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STATE OF NEW MEXICO

ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION

IN THE MATTER OF THE HEARING CALLED BY THE OIL CONSERVATION DIVISION FOR THE PURPOSE OF CONSIDERING:

APPLICATIONS OF AMOCO PRODUCTION COMPANY AND RICHARDSON OPERATING COMPANY

CASE NOS. 11,243 11,244 11,246 (Consolidated)

ORIGINAL

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.

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I N D E X

April 20th, 1995		
Examiner Hearing		
CASE NOS. 11,243, 11	,244, 11246 and 1	.1,247 (Consolidated)

CASE NOS. 11,243, 11,244, 11246 and 11,247 (Consolidat	:ed)
	PAGE
EXHIBITS	3
APPEARANCES	5
AMOCO WITNESSES:	
JULIE JENKINS Direct Examination by Mr. Carr Cross-Examination by Mr. Kellahin Examination by Examiner Stogner Examination by Mr. Carroll BILL HAWKINS Direct Examination by Mr. Carr Cross-Examination by Mr. Kellahin Examination by Examiner Stogner Further Examination by Mr. Kellahin	8 23 37 40 43 62 73 76
RICHARDSON WITNESSES:	
CATHLEEN COLBY Direct Examination by Mr. Kellahin Cross-Examination by Mr. Carr	77 101
<pre>DAVID B. RICHARDSON Direct Examination by Mr. Kellahin</pre>	115
DANA L. DELVENTHAL Direct Examination by Mr. Kellahin Cross-Examination by Mr. Carr Examination by Examiner Stogner	128 151 152
RODERICK A. MARKHAM Direct Examination by Mr. Kellahin	154
(Continued)	

				3
CLOSING	STATEMENTS			
	Mr. Kellahin			162
-	Mr. Carr			167
צם	rii. Call			10,
REPORTER	'S CERTIFICATE			172
		* * *		
	E X	HIBITS		
Amoco		Identified	Admitted	
Exh	ibit 1			
	Application	12	23	
	Ownership	13	23	
	Correspondence	18	23	
	correspondence	18	23	
	Well Cost	44	62	
	Overhead and Ris		62	
		* * *		
Richards	on	Identified	Admitted	
	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 95	101	
	Exhibit 9	98	101	
	TUTTATE 1	. 20	101	
	Exhibit 10	100	101	
	Exhibit 11	117	126	•
	Exhibit 12	120	126	
	Exhibit 13	121	126	ļ
	Exhibit 14	-	-	
	Exhibit 15	133	150	
	(Con	tinued)		
	•	•		

EXHIBITS (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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By: W. THOMAS KELLAHIN

* * *

WHEREUPON, the following proceedings were had at 1 2 1:40 p.m.: EXAMINER STOGNER: This hearing will come to 3 order. 4 5 At this time I'll call Case Number 11,243. MR. CARROLL: Application of Amoco Production 6 7 Company for compulsory pooling, San Juan County, New Mexico. 8 EXAMINER STOGNER: At this time I'll call for 9 10 appearances. MR. CARR: May it please the Examiner, my name 11 is William F. Carr with the Santa Fe law firm Campbell, 12 13 Carr and Berge. We represent Amoco Production Company in this 14 15 case. I will request that this case be continued with 16 three other cases, the other Amoco case being 11,244. 17 I believe it should also be consolidated with applications 18 filed by Richardson Operating Company, styled Case 11,247 19 20 and 11,246. EXAMINER STOGNER: Now, you said "continued". 21 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.

EXAMINER STOGNER: Okay. Are there any 1 objections -- That's 11,243, which we just called, 2 consolidated with Amoco Case 11,244, Richardson Case 11,247 3 and Richardson Case 11,246; is that correct? 4 Are there any objections to the consolidation of 5 this? 6 Mr. Examiner, for the record my 7 MR. KELLAHIN: name is Tom Kellahin of the Santa Fe law firm of Kellahin 8 and Kellahin. 9 10 I'm appearing today on behalf of Richardson Operating Company, and I have no objection to the 11 consolidation of these four matters together to be heard as 12 13 one presentation. EXAMINER STOGNER: Okay. With that, I'll also 14 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 compulsory pooling, downhole commingling and an unorthodox 21 gas well location, San Juan County, New Mexico. 22 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?
L1	(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
L9	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.		

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

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

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

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

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

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

- Q. Ms. Jenkins, you're familiar also with the Applications filed by Richardson Operating Company, are you not?
 - A. Yes, I am.

- Q. And are those Applications, to your understanding, Applications to force-pool the same acreage and designate Richardson as the operator of those wells?
 - A. Yes, that's my understanding.
- Q. Have you prepared exhibits for presentation here today?

- A. Yes, I have.
- Q. And are these exhibits included in the exhibit booklet that has been distributed for Amoco?
 - A. Yes.

- Q. Let's go to that booklet, and I'd ask you to first just identify the document behind the first tab in that booklet.
- A. Yes, the first page is simply a copy of the Application that was submitted to the Director of the New Mexico Oil Conservation Division from J.W. Hawkins, describing the Application.
- Q. Okay. And the second page behind that first tab is what?
- A. Is the list of names and addresses of the parties, the working interest in the Burnham Gas Com A Number 1, to which a copy of the Application was sent certified.
- Q. And that includes Richardson Production Company; is that right?
 - A. Yes, it does.
- Q. Behind that there is another page, "Addressee List". What is that?
 - A. That's an addressee list showing the names and addresses of the working interest owners within the drilling and spacing unit for our proposed Burnham Gas Com

B Number 1.

- Q. And again, that was sent to Richardson Production Company?
 - A. That is correct.
- Q. And behind that you have copies of a certificate showing that this Application was provided to these individuals by certified mail, return receipt requested?
 - A. That is correct.
- Q. Let's go to the tab identified as "Ownership" in the Amoco booklet. Will you refer to that and then go to the first document behind that tab, identify that and review it for the Examiner?
- A. Okay. The first page is simply a copy of a Form C-102, which is State of New Mexico, Oil Conservation Division, Well Location and Acreage Dedication Plat, showing the proposed location of Amoco's Burnham Gas Com A Number 1, and the proposed spacing unit for that well, being the northwest quarter of Section 12.
- Q. Does Richardson also propose a well on this 40-acre Pictured Cliff spacing unit?
- A. Yes, they do.
- Q. And what is the location of the well they are proposing?
- A. It's my understanding they are proposing a well to be located within 200 feet of 1470 feet from the north

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

- Q. So that could essentially be at the same location or close thereto, to the one you are proposing?
 - A. That's correct.

- Q. At the present time, does Amoco operate the wells in the northwest quarter of Section 12?
 - A. Yes, sir, they do.
- Q. Does the location being proposed by Richardson fall in close proximity to currently operated Amoco wells?
 - A. Yes, it does.
- Q. Would in fact the Richardson proposal be possibly located on the same well pad as existing Amoco Dakota wells?
 - A. It appears that way, yes.
- Q. Let's go to the next page in this exhibit. Would you identify that, please?
- A. Yes, this is a copy of the Exhibit A which was attached to the proposed Amoco -- the operating agreement that Amoco proposed to use to govern operations for the Burnham Gas Com A Number 1, and it sets forth the names and addresses of all working interest owners within that spacing unit and their respective working interests therein.
- Q. So we're talking here about just the northwest quarter of Section 12 in the Pictured Cliffs?

A. That's correct. 1 And what does Amoco -- How much of the working 2 Q. interest ownership does Amoco own in that 160-acre tract? 3 Amoco owns 83.38125-percent working interest. 4 Α. 5 0. Do you know what Richardson owns at this time in this 160-acre tract? 6 We -- At the time we did title, we showed them to 7 own 2.76979-percent working interest in the tract. 8 Is it possible that they have acquired additional 9 Q. 10 interests since this exhibit was prepared? 11 Α. Sure. 12 0. 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 participate in this Pictured Cliffs well with you? 18 19 That is correct. Let's go to the next page. Could you identify 20 Q. 21 that, please? 22 Yes, this is State of New Mexico, Oil 23 Conservation Division, Form C-102, Well Location and Acreage Dedication Plat, showing the proposed location of 24

Amoco's Burnham Gas Com B Number 1, and also depicting the

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

- Q. This well is to be completed in both those formations?
 - A. That is correct.

- Q. Has Richardson also filed an application seeking to drill a well in the southwest of Section 12 to be completed in both formations?
 - A. Yes, they have.
- Q. What is the location that is being proposed by Richardson?
- A. The proposed location is in 200 feet of 870 feet from the south line and 1180 feet from the west line of Section 12.
- Q. So again, this could be essentially at the same location being proposed by Amoco?
 - A. Yes.
- Q. And again, could this well at that location be on an existing well pad on which Amoco currently operates a Dakota well in the southwest of Section 12?
 - A. Yes.
 - 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?

- And do you know what Richardson owns?
- Our records at the time they were checked showed them to own 8.33 percent.
- 13 And again, that number may have increased and you Q. 14 wouldn't know it?
- 15 Α. Yes.

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- Q. What about a west-half unit? What is Amoco's ownership in a west-half spacing unit?
- 18 Α. 66.69062 percent.
- 19 And the last figure you had on the Richardson 20 ownership in a west-half unit was what?
 - Α. 5.55249 percent.
 - Q. Now, in the cases that have been filed by Amoco, is Amoco seeking an order pooling all of the interests as shown on the two Exhibit A's that have just been reviewed by you?

A. Yes.

- Q. Let's go to the portion of this exhibit that is behind the tab marked "Correspondence". Could you identify that, please?
- A. Yes, the first page is -- shows just relevant oral and written communications between Amoco and other working interest owners, regarding our proposed Burnham Gas Com A Number 1.
 - Q. And was this exhibit prepared by you?
- A. Yes.
- Q. This summary?
- 12 A. Yes, sir.
 - Q. When was the first contact between the parties concerning the drilling of a well in the northwest quarter of Section 12?
 - A. Well, Amoco sent out its initial well proposal by a letter dated February 14th, 1995.
 - Q. And is it possible that the parties could have been in negotiation prior to this time, or is it not?
 - A. Sure.
 - Q. When did you first start working on this area in -- portion of the San Juan Basin?
 - A. July of 1993.
 - Q. And if there had been communications between the parties prior to July of 1993, you wouldn't be aware of

those? 1 2 Α. That's correct. Are you aware of any proposal for farm out 3 Q. between the parties of the acreage involved in this case? 4 Yes, I recall Richardson requesting a farmout of 5 A. Amoco's acreage in this section. I think it may have been 6 late 1993. 7 And were you involved with that? 8 Q. 9 Α. Yes. 10 And what was Amoco's response to the 1993 farmout Q. 11 request? 12 Α. 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 Α. Yes, sir. 17 0. And it also includes some telephone conversations? 18 19 Α. That's correct. 20 If you would -- I'd like to direct your attention Q. 21 to the entry dated March 7, 1995. 22 Α. Yes. 23 Q. That indicates that you had contacted Richardson and requested a copy of the operating agreement? 24

That they proposed on their well.

25

Α.

1 0. Yes. 2 Α. Yes. Have you ever received that? Q. 3 4 Α. No, sir. Is this, to the best of your knowledge, a 5 **Q.** complete listing of the contacts between the parties 6 7 concerning the development of the northwest quarter of 12? Yes, sir, it is. 8 A. All right, let's go to the document behind that 9 Q. 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? A. Right. 14 And behind that -- ? 15 0. -- is just a list of the names and addresses of 16 Α. the working interest owners that this letter was sent to. 17 And again, this shows that the letter was sent to 18 Q. Richardson Production Company? 19 20 A. Yes, sir. 21 The next document in that page is a summary 0. 22 sheet, again. Was this prepared by you? 23 Α. Yes, sir. And basically what is this? 24 Q. 25 It's simply a time line of, again, relevant oral Α.

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

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

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- Q. Behind that, again, is a copy of the first letter that was sent?
- 11 A. That's correct.
- Q. And the last -- the next page is what?
- A. Is the names and addresses of the parties that this February 14th, 1995, letter was sent to.
- Q. And again, this letter shows it was sent to Richardson Production Company?
- 17 A. That's correct.
- Q. Let's go to the next letter, dated March 13,
- 19 | 1995.
- 20 A. Okay.
- Q. Could you tell me what this is?
- A. Well, Amoco's original well proposal -- in my

 cover letter dated February 14th, 1995 -- was to drill the

 Burnham Gas Com B Number 1 in the southwest corner of

 Section 12 as a Pictured Cliffs well only.

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

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

- Q. And that was then sent to Richardson, was it not?
- A. Yes, sir.

- Q. Ms. Talbot [Jenkins], is the documentation you have just reviewed, to the best of your knowledge, a complete summary of the efforts which have been made to reach voluntary agreement with Richardson and others for the development of this acreage?
 - A. Yes, sir, it is.
- Q. If this Application is granted, does Amoco

 Production Company request to be designated the operator of
 each of the wells involved in these consolidated cases?
 - A. Yes, they do.
- Q. Were the portions of Amoco Exhibit 1, the exhibit booklet which you have just reviewed -- been prepared by you or compiled under your direction?
 - A. Yes, they have.
 - MR. CARR: Mr. Stogner, at this time we move the

admission of the portions of Amoco's Exhibit 1 behind tabs 1 "Application", "Ownership" and "Correspondence", and we 2 move their admission into evidence. 3 EXAMINER STOGNER: That portion of Exhibit 1 --4 Are there any objections before --5 MR. KELLAHIN: No objection. 6 EXAMINER STOGNER: That portion of the exhibit 7 8 under "Application", "Ownership" and "Correspondence" will be admitted into evidence at this time. 9 10 MR. CARR: And that concludes my direct examination of Ms. Jenkins. 11 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 interest for the northwest guarter of 12, you've testified 19 that Manon McMullen has committed on a voluntary basis that 20 21 percentage to Amoco? 22 Yes, sir. Α. 23 0. When did that occur? 24 Α. I'm not exactly sure the date we received it, but 25 we received a signed copy of an AFE, an operating

agreement, from Manon Markham McMullen. 1 Was that before or after the February 14th letter 2 3 that you sent to those parties? Α. After. 5 Q. All right. Was it before or after the filing of 6 the compulsory pooling Application by Amoco for this well? 7 I don't recall exactly when we received it. Α. think it may have been -- Actually, I don't recall if it 8 was before or after. 9 Other than that interest, have you been able to 10 0. 11 persuade any of these other interest owners to commit their interest to an Amoco-operated well for this spacing unit? 12 13 Α. No, sir. When we look at your percentage for the Amoco 14 Q. 15 interest, does that represent a leasehold position you had in this tract? 16 17 A. Yes, sir. All right. It doesn't represent the 18 Q. 19 consolidation of interests pursuant to a well proposal, then? 20 21 A. Right. This is lease acquisition? 22 Q. That's correct. 23 A. 24 Q. So when you started making this well proposal, 25 you already had that percentage?

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

- Q. -- I notice that Manon McMullen has got an interest in this particular well and in this spacing configuration, but you did not indicate whether that party had agreed to participate on a voluntary basis. What is the status?
- A. I didn't indicate it because she has not committed as to this tract.
- Q. So as to this spreadsheet for this well and these two spacing units, none of these interest owners that you solicited have agreed to participate with Amoco?
 - A. That is correct.
- Q. Am I correct in understanding that the basic

 Amoco percentage is a leasehold-derived percentage, and it

 doesn't represent a consolidation of interest based upon a

 well proposal by Amoco?
 - A. That's correct.
- Q. Okay. When we turn to the correspondence, your well proposals are the February 14th letters?
 - A. Yes, sir.

Q. This looks to be a file copy of a letter. 1 2 you retain a copy of the letter you actually sent that shows the Amoco letterhead? 3 A. No, I did not. 4 To the best of your knowledge, this letter Q. 5 6 correctly conforms to the letter you had printed and issued and sent? 7 A. Absolutely. 8 Okay. When you look at the contents of the 9 Q. 10 letter, was it on your own information and belief that you 11 advised these interest owners in the last paragraph that, "Because we must drill this well as a 'package' with five 12 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 Α. Yes. 19 Q. Upon what inform- --20 I wrote that. Α. 21 Ma'am? Q. 22 Α. I wrote that. 23 Yes, ma'am. And did you come to that conclusion Q. on your own? 24

The fact that we needed to drill all of them to

25

A.

be economic came from the engineer. 1 Which engineer? 2 0. Greg Grotke. 3 Α. How do you spell his last name? It's Grotke? 4 Q. G-r-o-t-k-e. 5 Α. 6 Q. And he pronounces it -- ? 7 A. Grotke. 8 Grotke. Is Mr. Grotke the engineer that you Q. dealt with in terms of developing these two wells plus the 9 10 other five that made the package? 11 Yes, sir. Α. And was it based upon his representations to you 12 Q. 13 about packaging these five wells together to make them 14 economic, that you made this statement in this letter? 15 Α. Yes. 16 The AFE that's attached to this letter --Q. 17 Α. Yes. 18 0. -- does that represent your work product? 19 Α. No, sir, Mr. Grotke's. 20 Mr. Grotke, in fact, generated that AFE, did he Q. not? 21 22 That's correct. Α. 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.

-- there is Mr. Hawkins' -- or a letter that is 1 Q. over Mr. Hawkins' signature, dated March 9th. Do you see 2 that? 3 Yes, sir. A. 4 Between March 14th and March 9th, did you have 5 Q. any written correspondence to Richardson with regards to 6 7 either of these two well proposals? Between March 14th and March 9th? 8 9 Q. I'm sorry, I misspoke. It's April 14th, the date 10 of your first proposal. 11 Α. February 14th? I'm still not getting it correct. The February 12 Q. 13 14th date --14 Α. Okay. 15 -- and the March 9th date, between those two 16 dates did you have any written correspondence with 17 Richardson about your well proposals? 18 Α. Other than the February 14th letter? 19 0. Yes, ma'am. 20 Α. We had no other written communication, as I 21 remember. 22 Q. Okay. 23 Α. Oh, I take that back. 24 Q. Okay. 25 Α. We did have a letter to Richardson. I don't

1	recall the	e 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	Α.	That sounds right.	
7	Q.	All right. Let me show you	
8	Α.	Okay.	
9	Q.	this document.	
10		All right, have you seen the document?	
11	Α.	Yes.	
12	Q.	Do you recognize that document?	
13	Α.	Yes, I do.	
14	Q.	What does it purport to represent?	
15	Α.	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	Α.	Yes, sir.	
22		MR. KELLAHIN: Mr. Examiner, this letter is not	
23	yet marked	d as an exhibit.	
24		To keep the record straight, with Mr. Carr's	
25	concurrenc	ce, it is contained in the package of exhibits	

that our land person will testify to, and if we may simply 1 document it by its date I think the record might stay 2 3 straight if we do that. EXAMINER STOGNER: Okay, why don't we do that? 4 You are planning on offering this as an exhibit later on? 5 MR. KELLAHIN: Yes, sir, but I want to show it to 6 7 you now and discuss it with Ms. Jenkins. Is this my copy? 8 EXAMINER STOGNER: 9 MR. KELLAHIN: Yes, sir. 10 EXAMINER STOGNER: Thank you. 11 Q. (By Mr. Kellahin) All right. Other than the March 7th letter that I've just shown you, there was no 12 13 other written correspondence from you to Richardson within the time frame that I've described? 14 15 Α. 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? Yes, sir. 20 A. 21 Q. Is that something that you take care of? 22 Α. No, sir, Mr. Hawkins took care of those. 23 Do you know on what particular date the March 9th Q. 24 letter was sent to these other interest owners?

What day the letter was mailed?

25

Α.

Q. Yes, ma'am.

- A. I don't know that.
- Q. The two well proposals that you have sent on February 14th, one was for a PC-alone well in the northwest quarter of 12, right?
 - A. Yes.
- Q. And the second one you proposed was a PC-standalone well in the southwest quarter of 12; is that not correct?
 - A. That's correct.
- Q. When you look at Mr. Hawkins' application, he's applied for compulsory pooling of a coal gas spacing unit in the west half of Section 12 for a well that you had not yet proposed; is that not true?
- A. Not for a well that we had not proposed, but for a completion in a well that we had proposed in a second formation.
 - Q. And in a spacing unit you have not yet proposed?
 - A. That's correct.
- Q. Did Mr. Grotke come to you originally with his proposals on the AFEs and the prospect for this package of five wells?
 - A. Yes.
- Q. And they were individual PC-alone wells, were they not?

A. Yes.

- Q. Did you have any conversations or discussions with Mr. Grotke about the inclusion of the coal gas in either one of these wells?
 - A. Yes, I did.
- Q. All right. And is that a basis for the change, then, for adding the coal in the well in the southwest quarter of 12?
 - A. I'm not sure what you're asking.

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

- Q. The idea, then, for taking one of these wells and commingling it for a coal gas well with the PC generated with Richardson, did it not?
- A. I don't know what you mean when you say "generated". We contemplated doing it earlier, before Richardson did.
 - Q. Richardson formally proposed it to you first?
- A. Yes.
 - Q. Okay. And in response to that proposal, Mr. Grotke concurred and altered his proposal?
- 24 A. Yes.
- 25 Q. When you received Richardson's proposal for these

wells, did they come to you? 1 2 Yes, via fax. Α. Okay. And as part of that process, then, how did 3 0. you disseminate that information in order to generate a 4 5 response from your company? I took it down to Mr. Grotke to review. 6 7 All right. Again, this is his project as an Q. engineer, and he got that information? 8 That's correct. Α. 9 To what extent is Mr. Hawkins involved in any of 10 0. 11 this at this point? At this point we may have given him information, 12 Α. but as far as evaluation, he's not involved. 13 14 Okay. When we look at your February 14th letter, Q. 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 respond to your proposal? 18 19 Α. No. Did you discuss with Mr. Hawkins when to initiate 20 Q. compulsory pooling? 21 At the time the letter was sent out, no. 22 A. On the March 9th? 23 Q. His March 9th letter? 24 Α.

Yes, ma'am.

Q.

Yeah, but I'm saying at the time that the 1 Α. original proposal went out, we had not decided -- we were 2 going to wait till the appropriate amount of time had 3 passed. 4 In response to Richardson's proposal for these Q. 5 two wells, what conclusion did Mr. Grotke come to? 6 Ask that again. 7 A. 0. Yes, ma'am. The proposals from Richardson to 8 9 Amoco --Α. Uh-huh. 10 -- came through you --11 0. 12 Α. Right. -- were disseminated to him? 13 0. 14 Α. Yes. What, if any, action did he communicate to you in 15 Q. response to their request? 16 17 Α. The initial reaction is to go through the cost 18 and see, you know, how they compared to ours and evaluate 19 that. 20 Other than a cost comparison analysis, did you Q. 21 have any other discussion with Mr. Grotke about any other 22 factor or component in his decision about participating with Richardson or not? 23 24 A. Well, since we initially proposed the well and

because we had a majority interest, that, to us, was a

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

Q. Okay. The Richardson AFEs were lower than the

A. Yes.

Amoco AFEs, were they not?

- Q. Okay. Other than you having a larger interest and having proposed the well first, were there any other factors in your decision about rejecting Richardson as the operator?
- A. Well, we wanted to compare the AFEs, and even though the bottom lines were different -- Amoco's was higher -- we felt there were some costs that may not have been built into their AFEs, that were necessary to do the project that they were proposing.
- Q. Are you speaking from your own examination or from information given you by other Amoco employees?
 - A. Information given to me by other Amoco employees.
 - Q. And who would that employee be?
 - A. Greg Grotke.
- Q. All right, no one else?
 - A. No.
 - Q. I have discovered another copy, Ms. Jenkins, of the letter I showed the Examiner. It's the March 7th letter.
- 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?		
LO	A. There has been discussions with other parties,		
LΊ	but no verbal commitments to join.		
12	We have had discussions with Kerr-McGee, who		
L3	initially told us that they would farm out to Amoco, and I		
L4	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		
L7	that.		
18	And he said he said, No, I wasn't or he		
L9	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		

southwest quarter, the Kerr-McGee that you're referring to?

- A. Yes. And if you look -- they also -- Let's see. That's correct.
- Q. But they don't have interest in the northwest quarter of that section?
- A. I think they -- Yes, they do. See, the interest of Flag-Redfern Oil Company?
 - Q. Yes.

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

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

- Q. Are there any other interests that have had similar exchanges or acquisitions or --
- A. We did have a discussion with Rod -- it says
 Robert Allen Markham, and after discussions with him I
 believe his name is Roderick Allen Markham. Initially he
 had discussions with Mr. Grotke and with me. And his
 discussion with me was, Well, what terms would Amoco take a
 farmout on?

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

1 would eventually be operator and drill the well. EXAMINER STOGNER: Okay, I have no other 2 questions of this witness. 3 Mr. Carroll, do you? MR. CARROLL: Yes, Mr. Examiner. 5 **EXAMINATION** 6 7 BY MR. CARROLL: Ms. Jenkins, this March 7th, 1995, letter, with 8 Q. whom did you consult when you replied to Richardson that 9 10 Amoco has no interest in any type of sale or exchange? This was simply a letter to -- If you'll look 11 Α. over at our correspondence, under the "Correspondence" on 12 the exhibit, you'll see February 23rd, 1995, after 13 14 Richardson received Amoco's AFE, Cathleen Colby called Mr. 15 Grotke, and according to Mr. Grotke, that Cathleen expressed Richardson's opinion that our costs were too high 16 17 and asked if we would be willing to trade some of our acreage in this spacing unit for some other acreage in the 18 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 not interested in any trade of acreage, not that we were 24

not interested in any negotiations of an operating

agreement for the drilling of this well.

- Q. So you and Mr. Grotke, or Mr. Grotke, determined that Amoco had no interest?
 - A. In a trade of --

- Q. In a sale or exchange?
- A. -- this acreage -- or sale, whatever, that we were not willing -- we didn't want to do any trade. We weren't saying that we didn't want to negotiate in good faith a joint operating agreement for Amoco to operate the well.
- Q. All right. I guess I don't understand here.

 According to this letter it appears, from what you just said, that you and Mr. Grotke had the authority to turn down an offer from Richardson but you didn't have the authority to accept on behalf of Amoco.
 - A. I'm not sure what you're asking.
 - 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 --
 - A. Uh-huh.
 - Q. -- and then in the last sentence of that paragraph, you say if there's more discussions that follow any offer, acceptance by Amoco will have to be by somebody 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?

1		BILL HAWKINS,
2	the witne	ess herein, after having been first duly sworn upon
3	his oath,	was examined and testified as follows:
4		DIRECT EXAMINATION
5	BY MR. CA	ARR:
6	Q.	Will you state your name for the record, please?
7	Α.	Bill Hawkins.
8	Q.	Where do you reside?
9	A.	In Denver, Colorado.
10	Q.	By whom are you employed and in what capacity?
11	Α.	Amoco Production Company as a petroleum engineer.
12	Q.	Mr. Hawkins, have you previously testified before
13	this Divi	sion and had your credentials as a petroleum
14	engineer	accepted and made a matter of record?
15	A.	Yes, I have.
16	Q.	Are you familiar with each of the four
17	Applicati	ons filed in these consolidated cases?
18	Α.	Yes, I am.
19	Q.	Are you familiar with the subject acreage?
20	Α.	Yes.
21		MR. CARR: Are the witness's qualifications
22	acceptable?	
23		EXAMINER STOGNER: Are there any objections?
24		MR. KELLAHIN: No objection.
25		EXAMINER STOGNER: Mr. Hawkins is so qualified.

Q. (By Mr. Carr) Mr. Hawkins, have you prepared 1 2 certain exhibits for presentation here today? Yes, I have. 3 A. Q. Let's go to the material contained behind the tab 4 "Well Cost" in Amoco's Exhibit Number 1. 5 A. 6 Okay. 7 Q. Would you identify the first document behind this 8 tab? Yes, the first document behind the tab "Well 9 Α. Cost" is the AFE that Amoco submitted on the Burnham Gas 10 Com A Well Number 1. It's for a Pictured Cliffs completion 11 12 in the -- I believe it's the northwest quarter of Section 12. 13 And this is the AFE that was submitted to other 14 Q. 15 interest owners in the acreage? 16 Α. 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? That's correct. 21 A. Who is Mr. Grotke? 22 Q. 23 Greg Grotke is a petroleum engineer with Amoco, A. 24 His responsibility is primarily to assist in the as well.

drilling programs that we're putting forth in 1995.

And do you work with Mr. Grotke on a regular Q. 1 basis? 2 A. Yes, I do. 3 And in what respect? 4 0. 5 Α. Generally, I attend the drilling meetings that are discussing our drilling plans and provide consultation 6 7 on regulatory affairs, when we may need some special type of relief. 8 Let's go to the next document behind this tab. 9 0. What is this? 10 Again, this is an AFE for the Burnham Gas Com B 11 Well Number 1. It's identical to the A Number 1. 12 13 Pictured Cliffs well to be located in the southwest quarter 14 of the section. 15 0. And these totals are identical to the totals on the previous AFE; is that correct? 16 17 A. Yes, they are. Was this AFE submitted to other interest owners 18 0. 19 in the affected acreage? 20 A. Yes, it was. 21 0. This AFE was for only a Pictured Cliffs completion in the southwest quarter of Section 12, was it 22 23 not? 24 Α. That's correct.

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

25

Q.

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

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

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

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

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

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

- Q. And was this AFE, that reflected completing the well in both the Fruitland and Pictured Cliffs, also submitted to those interest owners who are -- those interest owners in the affected acreage?
 - A. Yes.
 - Q. Now, let's move to the next page.
 - A. Okay.

- Q. What is this?
- A. This page is a comparison of the AFEs that were submitted by Richardson and Amoco for the well to be

located in the northwest quarter of Section 12. 1 Pictured Cliffs well, and we have named that well --2 MR. KELLAHIN: I have an objection here, Mr. 3 Examiner. 4 THE WITNESS: -- the Burnham Gas Com A 1. 5 EXAMINER STOGNER: 6 MR. CARR: Just a minute. 7 MR. KELLAHIN: Mr. Examiner, I object. 8 no proper foundation laid for this witness to qualify as an 9 10 expert in comparing AFEs. And in fact, Ms. Jenkins just 11 testified it was Mr. Grotke who had made this analysis and had come to the conclusion. 12 So there's no foundation yet laid that Mr. 13 14 Hawkins has the requisite expertise to reach conclusions 15 about comparisons. Mr. Carr? 16 EXAMINER STOGNER: 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 Mr. Kellahin, but he didn't object when we qualified him 22 23 initially. And I'll be happy to have Mr. Hawkins testify 24 that he works with them regularly, that he evaluates them

as part of his daily work and that he has looked at the

AFEs for both of the wells that are involved, if that is 1 what would be desired. 2 EXAMINER STOGNER: Mr. Kellahin? 3 MR. KELLAHIN: I'm not going to suggest to Mr. 4 Carr how he try his case. I am telling the Division that I 5 have an objection because he's not laid a proper 6 It's up to him to figure out what he's going 7 foundation. to do. 8 I would just note that in that regard MR. CARR: 9 I will ask those questions of Mr. Hawkins. But when Mr. 10 11 Kellahin had no objections to the qualifications of Mr. 12 Hawkins in the past, we have explained in detail what his work has entailed, but I will ask those questions. 13 EXAMINER STOGNER: Mr. Carr, if you would begin 14 15 to lay a brief foundation for the record. (By Mr. Carr) Mr. Hawkins, have you reviewed the 16 Q. AFEs that have been submitted by Amoco to Richardson and 17 other interest owners concerning the wells that are the 18 subject of this hearing? 19 20 A. Yes, I have. 21 0. Have you also reviewed the AFEs that have been 22 provided by Richardson to you concerning the wells that are

A. Yes, I have.

hearing?

23

24

25

located on the property which is the subject of this

0. Now, in your work -- When did you first become 1 employed as a petroleum engineer? 2 In June of 1974. Α. 3 And by whom were you employed? 4 Q. A. Amoco Production Company. 5 And what was your position with Amoco at that 6 Q. time? 7 Petroleum engineer. 8 Α. And where were you working? 9 Q. 10 Α. In Lafayette, Louisiana. And what were the duties that you were assigned 11 Q. 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. Were you ever called upon in that role to review 18 Q. 19 AFEs? 20 Α. Yes. 21 Were you called upon in that role to ever prepare Q. an AFE? 22 23 Α. Yes. 24 Q. And how many AFEs have you prepared in your 25 career, since you first went to work with Amoco?

I don't have an exact number, but I would say 1 A. it's on the order of a dozen or so. 2 And after your initial assignment, you have held 3 various engineering positions with Amoco at all times 4 thereafter? 5 Α. Yes. 6 7 Q. And in all of those positions have you been called upon to be familiar with AFEs? 8 9 A. Yes. Q. And are you familiar with what goes into the 10 preparation of an AFE? 11 12 Α. Yes, I am. When you look at an AFE, do you know what the 13 Q. items in an AFE are intended to represent? 14 Α. Yes. 15 When you looked at the AFEs that were submitted 16 Q. in this case by Richardson, were you aware of what they 17 18 were representing to Amoco as the costs that were going to be incurred for various items? 19 20 Α. Yes. 21 In your expertise, do you understand an AFE when **Q**. 22 you receive one? 23 Α. Yes. And are you called upon to look at an AFE and 24 Q. 25 evaluate whether or not it's appropriate for your company

to participate in the well?

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

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

MR. KELLAHIN: Same objection, Mr. Examiner.

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

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

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

And for that reason, I object.

MR. CARR: You know, Mr. Stogner, we can sit here all afternoon, but the fact is, we're not offering Mr.

Hawkins' testimony as a person who prepared the AFE.

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

forward and present our case.

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

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

Mr. Carr?

- Q. (By Mr. Carr) Mr. Hawkins, can you identify the page that at the top in the Amoco exhibit book is entitled "AFE Comparison"?
 - A. Yes.
 - Q. Did you prepare this exhibit?
 - A. Yes, I did.
- Q. And what did you look at in preparing the exhibit?
- A. I looked at the AFEs that were submitted both by Richardson Operating Company and Amoco for the Burnham Gas Com A Well Number 1 and identified the significant differences between those two AFEs in terms of costs.
- Q. What was the total cost reflected on the AFE of the Richardson Operating Company AFE for the Burnham Gas Com A Number 1 well?
 - A. I show it here as \$152,117.

And how does that compare to the total cost shown Q. 1 on the Amoco Corporation AFE? 2 Our AFE was for \$216,260. Α. 3 And the total difference? 0. 4 \$64,143. 5 Α. So Amoco's AFE was \$64,143 higher than the 0. 6 7 Richardson? Α. That's correct. 8 Were you able to, looking at these two AFEs, 9 identify areas where there were significant differences in 10 the amount being suggested for various items in the 11 drilling of these wells? 12 13 Α. Yes, I was. There are a number of differences between the two AFEs, so it's difficult to compare line 14 items. 15 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 stimulation costs? 22 23 · A. Richardson's AFE was for \$24,000 for a 24 stimulation.

And for Amoco?

Q.

A. \$43,000.

- Q. Can you tell me whether or not the Amoco \$43,000 figure, in your estimate, is what the current cost for stimulation would be today?
- A. It would depend somewhat on the stimulation that we're proposing. In this case, we've looked at the types of stimulations that we would be using for the Burnham Gas Com A 1, and recently our costs are in fact more on the order of the Richardson estimate, \$24,000.

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

- Q. Looking at the recent stimulation costs for wells of this nature, you said they've come down. Over what period of time?
- A. We've been looking at trying to reduce costs of fracture stimulations over the last year. And in fact, over about the last six months we've seen stimulation costs come down to the \$20,000-to-\$24,000 range on our recent Ruth well completion and -- I believe there's one more. I'd have to look up the name of the well.
 - Q. When was the Ruth well actually completed?
 - A. February of 1994.
- Q. And so is it appropriate to assume the stimulation figure reflected by the Richardson AFE to be more in line with what the actual cost would be?

A. Yes.

- Q. What about the entry for compressor charges?
- A. We could not identify any cost for compressor for the Richardson well. We believe the well will need a compressor to produce efficiently, lower the surface pressure. In fact, we believe that the Richardson wells that are in the area use compressor as well.

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

- Q. Is that \$30,000 in line with the costs associated with installing compression on similar wells currently operated by or completed by Amoco?
 - A. Yes.
- Q. All right, there's an item called "Contingency" where there's a difference. Could you tell me how Amoco comes forward with a contingency item in an AFE?
- A. Well, our contingency is based on 15 percent.

 It's an estimated contingency that would reflect any number of problems you might incur or just some differences in actual costs.
- Q. And so that is the actual figure that you use across the board, or the way you derive a contingency figure within Amoco?
 - A. That's correct.
- Q. If you were successful in this case and submitted

1 an AFE with an order approving the pooling of the acreage and designating Amoco the operator, would the stimulation 2 charges in that AFE be adjusted to reflect the most recent 3 costs? 5 A. Yes, they would. Now let's go to the next page, "AFE Comparison, 6 Q. 7 Burnham Gas Com B Number 1 Well". Do you see that? 8 Α. Yes. Have you reviewed the AFEs, both of Amoco and 9 Q. 10 Richardson Operating Company, for the wells that are being 11 proposed in the southwest quarter of Section 12? 12 A. Yes, I have. And does this exhibit, like the page before it, 13 14 compare to certain cost differences reflected in those 15 AFEs? 16 A. Yes. How much was the Amoco AFE in excess of the 17 18 Richardson Operating Company AFE? 19 Α. \$66,781. 20 Q. Again, you have identified three areas where there is a difference in the two AFEs; is that correct? 21 That's correct. 22 Α. 23 Let's go to the bottom one, the contingency. Q. Again, that is a 15-percent charge for gross well costs, 24

and that's how the Amoco \$34,000 figure is obtained; is

that right?

- A. That's right.
- Q. And we go, then, up the list, the compressor cost again. You don't find compressor charge in the Richardson AFE, and you have estimated \$30,000 would be necessary for the Amoco well?
 - A. Yes.
 - Q. As to stimulation, would you review that, please?
- A. Again, we've looked at the Richardson cost of \$48,000 and Amoco's estimated cost, \$70,000.

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

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

- Q. And if you were successful in this case and required to submit an estimate of well costs with an order to those nonparticipating interest owners, is it correct that Amoco would use the most recent current stimulation figure?
 - A. Yes.
- Q. Now, these are just AFEs, these are just authorities for expenditure?
 - A. That's correct.

- Q. They're estimates; is that correct?
- A. They are estimates.

- Q. Are the actual charges that the non-operator would have to bear, the non-joining operator, would be a share of the actual expenses?
 - A. That's correct.
- Q. Let's go to the information behind the tab called "Overhead and Risk".
- A. Okay. I've prepared an exhibit here entitled "Compulsory Pooling", and it has the two remaining items I think we need to settle on today.

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

- Q. Mr. Hawkins, how do these figures compare with the Ernst & Young survey figures for wells to this depth in this area?
- A. The -- We've looked at the recent Ernst & Young figures, and the drilling costs are -- our costs are actually lower than the Ernst & Young figures. I believe they're -- I have something here to look at, let me just refresh my memory.

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

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

- Q. Do you request that the figures set forth on this exhibit be incorporated into any order resulting from this hearing?
- A. Yes, we would. And in fact, we would ask that the supervision -- the overhead rates allow to escalate according to a COPAS escalation factor each year.
- Q. Is that COPAS escalation factor included with the accounting attachment to the operating agreement which has been prepared for this property?
- A. Yes, it is. On the page just behind this "Compulsory Pooling" page there's a copy of the COPAS, on the page that discusses overhead charges. And you can see about halfway down the page the same charges that I've identified.

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

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

annually, I should say.

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- Q. Mr. Hawkins did you review the Applications that were filed by Richardson seeking compulsory pooling in each of these cases?
 - A. Yes.
- Q. Did you see the risk penalties that were being sought in each of those Applications to be assessed against any interest owner who wasn't voluntarily in the well?
 - A. Yes, I did.
 - Q. And do you recall what those were?
- 11 A. Yes, they were 200 percent.
 - Q. Do you disagree with assessing the maximum penalty authorized by this Division --
 - A. No, I do not.
 - Q. -- against any nonparticipating interest owner, no matter who prevails?
- 17 A. No, that's right, I do not.
 - Q. And what are you recommending as the appropriate risk penalty to be assessed if Amoco is successful in this matter?
 - A. For the Fruitland Coal, costs for that portion of the well, in the Burnham Gas Com B well, 156 percent, which I believe is the standard that the NMOCD has been using over the last few years.

For the Pictured Cliffs well and completion in

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

- Q. And why should we assess a penalty in this case if someone is not participating in the well?
- A. Well, the parties who are paying for the well obviously are taking all of the risk for this.

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

- Q. In your opinion, is it possible that any of the wells that are involved in this hearing could be drilled and in fact would not be an economic success?
 - A. Yes, I think that could be.
- Q. Does Amoco request to be designated operator of each of the proposed wells?
 - A. Yes.

- Q. In your opinion, will approval of this
 Application and designation of Amoco as operator and the
 drilling of development of these tracts as Amoco has
 proposed be in the best interest of conservation, the
 prevention of waste and the protection of correlative
 rights?
 - A. Yes.
- Q. Were the portions of the exhibit book behind the last two tabs prepared by you or compiled under your

direction?

A. Yes, they were.

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

EXAMINER STOGNER: Are there any objections?

MR. KELLAHIN: No objection, Mr. Examiner.

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

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

EXAMINER STOGNER: Thank you, Mr. Carr.

Mr. Kellahin, your witness.

MR. KELLAHIN: Thank you, Mr. Examiner.

CROSS-EXAMINATION

BY MR. KELLAHIN:

- Q. Mr. Hawkins, as part of your risk analysis for your last statements to Mr. Carr, did you examine the production or the productivity of any of the Pictured Cliff wells within a mile of either of these two proposed wells?
 - A. Yes, I have.
- Q. As part of your risk analysis for the coal gas well in the southwest portion of the section, did you, for that reservoir, examine for the location and productivity

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

- A. I did not look at any Fruitland Coal well.
- Q. How far do we have to go from either of these two well proposals to have a Pictured Cliff well that is operated by Amoco?
- A. Pretty far. The unit to the south is operated by BHP. The wells that are immediately next door, I know Richardson has some operations in the Pictured Cliffs. I'm not sure how far our wells -- how far we'd have to go. However, we do operate probably over 1000 Pictured Cliffs wells.
- Q. As part of your analysis and comparison of the AFEs, did you also look into Mr. Grotke's conclusion about the economics in packaging five of these PC well proposals as a package?
- A. My understanding on that is that we were trying to improve the economics by including five Pictured Cliffs wells to be drilled as a package, or six, and that was -- Really, the key there is to make these wells the most economic ventures that we can.
- Q. My question for you: Does Amoco's AFE, as we see it in the exhibit book, recommend the economic advantage that Mr. Grotke perceived by packaging five PC wells together?
 - A. I believe it does.

O. That was his method?

- A. That was one of the things he was looking at to drive the cost down, that's correct.
- Q. Okay. As part of your analysis, did you attempt to authenticate the reliability of his AFEs by looking for PC wells that you had drilled and operated recently, to see what actual costs did in comparison to his proposed AFE costs?
 - A. Yes, I did.
 - Q. And as a result of that, what did you conclude?
- A. Well, I concluded that the recent PC wells that we have drilled have been deeper than this. These are about 1200-foot wells. So it would be difficult to take a recent cost of a well such as the Ruth well and make a direct analogy to what's being proposed here.

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

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

- 0. All right. Let's turn, then, to the first page 1 of the "Well Cost" tab --2 Okay. 3 A. -- in your exhibit book, and just for 4 5 illustration, let's start there. This is the one up in the northwest quarter, and it's the PC stand-alone; is that 6 7 correct? Α. That's correct. 8 Q. What have you concluded to be the method by which 9 the drilling costs have been calculated? Is this a day 10 11 rate or a footage rate or some combination? 12 Α. 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. All right, a coiled tubing unit? 15 Q. That's correct. 16 Α. 17 And what will that do? 0. 18 Α. 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.
 - STEVEN T. BRENNER, CCR

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

Well, coiled tubing is simply a spool of tubing

(505) 989-9317

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Q.

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that can be used to lower the drill bit into the well and 1 to -- or you could use it as a workover mechanism to 2 displace fluids up and down the wellbore. 3 Q. Do the cost components of the two AFEs proposed by Amoco include the application of that technique to these 5 wells? 6 7 A. Yes, they do. 8 Q. You've made reference to slimhole technology. Define that for me. 9 I would say it is using wellbores that are 10 A. smaller than, say, 4-1/2-inch casing. 11 Mr. Grotke was anticipating using 2 7/8, if I'm 12 0. not mistaken. Do you have any information contrary to 13 that? 14 15 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 3-1/2inch casing, drilling a 4-3/4-inch hole with 3-1/2-inch 18 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 All right. Is that an acceptable method for Q.

We think that it can be done, and we think that

completing a PC well with the addition of the Coal?

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Α.

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

- Q. Have you done it anywhere?
- A. We have not.

- Q. This is an experiment in this project?
- A. Well, I don't know if I'd call it an experiment.

 It had been done by drilling companies, and I think that we would be using a drilling company that would be familiar with this. So in that respect --
- Q. We don't have a field example in the PC, in the San Juan Basin, where this has been done?
 - A. We have not.
- Q. In terms of the compression, there's an item of difference here for the Examiner's consideration. I want to understand what you and Mr. Grotke have anticipated in terms of compression and the cost.
 - A. Okay.
- Q. Are you anticipating buying a new compressor and sharing that cost with the operators, or are you going to rent it or lease it to the other working interest owners? What's the concept?
- A. My understanding is the concept that it would be purchased and it would be owned by the working interest owners of the well.
 - 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? As far as I understand. 3 Α. I'm curious about the overhead rates. Q. All right. You've got some proposed overhead rates in here. 5 Does Amoco charge the working interest owners for 6 7 items in addition to the overhead that represent reimbursements for what I would characterize to be a 8 district office charge? 9 I think we charge the direct salaries of 10 11 supervisors in the field, and all others are charged as an overhead rate. 12 So when we --13 0. All right. Excuse me, I mean -- not all others. 14 Α. 15 other salaries and other costs would be included within some type of overhead charge. 16 17 0. All right, and that is an overhead charge 18 attributable back to the wellhead, in addition to the overhead charges we talked about that are normally in these 19 20 pooling orders? I -- Well, we would treat it as a direct charge. 21 Α. 22 Q. That's what I'm saying. You and I are saying the

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

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same thing.

A.

Q.

Okay.

69 addition to --1 -- to the overhead charge. 2 -- this overhead number? 3 O. 4 That's correct. 5 0. Do you know what that direct charge would be for these two wells? 6 7 A. I don't know specifically what that portion of the direct charge would be. I think we could make some 8 estimates as to what direct charges might be. 9 If I estimated it was about \$300 for each of Q. 10 11 these wells for direct costs, would that be a fair estimate? 12 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 these wells, that would be in excess of that. 16 17 0. Did you and Mr. Grotke price out the compressor? I did not price out the compressor. 18 I just asked 19 him what was the price of the compressor. 20 He's only got \$30,000 down here for a compressor. Q. 21 Α. That's right. 22 Q. Do you have a bid or a price for a compressor at

- \$30,000? I do not know.

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Α.

25 Q. When we look at the drilling portion of the AFE, the \$36,000, now, how is that to be determined? Is that a daily rate or a footage rate?

- A. I don't think that is a daily rate or a footage rate. I think it is a charge for the coiled tubing unit services. I know that we are expecting to be on the rig about two days, but I'm not -- I couldn't tell you that that was a footage rate. I don't think that's the way that's set up with the coiled tubing unit.
 - Q. The anticipated drilling time is two days?
- A. The time that we would be on the well for -- actually drilling the hole, would be about two days.

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

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

- Q. Okay. The completion portion of the costs, what -- If I'm looking at the right AFE calculation for this well, it appears as if your completion rig costs are about \$3100?
 - A. I'm not sure where you're looking.
 - Q. Well, perhaps it's easier to ask you the direct

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

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

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

- Q. Do you anticipate that either one or both of these wells are going to be hooked into your Jupiter computer well automation system?
 - A. I suspect that they will be, yes.
- Q. And what is the approximate cost per well to participate on that system?
 - A. I don't really know what that cost is.
- Q. Describe for me the completion technique that you and Mr. Grotke anticipate for the downhole commingling of the well that will be the downhole commingled well.
 - A. Can you say that again?
 - Q. Yes, sir, perhaps I'm ahead of myself.

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

gas, is going to be a downhole commingled well?

A. Yes.

- Q. It's not going to be a dual?
- A. That's right.
- Q. All right. How will you complete it for downhole commingling production?
- A. It will be completed with both zones being perforated and fracture stimulated through the 3-1/2-inch casing and then producing up through a single string of tubing.

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

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

- Q. Do you and Mr. Grotke plan to apply the coiled tubing and the slimhole technology to the other three wells in the five-well project?
- A. That's my understanding, yes, that this would be used, move the coiled tubing from one location to the next to drill those and kind of save on some of the move-in/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

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

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

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

- Q. And the production would be broke out, I would assume --
 - A. That's correct.
 - O. -- somehow?

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

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

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

You know, right now I think we're just assuming that the 15 percent is a reasonable estimate of the contingencies that would be needed to be covered. How do I get the contingency for the Burnham Gas Com A well Number 1, \$28,000? Which figures do I add into that? Well, the way I got it, I had to back into it, Α. because it's 15 percent of the total costs before you add the \$28,000. If you take \$216,000 and subtract the contingency out, you get -- I don't have my calculator with me, but you get about \$188,000. And if you take 15 percent of that, you'll get pretty close to \$28,000. That's probably rounded off. So that's 15 percent of the total over what? Α. It's 15 percent of the total costs, before you --I mean, you have to back it out of the \$216,000, the contingency portion, to calculate 15 percent of that number prior to the contingency. EXAMINER STOGNER: Okay. Any other questions of Mr. Hawkins? MR. CARR: No questions. MR. KELLAHIN: I have a follow-up question, if I may, Mr. Examiner.

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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?
- 25 A. That's correct.

I mean, this one well? 0. 1 That's correct. Α. 2 MR. KELLAHIN: Thank you. 3 EXAMINER STOGNER: Any other questions of Mr. 4 Hawkins? 5 He may be excused. 6 7 Let's take a 20-minute recess from this one. the meantime, during this recess, I'm going to call the 8 9 nomenclature case, 11,272. 10 (Thereupon, a recess was taken at 3:09 p.m.) (The following proceedings had at 3:35 p.m.) 11 EXAMINER STOGNER: Hearing will come to order at 12 this time. 13 Mr. Kellahin? 14 15 MR. KELLAHIN: Mr. Examiner, I'd like to call my first witness, Ms. Cathy Colby. She spells her last name 16 17 C-o-1-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 Ms. Colby, for the record would you please state 24 your name and occupation? 25 My name is Cathleen Colby. I'm a certified Α.

professional landman.

- Q. You're going to have to keep the volume of your voice up. The microphone doesn't help you; that's for the court reporter. And we've got the hum of the air conditioner in here, so you really have to shout at us.
 - A. Okay.
- Q. On prior occasions, have you testified before this agency?
 - A. No, I have not.
- Q. Summarize for us, if you will, briefly, your educational background that qualified you as a professional petroleum landman.
- A. I have a degree from the University of Colorado,

 Denver, in mineral land management.
 - Q. In what year did you obtain that degree?
- A. In 1986.
 - Q. And subsequent to that, have you worked in that professional field?
 - A. Yes, I have. I've worked in the oil and gas business since 1979. I have worked in the capacity of a landman most of that time and -- continuously to current.
 - Q. And what is your employment with the Applicant, Richardson Operating Company?
- A. I am the land manager at Richardson Operating
 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

have put a photograph on the display board.

With Mr. Carr's indulgence, we will have this 1 2 duplicated after the hearing, Mr. Examiner. It represents our only copy at this point. 3 It is marked as Applicant -- Richardson Operating Company, as Applicant Exhibit 1. 5 For the record, before we start talking about the 6 7 display, describe for me the source of the photograph. I obtained this photograph from the U.S. 8 Α. Department of Agriculture. 9 All right, and what is the vintage of the 10 0. 11 photograph? 12 Α. It was taken in 1991. Have you utilized it in your work and bid on the 13 Q. surface of this area to a sufficient extent that you can 14 determine whether this photograph is accurate and correct 15 at the time it was taken? 16 17 A. Yes, sir, I have. And it appears to be accurate. Q. All right. And for your purposes, then, did you 18 prepare the overlay that's on the display? 19 20 A. Yes, I did. If you'll take the pointer and approach the 21 0. 22 exhibit, let's identify for the Examiner some of the identifying features in this area. 23

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Okay.

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

-- stand in front of me and orient the Examiner 1 0. so that Mr. Carr may also see. 2 First of all, let's find Mr. Tom Dugan's house. 3 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 it is and how you've identified it. 6 7 You can tell by the general shape of the structure that that's where it is. This is South Side 8 River Road, this is the dirt road that goes right up into 9 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 --THE WITNESS: Yes. 14 15 EXAMINER STOGNER: -- and that square denotes 16 Section 12. 17 THE WITNESS: Yes. 18 EXAMINER STOGNER: And then that square is divvied up into four equal parts, being the northeast, 19 northwest, southwest and southeast quarters? 20 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.

Dugan's house over on the northeast -- southwest of the 1 northeast; is that correct? 2 THE WITNESS: That's correct. 3 EXAMINER STOGNER: Okay, let's reference the 4 quarter sections, if you would. 5 I'm sorry, Mr. Kellahin. Go ahead. 6 7 (By Mr. Kellahin) Have you accurately determined Q. the location of the section as it's displayed on the 8 9 photograph? Yes, the overlay is a photocopy of the surface 10 ownership map obtained from the County Assessor's office, 11 and the tracts are easily identified. 12 Q. All right. In terms of subdividing Section 12, 13 14 then, what did you do with the overlay? I marked on the overlay the drilling blocks that 15 Α. would apply to PC wells, and I located the two existing 16 Dakota wells and drew the 200-foot radius around each of 17 those existing wells. 18 Insofar as the surface use is concerned, for the 19 Q. Richardson proposal, you have targeted an area within a 20 200-foot radius of a certain point, have you not? 21 That is correct. 22 Α. 23 How have you identified each of those starting Q. points on the display? The center of the 200-foot-radius 24

circle is where?

A. On the existing Dakota well.

- Q. All right. And what is the purpose to scribe an area with a 200-foot radius around that particular well in each instance?
- A. Our proposal is to locate our wells on the existing pads, to minimize surface disturbance. This is a common practice in the area. We have a well in the southeast quarter, our 12-2 well, where we share a pad with Conoco.

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

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

- Q. All right, and if the Examiner should approve Richardson as the operator, then you'll have that exact location staked, and that staking information, then, would be part of the approval process, and we would specifically know where the well would be?
 - A. That is correct.
- Q. All right. Let me ask you to return to your seat.

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

A. Yes, I am.

- Q. And have you made a search of information and taken that information and reduced it to a display form?
 - A. Yes, I did, and that is marked Exhibit 2.
 - Q. Describe for us how you prepared Exhibit 2.
- A. We have a base map that was put together by a consulting geologist, and on that map more current wells have been noted.

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

- Q. When we look at the display, if we start in the northwest corner, count down one row of sections from the top and count over one row from the left. You'll get to Section 12?
 - A. That is correct.
- Q. All right. The color code indicates yellow for what, now?
- A. Yellow are Richardson Operating Companyoperated -- or wells that we've drilled.
- Q. All right. How far away do you have to go, based upon your search, before you find an Amoco-operated PC well?

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

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

- Q. How would that be illustrated?
- A. Where the wells are spotted together.
- Q. When we look at Section 12 in the east half of the section, what has occurred in terms of the PC development in the east half of this section?
- A. Richardson Operating Company has drilled two wells that produce from the Pictured Cliffs formation. One of them is also a downhole commingled Fruitland Coal producer.
- Q. All right. Let's put that display aside and let's look specifically, then, at each of the spacing units accompanied by your calculation of the various interest owner percentages.

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

A. The entire map shows the west half of Section 12.

The spacing unit for the well that Richardson has proposed is -- the Pictured Cliffs spacing unit is the portion that

is colored.

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There is a -- two leases have been contributed.

One is a fee lease owned by Amoco. The other is a federal lease owned by Richardson, Christmann, Markham, McMullen, Redfern and Kerr-McGee.

- Q. All right. When we look at Exhibit 3, then, we're looking at the PC portion for the spacing unit, which would consist of the southwest guarter of 12?
 - A. That is correct.
- Q. Have you tabulated a breakout of the working interest ownership percentages and the identify of those percentages that correspond to this spacing unit?
 - A. Yes, I have.
- 14 Q. How will we find that?
 - A. That's on the next page.
 - Q. All right. Starting at the top, then, you've listed Richardson and then you've shown the following interest owners?
 - A. That's correct.
 - Q. And are you satisfied that this information is true and accurate?
 - A. Yes, to my best ability, I think it is correct.
- Q. All right. Let's turn now to the next spacing unit.

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

here?

- A. This is the same wellbore that we were just looking at, but it is the ownership of the Fruitland Coal formation. The spacing unit is the entire west half of Section 12.
- Q. In addition to the information shown on the first page of that display, what have you appended to that exhibit?
- A. The ownership of the -- division of ownership of everyone in the spacing unit.
- Q. Okay. Let's go to the next one. If you look at Exhibit 5, what are we looking at here?
- A. This is the second well that Richardson has proposed. It is a Pictured Cliffs formation well. The spacing unit consists of the northwest quarter of Section 12.
- Q. And again, have you followed the same method and attached to the first page of this display a breakout of the working interest identity and their percentages?
- A. Yes, I have.
- Q. Okay. Let me direct your attention to Exhibit
 Number 6.

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

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

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

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

- Q. All right. So your method in preparing Exhibit
 Number 6 was to prepare a chronology, and for each major
 event in the chronology you have attached the written
 documentation that supported that entry?
 - A. That is correct.

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

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

A. When we're speaking specifically of the west half of Section 12, in January of 1993 Richardson made a proposal to Amoco requesting a farm-in of their acreage.

It was a large multi-well drilling package. We were requesting 30 days between wells.

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

Q. Why were you seeking to do that?

- A. We had been -- In November and December of 1992, we had just drilled seven wells to the east of here, and this was an area that we were systematically and carefully trying to develop. We were very interested in the area, and we were making efforts to continue drilling wells based on our geology.
- Q. Were these Pictured Cliffs wells or wells from some other formation?
- A. The first seven wells that we drilled were Fruitland Coal wells.
 - Q. How did you continue with that effort, then?
- A. In November of 1993, another letter went to Amoco -- Well, a phone call was made first, asking the availability.

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

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

Q. Summarize for us your efforts with respect to

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

- A. I made a follow-up call to Amoco and talked to Mrs. Jenkins, inquiring of Mrs. Jenkins -- inquired about the review of our proposal. She said it was under review and that -- She said she would get back to me.
- Q. What then transpired in your efforts to pursue cooperation by Amoco so that you, on behalf of Richardson, could drill and operate PC wells in Section 12?
- A. Richardson became involved in litigation with Amoco in another state, and we were advised by our attorney to cut off all communications with Amoco. So I did not pursue our proposal.
 - Q. All right. Was that other dispute resolved?
 - A. It was resolved in settlement.
- Q. All right. At -- When was that resolved, and when did you then commence any efforts to further acquire interest in this area?
 - A. I believe it was resolved in August of 1994.
- Q. When, then, did you next commence efforts to acquire additional interests within this particular area?
- A. I had been talking to the other owners continuously.

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

to buy the interest of the estate of John J. Redfern, Jr.

And I had ongoing conversations with the other owners

within the spacing units.

- Q. All right. Did you receive a well proposal from Amoco that was dated February 14th of 1995 for two wells in the west half of Section 12?
- A. Yes, we got two letters proposing two Pictured Cliff wells.
- Q. What, if anything, did you do in response to receiving those proposals?
- A. I -- One of the things I did was to give the proposals -- well proposals and the AFEs to Mr. Richardson for review.
- Q. As a result of that review, did you have any other contacts with Amoco?
 - A. Yes, I did. We knew that their AFEs were high after reviewing them. We also, from past experiences, knew what it was like to be a non-operator in a well that Amoco operates.
 - Q. What was that like?
- A. Their operating costs are very high. That's -We had managed to --
 - MR. CARR: I'm going to object to this. There's no foundation for this witness as a land person being able to make statements as to whether or not well costs are high

or not, and --1 MR. KELLAHIN: I'm asking her for information, 2 3 for the background for her statement as to why she believed she could not reach a settlement with Amoco for them, for 4 5 Amoco, to operate a well. I think it's proper for this land witness to 6 7 testify on the basis for her belief concerning her 8 negotiations with Amoco, Mr. Examiner. MR. CARR: I don't think she's qualified to make 9 a statement about whether AFE costs were high or not, Mr. 10 11 Stogner. 12 I'm not going to keep us here all afternoon. I'll withdraw the objection. 13 14 EXAMINER STOGNER: Thank you, Mr. Carr. Mr. Kellahin? 15 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 Α. Our first choice is to continue our systematic development in the area. That's what we had been working 20 toward. 21 22 When it appeared that -- Currently, at the time 23 we got the Amoco AFEs, we did not feel that we had a standing, a large enough standing to submit -- You know, 24

that's why we had not yet submitted well proposals and AFEs

to the other parties.

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

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

- Q. With whom did you speak when you had that conversation?
- A. I spoke with Greg Grotke. He's not the first one I called.
- Originally, I called Ms. Jenkins; she was out of town.
 - I called John Hashe, who was the attorney-in-fact that signed the operating agreement. He was out for several days.
- So I called Greg Grotke because his name was on the AFE.
 - Q. And what if any response did you receive from Mr. Grotke with regards to that option?
 - A. He was very enthusiastic about the proposal, or the idea, and said, Let me check and see what we own in the area and I'll get back with you.

Q. All right. What happened then?

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

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

- Q. Did Richardson's proposal to Amoco include a proposal concerning the coal gas reservoir in the west half of Section 12?
- A. Yes, it did. The Fruitland Coal, you're allowed to drill in the southwest or northeast. Our southwest proposed well was a downhole commingle Pictured Cliff-Fruitland Coal.
- Q. Your chronology then goes on and describes your further discussions and negotiations with Amoco and other parties?
 - A. Yes, it does.
- Q. All right. Did you receive any response from Amoco concerning your AFE proposal that you sent to them on March 6th?

We got a letter in the fax, followed up by a hard 1 Α. copy on March the 7th, which was a response to two things. 2 It closed all negotiations to the acreage trade, 3 possible acreage trade, we had previously discussed. 4 And it said that they would respond to us soon in 5 writing regarding our well proposals. 6 What's the next thing you received from Amoco? 7 Q. We received a copy of Amoco's Application for Α. 8 force-pooling. 9 Let's turn to the next topic. If you'll look Q. 10 with me at Exhibit Number 7, identify and describe for me 11 12 what is presented to the Examiner in Exhibit Number 7. Α. Exhibit Number 7 is Richardson's proposed 13 14 operating agreement for the well to be located in the 15 southwest quarter of Section 12. And Exhibit Number 8? 16 0. 17 Exhibit Number 8 is a similar operating Α. agreement, however it covers the Pictured Cliffs formation 18 only, for the well to be located in the northwest quarter 19 of Section 12. 20 21 Q. Have you also compared Amoco's proposed operating 22 agreements to the Richardson proposed operating agreements? Yes, I have. 23 · A. 24 Q. As a result of that comparison conducted by you,

can you summarize what are the major differences, if any,

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

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

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

- Can you summarize for me in a brief fashion what Q. the major points are of difference in your examination of the operating agreements?
- If you look on page 5 of the operating agreement, Α. under Article V., D-8, there is a standard provision that upon request of any consenting party, the operator will furnish estimates of current and cumulative costs incurred for the joint account. Amoco has deleted this provision.
 - Q. All right. Any other points of major difference?
- A. On page 6, the standard provision is, once that a procedure has been proposed, that there is 90 days after expiration of the notice period in which to commence operations.

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

Other items? All right. Q.

- A. On page 7, Amoco has made a footnote to refer to a page 7-A. We did not get a copy of a page 7-A, so we don't know what that provides.
 - Q. All right, what else?
- A. On page 8 -- Oh, there's a few -- a couple of small typos on the Amoco operating agreement, on page 8 at the bottom, which we would want clarification on before we accepted the verbiage.
 - Q. All right.

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

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

- Q. When you examine these kinds of documents as a landman, are these matters of significance, important to you in determining whether you recommend to Mr. Richardson that he sign or not sign an operating agreement?
- A. Well, they are, because -- Say, for instance in the case of having a rig on standby over a weekend, could cost several thousand dollars, where a telephone call to somebody at home can get an answer and you can proceed with your operation or procedure.
 - Q. What have you recommended to Mr. Richardson with

regards to his execution of the Amoco joint operating agreement?

- A. As written, it would not be acceptable.
- Q. All right. Let's go to your efforts to consolidate the interest owners that were otherwise not committed between the parties when these proposals commenced.

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

- A. Okay. On April the 7th, I got a call from a landman at Kerr-McGee. He expressed to me that he had just talked to -- he had just called the landman at Amoco and was going to tell us the same thing, which was that Kerr-McGee was making a voluntary election to make assignment of their interest to whichever party the OCD recommended would be the operator of the two spacing units.
- Q. Apart from the Kerr-McGee interest, where that party decided to stand on the sidelines, have you been successful in your efforts to consolidate all the remaining uncommitted working interest owners, to participate with Richardson?
- A. Yes, I have. I have executed AFEs from all other parties, excluding Amoco.
- Q. All right. Do -- Ms. Jenkins says she had an AFE 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	Α.	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	methodolog	gy 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 uncomm	nitted 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 propo	osed?
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 over	rhead.

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.

102 If I understand this exhibit, what you're 1 testifying to is that if Richardson is successful, that the 2 wells will in fact be located on the existing well pads in 3 the west half of that section? A. That is what our proposal is. 5 And that those wells would then be located, then, 0. 6 7 on the pads that were constructed by Amoco for the drilling of Dakota wells in that acreage? 8 They would be on the existing well pads and 9 A. within a distance to minimize any interference with Amoco's 10 current operations. 11 Have you staked a location out there yet? 12 Q. A. No, we have not. 13 Do you know that the Amoco-proposed location has 14 Q. in fact been staked? Did you know that? 15 No, I did not. 16 Α.

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

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- A. Well, Amoco's footages proposed were very close to their existing wells, 28 feet, 52 feet away. We're proposing to get a distance much greater than that.
- Q. Are you, or are you just proposing to be anywhere within that 200 radius?
 - A. We're proposing a location that would work for

all parties. 1 And you're saying -- Is it your testimony that 2 0. the Amoco location will not? 3 I don't know about the Amoco location. 4 Α. 5 0. Is there, to your knowledge, any disagreement between the parties as to where these wells should be 6 7 drilled? Is that an issue in this case? I don't believe geologically that it's an issue. Α. 8 Q. 9 Okay, I'm just trying to find out what we're not 10 going to be fighting about. 11 Α. Okay. 12 Q. If we look at Exhibit Number 2, was this plat 13 prepared by you? 14 Α. Yes, sir. 15 0. And basically this shows Fruitland Coal and 16 Pictured Cliffs development in the portion of the Basin that's at issue in this case; is that right? 17 A. Yes, sir. 18 19 You would agree with me, would you not, that Q. Amoco, in fact, operates hundreds of Pictured Cliff wells 20 21 in the Basin? 22 Α. I believe they do. I don't know for a fact. 23 Q. But they have drilled a number of wells in the

Basin? You would agree with me that Amoco has, correct?

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A.

I believe so.

Q. We're not making a suggestion here that, if Amoco 1 should prevail, that they don't have the ability to drill 2 the Pictured Cliff in the Fruitland-Pictured Cliff well? 3 That's not what you're suggesting, is it? 4 I'm not suggesting anything. 5 A. And you're not suggesting that they don't have 6 Q. 7 the ability to produce and to operate the well if they were 8 awarded the operatorship in this proceeding? This map is a mere representation of the wells 9 Α. that Richardson has drilled, and I tried -- I attempted to 10 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 operations or drilling in the immediate area, and was 14 15 unable to find some. 16 That's the extent of what I tried to represent on 17 this map. And when you say Amoco's operations, you were 18 Q. limiting that to Pictured Cliffs and Fruitland Coal, were 19 you not? 20 21 Α. That's correct. Because if we go in the nine sections around the 22 23 area of interest, there are a number of squares, are there

Right, Dakota wells.

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not?

Α.

- Q. Those are Dakota wells?
- A. Right.

- Q. Would you agree with me that in excess of 20 of those wells in the offsetting nine sections are Amoco-operated Dakota wells?
 - A. I have no idea on the Dakota wells.
- Q. Do you know if Amoco operates any Dakota wells within the nine sections offsetting the acreage?
- A. I am aware of the two Dakota wells in the west half of Section 12 that Amoco operates.
- Q. And do you have any idea of who any of those other Dakota wells are drilled or -- have been drilled or operated by?
 - A. I have not looked at any of the Dakota wells.
- Q. Okay. So when we prepared this exhibit, we were only looking at certain formations, not all operations in this portion?
- A. That is correct.
- Q. If I look at your Exhibits 3, 4 and 5, it's essentially an ownership breakdown in the various spacing units that would be dedicated to the wells at issue in this case, right?
- 23 | A. Yes, sir.
- Q. And the only interest that you now say is not committed to Richardson is that of Kerr-McGee Corporation;

is that right?

- A. Oh, you could put it another way. You could say that if Richardson was selected to operate these two proposed wells, that Amoco would be the only one that would not be supportive.
 - Q. Has Kerr-McGee agreed to participate in the well?
- A. They have agreed to assign their interests to whichever operator the Commission chooses.
- Q. So it is your opinion that there is no need to include them in the pooling action?
 - A. That is correct.
- Q. If they decline to assign later, then of course that interest would be outstanding as to Richardson, and you'd have to come back and pool them again?
 - A. Yes.
- Q. In the southwest quarter, with all the interest owners committed to Richardson that are not committed to Amoco, we have a 50-50 split in the working interest ownership; is that not right?
 - A. For the Pictured Cliffs, that is correct.
- Q. And if we go to the west-half unit for the Fruitland Coal and we credit everything in the west-half unit to Richardson that isn't committed to Amoco, Amoco has 66.6 percent and Richardson has the balance of that --
 - 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.
LO	Q. And was it after that date that you actually
11	filed for hearing and announced what your overhead and
L2	administrative costs would be for a well on this tract?
L3	A. Yes, it was.
L4	Q. So your operating costs or your overhead costs
L5	were less, but they were proposed and developed a month
L6	after you had received those from Amoco?
L7	A. That is correct. And in addition, they're the
L8	same that we use on our wells in the east half of Section
L9	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

correct?

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- A. Yes, sir.
- Q. And that there were certain matters in the operating agreement that were unacceptable to you?
 - A. Yes, sir.
- Q. Now, you were concerned about Article V., D-8. That was one of the things you identified; isn't that right?
 - A. Yes.
 - Q. You also indicated there was a missing page?
- 11 A. Yes.
- Q. Did you contact Amoco to discuss the provisions of Article V., D-8?
- A. No, I didn't. When we got that, we were told that Amoco would respond in writing to our AFE and well proposal.

The next thing we got was notification by a copy of a letter to the Commission that we were being force-pooled. We felt that we were put in an adversarial position.

- Q. And my question was, you didn't contact Amoco about any of the provisions in this agreement with which you disagreed?
 - A. We had no contact with Amoco from that point.
 - Q. There was a missing page. You decided not to

call them and ask that they send you the missing page? That's correct. 2 A. And wouldn't that be a normal procedure for you 3 0. in evaluating an agreement with another company that you might be in some sort of a joint venture with? 5 It depends on if we're in an adversarial position 6 Α. 7 or not, whether I make contact with them. Q. Had your attorneys told you not to communicate 8 with Amoco about the operating agreement? 9 10 Α. Our attorney, Mr. Kellahin, had advised that we not communicate with Amoco. 11 And if you've been advised by your counsel not to 0. 12 talk to Amoco about this development for 14 months in 1993 13 14 and 1994 and again since this proceeding developed, is it your position that you're trying to voluntarily negotiate 15 something with Amoco? 16 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 Richardson good-faith effort to reach an agreement with 21 22 Amoco --23 MR. KELLAHIN: If he wants to make his argument, he may do so at closing and not with my witness, with 24 25 argumentative questions, Mr. Examiner.

113 EXAMINER STOGNER: Do you want to restate the question, Mr. Carr? (By Mr. Carr) I want to be sure that I 0. understood you. You were told by your counsel not to discuss the operating agreement with Amoco? Α. No, I meant to say, if I didn't say it clearly, that we were told by our counsel not to discuss the -anything with Amoco once we had received the letter informing us that we were going to be force-pooled. that point, all voluntary negotiations did stop. At this point in time, no matter what happens in this hearing, is it Richardson's position that voluntary negotiations are over? We would like to voluntarily make a satisfactory Α. arrangement with Amoco before we stop talking to Amoco. I told Greg Grotke that we would very much like for Amoco to participate, and we still are of that belief today. Q. And how could we accomplish that if you've been instructed not to talk?

- A. Well, that's why we're here.
- Q. I have no further --
- A. Amoco requested --

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- Q. I have no further questions.
- 25 A. -- that we talk before the Commission. That's

why we're here. 1 And that's the only place it's your understanding 2 that you may negotiate this or talk about it? 3 Α. As I said, we felt that we were put in an adversary position when Amoco sent us notice that we were 5 being force-pooled. 6 7 And my question is, does that mean that there is no hope at this point for the parties to talk to each 8 other? 9 10 MR. KELLAHIN: Objection, Mr. Examiner. MR. CARR: I'm just --11 MR. KELLAHIN: It's irrelevant at this point. 12 MR. CARR: I am inquiring -- I don't think it is 13 14 irrelevant. Parties reach voluntary agreement after pooling 15 orders are entered all the time, and my inquiry is whether 16 or not the door has been closed and stays closed. 17 18 MR. KELLAHIN: Witness has already responded to 19 Counsel, Mr. Examiner. 20 EXAMINER STOGNER: I believe she already has. That the door is closed? Is that what 21 MR. CARR: 22 I --23 EXAMINER STOGNER: I believe that she's already answered the question. 24 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.
2.5	A. It was formed in initially in 1980. I was an

employee of Amoco briefly, and Western Geophysical.

I started my own company in 1980 as Richardson
Oil Company. It evolved into Morgan-Richardson Operating
Company, and I subsequently purchased the entire company in

- Q. Describe for us your geologic play in the Pictured Cliff and the Fruitland Coal Gas Pool in the San Juan Basin of New Mexico.
- A. Initially, we drilled approximately 20 wells, about 30 miles southeast of this area in the Largo Canyon area.

In 1992 we obtained a farmout and drilled seven wells in the Fruitland Coal, shallow wells, approximately 1500 feet, just east of the prospect area. All the time we had been moving further west to our current location.

- Q. What's the vintage of your development in the east half of this Section 12 we've been discussing?
 - A. Recently, it's been in 1994.
- Q. As a geologist and as a CEO of your own company, do you also employ other geologists to provide you information and to consult with you about how to further develop the Pictured Cliffs?
 - A. Yes, I do.
- Q. And are we about to look at some of that type of information?

Yes, we are. 1 Α. Is this the same kind of information that you 2 Q. would use to develop these wells in these well locations, 3 regardless of a dispute with Amoco? 4 A. 5 Yes. If you're making decisions in this area for 6 0. 7 drilling wells, then this is the type of information you look at? 8 9 A. Yes. 10 Do you drill these wells for your own company, or Q. 11 are you doing this in some kind of promotional prospect 12 with other people's money? No, I don't take investors; I drill with my own 13 Α. 14 money. 15 Q. Let's turn to Exhibit A. 16 Α. Okay. 17 Q. I'm sorry, I --Exhibit 11. 18 Α. 19 -- misidentified the exhibit. Q. 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 displays at the same time, Mr. Richardson. I think it will 23

help us. If you'll unfold Exhibit 11, and then let's use

Exhibit 12 and 13 by which to understand what you're trying

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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

Let's see, if you look on the Exhibit 12, you see A' is in the southeast quarter. That's a well -- a Richardson Operating Company, 12-1 well, that is a Pictured Cliffs well we drilled in March of 1994.

And the northeast quarter is a commingled Fruitland Coal and Pictured Cliffs well.

As you go further to the west, now, you get into an Amoco Dakota well, and in the southwest quarter is another Dakota well operated by Amoco.

- Q. Did you use this type of information when you developed your prospect and drilled your wells in the east half of this section?
 - A. Yes, I did.

- Q. Give us a sense of the relationship between the coal that's productive in your well and the Pictured Cliff that is productive in that well. If we look at the cross-section, can you show us where the vertical relationship Is in those two reservoirs?
- A. Yes, in our two wells it's located between 1400 and 1550 feet. There's a separation of about 10 feet of shale between the two zones.
- Q. What is your recommendation for the development of the west half of Section 12, the disputed spacing units?
- A. In the west half of Section 12, I feel, in the northwest quarter, because of the spacing of the Fruitland

1 Coal on 320s, that should be a Pictured Cliffs well. the southwest guarter it should be a commingled Fruitland 2 Coal and Pictured Cliffs test. 3 Q. Describe for us how you reached the conclusion to make the coal gas well the one in the southwest quarter. 5 A. That's state spacing. 6 7 0. All right. Other than the state spacing, is there a geologic difference that matters when you compare 8 those two 160s? 9 10 A. No. 11 So you could stay on pattern with the rule and Q. still maximize your geologic objective in the coal? 12 13 Α. Yes. Describe for us the isopachs. When we look at 14 Q. 15 Exhibit 12, you have isopached what, sir? This is the Fruitland Coal in the entire section. 16 Α. Do you find that there is sufficient coal 17 18 thickness in this coal that it has been productive in the east half? 19 20 Α. Yes. 21 Q. Describe for us the kind of rates that you're getting in the east half of the section in the coal. 22 23 Α. Approximately 600 MCF a day, and I believe 40

barrels of water. That's commingled between the Pictured

Cliffs and the Fruitland Coal.

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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

required under the pooling procedures to make a decision

about risk, and he has the authority to award a risk factor

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1 penalty --2 A. Yes. -- to be applied against any working interest 3 4 owner which elect not to participate under the pooling order. Do you understand that concept? 5 Yes. Α. 6 7 Within that concept and within those percentages, Q. the Division has a maximum of 200 percent. 8 A. Yes. 9 Within that range, do you have a recommendation 10 Q. to the Examiner of where you would place that risk if you 11 12 are allowed to operate these two wells? A. I would say less than 200 percent. 13 14 Q. All right. Can you more specifically recommend 15 to him what you would propose? 16 Α. 150 percent. And that would be in addition to the cost 17 0. 18 attributable? 19 Α. Yes. 20 Q. And would that be a number that you would apply to both reservoirs? 21 Yes. 22 A. All right. And that is a recommendation with 23 Q. knowledge that your original application had asked for the 24 maximum? 25

A. Yes. 1 2 0. In reflection and in review, you say 150 percent is appropriate? 3 Α. Yes. 4 In your capacity as president of your company, 5 Q. did you examine and review Amoco's proposal for their two 6 wells? 7 8 Α. Yes. 9 Q. In their two proposals, the February 14th 10 letters, those proposals specified only completions in the Pictured Cliff formations, did it not? 11 A. 12 Yes. 13 0. Was that an issue of concern to you? Yes, it was. 14 Α. 15 Q. And why was that? 16 Α. We were leaving significant reserves behind pipe. 17 Q. And what would you do? 18 Α. Commingle both zones and produce them at the same 19 time. Other than the well proposal itself, in terms of 20 Q. 21 the formations it accessed, did you have any disagreement with regards to any other portion of their proposal? 22 23 A. Yes, I did. 24 What ultimately did you conclude to do about

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their proposal?

I could not participate on a voluntary basis. 1 Α. And for what reasons, sir? 2 Q. Several reasons. The first one, probably the 3 Α. most important to me, is, we are currently developing this 4 area, we have two wells in the same section. 5 residential and commercial area; it's a difficult area to 6 7 work. We have experience with the landowners, with Mr. 8 Dugan, several doctors live in there. It's not easy, but 9 10 we've done it, and we've had good rapport with them. we feel as though we're qualified, we've been successful 11 dealing with them and minimizing the disturbance of the 12 13 area. When you received the Amoco proposal, it included 14 ٥. a proposed AFE for their wells, did it not? 15 A. Yes. 16 Did you have any reaction to their proposal in 17 18 terms of their costs? 19 Α. Yes, I did. 20 How did you go about analyzing that information? Q. Through wells that we had actually drilled next 21 Α. 22 door. 23 For your own information, you had that data? Q. Yes, we not only had an AFE, we had actual cost. 24 A.

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Q.

And how did their AFE compare to your actual cost

experience in the adjoining spacing units? 1 2 Α. Significantly higher. In addition to your own judgment on those 3 Q. matters, do you employ engineers and consultants that have 4 expertise in that area to make those kinds of judgments and 5 recommendations to you? 6 7 Yes, I do. A. And did you do that in this case? 8 Q. 9 Α. Yes, I did. And were those recommendations consistent with 10 Q. your own conclusion? 11 12 Α. Yes, they were. Other than the AFE proposed by Amoco, were there 13 Q. any other aspects about their proposal that caused you to 14 reject their proposal? 15 Their overhead costs and their operating costs 16 were significantly higher than ours. 17 18 Q. And how do you know that, sir? 19 Α. 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 Well, we maintain one overhead cost, we don't 24 charge a district expense, we don't charge vacations,

It's one expense, one overhead cost.

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sicknesses.

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.

MR. CARR: I have no questions of this witness. 1 EXAMINER STOGNER: Mr. Kellahin, what's your 2 other two witness's expertise? 3 MR. KELLAHIN: Dana Delventhal is an expert in 4 drilling AFEs and actual costs, and she has analyzed the 5 two AFEs for you, and she has a comparison to demonstrate 6 7 the cost components and has reached some engineering conclusions to demonstrate that there is substantially 8 prolonged life and additional recovery if Richardson 9 10 operates, and that's the purpose of her testimony. 11 EXAMINER STOGNER: I was just -- You have an engineer and --12 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.)

EXAMINER STOGNER: Hearing will come to order. 1 Mr. Kellahin? 2 MR. KELLAHIN: Mr. Examiner, at this time I'd 3 4 like to call Ms. Dana Delventhal. She spells her last name D-e-l-v-e-n-t-h-a-l. 5 DANA L. DELVENTHAL, 6 7 the witness herein, after having been first duly sworn upon her oath, was examined and testified as follows: 8 DIRECT EXAMINATION 9 BY MR. KELLAHIN: 10 Ms. Delventhal, for the record would you please 11 0. 12 state your name and occupation? 13 A. Dana Delventhal, and I'm a consulting petroleum 14 engineer. 15 On prior occasions have you testified in that 0. capacity as a consulting engineer before this agency? 16 17 Α. Yes, I have. 18 0. And where do you reside? In Farmington, New Mexico. 19 A. 20 Q. Summarize for us your employment experience. 21 Α. 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 Farmington, New Mexico, since that time, and I've currently 24 25 had our own consulting company since 1985.

As part of your consulting work, do you on a 1 0. regular basis make cost analyses and recommendations for 2 your clients for the drilling of Pictured Cliffs and 3 Fruitland Coal gas wells? 4 5 Α. Yes, I do. How do you go about preparing yourself to make 6 Q. 7 that type of analysis? 8 Α. 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 evaluations of such. 11 12 0. 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? Yes, sir. Α. 16 17 0. As part of your consulting work, do you also make cost comparison analysis using the kinds of things that Mr. 18 19 Grotke and Mr. Hawkins did? 20 A. Yes, we do evaluate different completion methods, methodology and costs associated with such, so that when we 21 do make a recommendation for the drilling of a well, that 22 23 we have picked the optimum method.

that this well might be a slimhole candidate, you

So when Mr. Hawkins talked about Amoco's proposal

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understood what that all meant?

A. Yes, sir.

- Q. And when he talked about the use of a coiledtubing procedure for this well in terms of the way it was equipped, that meant something to you?
 - A. Yes, sir.
- Q. As part of that consulting work with that background of experience and knowledge, did you perform such services for Mr. Richardson?
 - A. Yes, I do make recommendations.
- Q. And have you made an analysis of the data by which to make such a recommendation to Mr. Richardson?
 - A. Yes, sir.

MR. KELLAHIN: We tender Ms. Delventhal as an expert petroleum engineer with expertise in analyzing and reviewing and comparing AFEs with actual well costs.

EXAMINER STOGNER: Any objections?

MR. CARR: No objection.

EXAMINER STOGNER: Ms. Delventhal is so qualified.

Q. (By Mr. Kellahin) Before we get into the parts of your documents, let me ask you your impressions and conclusions about the type of well program that Amoco has proposed, as related to the Examiner through Mr. Hawkins's testimony.

A. It's interesting. Slimhole completions have been used in the PC in the San Juan Basin extensively since the Fifties. Generally, it's a completion method designed for low-ultimate-recovery gas reservoirs which are dry, in an effort to save initial investment and therefore be able to justify completing those reserves.

The problem that I see with that technology as applied in this case is that, one, generally slimholes were drilled with conventional drilling rigs or drilling technology. The coiled tubing is somewhat new, and there are some risks associated. If you had a very high cost savings to offset such risks, it might be worth contemplating.

And the second problem in this area, generally Pictured Cliffs wells are dry, oftentimes not even requiring surface separation. However, in this area the Pictured Cliffs is for the most part fairly water-productive, and a slimhole completion would not facilitate the natural flow of this type of well.

- Q. As that program was described through Mr.

 Hawkins's testimony as to Amoco's proposal, do you have an opinion as to whether that well could be constructed in that fashion?
- A. I see several problems, the worst problem being that 3-1/2-inch casing with 2-3/8-inch tubing, both strings

being standard, will not fit.

- Q. What would the operator have to do?
- A. Well -- Let me figure out the numbers here. The drift diameter of 3 1/2 is roughly 2.9 inches. The OD of 2 3/8 standard tubing at the coupling is over 3 inches. The one option would be to mechanically slim down those couplings. But then you have a risk of tubing failure.

Then again, the natural flow of these wells -They're not an artificial lift, they're capable of flowing
this water production on compression. The annular space
would be negligible, and you would lose quite a bit of lift
capacity, even if you machined down the couplings.

- Q. Have you proposed to Mr. Richardson how this particular well ought to be drilled and completed?
- A. I would drill and complete it as a standard gas well.
- Q. Have you previously testified before the agency concerning the downhole commingling allocation formula and the approval of downhole commingling for the PC and the coal gas for the well in the other half of this same section?
 - A. Yes, I have.
- Q. That was your work, and you testified before this agency?
- 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.

Our actual 12 Number 1 Pictured Cliffs well,

which is within a half a mile, actual costs came in at \$123,000. So we were roughly 20 percent under budget.

As Mr. Hawkins pointed out, our AFE did not include capital compression costs and theirs did, in the amount of \$30,000.

- Q. What did you do to reconcile that difference?
- A. To put everything on as fair a basis as possible, we subtracted out the \$30,000 from their AFE estimate. If you take \$30,000 from their original \$216,000, you see the comparison at \$186,000, under Amoco's scenario.

Again, I assumed that their AFE was diligently prepared and that they feel that they can drill and complete a coiled-tubing-type completion for that type of money.

Based off of the AFE differential, there's a 22percent differential. But comparing our actual costs to
their AFE costs, their AFE is about 51 percent higher. And
I would have liked to have had some comparison of the
actual spending of an Amoco-drilled coiled tubing, but that
information wasn't available.

- Q. When we look at the bottom line on Exhibit 15, the \$186,000 attributable to the Amoco already has the \$30,000 compression cost deleted from their AFE?
- A. That's correct, so that we're comparing apples with apples.

Q. Okay. Let's go through this in terms of major items of difference to you as an expert.

When you look at the drilling portion, you get down to the subheading B. It says "Drilling". And looking through those components, there's a subtotal?

A. Correct. The largest areas of difference are between the drilling costs in which their estimate is roughly \$45,000, and our drilling cost history shows around \$18,000.

Our drilling rig, generally we get on a footage basis, so it's essentially risk-free to the working interest owners.

- Q. Show us other items of major difference.
- A. The downhole completion, which I think now we've come to agreement that that \$20,000 differential -- Perhaps their AFE has been overstated or they're agreeing now that they can complete and stimulate less expensively.
- Q. As you have analyzed the comparisons of AFEs, have you itemized completion rig cost factors?
- A. As well as we could. Again, the actual categorization off of the AFEs is a bit subjective. I put them in as best we could, and some detail is not there.

But yes, there is a completion day work figure on their AFEs.

Q. In the comments section on the far right side of

the comparison, you have made various notes at other points to identify for the Examiner matters of difference.

- A. They're definitely matters of concern to us. The day work figure of \$2100 does not allow much time. And again I assume that they've been diligent, but our experience has been that some of these costs are probably going to be significantly higher.
- Q. Describe -- Mr. Hawkins addressed the contingency method used by Amoco, and I think you heard that testimony. You have looked at the contingency components of the components of the AFEs, and you have them analyzed on this exhibit, do you not?
 - A. That's correct.

- Q. Describe for us what you have concluded.
- A. Generally, the 15-percent contingency used by Amoco is not unusual in the industry in general.

 Generally, it's based off of a percentage.

Again, those contingencies have a tendency to materialize during the drilling and completion of wells.

Generally through Richardson and the AFEs we generate and our charges, we don't use as high of a contingency basis. We try to actually categorize those anticipated costs ahead of time. So our contingencies are less. But basically, it's the bottom line on the AFE that matters.

- Q. The Examiner is here to listen to recommendations on how to decide matters of difference by which he can ultimately decide who operates. Is there a difference between this AFE that is a difference to you?
- A. Yes, actually there's a large matter of difference, both to the working interests and to the royalty owners.

Generally, both the -- the economics of the project and the ultimate recovery are tied to the initial investment and the overhead charges throughout the life of the well, and in this case it's significantly different.

- Q. And in a later display, you have attempted to calculate or to quantify the magnitude of that difference in terms of its effect on the life of the wellbore and on ultimate gas recovery?
- A. That's correct. And the other thing I would like to bring out is that basically my assumptions and my comparisons and the differentiation between operating and drilling these wells, I've held both the risk and the well results constant between ROPCO and Amoco.

I am concerned, if they should pursue a coiled-tubing-type completion, that there should be additional risk factors assigned into there, versus a standard gas well typical completion.

Q. Let's turn to Exhibit 16 and have you describe

what you've done when you have made a comparison for the 1 well in the southwest quarter of 12. 2 This comparison is identical in scope to the 3 first, except for this is for the well in the southwest quarter, which is assumed to be a commingled Pictured Cliff 5 Fruitland Coal well. 6 7 The only other item of note is, with Amoco's proposal, if for some reason their well did not qualify or 8 they were not able to get downhole commingling requirements 9 10 met, they would not be able to dual complete in 3-1/2-inch 11 casing. It's been our philosophy to go ahead and set 12 casing large enough for a dual completion so that if such 13 were the case, we would not have to eliminate the Fruitland 14 Coal side of the completion. 15 When you look at the components of difference in 16 Q. this comparison, describe for us what they are. 17 Generally, the components of difference are 18 Α. 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.

Q. When you get to the bottom line and you take off

varies, much like the first completion.

And there's contingency money, you know, that

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the compression costs for the Amoco AFE, what is still the net difference?

A. There's still quite a significant difference.

Generally, our AFE was for \$194,000. The dual within half
a mile, the actual well costs came in at \$177,000. We were
10 percent under budget.

Their AFE is for roughly \$231,000.

So based off of the AFE values, they're 20 percent higher. And based off of actual experienced drilling costs, they vary by 31 percent.

- Q. In your opinion, will compression be required in this well?
 - A. We anticipate that it is.

- Q. In order to take that cost factor into consideration in the AFEs, have you analyzed the net result of the inclusion of compression?
- A. Yes, I have. Compression, we deem, will be required. Generally, it's not in the original AFE because we're not sure of the size or what size of compressor would be needed.

Generally, we'll rent a compressor for the first few months' worth of production on the well and then size after at that point.

Q. Is it a flaw in the Richardson AFEs not to have an item for compression?

A. I don't believe so. The operating agreement has spending authorities, and each working interest owner would have their fallbacks through the operating agreement, if we were to AFE for compression at a later date.

- Q. Under different case examples, have you assumed compression for this well for both costs by either operator and shown the impact of the total well cost, of ultimate recovery?
- A. I have. What I've tried to do is make an economic comparison and see what the results are to the working interest owners as far as value, and secondly to the royalty owners as far as ultimate recovery, should ROPCO operate, versus Amoco operating.

I'm sure everybody realizes the number of variables is tremendous, so I've tried to keep everything as constant as possible and --

- Q. Have you reduced that information to an exhibit form?
- A. Yes, I've reduced what information I have onto Exhibit Number 17.
- Q. All right, let's look at that and have you describe for us how you've organized the display, and then we'll talk about the parameters, and then the assumptions and finally the conclusions.
 - A. Okay. Basically, the display is set up to show a

comparison on the Pictured Cliffs well versus the commingled Pictured Cliffs and Fruitland, so that essentially any variances would be added.

I've listed at the top the assumptions as far as reservoir parameters, economic parameters. And as you can see, I've kept them constant between ROPCO and Amoco. In essence, I've assumed that Amoco is on budget, ROPCO is on budget, that the well's productivity and decline rates are identical, in essence, for giving any fact as far as the different wellbore configurations, and held everything constant on that side --

Q. Do you have a --

- A. -- the only differentiation being the differentiation between capital investment and operating costs over the life of the wells.
- Q. So the Examiner understands how you've gone about this, describe for us how you've come up with your recoverable gas reserve number that you've put into the calculation.
- A. The recoverable reserves are calculated based off of initial gas rates and decline rates and economic limit.

The last page, Appendix Number 1, shows our assumption on operating costs, and they have a significant impact, and I want to be straightforward on what those assumptions are.

Basically, the overhead -- standard overhead rate varies by only \$50 per month. Generally there's a pumper charge.

The charge for compression, depending on the method each operator chooses to incorporate those expenses, varies, and I've got the figures used.

And then we've also added in the additional overhead charges that Amoco normally would associate with their wells. And I used \$300, and Mr. Hawkins said that may be conservative. I don't know. But for the purposes of this exhibit, we felt \$300 was a reasonable estimate.

- Q. All right. How did you handle the potential variable of the compression cost component?
- A. What I assumed was several cases. I was not sure how Amoco would propose their compression, whether they were going to compress the two wells through one compressor or whether they were going to buy them or lease them or rent them.

So just to be safe I ran several cases and --

- Q. Let's show the Examiner one. Let's pick an example and show him the method, and then he can satisfy himself if he wants to apply any of these other case examples.
- A. Okay, starting on the first page with A, this would be the stand-alone Pictured Cliff wells.

The Case 1 would be where ROPCO and Amoco were to rent a compressor. And what -- Each case has certain criteria and certain values shown for the ROPCO case, and then the Amoco case with the same fixed variables, just changing those -- the fixed constants being the same, changing the variables, and the variance being the difference.

Under the rental it shows that over the life of the well, we would extend the life by about four years and recover --

- Q. Where do you see that? The second entry down?
- A. Correct, the life of the project at the economic limit. Whereas ROPCO's well was 19 years, one month, Amoco's was 15 years, one month. Therefore, ROPCO operating would extend it approximately four years.
- Q. In addition to the extended four-year life of production by Richardson, what is your estimate of the additional gas recovered if they operate?
- A. Under the same scenario, it would be roughly 149,000 MCF.
- Q. All right, let's turn to see how you handle the Pictured Cliffs and Fruitland combined, that type of completion.
- A. Okay. I might mention that Case 2 is assuming that the compressors are purchased and financed.

And Case 3 assumes that we buy used compressors. 1 And again, in those two cases, the variance 2 between the two is still to the favor of ROPCO, roughly two 3 years, eight months, and 42,000 MCF. 4 Amoco's AFE used \$30,000 for the cost of a 5 Q. 6 compressor? 7 Α. Yes, and again I'm not sure where their number has come from, assuming that's a purchase price. 8 Generally, these wells produce a combined initial 9 rate of anywhere from 600 to 800 MCF per day, and the 10 11 pressure in those lines out there, it's high-pressure sales lines. 12 Generally, it's the type of compressor you would 13 need for that. And we've gotten bids for that, would run 14 15 around \$85,000 new. 16 Generally, we attempt to get used equipment, but 17 \$85,000 would be a new price. All right. Let's see how you've analyzed the 18 19 comparison when we deal with a Fruitland Coal Gas-PC 20 combination. Again, I've used the same cases, the same 21 Α. assumptions, but this analysis labeled B is for the 22 commingled well, and it assumes that it qualifies for 23 downhole commingling, and that's the completion method. 24

Basically, the variance here is again to the

favor of ROPCO, roughly 146,000 MCF under, you know, the Case 1 assumption, and 41,000 MCF under Cases 2 and Cases 3, again extending the life nearly three years for the well.

So for the total two-well project that we're looking at, the incremental reserves is -- well, nearly 300,000 MCF under one scenario, and if you take the conservative view it's roughly 82,000, 83,000 MCF.

- Q. Do you have an opinion as to whether it's appropriate for this case to be decided based upon a difference in AFE costs as proposed by the two different operators?
- A. I think the basis for any well being drilled is to drill it as efficiently as possible and recover the most reserves as economically possible.

If the numbers proposed by Amoco are their true belief on the cost of their wells and we've established some of the operating costs, it would be to their advantage as well as the other working interest owners and royalty owners to elect Richardson as operator.

- Q. Let's turn to Exhibit 18. Identify and describe for me what you're showing here.
- A. The rest of my exhibits pertain to the request for downhole commingling of the Pictured Cliff and Fruitland Coal.

Again, it's critical to get that prior approval, especially in this case. Otherwise, the Fruitland Coal reserves would perchance be left behind pipe.

And secondly, certainly in Amoco's case, they would have to have that approval before they could drill.

Exhibit Number 18 is the nine-section plat which shows the Fruitland Coal spacing unit in the west half of 12 and shows the offset wells and their owners. This is what was used for notification purposes for the downhole commingling application.

- Q. All right. Let's turn to Exhibit 19 now, Ms. Delventhal, and have you describe this exhibit.
- A. Exhibit 19 shows some economic criteria for why a commingled completion is preferable, as opposed to drilling two stand-alone wells or completing a separate Fruitland Coal formation.

The first page shows the assumptions as far as the economic criteria and gas rates, et cetera. For this case, we assumed that we purchased a compressor at our bid price and financed it.

And the second page shows, as Part A, the Pictured Cliffs well stand-alone economics. As you can see, the profit-to-investment ratio is nearly 12. It's a good project. The well life is 26-some years, and we should recover just under 2 BCF.

The Fruitland Coal, if we were to drill a standalone well, is barely economic. The profit-to-investment
ratio is less than one, and it has roughly a 10-year well
life. It is unlikely, if an operator were choosing
projects, that this well would be drilled separately during
this environment.

Part C is the economics of the commingled well.

Under the commingled scenario, the profit-to-investment ratio is nearly 14, recoverable reserves are now roughly 2.8 BCF. Therefore, you've recovered roughly .8 BCF of Fruitland Coal reserves, whereas if you drilled it standalone, you were recovering under 600,000.

So by commingling the two together, your incremental recovery versus the separate completions is nearly 300,000 MCF.

- Q. Would it have been a mistake to drill the west half of the section with two stand-alone PC wells, without trying to get the coal gas production?
- A. Again, if that had occurred, if both had been developed and the Fruitland Coal formation owners wished to develop their reserves, they would be looking at standalone Fruitland Coal economics.

I would doubt that either Amoco or Richardson or any other operator in the San Juan Basin right now would drill the well under that case. In essence, those reserves

would not be developed at this time.

- Q. In your opinion, for the coal gas reserves in the west half of the section, then, it's most prudent to develop those with one of these wellbores being a commingled wellbore?
- A. That's correct. And should -- for either bottomhole pressure reasons or if it for some reason did not qualify it to be commingled, then a dual completion would be your next alternate. But you would definitely develop those reserves at the same time.
- Q. All right. Let's turn to Exhibit 20 and have you give us a short summary on the wellbore diagram.
- A. Like I said, there's no new science at all to the proposal of ROPCO and how we drill these wells out here, just a standard gas well: Set 7-inch surface casing, and then we set 4 1/2 or 5 1/2 casing down to about 1630 feet.

The formations range from about 1420 to 1485 foot in depth.

We use a standard completion method. We circulate cement to surface if possible, perforate and test each zone to gather the data we need for the downhole commingling, run open-ended tubing and place it on line.

Q. Let's turn to Exhibit 20.

Is there any pressure differential of concern estimated between the Fruitland Coal and the PC that would

preclude the downhole commingling of production in these two reservoirs?

- A. No, actually the bottomhole pressure data that we've gathered in the area shows that the area is fairly depleted, that the reservoir pressure is quite similar between both the Fruitland Coal and the Pictured Cliffs and ranges between about 210 and 240 p.s.i.
- Q. Have you also analyzed the gas analysis to determine whether the gas components and constituents in this specific area are compatible if the formations are commingled?
- A. Yes, I have, and I've included as Exhibits Number 22 and Number 23 actual chromatograph analysis of a Pictured Cliffs well and a Fruitland Coal well --
 - Q. With what conclusion?

- A. -- both within a mile. And the gas is compatible.
- Q. All right, let's turn to the allocation formula. If you'll look at Exhibit 24, which is the last of your exhibits, give us a summary of your method and your conclusions.
- A. I've included this so that all the operators would know the general procedure that ROPCO would propose. Again, it's a fairly standard allocation formula, applied to Fruitland Coal-Pictured Cliffs commingled wells in the

150 1 area. Because the Pictured Cliffs is an established 2 pool and a good -- ultimate recovery numbers can be 3 calculated in the area, the allocation formula is based on 4 a difference method, whereas you calculate the PC reserves 5 and additional reserves are allocated to the Fruitland 6 7 Coal. I've included the standard calculation. 8 The 9 numbers will change based on actual reservoir pressures and 10 actual test rates, but the allocation method is at least 11 outlined. 0. Is this the method that you utilized when you 12 made your presentation to the Division for the commingled 13 14 well that's in the east half of the spacing unit --Yes, sir. 15 Α. -- or east half of the section? 16 Q. 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 No objection. MR. CARR: 22 EXAMINER STOGNER: 15 through 24 Exhibits of 23 Richardson will be admitted into evidence at this time.

Thank you, Mr. Kellahin.

Mr. Carr, your witness.

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1	CROSS-EXAMINATION
2	BY MR. CARR:
3	Q. Ms. Delventhal, you previously worked for Amoco?
4	A. Yes, I did.
5	Q. And you are familiar with their operations in the
6	San Juan Basin because you worked for them and also because
7	you are a consultant active in the Basin; is that not fair
8	to say?
9	A. Yes, sir.
10	Q. You do know that Amoco has drilled a number of
11	Pictured Cliffs wells throughout the San Juan Basin?
12	A. A number of standard PC wells, yes.
13	Q. And they operate and produce a number of Pictured
14	Cliffs wells in the Basin?
15	A. Uh-huh.
16	Q. They also have drilled and completed wells within
17	the City of Farmington, haven't they?
18	A. Yes.
19	Q. Now, I gather from your testimony that you differ
20	with the way they're proposing this well; is that fair to
21	say?
22	A. Yes.
23	Q. Have you ever actually drilled a slimhole well
24	with coiled tubing?
25	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	FYAMINED STOCKED. Okay one and the came Okay

proceed. 1 2 RODERICK A. MARKHAM, 3 the witness herein, after having been first duly sworn upon his oath, was examined and testified as follows: 4 DIRECT EXAMINATION 5 BY MR. KELLAHIN: 6 7 Mr. Markham, would you please state your name and 8 occupation? 9 A. Rod Markham. I'm an independent oil and gas landman, whatever. Jack of all --10 11 Do you make -- I'm sorry, I didn't hear you. 0. Jack of all trades. I'm not a professional 12 Α. 13 landman. Well, maybe by experience, Mr. Markham. 14 Q. We're 15 going to find out. 16 You'll have to speak up, it's going to be heard 17 to hear you. Are you a working interest owner in the spacing 18 19 units that are being proposed to be operated either by Amoco or Richardson? 20 21 Α. That's correct. 22 0. 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?

Well, the -- Of course, the initial look is the

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Α.

AFEs, and then past experience with the operator. 1 0. Is this a type of decision that's new for you 2 with this case? 3 Α. No, sir. Do you make this kind of decision for yourself on 5 0. a regular basis? 6 7 Α. Yes, sir. 0. And have you had to make this type of decision in 8 9 the San Juan Basin concerning Pictured Cliffs wells? A. Yes, sir. 10 Have you been involved in a similar position with 11 Q. Amoco as an operator in other wells? 12 13 A. Not my interest, but my father's interest has been involved with Amoco in numerous wells, including the 14 Dakota well on the same unit. 15 Q. And is that an interest and an involvement for 16 17 which you have personal knowledge? 18 Α. That's right, that's correct. 19 What have you decided to do about committing your Q. 20 interest to either operator? 21 Α. 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. What information did you obtain in order to help 24 Q. 25 you make a decision on what to do?

A. Well, the AFEs, for one thing, that was -- Of course, that's the first look, is the AFEs. And we have drilled quite a few Pictured Cliffs wells and Fruitland Coal wells in the immediate vicinity, with BHP and Hallwood Petroleum, and we have information also on Richardson wells and Bob Bayless.

So we've been involved in the Pictured Cliffs and Fruitland Coal wells.

- Q. Based upon that experience, what did you conclude about the AFE as proposed by Amoco?
 - A. It was way too high.

- Q. What did you conclude about the AFE as proposed by Richardson?
- A. That was -- It was right in line with our experience with BHP.

And we -- We're involved in the Gallegos Canyon unit, and BHP is the operator, and we have access to -- as part of the unit -- information, all of the wells that have been drilled, 60-some-odd wells that have been drilled on their well [sic], 30 recent wells.

And we have the total well costs for all these wells, and the average is \$142,000. And these have been drilled since 1990. And we have drilled wells within the last year with them.

Q. Your conclusion with regards to that component of

your decision was what, sir?

- A. That Amoco was too high, that Richardson was basically right on the money, for what we would expect to complete these wells for, drill and complete.
- Q. When you received the original Amoco proposals for the two PC wells in the west half of 12, what was your understanding of how those wells were to be drilled and completed?
 - A. From Amoco?
 - Q. Yes, sir.
- A. Well, there wasn't enough information on the AFE to know. It's very gross information that you have here, and you can't deduce anything -- or I couldn't -- in comparison to, for instance, BHP and Bob Bayless and Tom Dugan and most other operators. It's just too big a numbers to pull things out of.
- Q. What did you do in order to help overcome that difficulty?
 - A. I called Greg Grotke.
 - Q. Grotke, I think, is how you say his name.
- A. Grotke. And frankly, my first -- the first thing
 I said to him is, Would you consider letting someone else
 operate? We didn't want Amoco operating the well. So I
 asked him if he would.
 - And he said -- He didn't say too much, he said

158 it's a pet project -- or -- It's a pet project of his, and 1 they were trying to drill a bunch of wells at one time and 2 save a whole lot of money. 3 Q. Did you ask him to describe for you the kind of 4 well he proposed to drill under this plan? 5 Yes, and he started talking about the slimhole 6 completion, the 2-7/8-inch production string and coiled 7 8 tubing. And I asked him also about the water, what do you 9 do with the water production? 10 11

Oh, about the coal, I asked him about the coal.

And he said, Well, that' not -- that coal is not -- It's not relevant to this prospect.

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And I said, Well, you know, we've been drilling wells out there, and they're commingling. Other wells, they're -- It's just happening all over the place out there.

And he said, Well, actually I haven't looked at the logs yet. And he said, My experience has been off northeast, I believe, in some other area.

- Did you ask him whether or not water as a 0. component of production was an issue for these wells?
- Yeah, water cost is a big issue, a big deal out · A. here. And I asked him, What are you going to do with the water?

And he said, Well, these wells don't make hardly 1 any water. 2 And they do. I mean, just look at the records, 3 4 that's -- They do. Did you have any discussion with Mr. Grotke about 5 his information level with regards to examinations of logs 6 in this area? 7 A. He said he hadn't -- I said, I think it's five, 8 ten feet, between the two -- between the base of the 9 Fruitland Coal and the PC. 10 And he said, Well, actually I haven't looked at 11 the logs yet. 12 13 That's what he told me. 14 Q. Approximately when did that conversation take place? 15 16 2-17-95. And he called me back on 2-18-95. Α. 17 0. So this is after the well proposal is submitted 18 to you? 19 Α. Yes, sir. 20 Did you have any other conversations with Mr. Q. Grotke, other than the two that you have related? 21 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 engineering project, and he was talking about completing 25

three to five wells in a day and all this stuff.

And I kept looking -- The bottom line on the AFE was greater than the other wells, and if they were doing this to save money they were taking the risk with 2-7/8-inch production, this is crazy. I mean, it's -- I just didn't want to have anything to do with the deal at that point.

- Q. What have you decided to do with your interest?
- A. It depends. It depends on -- I called Ms.

 Jenkins and asked if they would make us a proposal, because all we had was drill or -- you know, drill or be penalized.

 And I asked if they would give us a proposal, an alternate proposal to farm out or buy out.

And I also asked her if they would market our gas and also if they would make distribution on our, you know, burdens.

And she never called me back, never came back to me.

- Q. In terms of your options, now, with regards to an election to participate, would you elect to participate if Amoco is awarded the operatorship of either or both of these cases?
 - A. I don't know, I don't know. I just don't know.
 - Q. What is your --
 - A. It's a good prospect, it's --

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What is your dilemma, Mr. Markham? 1 0. We've been involved with Amoco -- We're involved Α. 2 with Amoco right here in Dakota wells and in some Fruitland 3 4 sand in the area. 5 The communication is not good with Amoco. They're nice -- Everybody's nice people, but you can't get 6 7 an answer to anything. You get these oddball charges showing up on your bills, some of them just gigantic, and 8 you try to find somebody to explain to you what they are, 9 and it may take two months, literally, to get a response. 10 11 And it can -- You can have seven or eight things going on at one time, and none of them resolved. 12 13 They start charging you plugging costs before you've ever signed an AFE to plug a well. They charge you 14 overhead when a well is not being produced. It just hasn't 15 16 been good for us. 17 0. If Richardson is awarded the right to operate these wells, either both or one of them, what decision 18 19 would you make if Richardson operated? 20 Α. I think we would -- I think we would participate. 21 Thank you, Mr. Examiner. MR. KELLAHIN: 22 EXAMINER STOGNER: Mr. Kellahin.

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

MR. CARR: We don't have any questions of this

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witness.

Mr. Carr?

EXAMINER STOGNER: I don't have any questions of 1 2 Mr. Markham myself, I believe. At this time -- You may be excused. 3 At this time --4 MR. KELLAHIN: That concludes our presentation. 5 EXAMINER STOGNER: -- if there are any recall of 6 7 any witnesses at this time? 8 MR. CARR: No, sir. 9 EXAMINER STOGNER: So are we ready for closing statements? 10 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 concise as I can. 13 I would appreciate the opportunity to prepare a 14 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 you, Mr. Examiner, and it's now pushing six o'clock, and a 20 21 lot of times these pooling cases fall into a common pattern where you can make some decisions just by following a set 22 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

ought to operate for no other reason than they perhaps have the greatest amount of dollars at risk. We've talked about this on numerous occasions.

And every so often, we have a case like this.

And these cases are hard because they represent an effort

by a majority working interest owner to do as little as

possible in order to force-pool parties that don't want to

be in their proposal. And that's what occurred here, Mr.

Examiner.

Amoco is sleepwalking through the process. They have a majority interest, they send us a routine letter, which is not a request to participate, it's an ultimatum. They tell us that this is going to be under their terms, and if we don't, they're going to force-pool us.

Now, letters are hardly exchanged, and Mr.

Hawkins is busy filing a pooling Application. And what he seeks to do is something that's not appropriate in this area. He's ahead of his project. He forgets to ask to pool the coal. It's included in his Application, but his land person never proposed it.

And you and Mr. Carr and I have argued a number of cases where it mattered to you that a proposal by an Applicant was different than the relief requested.

In this case, they -- Amoco had proposed two stand-alone PC wells, and yet they filed a pooling

application for a downhole commingled PC-Fruitland Coal well.

Those little differences matter.

It matters that Amoco didn't think to file for downhole commingling. It indicates a disregard for being thorough and complete.

Look at the AFE process that they went through.

It again was sleepwalking through the process. Compare that AFE to the AFEs, the hundreds that you've seen, and how careful most of those are.

We asked a number of questions of importance about how that was put together. And the question you should have is the same question I have, is, Where is Mr. Grotke? Where is he? This is his project, his deal, his representation that he needed five wells to be economic.

And who comes to testify? It is not Mr. Grotke.

What we do here, though, is, Amoco sends Mr.

Hawkins down here to describe a science project. He wants to use slimhole technology with some kind of coiled tubing, with my investors' money, to help them with their science project. They haven't done one of these in the San Juan Basin, and they want us to help pay for their science project.

I suspect Amoco's got a hundred-percent acreage position somewhere in the PC that they can go through this

project on their dollars and not ours.

The little guy matters.

And we have shown you a difference in the AFE costs in comparison to ultimate recoveries.

Dana has presented to you a thorough analysis, and I hope you will look at it again. She's shown you a differential by which the producing life of these wells can be extended at least four more years, with cost-efficient operation by my client.

It's easy for you to simply go down the checklist and say Amoco's got the bigger interest and let them operate. We think that is not the appropriate answer in this case. There are other ways for Amoco to go about their project.

I believe it's of significance to allow Mr.

Richardson to operate this when he already has developed

the other half of this section and where you have to go six

miles away to find a PC well that Amoco has proposed.

There in fact are a number of things that are not of significance.

There is no significant difference in overhead rates.

There is no dispute about where to put the wells.

Amoco has adopted our plan to commingle one of them. They realized very quickly that that was a good idea and adopted

what we wanted to do, and we ought to get credit for 1 proposing that. 2 What we ought not to do is be penalized by being 3 pooled by Amoco. Small things matter. 4 The last point: What to do about the risk factor 5 penalty? 6 7 I think Mr. Richardson's idea was just fine. 8 not cost plus 150 percent? That's a level field for both interest owners in both pools. Let's use that. 9 Why make it complicated by making it 200 percent 10 11 for one formation and 156 for the other? It doesn't make 12 any sense. Award us credit and an opportunity to operate 13 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 a five-well package, has provided to you a well proposal 18 that's far in excess of what Richardson can do with a 19 20 single well. 21 We may be the little guy, but maybe the little 22 guy needs a turn. 23 Thank you. EXAMINER STOGNER: Mr. Kellahin. 24 25 Mr. Carr?

MR. CARR: May it please the Examiner, I would agree with Mr. Kellahin that over the years we've been before you many times with opposing compulsory pooling applications.

What you can always count on when we come before you is, the person who doesn't have the evidence immediately starts trying to characterize the case as unique and something that you can't deal with by just hitting the pegs with a hammer and determining who should actually prevail.

You know better than any of us, Mr. Stogner, that now we're looking at a number of proposed compulsory pooling applications. They're coming into the Oil Commission daily.

And to deal with this, by a memorandum dated April the 5th, 1995, this month, the Division has defined what is considered relevant and pertinent evidence, and that which is considered irrelevant and unnecessary evidence. These are the pegs, these are the pegs that we can hit. We can show you why, with relevant and pertinent evidence, Amoco should prevail.

The question here, Mr. Stogner, is, Who should operate this well? Both parties want to do that. And the place you start, if we follow this Division's memorandum, is, we take a look at the ownership.

In the northwest quarter, Amoco has 83.38 percent of the working interest. In the southwest quarter, on a stand-alone basis we would have 50 percent, but in a west-half unit we 67 percent. So on that basis alone we can hit the peg.

If we look at the west half, we see although Mr. Richardson is operating in the east half of the section, we have two Dakota wells in the west half. They have nothing there, and they want to come and drill two additional wells on well pads that we have previously prepared.

The other thing -- The next peg that they in your memo suggest you should look at is, Who actually proposed the well?

Well, we can see that there were negotiations about exchanging property interests several years ago. But because of litigation and instructions from their counsel, they went silent until we actually proposed the well in February of this year.

And that is what started the process which has brought us here today. We submit to you on that front we also hit the peg.

I agree with Mr. Kellahin that overhead and administrative costs are really not an issue, that the actual well locations are not really an issue. And I submit that when you take a look at the evidence, you're

going to find that the differences in cost are really not an issue.

And what I'm suggesting there is, if you look at the exhibits that were presented by Mr. Hawkins and you take out compression, if you normalize stimulation costs as we have suggested will be done and told you will be done, and if you adjust the contingencies, you see the differences are not, in fact, significant.

We submit to you that when you apply the standards that this Division has announced, if you apply relevant, pertinent evidence to the issues before you, you come out on Amoco's side.

On the other hand, you can look at what Richardson did, and we can look at what is considered irrelevant or unnecessary evidence. And they talk about the operator's ability to drill a well or ability to produce and operate a well, previous disagreements with us. But those you have already defined as irrelevant.

We submit when you take the evidence presented, when you apply it to the standards announced by this Division, you will grant the Application of Amoco and that we will go forward and develop this acreage in a prudent and responsible fashion.

EXAMINER STOGNER: Thank you, Mr. Carr.
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

	171
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	I do hereby certify that the foregoing is a complete record of the proceedings in
21	the Examiner hearing of Case Nos. 1/243, 1/244, 1/24
22	M. L. Lata
23	Oil Conservation Division
24	
25	

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