  
11 developed your prospect and drilled your wells in the east  
12 half of this section?

13 A. Yes, I did.

14 Q. Give us a sense of the relationship between the  
15 coal that's productive in your well and the Pictured Cliff  
16 that is productive in that well. If we look at the cross-  
17 section, can you show us where the vertical relationship is  
18 in those two reservoirs?

19 A. Yes, in our two wells it's located between 1400  
20 and 1550 feet. There's a separation of about 10 feet of  
21 shale between the two zones.

22 Q. What is your recommendation for the development  
23 of the west half of Section 12, the disputed spacing units?

24 A. In the west half of Section 12, I feel, in the  
25 northwest quarter, because of the spacing of the Fruitland

1 Coal on 320s, that should be a Pictured Cliffs well. In  
2 the southwest quarter it should be a commingled Fruitland  
3 Coal and Pictured Cliffs test.

4 Q. Describe for us how you reached the conclusion  
5 to make the coal gas well the one in the southwest quarter.

6 A. That's state spacing.

7 Q. All right. Other than the state spacing, is  
8 there a geologic difference that matters when you compare  
9 those two 160s?

10 A. No.

11 Q. So you could stay on pattern with the rule and  
12 still maximize your geologic objective in the coal?

13 A. Yes.

14 Q. Describe for us the isopachs. When we look at  
15 Exhibit 12, you have isopached what, sir?

16 A. This is the Fruitland Coal in the entire section.

17 Q. Do you find that there is sufficient coal  
18 thickness in this coal that it has been productive in the  
19 east half?

20 A. Yes.

21 Q. Describe for us the kind of rates that you're  
22 getting in the east half of the section in the coal.

23 A. Approximately 600 MCF a day, and I believe 40  
24 barrels of water. That's commingled between the Pictured  
25 Cliffs and the Fruitland Coal.

1 Q. All right. So as an operator, in addition to  
2 being a geologist, there is a water component to deal with  
3 here?

4 A. Yes, there is.

5 Q. In what reservoir?

6 A. Both of them.

7 Q. All right. When you look at the isopach for the  
8 Pictured Cliff, Exhibit Number 13, what does it show you in  
9 terms of well locations?

10 A. Again, it shows that Pictured Cliffs is --  
11 throughout the section, it ~~varies between 30 and 45 feet in~~  
12 thickness, but we could expect the same Pictured Cliffs in  
13 the west half of the section as the east half.

14 Q. In terms of risk, Mr. Richardson, can you  
15 quantify the degree of risk for the Pictured Cliffs wells  
16 in this area?

17 A. Geologically, very, very small, less than five  
18 percent.

19 Q. In terms of the geologic risk involved with the  
20 Coal side, what is the geologic risk involved there?

21 A. Very, very small again, less than five percent.  
22 Maybe less than one percent.

23 Q. In terms of a percentage, the Examiner is  
24 required under the pooling procedures to make a decision  
25 about risk, and he has the authority to award a risk factor

1 penalty --

2 A. Yes.

3 Q. -- to be applied against any working interest  
4 owner which elect not to participate under the pooling  
5 order. Do you understand that concept?

6 A. Yes.

7 Q. Within that concept and within those percentages,  
8 the Division has a maximum of 200 percent.

9 A. Yes.

10 Q. Within that range, do you have a recommendation  
11 to the Examiner of where you would place that risk if you  
12 are allowed to operate these two wells?

13 A. I would say less than 200 percent.

14 Q. All right. Can you more specifically recommend  
15 to him what you would propose?

16 A. 150 percent.

17 Q. And that would be in addition to the cost  
18 attributable?

19 A. Yes.

20 Q. And would that be a number that you would apply  
21 to both reservoirs?

22 A. Yes.

23 Q. All right. And that is a recommendation with  
24 knowledge that your original application had asked for the  
25 maximum?

1 A. Yes.

2 Q. Okay. In reflection and in review, you say 150  
3 percent is appropriate?

4 A. Yes.

5 Q. In your capacity as president of your company,  
6 did you examine and review Amoco's proposal for their two  
7 wells?

8 A. Yes.

9 Q. In their two proposals, the February 14th  
10 letters, those proposals specified only completions in the  
11 Pictured Cliff formations, did it not?

12 A. Yes.

13 Q. Was that an issue of concern to you?

14 A. Yes, it was.

15 Q. And why was that?

16 A. We were leaving significant reserves behind pipe.

17 Q. And what would you do?

18 A. Commingle both zones and produce them at the same  
19 time.

20 Q. Other than the well proposal itself, in terms of  
21 the formations it accessed, did you have any disagreement  
22 with regards to any other portion of their proposal?

23 A. Yes, I did.

24 Q. What ultimately did you conclude to do about  
25 their proposal?

1           A.    I could not participate on a voluntary basis.

2           Q.    And for what reasons, sir?

3           A.    Several reasons. The first one, probably the  
4 most important to me, is, we are currently developing this  
5 area, we have two wells in the same section. It's a  
6 residential and commercial area; it's a difficult area to  
7 work.

8                   We have experience with the landowners, with Mr.  
9 Dugan, several doctors live in there. It's not easy, but  
10 we've done it, and we've had good rapport with them. And  
11 we feel as though we're qualified, we've been successful  
12 dealing with them and minimizing the disturbance of the  
13 area.

14          Q.    When you received the Amoco proposal, it included  
15 a proposed AFE for their wells, did it not?

16          A.    Yes.

17          Q.    Did you have any reaction to their proposal in  
18 terms of their costs?

19          A.    Yes, I did.

20          Q.    How did you go about analyzing that information?

21          A.    Through wells that we had actually drilled next  
22 door.

23          Q.    For your own information, you had that data?

24          A.    Yes, we not only had an AFE, we had actual cost.

25          Q.    And how did their AFE compare to your actual cost

1 experience in the adjoining spacing units?

2 A. Significantly higher.

3 Q. In addition to your own judgment on those  
4 matters, do you employ engineers and consultants that have  
5 expertise in that area to make those kinds of judgments and  
6 recommendations to you?

7 A. Yes, I do.

8 Q. And did you do that in this case?

9 A. Yes, I did.

10 Q. And were those recommendations consistent with  
11 your own conclusion?

12 A. Yes, they were.

13 Q. Other than the AFE proposed by Amoco, were there  
14 any other aspects about their proposal that caused you to  
15 reject their proposal?

16 A. Their overhead costs and their operating costs  
17 were significantly higher than ours.

18 Q. And how do you know that, sir?

19 A. Our own experience with them in the past on  
20 several projects. I've been involved with Amoco before.

21 Q. What do you propose to do if the Division allows  
22 you to operate these wells, Mr. Richardson?

23 A. Well, we maintain one overhead cost, we don't  
24 charge a district expense, we don't charge vacations,  
25 sicknesses. It's one expense, one overhead cost.



1 Q. In terms of having the impact of your cost  
2 proposal compared to the Amoco impact of cost proposals,  
3 have you retained the assistance of an expert in that area?

4 A. Yes, we have.

5 Q. And what's the name of the lady that's done the  
6 consulting work for you to make that comparison?

7 A. Dana Delventhal.

8 Q. And Ms. Delventhal has experience, based upon  
9 your knowledge, in providing you with that kind of  
10 information?

11 A. Yes, she has.

12 Q. And has her work in the past proved to be  
13 accurate and reliable, based upon your knowledge and  
14 experience?

15 A. Yes, it has.

16 MR. KELLAHIN: That concludes my examination of  
17 Mr. Richardson.

18 We move the introduction of his exhibits, which  
19 are marked 11, 12 and 13.

20 EXAMINER STOGNER: Are there any objections?

21 MR. CARR: No objection.

22 EXAMINER STOGNER: Exhibits 11, 12 and 13 will be  
23 admitted into evidence.

24 Thank you, Mr. Kellahin.

25 Mr. Carr, your witness.

1 MR. CARR: I have no questions of this witness.

2 EXAMINER STOGNER: Mr. Kellahin, what's your  
3 other two witness's expertise?

4 MR. KELLAHIN: Dana Delventhal is an expert in  
5 drilling AFEs and actual costs, and she has analyzed the  
6 two AFEs for you, and she has a comparison to demonstrate  
7 the cost components and has reached some engineering  
8 conclusions to demonstrate that there is substantially  
9 prolonged life and additional recovery if Richardson  
10 operates, and that's the purpose of her testimony.

11 EXAMINER STOGNER: I was just -- You have an  
12 engineer and --

13 MR. KELLAHIN: And Mr. Rod Markham is one of the  
14 interest owners, which both sides were attempting to obtain  
15 his consent, and he is here as a third party to testify as  
16 to his preference in terms of an operator.

17 EXAMINER STOGNER: Okay, I just wanted to see  
18 where we're heading on that.

19 Do you have any questions of this witness?

20 MR. CARROLL: No, I don't.

21 EXAMINER STOGNER: I don't at this time either,  
22 unfortunately -- fortunately.

23 Let's take a ten-minute recess.

24 (Thereupon, a recess was taken at 4:33 p.m.)

25 (The following proceedings had at 4:50 p.m.)

1 EXAMINER STOGNER: Hearing will come to order.

2 Mr. Kellahin?

3 MR. KELLAHIN: Mr. Examiner, at this time I'd  
4 like to call Ms. Dana Delventhal. She spells her last name  
5 D-e-l-v-e-n-t-h-a-l.

6 DANA L. DELVENTHAL,

7 the witness herein, after having been first duly sworn upon  
8 her oath, was examined and testified as follows:

9 DIRECT EXAMINATION

10 BY MR. KELLAHIN:

11 Q. Ms. Delventhal, for the record would you please  
12 state your name and occupation?

13 A. Dana Delventhal, and I'm a consulting petroleum  
14 engineer.

15 Q. On prior occasions have you testified in that  
16 capacity as a consulting engineer before this agency?

17 A. Yes, I have.

18 Q. And where do you reside?

19 A. In Farmington, New Mexico.

20 Q. Summarize for us your employment experience.

21 A. I'm a 1981 graduate of the New Mexico Institute  
22 of Mining and Technology.

23 I've worked in the petroleum industry out of  
24 Farmington, New Mexico, since that time, and I've currently  
25 had our own consulting company since 1985.

1           Q.    As part of your consulting work, do you on a  
2 regular basis make cost analyses and recommendations for  
3 your clients for the drilling of Pictured Cliffs and  
4 Fruitland Coal gas wells?

5           A.    Yes, I do.

6           Q.    How do you go about preparing yourself to make  
7 that type of analysis?

8           A.    We're active in the drilling and completion of  
9 wells, so we have actual cost experience. We also  
10 participate in the drilling and completion of wells and  
11 evaluations of such.

12          Q.    Are you familiar with the drilling mechanics and  
13 the various elements and components for drilling a single-  
14 completion PC well and/or a PC well that's commingled with  
15 the coal gas?

16          A.    Yes, sir.

17          Q.    As part of your consulting work, do you also make  
18 cost comparison analysis using the kinds of things that Mr.  
19 Grotke and Mr. Hawkins did?

20          A.    Yes, we do evaluate different completion methods,  
21 methodology and costs associated with such, so that when we  
22 do make a recommendation for the drilling of a well, that  
23 we have picked the optimum method.

24          Q.    So when Mr. Hawkins talked about Amoco's proposal  
25 that this well might be a slimhole candidate, you

1 understood what that all meant?

2 A. Yes, sir.

3 Q. And when he talked about the use of a coiled-  
4 tubing procedure for this well in terms of the way it was  
5 equipped, that meant something to you?

6 A. Yes, sir.

7 Q. As part of that consulting work with that  
8 background of experience and knowledge, did you perform  
9 such services for Mr. Richardson?

10 A. Yes, I do make recommendations.

11 Q. And have you made an analysis of the data by  
12 which to make such a recommendation to Mr. Richardson?

13 A. Yes, sir.

14 MR. KELLAHIN: We tender Ms. Delventhal as an  
15 expert petroleum engineer with expertise in analyzing and  
16 reviewing and comparing AFES with actual well costs.

17 EXAMINER STOGNER: Any objections?

18 MR. CARR: No objection.

19 EXAMINER STOGNER: Ms. Delventhal is so  
20 qualified.

21 Q. (By Mr. Kellahin) Before we get into the parts  
22 of your documents, let me ask you your impressions and  
23 conclusions about the type of well program that Amoco has  
24 proposed, as related to the Examiner through Mr. Hawkins's  
25 testimony.

1           A.   It's interesting. Slimhole completions have been  
2   used in the PC in the San Juan Basin extensively since the  
3   Fifties. Generally, it's a completion method designed for  
4   low-ultimate-recovery gas reservoirs which are dry, in an  
5   effort to save initial investment and therefore be able to  
6   justify completing those reserves.

7           The problem that I see with that technology as  
8   applied in this case is that, one, generally slimholes were  
9   drilled with conventional drilling rigs or drilling  
10   technology. The coiled tubing is somewhat new, and there  
11   are some risks associated. If you had a very high cost  
12   savings to offset such risks, it might be worth  
13   contemplating.

14           And the second problem in this area, generally  
15   Pictured Cliffs wells are dry, oftentimes not even  
16   requiring surface separation. However, in this area the  
17   Pictured Cliffs is for the most part fairly water-  
18   productive, and a slimhole completion would not facilitate  
19   the natural flow of this type of well.

20           Q.   As that program was described through Mr.  
21   Hawkins's testimony as to Amoco's proposal, do you have an  
22   opinion as to whether that well could be constructed in  
23   that fashion?

24           A.   I see several problems, the worst problem being  
25   that 3-1/2-inch casing with 2-3/8-inch tubing, both strings

1 being standard, will not fit.

2 Q. What would the operator have to do?

3 A. Well -- Let me figure out the numbers here. The  
4 drift diameter of 3 1/2 is roughly 2.9 inches. The OD of 2  
5 3/8 standard tubing at the coupling is over 3 inches. The  
6 one option would be to mechanically slim down those  
7 couplings. But then you have a risk of tubing failure.

8 Then again, the natural flow of these wells --  
9 They're not an artificial lift, they're capable of flowing  
10 this water production on compression. The annular space  
11 would be negligible, and you would lose quite a bit of lift  
12 capacity, even if you machined down the couplings.

13 Q. Have you proposed to Mr. Richardson how this  
14 particular well ought to be drilled and completed?

15 A. I would drill and complete it as a standard gas  
16 well.

17 Q. Have you previously testified before the agency  
18 concerning the downhole commingling allocation formula and  
19 the approval of downhole commingling for the PC and the  
20 coal gas for the well in the other half of this same  
21 section?

22 A. Yes, I have.

23 Q. That was your work, and you testified before this  
24 agency?

25 A. Yes.

1 Q. Have you performed a similar analysis for this  
2 well in the west half of the section?

3 A. Yes, I have.

4 Q. And do you have recommendations for the Examiner  
5 about the downhole commingling procedure for this well?

6 A. Yes, I recommend that it be downhole commingled  
7 and that the engineering data will substantiate that.

8 Q. All right. Let's start with the well-comparison  
9 work that you have done in terms of comparing well costs,  
10 as proposed by the two operators.

11 If you'll start with what we've marked as Exhibit  
12 Number 15.

13 A. Okay, the AFE comparison that we have before us  
14 is a comparison of the Richardson AFE and the Amoco AFE,  
15 much as Mr. Hawkins has done.

16 I've also added the one other additional column  
17 of Richardson's actual spending. I guess we're all aware  
18 that AFEs can be inaccurate, and our first concern when we  
19 received the Amoco AFE was that perhaps our AFE was not in  
20 line.

21 What I've got on the first column -- and I'll be  
22 as concise as possible -- if you look at the total at the  
23 bottom, the Richardson AFE for the stand-alone Pictured  
24 Cliffs well is roughly \$152,000.

25 Our actual 12 Number 1 Pictured Cliffs well,



1     which is within a half a mile, actual costs came in at  
2     \$123,000. So we were roughly 20 percent under budget.

3             As Mr. Hawkins pointed out, our AFE did not  
4     include capital compression costs and theirs did, in the  
5     amount of \$30,000.

6             Q.     What did you do to reconcile that difference?

7             A.     To put everything on as fair a basis as possible,  
8     we subtracted out the \$30,000 from their AFE estimate. If  
9     you take \$30,000 from their original \$216,000, you see the  
10    comparison at \$186,000, under Amoco's scenario.

11            Again, I assumed that their AFE was diligently  
12    prepared and that they feel that they can drill and  
13    complete a coiled-tubing-type completion for that type of  
14    money.

15            Based off of the AFE differential, there's a 22-  
16    percent differential. But comparing our actual costs to  
17    their AFE costs, their AFE is about 51 percent higher. And  
18    I would have liked to have had some comparison of the  
19    actual spending of an Amoco-drilled coiled tubing, but that  
20    information wasn't available.

21            Q.     When we look at the bottom line on Exhibit 15,  
22    the \$186,000 attributable to the Amoco already has the  
23    \$30,000 compression cost deleted from their AFE?

24            A.     That's correct, so that we're comparing apples  
25    with apples.

1 Q. Okay. Let's go through this in terms of major  
2 items of difference to you as an expert.

3 When you look at the drilling portion, you get  
4 down to the subheading B. It says "Drilling". And looking  
5 through those components, there's a subtotal?

6 A. Correct. The largest areas of difference are  
7 between the drilling costs in which their estimate is  
8 roughly \$45,000, and our drilling cost history shows around  
9 \$18,000.

10 Our drilling rig, generally we get on a footage  
11 basis, so it's essentially risk-free to the working  
12 interest owners.

13 Q. Show us other items of major difference.

14 A. The downhole completion, which I think now we've  
15 come to agreement that that \$20,000 differential -- Perhaps  
16 their AFE has been overstated or they're agreeing now that  
17 they can complete and stimulate less expensively.

18 Q. As you have analyzed the comparisons of AFEs,  
19 have you itemized completion rig cost factors?

20 A. As well as we could. Again, the actual  
21 categorization off of the AFEs is a bit subjective. I put  
22 them in as best we could, and some detail is not there.

23 But yes, there is a completion day work figure on  
24 their AFEs.

25 Q. In the comments section on the far right side of

1 the comparison, you have made various notes at other points  
2 to identify for the Examiner matters of difference.

3 A. They're definitely matters of concern to us. The  
4 day work figure of \$2100 does not allow much time. And  
5 again I assume that they've been diligent, but our  
6 experience has been that some of these costs are probably  
7 going to be significantly higher.

8 Q. Describe -- Mr. Hawkins addressed the contingency  
9 method used by Amoco, and I think you heard that testimony.  
10 You have looked at the contingency components of the  
11 components of the AFEs, and you have them analyzed on this  
12 exhibit, do you not?

13 A. That's correct.

14 Q. Describe for us what you have concluded.

15 A. Generally, the 15-percent contingency used by  
16 Amoco is not unusual in the industry in general.  
17 Generally, it's based off of a percentage.

18 Again, those contingencies have a tendency to  
19 materialize during the drilling and completion of wells.

20 Generally through Richardson and the AFEs we  
21 generate and our charges, we don't use as high of a  
22 contingency basis. We try to actually categorize those  
23 anticipated costs ahead of time. So our contingencies are  
24 less. But basically, it's the bottom line on the AFE that  
25 matters.

1           Q.    The Examiner is here to listen to recommendations  
2   on how to decide matters of difference by which he can  
3   ultimately decide who operates.  Is there a difference  
4   between this AFE that is a difference to you?

5           A.    Yes, actually there's a large matter of  
6   difference, both to the working interests and to the  
7   royalty owners.

8                   Generally, both the -- the economics of the  
9   project and the ultimate recovery are tied to the initial  
10  investment and the overhead charges throughout the life of  
11  the well, and in this case it's significantly different.

12          Q.    And in a later display, you have attempted to  
13  calculate or to quantify the magnitude of that difference  
14  in terms of its effect on the life of the wellbore and on  
15  ultimate gas recovery?

16          A.    That's correct.  And the other thing I would like  
17  to bring out is that basically my assumptions and my  
18  comparisons and the differentiation between operating and  
19  drilling these wells, I've held both the risk and the well  
20  results constant between ROPCO and Amoco.

21                   I am concerned, if they should pursue a coiled-  
22  tubing-type completion, that there should be additional  
23  risk factors assigned into there, versus a standard gas  
24  well typical completion.

25          Q.    Let's turn to Exhibit 16 and have you describe

1     what you've done when you have made a comparison for the  
2     well in the southwest quarter of 12.

3             A.     This comparison is identical in scope to the  
4     first, except for this is for the well in the southwest  
5     quarter, which is assumed to be a commingled Pictured Cliff  
6     Fruitland Coal well.

7             The only other item of note is, with Amoco's  
8     proposal, if for some reason their well did not qualify or  
9     they were not able to get downhole commingling requirements  
10    met, they would not be able to dual complete in 3-1/2-inch  
11    casing.

12            It's been our philosophy to go ahead and set  
13    casing large enough for a dual completion so that if such  
14    were the case, we would not have to eliminate the Fruitland  
15    Coal side of the completion.

16            Q.     When you look at the components of difference in  
17    this comparison, describe for us what they are.

18            A.     Generally, the components of difference are  
19    fairly similar.

20            We have a difference in our drilling estimates.  
21    Again, we use a standard footage rate.

22            The completion again is different.

23            And there's contingency money, you know, that  
24    varies, much like the first completion.

25            Q.     When you get to the bottom line and you take off

1 the compression costs for the Amoco AFE, what is still the  
2 net difference?

3 A. There's still quite a significant difference.  
4 Generally, our AFE was for \$194,000. The dual within half  
5 a mile, the actual well costs came in at \$177,000. We were  
6 10 percent under budget.

7 Their AFE is for roughly \$231,000.

8 So based off of the AFE values, they're 20  
9 percent higher. And based off of actual experienced  
10 drilling costs, they vary by 31 percent.

11 Q. In your opinion, will compression be required in  
12 this well?

13 A. We anticipate that it is.

14 Q. In order to take that cost factor into  
15 consideration in the AFEs, have you analyzed the net result  
16 of the inclusion of compression?

17 A. Yes, I have. Compression, we deem, will be  
18 required. Generally, it's not in the original AFE because  
19 we're not sure of the size or what size of compressor would  
20 be needed.

21 Generally, we'll rent a compressor for the first  
22 few months' worth of production on the well and then size  
23 after at that point.

24 Q. Is it a flaw in the Richardson AFEs not to have  
25 an item for compression?

1           A.    I don't believe so. The operating agreement has  
2    spending authorities, and each working interest owner would  
3    have their fallbacks through the operating agreement, if we  
4    were to AFE for compression at a later date.

5           Q.    Under different case examples, have you assumed  
6    compression for this well for both costs by either operator  
7    and shown the impact of the total well cost, of ultimate  
8    recovery?

9           A.    I have. What I've tried to do is make an  
10   economic comparison and see what the results are to the  
11   working interest owners as far as value, and secondly to  
12   the royalty owners as far as ultimate recovery, should  
13   ROPSCO operate, versus Amoco operating.

14                I'm sure everybody realizes the number of  
15   variables is tremendous, so I've tried to keep everything  
16   as constant as possible and --

17           Q.    Have you reduced that information to an exhibit  
18   form?

19           A.    Yes, I've reduced what information I have onto  
20   Exhibit Number 17.

21           Q.    All right, let's look at that and have you  
22   describe for us how you've organized the display, and then  
23   we'll talk about the parameters, and then the assumptions  
24   and finally the conclusions.

25           A.    Okay. Basically, the display is set up to show a

1 comparison on the Pictured Cliffs well versus the  
2 commingled Pictured Cliffs and Fruitland, so that  
3 essentially any variances would be added.

4 I've listed at the top the assumptions as far as  
5 reservoir parameters, economic parameters. And as you can  
6 see, I've kept them constant between ROPCO and Amoco. In  
7 essence, I've assumed that Amoco is on budget, ROPCO is on  
8 budget, that the well's productivity and decline rates are  
9 identical, in essence, for giving any fact as far as the  
10 different wellbore configurations, and held everything  
11 constant on that side --

12 Q. Do you have a --

13 A. -- the only differentiation being the  
14 differentiation between capital investment and operating  
15 costs over the life of the wells.

16 Q. So the Examiner understands how you've gone about  
17 this, describe for us how you've come up with your  
18 recoverable gas reserve number that you've put into the  
19 calculation.

20 A. The recoverable reserves are calculated based off  
21 of initial gas rates and decline rates and economic limit.

22 The last page, Appendix Number 1, shows our  
23 assumption on operating costs, and they have a significant  
24 impact, and I want to be straightforward on what those  
25 assumptions are.



1           Basically, the overhead -- standard overhead rate  
2 varies by only \$50 per month. Generally there's a pumper  
3 charge.

4           The charge for compression, depending on the  
5 method each operator chooses to incorporate those expenses,  
6 varies, and I've got the figures used.

7           And then we've also added in the additional  
8 overhead charges that Amoco normally would associate with  
9 their wells. And I used \$300, and Mr. Hawkins said that  
10 may be conservative. I don't know. But for the purposes  
11 of this exhibit, we felt \$300 was a reasonable estimate.

12          Q. All right. How did you handle the potential  
13 variable of the compression cost component?

14          A. What I assumed was several cases. I was not sure  
15 how Amoco would propose their compression, whether they  
16 were going to compress the two wells through one compressor  
17 or whether they were going to buy them or lease them or  
18 rent them.

19                So just to be safe I ran several cases and --

20          Q. Let's show the Examiner one. Let's pick an  
21 example and show him the method, and then he can satisfy  
22 himself if he wants to apply any of these other case  
23 examples.

24          A. Okay, starting on the first page with A, this  
25 would be the stand-alone Pictured Cliff wells.

1           The Case 1 would be where ROPCO and Amoco were to  
2   rent a compressor. And what -- Each case has certain  
3   criteria and certain values shown for the ROPCO case, and  
4   then the Amoco case with the same fixed variables, just  
5   changing those -- the fixed constants being the same,  
6   changing the variables, and the variance being the  
7   difference.

8           Under the rental it shows that over the life of  
9   the well, we would extend the life by about four years and  
10   recover --

11          Q.   Where do you see that? The second entry down?

12          A.   Correct, the life of the project at the economic  
13   limit. Whereas ROPCO's well was 19 years, one month,  
14   Amoco's was 15 years, one month. Therefore, ROPCO  
15   operating would extend it approximately four years.

16          Q.   In addition to the extended four-year life of  
17   production by Richardson, what is your estimate of the  
18   additional gas recovered if they operate?

19          A.   Under the same scenario, it would be roughly  
20   149,000 MCF.

21          Q.   All right, let's turn to see how you handle the  
22   Pictured Cliffs and Fruitland combined, that type of  
23   completion.

24          A.   Okay. I might mention that Case 2 is assuming  
25   that the compressors are purchased and financed.

1           And Case 3 assumes that we buy used compressors.

2           And again, in those two cases, the variance  
3   between the two is still to the favor of ROPCO, roughly two  
4   years, eight months, and 42,000 MCF.

5           Q.   Amoco's AFE used \$30,000 for the cost of a  
6   compressor?

7           A.   Yes, and again I'm not sure where their number  
8   has come from, assuming that's a purchase price.

9           Generally, these wells produce a combined initial  
10   rate of anywhere from 600 to 800 MCF per day, and the  
11   pressure in those lines out there, it's high-pressure sales  
12   lines.

13           Generally, it's the type of compressor you would  
14   need for that. And we've gotten bids for that, would run  
15   around \$85,000 new.

16           Generally, we attempt to get used equipment, but  
17   \$85,000 would be a new price.

18           Q.   All right. Let's see how you've analyzed the  
19   comparison when we deal with a Fruitland Coal Gas-PC  
20   combination.

21           A.   Again, I've used the same cases, the same  
22   assumptions, but this analysis labeled B is for the  
23   commingled well, and it assumes that it qualifies for  
24   downhole commingling, and that's the completion method.

25           Basically, the variance here is again to the

1 favor of ROPCO, roughly 146,000 MCF under, you know, the  
2 Case 1 assumption, and 41,000 MCF under Cases 2 and Cases  
3 3, again extending the life nearly three years for the  
4 well.

5 So for the total two-well project that we're  
6 looking at, the incremental reserves is -- well, nearly  
7 300,000 MCF under one scenario, and if you take the  
8 conservative view it's roughly 82,000, 83,000 MCF.

9 Q. Do you have an opinion as to whether it's  
10 appropriate for this case to be decided based upon a  
11 difference in AFE costs as proposed by the two different  
12 operators?

13 A. I think the basis for any well being drilled is  
14 to drill it as efficiently as possible and recover the most  
15 reserves as economically possible.

16 If the numbers proposed by Amoco are their true  
17 belief on the cost of their wells and we've established  
18 some of the operating costs, it would be to their advantage  
19 as well as the other working interest owners and royalty  
20 owners to elect Richardson as operator.

21 Q. Let's turn to Exhibit 18. Identify and describe  
22 for me what you're showing here.

23 A. The rest of my exhibits pertain to the request  
24 for downhole commingling of the Pictured Cliff and  
25 Fruitland Coal.

1           Again, it's critical to get that prior approval,  
2 especially in this case. Otherwise, the Fruitland Coal  
3 reserves would perchance be left behind pipe.

4           And secondly, certainly in Amoco's case, they  
5 would have to have that approval before they could drill.

6           Exhibit Number 18 is the nine-section plat which  
7 shows the Fruitland Coal spacing unit in the west half of  
8 12 and shows the offset wells and their owners. This is  
9 what was used for notification purposes for the downhole  
10 commingling application.

11          Q. All right. Let's turn to Exhibit 19 now, Ms.  
12 Delventhal, and have you describe this exhibit.

13          A. Exhibit 19 shows some economic criteria for why a  
14 commingled completion is preferable, as opposed to drilling  
15 two stand-alone wells or completing a separate Fruitland  
16 Coal formation.

17               The first page shows the assumptions as far as  
18 the economic criteria and gas rates, et cetera. For this  
19 case, we assumed that we purchased a compressor at our bid  
20 price and financed it.

21               And the second page shows, as Part A, the  
22 Pictured Cliffs well stand-alone economics. As you can  
23 see, the profit-to-investment ratio is nearly 12. It's a  
24 good project. The well life is 26-some years, and we  
25 should recover just under 2 BCF.

1           The Fruitland Coal, if we were to drill a stand-  
2 alone well, is barely economic. The profit-to-investment  
3 ratio is less than one, and it has roughly a 10-year well  
4 life. It is unlikely, if an operator were choosing  
5 projects, that this well would be drilled separately during  
6 this environment.

7           Part C is the economics of the commingled well.  
8 Under the commingled scenario, the profit-to-investment  
9 ratio is nearly 14, recoverable reserves are now roughly  
10 2.8 BCF. Therefore, you've recovered roughly .8 BCF of  
11 Fruitland Coal reserves, whereas if you drilled it stand-  
12 alone, you were recovering under 600,000.

13           So by commingling the two together, your  
14 incremental recovery versus the separate completions is  
15 nearly 300,000 MCF.

16           Q.    Would it have been a mistake to drill the west  
17 half of the section with two stand-alone PC wells, without  
18 trying to get the coal gas production?

19           A.    Again, if that had occurred, if both had been  
20 developed and the Fruitland Coal formation owners wished to  
21 develop their reserves, they would be looking at stand-  
22 alone Fruitland Coal economics.

23           I would doubt that either Amoco or Richardson or  
24 any other operator in the San Juan Basin right now would  
25 drill the well under that case. In essence, those reserves

1 would not be developed at this time.

2 Q. In your opinion, for the coal gas reserves in the  
3 west half of the section, then, it's most prudent to  
4 develop those with one of these wellbores being a  
5 commingled wellbore?

6 A. That's correct. And should -- for either  
7 bottomhole pressure reasons or if it for some reason did  
8 not qualify it to be commingled, then a dual completion  
9 would be your next alternate. But you would definitely  
10 develop those reserves at the same time.

11 Q. All right. Let's turn to Exhibit 20 and have you  
12 give us a short summary on the wellbore diagram.

13 A. Like I said, there's no new science at all to the  
14 proposal of ROPCO and how we drill these wells out here,  
15 just a standard gas well: Set 7-inch surface casing, and  
16 then we set 4 1/2 or 5 1/2 casing down to about 1630 feet.

17 The formations range from about 1420 to 1485 foot  
18 in depth.

19 We use a standard completion method. We  
20 circulate cement to surface if possible, perforate and test  
21 each zone to gather the data we need for the downhole  
22 commingling, run open-ended tubing and place it on line.

23 Q. Let's turn to Exhibit 20.

24 Is there any pressure differential of concern  
25 estimated between the Fruitland Coal and the PC that would

1 preclude the downhole commingling of production in these  
2 two reservoirs?

3 A. No, actually the bottomhole pressure data that  
4 we've gathered in the area shows that the area is fairly  
5 depleted, that the reservoir pressure is quite similar  
6 between both the Fruitland Coal and the Pictured Cliffs and  
7 ranges between about 210 and 240 p.s.i.

8 Q. Have you also analyzed the gas analysis to  
9 determine whether the gas components and constituents in  
10 this specific area are compatible if the formations are  
11 commingled?

12 A. Yes, I have, and I've included as Exhibits Number  
13 22 and Number 23 actual chromatograph analysis of a  
14 Pictured Cliffs well and a Fruitland Coal well --

15 Q. With what conclusion?

16 A. -- both within a mile. And the gas is  
17 compatible.

18 Q. All right, let's turn to the allocation formula.  
19 If you'll look at Exhibit 24, which is the last of your  
20 exhibits, give us a summary of your method and your  
21 conclusions.

22 A. I've included this so that all the operators  
23 would know the general procedure that ROPCO would propose.  
24 Again, it's a fairly standard allocation formula, applied  
25 to Fruitland Coal-Pictured Cliffs commingled wells in the



1 area.

2 Because the Pictured Cliffs is an established  
3 pool and a good -- ultimate recovery numbers can be  
4 calculated in the area, the allocation formula is based on  
5 a difference method, whereas you calculate the PC reserves  
6 and additional reserves are allocated to the Fruitland  
7 Coal.

8 I've included the standard calculation. The  
9 numbers will change based on actual reservoir pressures and  
10 actual test rates, but the allocation method is at least  
11 outlined.

12 Q. Is this the method that you utilized when you  
13 made your presentation to the Division for the commingled  
14 well that's in the east half of the spacing unit --

15 A. Yes, sir.

16 Q. -- or east half of the section?

17 MR. KELLAHIN: All right, that concludes my  
18 examination, Mr. Examiner, of Ms. Delventhal.

19 We move the introduction of her Exhibits 15  
20 through 24.

21 MR. CARR: No objection.

22 EXAMINER STOGNER: 15 through 24 Exhibits of  
23 Richardson will be admitted into evidence at this time.

24 Thank you, Mr. Kellahin.

25 Mr. Carr, your witness.

## CROSS-EXAMINATION

BY MR. CARR:

Q. Ms. Delventhal, you previously worked for Amoco?

A. Yes, I did.

Q. And you are familiar with their operations in the San Juan Basin because you worked for them and also because you are a consultant active in the Basin; is that not fair to say?

A. Yes, sir.

Q. You do know that Amoco has drilled a number of Pictured Cliffs wells throughout the San Juan Basin?

A. A number of standard PC wells, yes.

Q. And they operate and produce a number of Pictured Cliffs wells in the Basin?

A. Uh-huh.

Q. They also have drilled and completed wells within the City of Farmington, haven't they?

A. Yes.

Q. Now, I gather from your testimony that you differ with the way they're proposing this well; is that fair to say?

A. Yes.

Q. Have you ever actually drilled a slimhole well with coiled tubing?

A. No.

1 Q. You can't say that it won't work, can you?

2 A. No, I didn't, and I didn't use any  
3 differentiation in risk or cost in my analysis either.

4 MR. CARR: That's all I have, thank you.

5 EXAMINER STOGNER: Any redirect, Mr. Kellahin?

6 MR. KELLAHIN: No further questions.

7 EXAMINATION

8 BY EXAMINER STOGNER:

9 Q. On Exhibit Number 24 -- that's the allocation  
10 formula -- this is essentially the basic things that have  
11 been concluded in the -- I guess a lot of Meridian; is that  
12 where you got this?

13 A. It's the similar -- yes, similar basis.

14 Q. Does Richardson have any commingled Pictured  
15 Cliffs-Fruitland Coal gas wells in that southern part of  
16 this area at this point, do you know?

17 A. We have one in the southeast -- or, excuse me, in  
18 the northeast of Section 12, within a half mile.

19 Q. Okay, and that one is downhole commingled?

20 A. Yes, sir.

21 Q. Similar allocation formula?

22 A. Correct.

23 Q. Was that a new drill or a recompletion?

24 A. It was a new drill.

25 EXAMINER STOGNER: Okay. Any other questions of

1 the witness?

2 Ms. Delventhal may be excused.

3 Mr. Kellahin?

4 MR. KELLAHIN: Mr. Examiner, the reference for  
5 that other offsetting commingling application, it's Case  
6 11,106. It's an October 13th, 1994, case.

7 I apologize for not having the order number, but  
8 that's the case number.

9 EXAMINER STOGNER: That was 11,106?

10 MR. KELLAHIN: Yes, sir.

11 EXAMINER STOGNER: Okay.

12 MR. KELLAHIN: Mr. Examiner, I have Exhibits 25  
13 and 26, which represent my certificate of notification for  
14 the compulsory pooling portion plus the downhole  
15 commingling portion of the case.

16 EXAMINER STOGNER: Thank you.

17 Mr. Kellahin?

18 MR. KELLAHIN: Mr. Examiner, Mr. Rod Markham, who  
19 is one of the working interest owners in each of these  
20 spacing units, has requested an opportunity to testify  
21 before you, and with your permission I will call him and  
22 sponsor him as a witness.

23 He's listed in all these tabulations as Roderick  
24 Allen Markham, I believe.

25 EXAMINER STOGNER: Okay, one and the same. Okay,

1 proceed.

2 RODERICK A. MARKHAM,

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

5 DIRECT EXAMINATION

6 BY MR. KELLAHIN:

7 Q. Mr. Markham, would you please state your name and  
8 occupation?

9 A. Rod Markham. I'm an independent oil and gas  
10 landman, whatever. Jack of all --

11 Q. Do you make -- I'm sorry, I didn't hear you.

12 A. Jack of all trades. I'm not a professional  
13 landman.

14 Q. Well, maybe by experience, Mr. Markham. We're  
15 going to find out.

16 You'll have to speak up, it's going to be heard  
17 to hear you.

18 Are you a working interest owner in the spacing  
19 units that are being proposed to be operated either by  
20 Amoco or Richardson?

21 A. That's correct.

22 Q. What type of experience do you bring with you in  
23 order to make decisions about what you wanted to do in  
24 terms of your interest?

25 A. Well, the -- Of course, the initial look is the

1 AFEs, and then past experience with the operator.

2 Q. Is this a type of decision that's new for you  
3 with this case?

4 A. No, sir.

5 Q. Do you make this kind of decision for yourself on  
6 a regular basis?

7 A. Yes, sir.

8 Q. And have you had to make this type of decision in  
9 the San Juan Basin concerning Pictured Cliffs wells?

10 A. Yes, sir.

11 Q. Have you been involved in a similar position with  
12 Amoco as an operator in other wells?

13 A. Not my interest, but my father's interest has  
14 been involved with Amoco in numerous wells, including the  
15 Dakota well on the same unit.

16 Q. And is that an interest and an involvement for  
17 which you have personal knowledge?

18 A. That's right, that's correct.

19 Q. What have you decided to do about committing your  
20 interest to either operator?

21 A. If Amoco operates, I don't know what we will do.

22 If Richardson operates, I feel sure that we'll  
23 stay and participate for our interest.

24 Q. What information did you obtain in order to help  
25 you make a decision on what to do?

1           A.   Well, the AFEs, for one thing, that was -- Of  
2   course, that's the first look, is the AFEs. And we have  
3   drilled quite a few Pictured Cliffs wells and Fruitland  
4   Coal wells in the immediate vicinity, with BHP and Hallwood  
5   Petroleum, and we have information also on Richardson wells  
6   and Bob Bayless.

7           So we've been involved in the Pictured Cliffs and  
8   Fruitland Coal wells.

9           Q.   Based upon that experience, what did you conclude  
10  about the AFE as proposed by Amoco?

11          A.   It was way too high.

12          Q.   What did you conclude about the AFE as proposed  
13  by Richardson?

14          A.   That was -- It was right in line with our  
15  experience with BHP.

16               And we -- We're involved in the Gallegos Canyon  
17  unit, and BHP is the operator, and we have access to -- as  
18  part of the unit -- information, all of the wells that have  
19  been drilled, 60-some-odd wells that have been drilled on  
20  their well [*sic*], 30 recent wells.

21               And we have the total well costs for all these  
22  wells, and the average is \$142,000. And these have been  
23  drilled since 1990. And we have drilled wells within the  
24  last year with them.

25          Q.   Your conclusion with regards to that component of

1 your decision was what, sir?

2 A. That Amoco was too high, that Richardson was  
3 basically right on the money, for what we would expect to  
4 complete these wells for, drill and complete.

5 Q. When you received the original Amoco proposals  
6 for the two PC wells in the west half of 12, what was your  
7 understanding of how those wells were to be drilled and  
8 completed?

9 A. From Amoco?

10 Q. Yes, sir.

11 A. Well, there wasn't enough information on the AFE  
12 to know. It's very gross information that you have here,  
13 and you can't deduce anything -- or I couldn't -- in  
14 comparison to, for instance, BHP and Bob Bayless and Tom  
15 Dugan and most other operators. It's just too big a  
16 numbers to pull things out of.

17 Q. What did you do in order to help overcome that  
18 difficulty?

19 A. I called Greg Grotke.

20 Q. Grotke, I think, is how you say his name.

21 A. Grotke. And frankly, my first -- the first thing  
22 I said to him is, Would you consider letting someone else  
23 operate? We didn't want Amoco operating the well. So I  
24 asked him if he would.

25 And he said -- He didn't say too much, he said



1 it's a pet project -- or -- It's a pet project of his, and  
2 they were trying to drill a bunch of wells at one time and  
3 save a whole lot of money.

4 Q. Did you ask him to describe for you the kind of  
5 well he proposed to drill under this plan?

6 A. Yes, and he started talking about the slimhole  
7 completion, the 2-7/8-inch production string and coiled  
8 tubing.

9 And I asked him also about the water, what do you  
10 do with the water production?

11 Oh, about the coal, I asked him about the coal.

12 And he said, Well, that's not -- that coal is  
13 not -- It's not relevant to this prospect.

14 And I said, Well, you know, we've been drilling  
15 wells out there, and they're commingling. Other wells,  
16 they're -- It's just happening all over the place out  
17 there.

18 And he said, Well, actually I haven't looked at  
19 the logs yet. And he said, My experience has been off  
20 northeast, I believe, in some other area.

21 Q. Did you ask him whether or not water as a  
22 component of production was an issue for these wells?

23 A. Yeah, water cost is a big issue, a big deal out  
24 here. And I asked him, What are you going to do with the  
25 water?

1           And he said, Well, these wells don't make hardly  
2 any water.

3           And they do. I mean, just look at the records,  
4 that's -- They do.

5           Q. Did you have any discussion with Mr. Grotke about  
6 his information level with regards to examinations of logs  
7 in this area?

8           A. He said he hadn't -- I said, I think it's five,  
9 ten feet, between the two -- between the base of the  
10 Fruitland Coal and the PC.

11           And he said, Well, actually I haven't looked at  
12 the logs yet.

13           That's what he told me.

14           Q. Approximately when did that conversation take  
15 place?

16           A. 2-17-95. And he called me back on 2-18-95.

17           Q. So this is after the well proposal is submitted  
18 to you?

19           A. Yes, sir.

20           Q. Did you have any other conversations with Mr.  
21 Grotke, other than the two that you have related?

22           A. That scared me. I just -- I -- I wasn't at all  
23 comfortable that they knew what they were doing. It was  
24 a -- I felt like it was an engineering prospect, an  
25 engineering project, and he was talking about completing

1 three to five wells in a day and all this stuff.

2 And I kept looking -- The bottom line on the AFE  
3 was greater than the other wells, and if they were doing  
4 this to save money they were taking the risk with 2-7/8-  
5 inch production, this is crazy. I mean, it's -- I just  
6 didn't want to have anything to do with the deal at that  
7 point.

8 Q. What have you decided to do with your interest?

9 A. It depends. It depends on -- I called Ms.  
10 Jenkins and asked if they would make us a proposal, because  
11 all we had was drill or -- you know, drill or be penalized.  
12 And I asked if they would give us a proposal, an alternate  
13 proposal to farm out or buy out.

14 And I also asked her if they would market our gas  
15 and also if they would make distribution on our, you know,  
16 burdens.

17 And she never called me back, never came back to  
18 me.

19 Q. In terms of your options, now, with regards to an  
20 election to participate, would you elect to participate if  
21 Amoco is awarded the operatorship of either or both of  
22 these cases?

23 A. I don't know, I don't know. I just don't know.

24 Q. What is your --

25 A. It's a good prospect, it's --

1 Q. What is your dilemma, Mr. Markham?

2 A. We've been involved with Amoco -- We're involved  
3 with Amoco right here in Dakota wells and in some Fruitland  
4 sand in the area.

5 The communication is not good with Amoco.  
6 They're nice -- Everybody's nice people, but you can't get  
7 an answer to anything. You get these oddball charges  
8 showing up on your bills, some of them just gigantic, and  
9 you try to find somebody to explain to you what they are,  
10 and it may take two months, literally, to get a response.  
11 And it can -- You can have seven or eight things going on  
12 at one time, and none of them resolved.

13 They start charging you plugging costs before  
14 you've ever signed an AFE to plug a well. They charge you  
15 overhead when a well is not being produced. It just hasn't  
16 been good for us.

17 Q. If Richardson is awarded the right to operate  
18 these wells, either both or one of them, what decision  
19 would you make if Richardson operated?

20 A. I think we would -- I think we would participate.

21 MR. KELLAHIN: Thank you, Mr. Examiner.

22 EXAMINER STOGNER: Mr. Kellahin.

23 Mr. Carr?

24 MR. CARR: We don't have any questions of this  
25 witness.

1 EXAMINER STOGNER: I don't have any questions of  
2 Mr. Markham myself, I believe.

3 At this time -- You may be excused.

4 At this time --

5 MR. KELLAHIN: That concludes our presentation.

6 EXAMINER STOGNER: -- if there are any recall of  
7 any witnesses at this time?

8 MR. CARR: No, sir.

9 EXAMINER STOGNER: So are we ready for closing  
10 statements?

11 MR. KELLAHIN: There are a few points I'd like to  
12 raise with you, Mr. Examiner, and I will attempt to be as  
13 concise as I can.

14 I would appreciate the opportunity to prepare a  
15 draft order for you so that those matters that I do not  
16 discuss with you now, I can make reference to in a proposed  
17 order, and then you can decide if they are of importance to  
18 you.

19 Mr. Carr and I have done hundreds of cases before  
20 you, Mr. Examiner, and it's now pushing six o'clock, and a  
21 lot of times these pooling cases fall into a common pattern  
22 where you can make some decisions just by following a set  
23 of pegs to hit with your hammer.

24 And sometimes it's appropriate to simply say all  
25 things are equal and the party with the greatest interest

1 ought to operate for no other reason than they perhaps have  
2 the greatest amount of dollars at risk. We've talked about  
3 this on numerous occasions.

4 And every so often, we have a case like this.  
5 And these cases are hard because they represent an effort  
6 by a majority working interest owner to do as little as  
7 possible in order to force-pool parties that don't want to  
8 be in their proposal. And that's what occurred here, Mr.  
9 Examiner.

10 Amoco is sleepwalking through the process. They  
11 have a majority interest, they send us a routine letter,  
12 which is not a request to participate, it's an ultimatum.  
13 They tell us that this is going to be under their terms,  
14 and if we don't, they're going to force-pool us.

15 Now, letters are hardly exchanged, and Mr.  
16 Hawkins is busy filing a pooling Application. And what he  
17 seeks to do is something that's not appropriate in this  
18 area. He's ahead of his project. He forgets to ask to  
19 pool the coal. It's included in his Application, but his  
20 land person never proposed it.

21 And you and Mr. Carr and I have argued a number  
22 of cases where it mattered to you that a proposal by an  
23 Applicant was different than the relief requested.

24 In this case, they -- Amoco had proposed two  
25 stand-alone PC wells, and yet they filed a pooling

1 application for a downhole commingled PC-Fruitland Coal  
2 well.

3 Those little differences matter.

4 It matters that Amoco didn't think to file for  
5 downhole commingling. It indicates a disregard for being  
6 thorough and complete.

7 Look at the AFE process that they went through.  
8 It again was sleepwalking through the process. Compare  
9 that AFE to the AFEs, the hundreds that you've seen, and  
10 how careful most of those are.

11 We asked a number of questions of importance  
12 about how that was put together. And the question you  
13 should have is the same question I have, is, Where is Mr.  
14 Grotke? Where is he? This is his project, his deal, his  
15 representation that he needed five wells to be economic.

16 And who comes to testify? It is not Mr. Grotke.

17 What we do here, though, is, Amoco sends Mr.  
18 Hawkins down here to describe a science project. He wants  
19 to use slimhole technology with some kind of coiled tubing,  
20 with my investors' money, to help them with their science  
21 project. They haven't done one of these in the San Juan  
22 Basin, and they want us to help pay for their science  
23 project.

24 I suspect Amoco's got a hundred-percent acreage  
25 position somewhere in the PC that they can go through this

1 project on their dollars and not ours.

2 The little guy matters.

3 And we have shown you a difference in the AFE  
4 costs in comparison to ultimate recoveries.

5 Dana has presented to you a thorough analysis,  
6 and I hope you will look at it again. She's shown you a  
7 differential by which the producing life of these wells can  
8 be extended at least four more years, with cost-efficient  
9 operation by my client.

10 It's easy for you to simply go down the checklist  
11 and say Amoco's got the bigger interest and let them  
12 operate. We think that is not the appropriate answer in  
13 this case. There are other ways for Amoco to go about  
14 their project.

15 I believe it's of significance to allow Mr.  
16 Richardson to operate this when he already has developed  
17 the other half of this section and where you have to go six  
18 miles away to find a PC well that Amoco has proposed.

19 There in fact are a number of things that are not  
20 of significance.

21 There is no significant difference in overhead  
22 rates.

23 There is no dispute about where to put the wells.  
24 Amoco has adopted our plan to commingle one of them. They  
25 realized very quickly that that was a good idea and adopted



1 what we wanted to do, and we ought to get credit for  
2 proposing that.

3 What we ought not to do is be penalized by being  
4 pooled by Amoco. Small things matter.

5 The last point: What to do about the risk factor  
6 penalty?

7 I think Mr. Richardson's idea was just fine. Why  
8 not cost plus 150 percent? That's a level field for both  
9 interest owners in both pools. Let's use that.

10 Why make it complicated by making it 200 percent  
11 for one formation and 156 for the other? It doesn't make  
12 any sense.

13 Award us credit and an opportunity to operate  
14 because we have done a thorough job, we brought you the  
15 downhole commingling presentation and have made that a  
16 complete and thorough presentation.

17 Amoco, despite its effort to economically provide  
18 a five-well package, has provided to you a well proposal  
19 that's far in excess of what Richardson can do with a  
20 single well.

21 We may be the little guy, but maybe the little  
22 guy needs a turn.

23 Thank you.

24 EXAMINER STOGNER: Mr. Kellahin.

25 Mr. Carr?

1           MR. CARR: May it please the Examiner, I would  
2 agree with Mr. Kellahin that over the years we've been  
3 before you many times with opposing compulsory pooling  
4 applications.

5           What you can always count on when we come before  
6 you is, the person who doesn't have the evidence  
7 immediately starts trying to characterize the case as  
8 unique and something that you can't deal with by just  
9 hitting the pegs with a hammer and determining who should  
10 actually prevail.

11           You know better than any of us, Mr. Stogner, that  
12 now we're looking at a number of proposed compulsory  
13 pooling applications. They're coming into the Oil  
14 Commission daily.

15           And to deal with this, by a memorandum dated  
16 April the 5th, 1995, this month, the Division has defined  
17 what is considered relevant and pertinent evidence, and  
18 that which is considered irrelevant and unnecessary  
19 evidence. These are the pegs, these are the pegs that we  
20 can hit. We can show you why, with relevant and pertinent  
21 evidence, Amoco should prevail.

22           The question here, Mr. Stogner, is, Who should  
23 operate this well? Both parties want to do that. And the  
24 place you start, if we follow this Division's memorandum,  
25 is, we take a look at the ownership.

1           In the northwest quarter, Amoco has 83.38 percent  
2 of the working interest. In the southwest quarter, on a  
3 stand-alone basis we would have 50 percent, but in a west-  
4 half unit we 67 percent. So on that basis alone we can hit  
5 the peg.

6           If we look at the west half, we see although Mr.  
7 Richardson is operating in the east half of the section, we  
8 have two Dakota wells in the west half. They have nothing  
9 there, and they want to come and drill two additional wells  
10 on well pads that we have previously prepared.

11           The other thing -- The next peg that they in your  
12 memo suggest you should look at is, Who actually proposed  
13 the well?

14           Well, we can see that there were negotiations  
15 about exchanging property interests several years ago. But  
16 because of litigation and instructions from their counsel,  
17 they went silent until we actually proposed the well in  
18 February of this year.

19           And that is what started the process which has  
20 brought us here today. We submit to you on that front we  
21 also hit the peg.

22           I agree with Mr. Kellahin that overhead and  
23 administrative costs are really not an issue, that the  
24 actual well locations are not really an issue. And I  
25 submit that when you take a look at the evidence, you're

1 going to find that the differences in cost are really not  
2 an issue.

3 And what I'm suggesting there is, if you look at  
4 the exhibits that were presented by Mr. Hawkins and you  
5 take out compression, if you normalize stimulation costs as  
6 we have suggested will be done and told you will be done,  
7 and if you adjust the contingencies, you see the  
8 differences are not, in fact, significant.

9 We submit to you that when you apply the  
10 standards that this Division has announced, if you apply  
11 relevant, pertinent evidence to the issues before you, you  
12 come out on Amoco's side.

13 On the other hand, you can look at what  
14 Richardson did, and we can look at what is considered  
15 irrelevant or unnecessary evidence. And they talk about  
16 the operator's ability to drill a well or ability to  
17 produce and operate a well, previous disagreements with us.  
18 But those you have already defined as irrelevant.

19 We submit when you take the evidence presented,  
20 when you apply it to the standards announced by this  
21 Division, you will grant the Application of Amoco and that  
22 we will go forward and develop this acreage in a prudent  
23 and responsible fashion.

24 EXAMINER STOGNER: Thank you, Mr. Carr.

25 What's the date of the memorandum, Mr. Carr?

1 MR. CARR: April the 5th, 1995.

2 EXAMINER STOGNER: Is that signed by Mr. Catanach  
3 or Mr. LeMay?

4 MR. CARR: And both. Yes, and yes.

5 EXAMINER STOGNER: Is my name on there anywhere?

6 MR. CARR: No, it was just -- It was just by  
7 other people in the Division, but an issue by the Director.

8 EXAMINER STOGNER: Okay, I'll make administrative  
9 notice of that particular memorandum --

10 MR. CARR: Thank you, Mr. Examiner.

11 EXAMINER STOGNER: -- in this matter.

12 Mr. Kellahin, I believe you are aware of the  
13 memorandum that he was referring to?

14 MR. KELLAHIN: Yes, sir.

15 EXAMINER STOGNER: I'm going to request that both  
16 parties give me a rough draft, probably -- What? Two rough  
17 drafts?

18 MR. KELLAHIN: I'm assuming Mr. Carr will not  
19 agree with my draft.

20 EXAMINER STOGNER: Well, what I meant is, two  
21 rough drafts for each particular acreage --

22 MR. CARR: Correct.

23 MR. KELLAHIN: Yes, sir.

24 EXAMINER STOGNER: -- as opposed to one for all  
25 the acreage --

1 MR. CARR: Right.

2 EXAMINER STOGNER: -- if that makes sense.

3 MR. CARR: It does.

4 EXAMINER STOGNER: I'll let you guys set the time  
5 frame.

6 MR. KELLAHIN: Okay.

7 EXAMINER STOGNER: You can get back with me  
8 later.

9 MR. KELLAHIN: May we discuss it and let you know  
10 later?

11 EXAMINER STOGNER: That will be fine.

12 MR. KELLAHIN: All right, sir.

13 And with that, if there's nothing further in any  
14 of these cases, at this time I'll take them under  
15 advisement.

16 (Thereupon, these proceedings were concluded at  
17 5:53 p.m.)

18 \* \* \*

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I do hereby certify that the foregoing is  
a complete record of the proceedings in  
the Examiner hearing of Case Nos. 11243, 11244, 11246,  
heard by me on 29 April 1955.

  
Oil Conservation Division

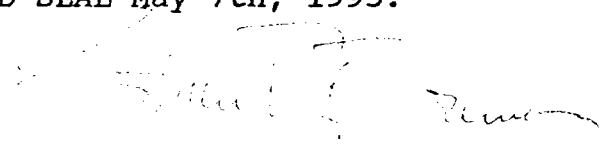
## CERTIFICATE OF REPORTER

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

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

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

WITNESS MY HAND AND SEAL May 7th, 1995.

  
\_\_\_\_\_  
STEVEN T. BRENNER  
CCR No. 7

My commission expires: October 14, 1998

1 Q. Those are Dakota wells?

2 A. Right.

3 Q. Would you agree with me that in excess of 20 of  
4 those wells in the offsetting nine sections are Amoco-  
5 operated Dakota wells?

6 A. I have no idea on the Dakota wells.

7 Q. Do you know if Amoco operates any Dakota wells  
8 within the nine sections offsetting the acreage?

9 A. I am aware of the two Dakota wells in the west  
10 half of Section 12 that Amoco operates.

11 Q. And do you have any idea of who any of those  
12 other Dakota wells are drilled or -- have been drilled or  
13 operated by?

14 A. I have not looked at any of the Dakota wells.

15 Q. Okay. So when we prepared this exhibit, we were  
16 only looking at certain formations, not all operations in  
17 this portion?

18 A. That is correct.

19 Q. If I look at your Exhibits 3, 4 and 5, it's  
20 essentially an ownership breakdown in the various spacing  
21 units that would be dedicated to the wells at issue in this  
22 case, right?

23 A. Yes, sir.

24 Q. And the only interest that you now say is not  
25 committed to Richardson is that of Kerr-McGee Corporation;