1 2	STATE OF NEW MEXICO ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT OIL CONSERVATION DIVISION STATE LAND OFFICE BUILDING SANTA FE, NEW MEXICO			
3	29 March 1989			
5	EXAMINER HEARING			
6	IN THE MATTER OF:			
7 8	Application of Yates Petroleum Corp- CASE oration for compulsory pooling, 9629 Chaves County, New Mexico, and			
9	Application of Yates Petroleum Corp- 9630			
10	oration for an unorthodox gas well location, Chaves County, New Mexico, and			
11	Application of BHP Petroleum Company, 9631			
12	Inc. for compulsory pooling and an un- orthodox gas well location, Chaves County, New Mexico.			
14	country, new nexteo.			
15	BEFORE: David R. Catanach, Examiner			
16	TRANSCRIPT OF HEARING			
17	APPEARANCES			
18				
19	For the Division:			
20	For Yates Petroleum Chad Dickerson Corporation: Attorney at Law			
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Mr.

Cata-

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nach, the subject matter of Cases 9629, 9630 and 9631 describe -- Case 9630 was filed for an unorthodox location. Since the filing of these applications it's my understanding that all the parties have agreed that the nonstandard location described in Case 9630, which is also described in BHP's application 9631, are the preferable -- or is the preferable location for a well, so your file will, in Case 9629 will reflect a letter by myself last week requesting

MR.

DICKERSON:

## KATHY COLBERT,

being called as a witness and being duly sworn upon her oath, testified as follows, to-wit:

that the Yates application in that case be amended to the

unorthodox location which has been requested in Case 9630.

## DIRECT EXAMINATION

BY MR. DICKERSON:

Q Ms. Colbert, will you state your name, your occupation and by whom you're employed, please?

A My name is Kathy Colbert. I'm employed by Yates Petroleum Corporation, Artesia, New Mexico, as a landman.

Q You have previously testified before this Division as a landman several times, have you not?

Α

Yes, I have.

,

Q And are you familiar with the underlying land ownership situation in the area involved in these consolidated cases?

A Yes, I am.

Q Will you summarize briefly for us the purpose of Yates' applications in these cases?

A Yates Petroleum is seeking an order pooling all the mineral interests from the surface to the base of the Ordovician formation underlying the east half of Section 36, Township 10 South, Range 26 East, to form a standard 320-acre gas spacing unit, with Yates Petroleum designated as operator.

Q And what --

A We --

Q -- excuse me --

A Excuse me.

Q -- go ahead.

A We are also requesting approval of an unorthodox gas well location to be located 1650 from the north line, 2310 from the east line of the said Section 36.

Q Now Yates anticipates drilling the well from the surface to the base of the Ordovician but the pooling order is understood to affect only the zones which would be developed on 320-acre spacing, is that correct?

1 Α Yes, that's correct. 2 Okay, refer to the plat submitted as 3 Exhibit Number One and describe for us the information you've shown on that. 5 Α Exhibit Number One is the land plat that 6 shows this proposed unorthodox location and its relation-7 ship to the surrounding acreage. 8 We have colored all the surrounding ac-9 reage where Yates does have an interest. 10 Now notwithstanding the amendment by 11 Yates of its application in Case 9629, all the parties ne-12 cessary to be notified of either application have been 13 notified --14 Α Yes, they have. 15 -- prior to this point. Q 16 Α Yes. 17 So it did not change any parties or the 18 true situation. 19 A That's correct. 20 Before we leave Exhibit Number One, just 21 us with respect to the development which is taking 22 place in this area and tell us who's doing it and over what

A During the last twelve months this has been a very active area. Yates and BHP have been drilling

period of time it's occurred.

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1 the Ordovician gas wells. BHP is primarily located with 2 their wells to the south of this particular location. 3 5 Α 6

Indicate for Mr. Catanach where those wells that you're referring to are shown on the plat.

Okay. The most recent one would be the BHP well located in the west half of Section 36, their well that's located there in the north half of 5 in the township directly below on the plat.

So the well in Section 5 was drilled first. Approximately when was that drilled?

I am not familiar with the exact date. Α I understand that that was the first well drilled.

Q The last quarter of 1988, you would think?

> Oh, I would, yes, sir. Α

Refer to Exhibit Number Two, Ms. Colbert, and tell us what that is.

Exhibit Number Two is simply a summary covering the acreage in the 320 acres located in the east half of 36. It shows the parties that own the acres, the percentage that they would have out of the 320-acre spacing unit. It further goes on to show what the interest would be in an initial test well in the east half before and after payout.

> 0 And tell us what those figures show.

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What -- what do the Yates Petroleum Corporation parties control in the east half of Section 36?

A Yes. Yates has 160 acres out of the east half, being -- being the southeast quarter.

Valley Oil and Gas out of Roswell owns the oil and gas lease covering the northeast quarter. This is the 160 acres that has been later reflected to be split up between BHP and Samedan where they would be drilling with that 50 percent interest with Yates on the other 50 percent.

Q So this exhibit takes into account the contractual agreements of the various parties as they actually exist to the best of your knowledge?

A That's correct. It reflects the farmout which gives BHP and Samedan their interest before payout.

It also reflects when Valley backed in after payout, if they exercise their option.

Q And summarize these figures for us. What amount, 50 percent of the acreage is controlled by Yates Petroleum Corporation?

A That's correct. Yates would have 50 percent of the interest not only before payout but after payout of this well.

After payout BHP and Samedan each are reduced to 18-3/4. That leaves Valley with the remaining

12-1/2 percent.

Q And that is prepared based on your understanding of the arrangement between Valley Oil & Gas and BHP and Samedan?

A That's correct.

Q All right. Identify Exhibit Number Three and tell us what those letters are.

A Exhibit Number Three are copies of the transmittal letters sent to BHP and Samedan when the formal operating agreement and AFE covering this unorthodox location was sent. It was sent certified return receipt. That notification is on the back of the transmittal letter.

Q Ms. Colbert, what is your understanding of the nature of the dispute between these parties because of which we're here today?

A As far as I understand it, as you earlier stated, both parties do agree that the best location for all involved, including the State of New Mexico, is the unorthodox location. There is no argument or discusion between Yates, Samedan, BHP. The only question here is that Yates feels with their majority interest that they should be the operator. We feel we have the expertise in the area. We feel our costs are lower, not only drilling but overhead costs, and that is our main case, that we feel that controlling interest should drill the well.

 Q All right, identify Exhibit Number Four for us and tell us what it is.

A Exhibit Number Four is an operating agreement covering our proposed well in the east half of 36. This is on the standard AAPL Form 610, the 1977 agreement. This was a copy of the agreement that was transmitted with the certified letters.

Q All right, and Exhibit A to that joint operating agreement is another summary, is it not, of the ownership of the various parties within the east half of Section 36?

A That's correct. It lists all the parties and shows their before and after payout status under this east half.

Q So as I understand your earlier statement, the current controversy revolves solely around which party, BHP or Yates Petroleum Corporation, should be designated the operator of this proposed well?

A That's correct.

Q Does it appear from the communication between the parties that all are, in fact, desirous of drilling a well at the proposed unorthodox location?

A Yes.

Q So even though these cases are set up as forced pooling cases, it would appear that most likely who-

ever is designated as operator, as far as you know the other parties still intend to participate?

A Oh, I feel that's certain because all parties have stated that they agree that this is a good location if it's to be drilled at this unorthodox -- like you stated, it's simply both parties feel that they should be the operator.

Q In addition to designating Yates Petroleum Corporation as operator under your proposed operating
agreement, Exhibit Number Four, does it set forth the overhead and supervision charges requested by Yates in the
event that it is designated as operator of this spacing
unit?

A Yes. The COPAS form does set out our drilling and producing rates. The one that we transmitted to BHP and Samedan is no different than any other we've been using in the area. It shows a drilling rate of 3500, producing rate of 350.

Q And what was the basis, how were those rates arrived at, to your knowledge?

Every year we review the COPAS recommendation that's sent out by the petroleum accountants and also we do look at the Ernst and Whinney Survey that they send out.

Our rates have not been changed during

1 the last year. Like I say, this is what we have been using 2 for a well of this depth. 3 You previously mentioned Yates' exper-4 in the area. Do you have other Ordovician wells ience 5 which have been drilled in the general area, and if so, 6 tell us generally where those wells are. 7 They are located for the most part north Α 8 of the proposed location in Section 36; I believe somewhere 9 around ten wells, maybe even twelve. 10 And do your requested overhead rates in 11 these cases coincide with voluntary rates which are paid by 12 the parties in your existing wells? 13 That's correct. Α 14 MR. DICKERSON: Mr. Catanach, 15 I'd move admission of Yates Exhibits One, Two, Three and 16 Four. I have no further questions of Ms. Colbert. 17 MR. KELLAHIN: No objection. 18 MR. CATANACH: Exhibits One 19 through Four will be admitted as evidence. 20 Mr. Kellahin, any questions? 21 MR. KELLAHIN: Yes. sir. 22 23 CROSS EXAMINATION 24 BY MR. KELLAHIN: 25 Ms. Colbert, let me ask you to direct Q

1 your attention to your Exhibit Number One. 2 Α Yes. 3 In response to Mr. Dickerson's question 4 you told us there was approximately ten to twelve Yates' 5 wells north of this specific area of Section 36. 6 Uh-huh. Α 7 Are those each Ordovician wells? 8 I do not know if exactly Ordovician Α would be the right. I know sometimes they're completed 10 considering Montoya --11 Q Ellenburger, --Yes. 12 Α 13 -- Ordovician, in that general --Q 14 It's my understanding that it's the Or-15 dovician formation. I know that some of them up to the 16 north may be dually completed and I would not have the 17 facts to tell you which ones are. 18 Can we find on -- by looking on Exhibit 19 One, any of those ten to twelve wells? 20 I don't believe so. You notice we did Α 21 not use a legal size. We cut it down to letter size. 22 My question is where is the closest of Q 23 the ten or twelve wells that --24 Okay, in the --Α 25 -- Yates operates in this general forma-Q

1 tion? 2 Okay, the Pathfinder over in Section 21 Α 3 of 10, 27, would be on the east end of your map, north and 4 east? 5 Yes, ma'am. Q 6 The others would be, let's see --Α 7 Q The others are farther away, are they 8 not? 9 Five, six miles. I'm guessing, because Α 10 I don't have the rest of this map. I believe that there is 11 two wells, there are two wells up in 36 in the next town-12 ship. 13 Q The Pathfinder Well has just been re-14 cently potentialed by Yates in the last few weeks, has it 15 not? 16 Α You're probably right. I do not have 17 that information. 18 Okay. Does Yates operate any of the 19 wells located in any of the acreage outlined in yellow for 20 this formation? 21 Outlined in yellow? Α 22 Yes, ma'am. Q 23 No, sir, there's only one well outlined Α 24 in yellow. 25 The initial well was drilled by BHP. Q

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   That's that Urban Ranch well in the north half of 5
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                       That's my understanding, yes.
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                       And then the second well is the well in
   which Yates does have an interest in the west half of 36.
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             Α
                       An interest, right.
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             Q
                              Did you participate on behalf of
                       Yes.
7
    your company with negotiations with BHP concerning the
8
    drilling of the well in the west half?
                       Did I personally? No, sir.
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                             you reviewed the documentation to
                       Have
11
    understand that
                      Yates farmed out its acreage in the west
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    half of 36 to BHP --
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             Α
                       Yes, sir.
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             Q
                       -- for the drilling of that well?
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             Α
                       Yes, sir, I do know that.
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             Q
                       Okay.
                               You did not seek to operate that
17
    well, did you?
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             Α
                       No, sir, we farmed out.
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                       When we look at the Exhibit Number Two,
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    which is the summary of ownership, have you examined the
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    Valley Oil & Gas Company's farmout agreement with BHP Pet-
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    roleum Company?
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             Α
                       No,
                            sir, that is not with our company.
24
    It is with BHP.
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             Q
                       You said you were familiar with the
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1 Valley farmout and utilized that information in the tabula-2 tion. 3 Α Sir, I said I was familiar with the interest because we were furnished those interests by BHP. 5 So you have not examined the farmout Q 6 agreement. 7 Α No, sir, we are not privy to that. 8 You would not know, then, to what ex-9 if the Division allowed Yates to be the operator in 10 the east half of 36, what impact that might have, if any, 11 on the farmout agreement with Valley and BHP. 12 I would have no idea to any of the con-Α 13 ditions. 14 Are you aware of any of the time con-Q 15 straints with regards to when BHP must spud the well on the 16 Valley acreage in order to earn its farmout interest? 17 Yes, sir, simply through BHP. We have 18 not contacted Valley. 19 And what is your understanding of the 20 date at which the well must be commenced in the east half 21 of 36? 22 Α It was our understanding through tele-23 phone conversations that it must be commenced by May 15th. 24 That is under the original agreement with no consideration 25 given for any kind of time extensions.

Q Is Yates in a position where they can commence the well in order to satisfy the conditions of the spud date, using May 15th as the date by which the well must be started?

A Yes, sir, and we have indicated this to the other parties.

Q Exhibit Number Three represents Yates' first correspondence to BHP in which it proposes that Yates drill the Valley State No. 1 Well in the east half of 36?

A Yes, sir, this is the first formal transmittal, that's correct.

Q Am I correct in understanding that it in fact was BHP Petroleum Company that first proposed the well to Yates?

A They first proposed an orthodox location to Yates before the well in the west half was even down.

Q The proposal for the drilling of a well in the east half of 36, the initial proposal, came from BHP to Yates in January of this year, did it not?

A That's correct.

Q In response to BHP's request to have Yates participate in the well in the east half of 36, then, the parties discussed sharing data, developing new seismic information from which to agree upon a well location, is that not correct?

1 Α That's my understanding, yes, sir. 2 it also your understanding that the Is 3 have now agreed on the unorthodox location which parties would be located in the northeast quarter of Section 36 on 5 the Valley Oil & Gas Company lease? 6 Α That is my understanding, that the other 7 parties have agreed with our proposed location. 8 In responding to BHP Operating -- BHP Q Petroleum Company's request that they operate the well in 10 the east half of 36, regardless of where it's drilled --11 Uh-huh. Α 12 -- what specific reasons did Yates com-Q 13 municate to BHP were the reasons that Yates sought to oper-14 ate instead of BHP? 15 The main reason being the majority in-A 16 terest. 17 All right, that was the main reason. 18 Did you communicate or anyone else on behalf of Yates, to 19 your knowledge, communicate to BHP personnel any other 20 reasons? 21 Α Sure. 22 What are they? Q 23 Α Mainly our expertise in the area under 24 which would come into account the drilling cost, completion 25 costs, being the AFE, and, of course, the operating agree-

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ment, the reduced overhead that are using in this Foor Ranch area.

There are no other reasons that you're to contend before this Division that Yates ought to using be the operator.

Α There are no other reasons that we wish to bring forth.

Q Have you expressed to BHP personnel that these were the reasons that you were opposing BHP being the operator of the well in the east half of 36?

Α It is my understanding; I did not do it personally.

Q Who was the land person in charge of negotiating with BHP over the operations?

Robert Bullock would have been the ini-Α tial contact. Most of the conversations after the first proposal was received before the west half well was completed, were between the geologists, because when it was first proposed to us, we did not agree with the location; we weren't sure it was prudent to drill a well then, and like I say, discussions passed from the Land Department to the geologist based on the technical data.

Did land discussions take place between the corresponding land personnel with regards to the operating agreements?

1 On a limited basis. Α 2 not BHP Did propose an operating 0 3 agreement and furnish it to Yates before they furnished 4 their operating agreement back to BHP? 5 That's correct. Α 6 Q And in fact you have utilized one of the 7 exhibits in your Exhibit Number Four taken from the BHP 8 operating agreement, haven't you? 9 That is correct. Exhibit Eight is the 10 BHP one because we were not privy to the Valley farmout. 11 On top of Exhibit Eight, Ms. Colbert, it 12 says, "Attached to and made a part of that certain 13 operating agreement dated January 12th, 1989, between BHP 14 Petroleum Company, Inc. as operator and Yates Petroleum 15 Corporation, et al, as non-operators"? 16 A Right, because the landman did copy the 17 agreement exactly as it was in the operating agreement sent 18 to him. 19 That is certainly not your intent, Q 20 though. You're --21 A No, sir. 22 -- going to change that language? 0 23 Α No, sir. 24 Have you satisfied yourself that the Q 25 other information on Exhibit A is correct?

1 Yes, they have. Α 2 What's your understanding of Mr. Randy 3 Patterson's involvement with regards to negotiating your 4 company's position with BHP Petroleum? 5 Α He is the Land Manager and when it be-6 came obvious that the problem was not going to be easily resolved, as I'm sure BHP and Yates and Samedan would have 8 liked to have seen it avoid a hearing, he became active in 9 the negotiations. He is more experienced than the landman 10 handling this. He had many conversations simply because he 11 was dealing with the land manager of BHP. 12 Q Is Mr. Patterson here today? 13 Α No, he's not. 14 Q Tell me specifically what your personal 15 involvement was? 16 Α My personal involvement? 17 Yes, ma'am. Q 18 I am Robert Bullock's direct supervisor. 19 I attended the January meeting between Yates, BHP, Samedan, 20 at which time we formally showed the geology, some back-21 ground as to why we thought the location in the east half 22 should be unorthodox rather than the standard location pro-

So I have to say I was present, as BHP knows, on many of the telephone calls with the land

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posed to us by BHP.

manager speaking to their land manager.

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Are there any particular reasons that Yates has utilized the 1977 GAO form as opposed to the 1982

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20 21 22 form? Α That is our -- the (unclear) that we use for all wells. We have not formally changed our policy, our way of doing things. We are still using the 1977 form,

I want to make sure I'm focused on the areas in which there is an opportunity for disagreement that the Examiner must resolve.

not only in this area, throughout our other dealings.

Am I correct in understanding that BHP's operating agreement submitted to you was on the 1982 form?

> Α That's correct.

Is there any material difference between the two companies as to what form is utilized, in your opinion?

I don't think as far as the form. Α There couple of options that we did not like in the BHP agreement; however, we did not argue them because we preferred to try and operate and use the '77 form, but we have used the '82 form with other people operating. We like to the language where it says each party shall take in kind, we like to add in there, shall have the right to take in kind. There are a few minor changes, but we have no ob-

1 jections that we can state against using the 1982 form. 2 So that is one of the issues that's not 3 in contention today. Α No, sir. Like I say, the basic form, we 5 have no problems with '77 or '82. 6 Q During any of these conversations in which you participate or have knowledge between your com-8 pany and the BHP personnel in negotiating a resolution of who should operate the interests and the wells in the east 10 half of 36, were you ever present or did you understand 11 that one of the principal contentions of your company was 12 that they had the ability to obtain a price advantage by 13 the connection of this well to Transwestern's pipeline 14 system only if Yates was the operator? 15 MR. DICKERSON: Excuse 16 Mr. Catanach would you and Mr. Kellahin have any problem 17 with us going off the record for just a minute? We have a 18 very brief --19 MR. CATANACH: Sure, go ahead 20 and do that. 21 22 (Thereupon a recess was taken.) 23 24 MR. CATANACH: Call the 25 hearing back to order and I believe Mr. Kellahin was still

cross examining the witness.

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MR. KELLAHIN: Thank you, Mr.

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Examiner.

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Colbert, let me ask you some ques-Ms. tions with regards to your position on the fact that you believe Yates has the ability to drill the well using AFE costs that are lower than BHP costs. All right, you raised that this morning as one of your points for urging the Examiner to award operations to Yates.

Based on the AFE's, that's true.

0 All right. Have you made a comparison of other wells that Yates either operates or has an interest in to see what the AFE costs were versus the completed well costs for those various wells?

> Yes, sir, we have. Α

Are you prepared as part of your presen-Q tation to talk about those points or is that another witness?

I believe that's another witness. Drill-Α ing is not my field.

Well, sure. You also mentioned one of 0 your points was the opinion that the overhead rates that Yates had proposed for the well were going to be lower than the BHP rates.

Let me see if I remember correctly, I

1 believe your JOA has got 3500 and 350 --2 350, that's correct. 3 -- as the proposed overhead rates? Have you utilized those overhead rates on any similar well 5 in the immediate vicinity? 6 Α Yes. 7 0 For this depth? 8 Α For all the Ordovician gas wells, that's 9 correct. 10 Okay. When we look at your Exhibit Num-11 ber One, there is an area up in the northwest corner of 12 that display which is the Yates Petroleum operated 13 Sunnyside Unit? 14 That's correct. It's a State unit. A 15 Q Okay. The overhead rates in that unit 16 agreement to which BHP participates are \$5400 and \$540 a 17 month, are they not? 18 A I could not tell you. I haven't looked 19 at this unit since it was put together. 20 Q All right. I understand. The unit 21 operation --22 Α It is a unit, State exploratory unit, 23 not a single spacing unit well. 24 You do not know what rates Yates, as 25 operator, is using in the Sunnyside Unit?

1 Α I'm sorry, I don't. I should because I that, but, like I say, since it was put together last 3 year and drilled, I have not looked at it. Let's look at the overhead Q Okay. 5 charges in the west half of 36. Now, that's -- that's an 6 area in which after payout, then, Yates will participate as 7 a working interest owner. 8 That's correct, yes. Α 9 And Yates has signed the BHP operating 10 agreement for the well in the west half of 36, haven't you? 11 Α I'm sure we have. 12 Q And that agreement, to which Yates has 13 signed, provides for overhead rates on that well of \$4100 a 14 month drilling well and then a producing well rate of \$410 15 a month. Is that not true? 16 Α I'm sorry, I don't know. 17 You don't know? Q 18 Α No. I would assume they sent the AFE, 19 the operating agreement on the east half that it would 20 match a west half, but I don't know this. 21 Q You made a comment this morning about 22 looking at the Ernst and Whinney overhead rates that are 23 tabulated by the accounting firm?

When we set our rates every year, that's

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correct.

1 Have you looked at the 1988 Ernst and 2 Whinney publication for wells at this depth to determine 3 what they show to be the average prices for wells? No, sir, not recently. 5 Q Okay. Let me show you the 1988 book, 6 Ms. Colbert, and I'll turn to page 18 and 19 and if you'll 7 go down that schedule and find for me the particular depth 8 and locate for me, then, what they suggest for overhead rates. 10 Α Well, where you turned is the Gulf of 11 Mexico and I --12 Q I'm sorry, did I miss the page? 13 Α -- don't think will apply. 14 You don't work there? Q 15 Α No, sir. 16 Q That wasn't a quiz. That was just a 17 mistake on my part. 18 Α Oh, I thought it was a test. Okay. 19 Okay, this would fall under this 1988 20 survey results for Region V, which is West Texas/Eastern 21 New Mexico. 22 Q That's found on what page of the report? 23 It's found on page 15 as to the gas Α 24 wells and, of course, they refer to a gas well over 5000 25 feet but not over 10,000, with the average being 4109 and,

Any

further

Thank you very much. I have no further

CATANACH:

MR. DICKERSON: Just one.

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of course, they trim that down to 5 -- 419.

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questions.

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BY MR. DICKERSON:

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That's exactly correct. Α

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MR. DICKERSON: I have nothing

Ms. Colbert, you -- did I understand your answer in response to question of Mr. Kellahin to be that Yates Petroleum, if designated operator of this unit, is willing to commit to spud the well to accommodate any time problems under its farmout arrangements that BHP and other parties in the northeast quarter of Section 36 have?

REDIRECT EXAMINATION

MR.

Well, that's how I responded this morning, that not only were we able and willing to, that we had relayed that to the other parties in the well.

So Yates is firmly committed that you're 0 not in a position where you're trying to delay the drilling of the well in order to create any problems, expiring farmout, or anything of that nature. Yates will comply with BHP's time problem if they're named operator?

1 further. 2 MR. CATANACH: No questions. 3 The witness may be excused. 5 LESLIE BENTZ, 6 being called as a witness and being duly sworn upon her 7 oath, testified as follows, to-wit: 8 9 DIRECT EXAMINATION 10 BY MR. DICKERSON: 11 Ms. Bentz, state your name, your occupa-12 tion and by whom you're employed, and in what capacity, 13 please. 14 Α My name is Leslie Bentz. I'm employed 15 as a petroleum geologist by Yates Petroleum Corporation of 16 Artesia, New Mexico. 17 And, Ms. Bentz, you have previously 18 qualified and testified before this Division on numerous 19 occasions as a petroleum geologist, have you not? 20 Α Yes, I have. 21 And are you familiar with the available Q 22 geologic data which is available to you regarding the area 23 which is the subject of today's application? 24 Α Yes, I am. 25 Refer to the structure map which was Q

submitted as Exhibit Number Five and review this for us.

The map is a subsurface structure map on top of the PrePenn unconformity. This surface is near or at the top of the productive interval Ordovician formation and it is used as it provides the best seismic marker. The contour interval used is 25 feet.

Datum points are noted by circles and the appropriate datum is listed next to the well. Yellow lines indicate the seismic data incorporated into this map and the calculated subsea depth conversions are located next to the associated shot points. The well spots colored in red indicate the Ordovician producers in the area. They are the BHP Yates "36" No. 1 in Section 36, and BHP's Ervin Ranch State No. 1, which is the discovery well in Section 5.

Production from the Ordovician formation in this area occurs when there is sufficient structural relief to provide a trapping mechanism. The structure map provided shows a narrow, tilted fault block trending north-slightly northeast. Closure into the bounding fault, which is downthrown to the west provides the western limits of production.

To the east the beds dip very steeply and provide the eastern limits to production.

The north and the south limits of this

field have not yet been defined but indications are that anti-regional dip to the north provides the northern limits and that regional dip to the south provides the southern limits.

Ms. Bentz, we've heard previous testimony relating to other Yates Petroleum Corporation wells in this same general area possibly some distance away. Relate to us a little bit more about other Ordovician wells in this vicinity in which Yates has an interest, where they're located, and tell us some of the factors which bear on both risk in drilling these Ordovician wells and in making the decision as to the best allowable location within a given spacing unit when you're dealing with the Ordovician.

A Okay. In 1982 Yates Petroleum drilled two wells at the Foor Ranch Field. Both of these wells were drilled in an attempt to complete in the Ordovician formation. At the time we did not employ the uses of seismic. Both of those wells, we missed our objective. One well we drilled on the PreCambrian Knob (sic) and missed the Ordovician entirely. The other well, on the eastern side of the Foor Ranch, was 200 feet low to prognosis.

So after that we sat back and we reconsidered our position and area and we decided that we probably needed to employ seismic. Since then we've drilled 12

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Ordovician tests and 10 of them have been completed as producers.

Q Relate to us a little more about exactly -- you referred to the Foor Ranch Field and some of the
other Ordovician wells that you're talking about. Where,
in general terms, are these wells located with regard to
the west half of 36 that we're concerned with?

A The closest Foor Ranch production is in Section 36 of 9, 26, which puts it exactly one township due north.

The nearest production Yates Petroleum has to this particular section is in Section 21 of Township 10 South, 27 East, and that is the Pathfinder No. 3. In fact, the Pathfinder No. 3 was completed within a week of the Ervin, BHP's Ervin Ranch State No. 1.

We have also been to the Commission -10 of those wells that have been completed, 3 of them have
been unorthodox locations.

Q Now why is that? Why is there seem to be a necessity in the operators' opinions for unorthodox locations when drilling to test the Ordivician in the area?

A Often the structure, as in the case with the Ervin Ranch area, the structures are very narrow and very complex. We have been shooting seismic lines just to pick one location and where we see the best location seis-

1 mically is where we have been drilling the wells and we don't feel like that we can compromise in where the location of the well is, not only due -- it has a bearing on whether or whether or not you make a well, but the higher 5 you can get structurally, the longer that well will pro-6 duce. These are water drive reservoirs and when you start 7 having water encroachment on a gas well it makes production 8 really tough, and so some of these wells, because we had 9 drilled unorthodox, we had recovered more reserves and 10 these may produce years longer than if we had drilled at an 11 orthodox location. 12

Q So do I understand you that you use a combination of borehole data obtained, subsurface data, and seismic information to come up with these prospective locations?

A That's correct.

Q What are the yellow lines indicated on your Exhibit Number Five?

A Okay. The yellow lines indicate the four seismic lines that were used -- well, four of them were used picking this location. The fifth line was used, was shot to verify the location.

Q Okay, tell us which lines are which. Which --

A Okay.

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Q -- line was used to verify?

A BHP Line 6 was available before the location was chosen; BHP Line 5, BHP Line 2 and Yates Line 11. We shot the Ervin Ranch Line 2, or actually BHP shot the line and we paid for 50 percent of that line to verify this location.

Q Now that BHP Line 2 that you're referring to is the vertical north/south seismic line extending

A Right the Ervin Ranch Line 2 is the one that goes the proposed location.

O From east to west.

A From east to west.

Q All right. By looking at the Exhibit Number Five, tell us what you see on this exhibit that convinces you as a petroleum geologist with access to both this borehole data and the seismic information obtained by all the parties here, that your proposed unorthodox at the footage previously given is superior to any standard loca-

tion for a spacing unit on the east half of Section 36.

Α

Ranch State No. 1, a drill stem test and detailed log calculations of Yates "36" No. 1, we have established a water

From information obtained from the Ervin

-- gas/water contact at approximately -2524, and I would

put this in the range of plus to minus 10 feet of error.

By locating the well at the unorthodox location, it is possible that we may get 90 feet of gross pay, whereas if we move this to the closest orthodox location, which would be at 1980/1980, we are down to 40 feet of gross pay.

where from 20 to 30 feet below the top of the Ordovician which I define as the gross pay, so then you're down to maybe 10 to 20 feet above the gas/water contact. By the time you throw some error in there, as your agreement with seismic may be plus or minus 30 feet, it is a very real possibility that that well will be located at or below the gas/water contact.

Another thing is that the dolomite reservoir, Ordovician reservoir, has very good vertical permeability and it is fractured. If you get within 10 or 20 feet of the gas/water contact, even though you may have 10 or 20 feet of pay, it is possible that you may not be able to make a good completion from water coming up from below you through the fractures.

So I feel like that by placing it at the unorthodox location, that we are lowering our risk; we have a better chance of making a well; if we do make a well, we will be higher and that will increase the life and we will ultimately recover more reserves that would otherwise have

been left behind.

Q Is it your opinion that the proposed well location for this east half spacing unit is the best geologic location for a well to drain that east half?

A It is the best geological location in Section 36 without moving it completely up to the north edge of that line, which would be, you know, very unorthodox. So I picked the best geological location I could near an orthodox location.

Q So as I understand it, there are two principal factors that you look at to determine risk. One, if you get below the gas/water contact, you get oil or not -- you get oil or water and not gas.

- A That's right.
- Q A dry hole.
- A A dry hole.

Q And the other is based on structural position in the reservoir so that if you get higher relatively speaking, structurally you have a better opportunity for larger reserves in that spacing unit?

A That is correct. One other thing is you'll notice that the blue area on this map indicates areas in which the Mississippian formation, which is the PrePenn unconformity surface, too, doesn't exist in the Ervin Ranch State No. 1 and the Yates "36" State No. 1 we've

picked up approximately 50 feet of Mississippian.

By moving east regionally you may pick up more Mississippian section, so we feel like by staying as far west as we can that we have a chance to not pick up a lot of additional Mississippian section which would definitely make (unclear) and again increase the risk.

Q So except as noted by blue, the Missis-sippian either does not exist there or was not deposited or has been eroded away in the interim.

A On the blue area the Mississippian has been eroded away or nondeposition, probably erosion. In the white area you do have a Mississippian section where the PrePenn nonconformity was (unclear).

Seismically you cannot distinguish between the top of the Mississippian and the top of the Ordovician in this area, so this is the best we can do .

Q Do you have anything further you'd like to add about Exhibit Number Five?

A No.

Q Okay, identify your cross section, Exhibit Number Six and review it for us.

A Okay. Exhibit Number Six is a structural cross section and it shows the relationship between the two completed gas wells to our proposed location. As a datum we've hung it at -2050 and it shows all of the perti-

nent formation tops in the area.

As you will note, the PrePenn unconformity is our mapping surface, which in the case of the BHP Ervin Ranch No. 1 is the top of the pay, the top of the Ordovician formation. By the time you get over to the Yates "36" State No. 1, we have picked up approximately 40 to 50 feet of Mississippian, so the mapping surface is actually 50 feet above where the actual pay is.

What we're showing at the proposed location is we expect to be slightly down dip from the BHP Yates "36" State No. 1. I have left the Mississippian about the same interval thickness but there is a chance that may increase with a little bit more Mississippian section.

We are -- I'm also showing my gas/water contact. It's at -- estimated at -2524 and again I think that's probably within 10 feet.

Q Ms. Bentz, tell us, if you would, your involvement in picking this location, specifically with BHP and the other parties which we are here for today, as far as how this current location has been evolved, been agreed upon by all parties.

A Okay. About the time that the Yates "36" No. 1 was being completed, we received an AFE from BHP.

38 1 Q Now that was in January of this year, 2 right? 3 A That was in January of this year. The location was 1980 from the south and 1980 from the east. 5 did not immediately act on this until I could get in touch 6 with Bill Morris, which is the geologist with BHP, and I 7 felt like that neither one of us would be prudent to ap-8 prove or not approve the location without trying to work 9 out some kind of seismic exchange. 10 So BHP swapped the three existing lines 11 that they had over that section that were pertinent to the 12 location and I in turn swapped the one line that I had over 13 that section. 14 After -- I did not immediately have a 15 problem with the location until I was able to obtain BHP's 16 seismic data. After I reviewed not only my line, and their 17 three lines, I felt like that that location was not the 18 best location --19 Q Now let me ask you --20 Α -- could have. 21 Q -- what -- what location was proposed by BHP? 23 Α Okay, it was the 1980 from the south and

Q The standard location --

1980 from the east.

A The standard location --

2

Q -- for an east half spacing unit.

3

A Right, but in the southeast quarter.

I determined that that was not the best

So I had thrown my well location to Bill

it became my understanding through

4

Q All right, and upon your review of all

5

the data you determined what?

Α

6 7

location for the east half of Section 36. Once I decided

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that I was very worried about the location, I had talked to Bill Morris with BHP about the location and he admitted

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that he had some reservations, there was also a dipmeter on

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the Yates "36" No. 1 that indicates that dip is 4 to 6 de-

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grees to the southeast, which when you use the dipmeter

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computations versus what we had with the seismic, that in-

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dicated that there was a very real possibility that we were

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going to be below the gas/water contact, maybe even 30 or

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40 feet below it, plus with the Mississippian thickening to

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the southeast.

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but all this was done very informally, two geologists

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speaking over the phone discussing what we could do tech-

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nically.

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conversations with the Land Department that there was a

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very real possibility that Yates Petroleum was going to be

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force pooled at that location.

Then

Q

At the standard --

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At the standard --

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Q

-- orthodox location proposed?

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location proposed. So we had -- and

to -- Kathy Colvert and I flew to Midland, went into BHP's

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office and I made my maps and my interpretation available

I had heard this, we made arrangements with BHP and we went

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to BHP at that time, and to Samedan.

And since that time has an additional

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seismic line been conducted?

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Α Yes. They called back several days

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after the meeting and said that Samedan was still exercising, you know, they were worried about the location in

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general, and they felt like the best thing we could do was

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shoot a seismic line through the proposed location, the new

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proposed location, the Yates location. We thought that

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that was a very prudent thing to do, so within probably two

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days of that Bill Morris FAX'ed an AFE to our office con-

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cerning seismic. We signed it and FAX'ed it back that very

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So then we had put everything on hold on

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this location until we could get the additional seismic in,

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which we did shortly --

same afternoon.

Q

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-- before this hearing. A

And --

1 And what, briefly, is the current con-Q 2 sensus of the parties, if there is one? 3 I think the current consensus after shooting this line is that we affirm that we do need an 5 unorthodox location and this well deserves to be drilled. 6 Q So to your understanding BHP now sup-7 ports the same location as originally proposed by you? 8 Α Their force pooling us at that location. 9 I assume that they liked it. 10 Now you have discussed the factors which 11 bear upon the risk involved in drilling an Ordovician well 12 at this location. Based upon those factors, Ms. Bentz, 13 have you come to an opinion as to what would be an appro-14 priate risk penalty to be imposed in any pooling order is-15 sued out of these cases? 16 Yes, I have. 17 Q And what in your opinion is an appro-18 priate risk penalty? 19 Α 200 percent. 20 The maximum 200 percent permissible? Q 21 Α Yes. 22 From your study of this data which is 23 available, Ms. Bentz, do you know whether or not these 24 existing two wells appear to be in the same geologic reser-

25

voir?

1 The pressures indicate, as well as the Α 2 gas/water indicates that they are in the same reservoir. 3 Would that be consistent with what you find in the other Ordovician wells in the area in which 5 Yates has an interest? 6 Yes, it would. Α 7 You generally find a reservoir defined Q 8 structure and limited by the gas/water contact or the 9 any other factors, but once discovered there's more than 10 one well produced from those reservoirs? 11 Α That is correct. 12 Now tell us the time frame, the Ervin Q 13 Ranch State No. 1 Well, do you know exactly when that well 14 was drilled? That's the wells in the northwest quarter of 15 Section 5. That was the first --16 Α I can tell you when --17 -- discovery well, wasn't it? Q 18 I can tell you when they did their Yes. 19 4-point test. It was in November and early December of 20 1988. 21 Q Okay, and tell us the timeframe for the 22 drilling and completion of the Yates 36" State Well in the 23 west half of Section 36. 24 Okav. I don't have an exact date on the 25 4-point test but it was down and logged over New Year's and

completed shortly thereafter, so it would have put it the very first to middle of January.

Q Now, neither of these wells are currently -- there is no pipeline in the area; the wells are not currently producing, are they?

A No, they're not.

veloping pools in the Ordovician, absent the time problems that we understand BHP has under its farmout arrangements in order to earn the additional acreage by the drilling of the third well in the east half of 36, which is the subject of this hearing, would it ordinarily be necessary to drill a third well at this time or at the end of January to a proposed third well?

A No. They're really not, there is no pipeline immediately accessible. I have the same problem, I've mentioned the Pathfinder, which is the closest Yates production, we know that we have additional locations in that area but as we have no pipeline connection, we feel like it is not prudent of us to go invest the money in a hole that may sit there for an indefinite period of time without producing. As soon as a pipeline becomes available we will go drill the offset well.

Q But notwithstanding those concerns, you share what we understand is Yates' commitment to drill that

 third well at the proposed unorthodox location for the reason of accommodating BHP's lease expiration -- or farmout timeframe?

A Yes. We intend to drill the well as soon problems are resolved to honor that commitment.

MR. DICKERSON: Mr. Catanach, move admission of Yates Exhibits Five and Six. I have nothing further of Ms. Bentz.

MR. KELLAHIN: No objection.

MR. CATANACH: Exhibits Five

and Six will be admitted as evidence.

Mr. Kellahin?

## CROSS EXAMINATION

BY MR. KELLAHIN:

Q Ms. Bentz, let me take you back to the structure map, Exhibit Number Five. Tell me again what your opinion is of the approximate location of the current gas/water contact.

A -2524. It's not actually located on the well but it is on the -- I mean on the map, but it's on the cross section.

Q Your estimate of the gas/water contact would place that gas/water contact to the east of Section 36 the way this is contoured.

1 Α Yes, but you have to realize that this 2 map is on top of the PrePenn unconformity, which is not necessarily the Ordovician top. What I'm looking for is to have you 5 explain for me where you think the gas/water contact is 6 within the boundaries of the east half of 36. What contour 7 line do I follow? 8 Well, it's not quite as simple as that. 0 I understand, but I'm a simple person 10 and I can't figure it out. 11 Α Well, --12 Q I want to use a contour line on here and 13 I know this is mapped --14 Α You can't -- okay, it's mapped on the 15 PrePenn unconformity --16 That's right. Q 17 -- which is a top of a surface. A 18 Yeah. Q 19 Α You have the Mississippian section in-20 creasing to the south/southeast. 21 Well, I understand all that. I want --Q 22 So, okay --Α 23 -- you to tell me where the water is. Q 24 Α The water is at -2524 in subsea 25 That doesn't necessarily mean that you can draw one

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line on this map and say, you know -- you would have to map the top of the PrePenn dolomite to be able to do that.

Q Project this to the top of the PrePenn dolomite for me and give me your best estimate of where you think the likely gas/water contact is within the boundaries of the east half of 36.

A Okay, well, obviously, if I felt their location at 1980/1980 was very risky and near that, then probably what you're doing is that is going to run down the middle of that east half. So you're going to have 80 acres in the northeast quarter and approximately 80 acres in the southeast quarter.

Q Well, it will -- you will have to honor the contour lines that you've display, will it not?

A Right.

Q Can I follow the -2425 contour line on the display? Does that approximate --

A Very, very roughly.

Q All right. Okay. What I'm trying to find out is the relationship geologically between your proposed unorthodox location that everyone, I assume, now agrees to, and the closest standard location. I'm trying to have you draw for us the distinction. All right, what are we --

Okay, I guess I'm a little curious as to

1 why we're discussing this because I thought that BHP approved that location. 3 Because Mr. Catanach's got a memo from the Director today telling him to consider imposing a pen-5 alty on an unorthodox well location even if there's no 6 opposition to that. 7 So you're speaking for Mr. Catanach? 8 I'm speaking for both of us trying not Q 9 to get this well penalized. 10 Α Okay. 11 Q Bear with me, I'm on your side. 12 Α Okay. Well, I -- that's what -- I was 13 trying to respond there for a second. 14 Q When we look at the closest standard 15 location for an east half well. 16 Α The closest is 1980 from the north and 17 east. 18 That's right. Q 19 That's the location I discussed. 20 Well, let's look from the north 1980 and Q 21 bring yourself 660 from the western boundary of the spacing 22 unit. 23 Α Okay. 24 Q All right, you said east, let me make 25 sure we're at the same point; 1980 form the north --

		48
1	A	1980 from the north.
2	Q	660 from the west
3	A	No, no.
4	Q	660 from the western boundary of the
5	spacing unit.	
6	A	Yeah, but 1980 from the east line.
7	Q	Yes, all right, same point. Okay, what
8	structural positio	n on this exhibit does that put you at?
9	A	That puts you below the -2385 but again
10	you're going to	have additional Mississippian section,
11	which I threw in	approximately 30 feet north of Mississip-
12	pian section, so	you're looking at a point on the top of
13	the Ordovician whi	ch is 30 to 40 feet below that particular
14	point.	
15	Q	So if I take -2385, approximately, sub-
16	tract 40 feet, tha	t's going to get me in the top of the pay
17	of the Ordovician.	
18	A	Hopefully.
19	Q	All right.
20	A	And then there is a factor for when
21	you're dealing w	with seismic there is also an error factor
22	or two that you co	ould go either way on either location.
23	Q	And that's a plus or minus 30 feet.
24	A	30, 35 feet.
25	Q	All right. Now give me the structural
	1	

1 position on the top of the Ordovician for the proposed 2 unorthodox location which is 1650 and 330, 330 from the 3 western boundary of the spacing unit. What's that point? That point is between -2380 and -2375. Α 5 What then is the vertical difference --0 6 But you --Α 7 -- between the closest standard location Q 8 and the unorthodox location? Okay. You're going to have less Missis-10 sippian there, so you're looking at roughly, maybe 10 to 15 11 feet structurally on the Mississippian and then you had the 12 30 to 40 feet, so you're looking at approximately, maybe 55 13 feet of difference. 14 Okay, we gain approximately 55 feet of Q 15 vertical structure in the primary pay formation. 16 Yes. Α 17 All right. And that to you as a geolo-Q 18 gist is a significant enough number that requires you to 19 assert an unorthodox location as opposed to the closest 20 standard location. 21 That is correct. Α 22 And that coupled with the opinion of the O 23 gas/water contact is your justification, then, for the un-24 orthodox location. 25 Α Correct.

1 Q All right. Does this location gain any unfair advantage over the interest owners in the west half 3 of the section? Α I have not sat down and calculated the 5 exact drainage. 6 Q Well, it wasn't intended --7 But you are --Α 8 Excuse me. Q 9 But it wasn't intended to do that. 10 was not the intention of it, but it is 330 -- 330 feet 11 nearer the line, the center line. 12 Q I don't expect you to calculate the 13 drainage calculations for me. Geologically, though, you 14 have told us there's a significance in being up structure. 15 Α Right. 16 And avoiding the gas/water contact. Q 17 Ā That's correct. 18 Geologically, by approval of this loca-Q 19 tion without a penalty are the owners in the east half 20 gaining an unfair advantage over the owners in the west 21 half? 22 You're 330 nearer their line. A 23 What is the structural relationship be-24 tween the Yates State 36 - 1 Well in the west half of 36 to 25 the unorthodox location?

1 Structurally I expect the Yates "36" No. Α 2 1 to be higher than the proposed location. 3 So it already has some structural advantage, then. 5 Α It does have some structural advantage. 6 What contour line do I follow as I move Q 7 through the west half of 36 to find the -- the size and 8 shape of the reservoir? Α Well, it's the fault on the lefthand 10 side is one boundary factor. 11 Q Okay. 12 And then as you have already, around --Α 13 between -2425 and -2450 would be the gas/water contact over 14 on the eastern side. It's not bound by a fault, it's just 15 steep dip. 16 Did you participate as a geologist in 17 Yates' decision to farmout its interest in the west half of 18 36 rather than --19 Α Yes, I did. 20 -- participate in that well? Q 21 Α Yes, I did. May I explain that deci-22 sion or are you just wanting to know if I was involved? 23 I wanted to know if you were involved. Q 24 Α Yes. 25 Q You've answered my question, thank you.

1 Α Sure. 2 MR. DICKERSON: Would you like 3 to explain --MR. KELLAHIN: Well, when you 5 get a chance to. 6 MR. DICKERSON: I'm sorry, I 7 thought you were --8 MR. KELLAHIN: It's my turn, 9 honey. 10 Q Using Ms. Colbert's Exhibit Number One 11 that she talked about Yates' acreage position, am -- am I 12 correct in understanding that Yates, other than a working 13 interest owner in its -- in the well, the BHP well on the 14 west half of 36, there aren't any other of these similar 15 type gas wells in which Yates operates or has a working in-16 terest? 17 Α On the -- are you talking about the yel-18 low colored acreage? 19 0 The yellow color, yes, ma'am. 20 Α Well the only well on the yellow 21 coloring that is an Ordovician well is the Yates "36" No. 22 1. 23 Q Okay, and then to the south of that we 24 have the Ervin Ranch well in the northeast of 5. 25 Α Right.

1 And that's outside the yellow, and then Q 2 we have to move over into the northeast corner in Section 3 21 to the Pathfinder Well. It's not the northeast quarter; it's the 5 southwest quarter. 6 Q Would it be your responsibility for your 7 company to make an analysis of the availability and the 8 cost in bringing a pipeline into this particular portion of 9 the pool to have the wells connected and then produced; 10 just not something you would do, would it be? 11 Α No. 12 MR. KELLLAHIN: Thank you, Mr. 13 Examiner. 14 MR. CATANACH: Redirect, Mr. 15 Dickerson? 16 MR. DICKERSON: Just a couple 17 of questions. 18 19 REDIRECT EXAMINATION 20 BY MR. DICKERSON: 21 Q Bentz, in picking your location for  ${\tt Ms.}$ 22 this proposed well, you weigh the geologic factors and the 23 risk factors that you've discussed, do you not? 24 Α Yes, I do. 25 Q You don't -- you don't weigh and take

into consideration the relative merits as to how far it is from the boundary line.

A No, other than I almost never go beyond 330 towards the particular boundary.

Q But in choosing that particular unorthodox location you have attempted to pick the best geologic location for the maximum recovery or chance of recovery of oil and gas anywhere in that spacing unit that we're relegated with since the west half is already dedicated.

- A That's right.
- Q All right.
- A Without going on top of the lease line.

Q Mr. Kellahin asked you whether or not you were involved and you stated that you were in the decision to farmout the Yates acreage in the west half of Section 36. Would you like to explain your participation in that decision?

A Yes, I would. At the time BHP brought the Ervin Ranch prospect to us we were looking at joining them in this project but also at the same time we were drilling numerous step out wells in the Foor Ranch area and at the same time they were drilling the Ervin Ranch State No. 1 we were drilling the Pathfinder. So we had two other areas that we were involved with that were the same formation that we felt like we should do.

We wanted to see BHP drill a well; therefore we gave them support in the form of a farmout option on the west half of Section 36. We did not give them all of our acreage in 36. Yates has a back-in in that well and we left ourselves an offset location if we so desired. So it was a business decision.

Q But that decision to support BHP's drilling of the Yates "36" State Well, as it turned out BHP took the risk in drilling that well, it appears to have established a commercial well, and have benefitted not only themselves but Yates Petroleum Corporation as a practical matter.

A That is correct.

Q And in your experience is that the way this business customarily operates, the companies supporting each other in a mutual endeavor to establish oil and gas production?

A Yes.

Q Okay, I have nothing further.

## CROSS EXAMINATION

BY MR. CATANACH:

Q Ms. Bentz, just a couple of questions.

You said that you gain approximately 55 feet structure at the proposed location.

A Yes.

Q Yet the -- you said that the standard location would be at about -2385?

A Yes.

Q And at the proposed between 2375 and 2380.

A Yes, but I expect by moving further to the south and to the east, as would be the proposed location, your Mississippian section is going to thicken very rapidly, so I'm expecting to pick up 30, 40, and maybe even 50 feet of additional Mississippian section. From the Ervin Ranch State No. 1, which was original discovery well, there was no Mississippian present whatsoever. By moving up to Yates "36" State No. 1 they have picked up additional nearly 50 feet of Mississippian and they're basically still on the structural ridge, so when you get off on the flanks you're going to pick up Mississippian very rapidly.

Q Ms. Bentz, if you -- if you were forced to drill a standard location, would you recommend that location to your management? Would you recommend that well be drilled?

A I would have to think about it very seriously and point out to them the additional risk and then I think from there forward it would be a management decision.

57 1 MR. CATANACH: No further 2 questions. 3 ROBERT G. SPRINGER, 5 being called as a witness and being duly sworn upon his 6 oath, testified as follows, to-wit: 7 8 DIRECT EXAMINATION 9 BY MR. DICKERSON: 10 Mr. Springer, will you state your name, 11 your occupation and by whom you're employed, please? 12 Α My name is Robert G. Springer, III. 13 employed by Yates Petroleum Corporation, Artesia, New Mexi-14 co; engineer over drilling operations. 15 You have previously testified before Q 16 this Division as an engineer, have you not? 17 Yes, I have. Α 18 And in connection with the applications Q 19 pending here today have you reviewed certain of the costs 20 inherent in drilling an Ordovician well in this area for 21 the purpose of making some cost comparisons between the 22 Yates proposed cost and those proposed by BHP? 23 Α Yes, I have. 24 All right, identify the AFE's for us Q 25 that we have submitted as Exhibit Number Seven and review those for us.

A Exhibit Number Seven has two AFE's composed in it, the first one being Yates Petroleum AFE and that was made out by myself; the second (unclear) location that we feel that we being the operator could save a substantial amount of money in drilling this well.

To back that up I'll have to go into a little background. This area has an individual drilling characteristics. About a year and a half ago our management asked me to take a look at the area to see if we couldn't come up with some way to substantially cut costs. If we could, we could drill a lot more wells.

So I went about it by looking at the area that causes us the most risk and the most potential cost in drilling that area and that turns out to be shale problems from the Abo shales and the Wolfcamp shales. They tend to be very water sensitive in this entire region. Because of that you have to mud up early and carry your mud for a long time, it slows down drilling and adds to costs.

So I, along with some other people, have been working on that particular problem, since it was the most costly one.

During that period of time and originally the cheapest way to drill a well was just plain with fresh water. You couldn't even get a well down if you

2<del>4</del>  drilled with fresh water in that country.

The next thing that I went to was drilling with brine water. The sodium and the chloride in the water helps create -- the shale wants to absorb the water. When it absorbs the water it expands the shales and causes them to break up and in a sense it falls into the wellbore causing all sorts of problems with drilling, drag, difficulty in getting logs down, difficulty in pulling DST's off, drill stem tests.

The brine water helps but it did not solve the problem. It works in an osmosis type of effect where if the brine water is strong enough it tends to keep the fresh water from going into the shales.

Back last year we kind of went at it with everything we could. We went at it with brine water. We went at it with adding 3 to 5 percent oil into it to inhibit the shales, plus then finally we went ahead and added potassium chloride to the mud, which is another shale inhibitor. We were using those three things up until about November of last year. From looking at well records I could find that is the same type of mud system that BHP employed on their two wells.

Q Let me, before we get into that, let's just for a minute, summarize for us, you prepared these Yates AFE for this drilling of this well based on the

			60
1	factors	that you'	ve related, which come from Yates' exper-
2	ience in	drilling	through these Abo and Wolfcamp formations
3	in this a	area.	
4		А	That's correct.
5		Q	Now, your calculation shows an estimated
6	dry hole	cost of \$	191,300.
7		A	That's correct.
8		Q	The BHP AFE, I presume this is the one
9	furnished to Yates when BHP proposed this well?		
10		А	That's correct.
11		Q	What's the correlative figure for a dry
12	hole under that AFE?		
13		A	\$210,950.
14		Q	And for the completed well cost?
15		A	\$396,450.
16		Q	For BHP as compared to what estimate for
17	Yates?		
18		A	\$334,400.
19		Q	Now we all understand that these AFE's
20	are merely estimates. Actual costs incurred may be more or		
21	less than the estimate.		
22		A	That is right.
23		Q	And so for what it's worth, there is
24	some dif	ference sh	own in the estimates of the two parties.
25		A	I might point out one thing that may be

of interest. The -- it's hard to see how this compares because your contracts with drilling contractors and everything are different and I don't have access to them, but the footage rate that we have on ours is \$12.80, and that's for a partial turnkey type basis.

Looking at their footage rate for their drilling contractor, they're showing \$14.00 a foot and with the day work I don't know how close it would be to our kind of contract, but it certainly isn't any more turnkey.

Q What you're saying is since you did not have the BHP actual data you had to make projections and to some extent some estimates of -- of what those figures were?

A That's correct.

Q All right, and Exhibit Number Eight is where you summarized these projections?

Yeah, Exhibit Number Eight, the information, the best information I could get for correlation is going back to daily drilling records that were submitted on our wells and theirs and it's difficult to compare apples to apples, so I took a point, as noted on here, of -- to determine a cost after the well had been drilled and the production pipe had been put in place and cemented in the Wrigley lease.

I did not continue on further than that

A Right.

for the purpose that once you get past that point you've got several zones you may be testing and various other things, it's too hard to compare one well to the other one; too many different approaches that you could take. That's the best cutoff point I could find. And these are just the numbers I came up with on BHP's two wells, which are about 350 feet deeper than ours as an average. They were 263,000 -- well, the two wells on the bottom left column here average \$266,128.

The two wells that we drilled at that same time, or approximately the same time, we drilled these the first month and a half of this year, these are about five miles north of there, averaged \$239,556 at that point, which is approximately \$24,000 difference. This is an indicator of a difference and the difference that I claim to have primarily is a new technology and mud system that we've come up with recently.

Q Let me ask you to talk about that in just a minute.

A Okay.

Q State again why you chose the two -it's obvious you chose the two BHP wells because they're
the most recent wells in the -- involved in the pool which
is the subject of this hearing.

 Q Are the Yates Petroleum Corporation wells which you've used the most recent chronologically in time to be relevant to this hearing?

A They're the most recent ones that we've drilled in time, approximately the same time, only a month later. They're also, with the exception of the Pathfinder, probably as close as any of the other ones. Pathfinder has been mentioned before. I did not compare that because the first part of that well was drilled with cable tool.

Q All right, why did you exclude, let's say, some of the other approximately 7 or 8 Yates Ordovician wells within five or six miles of this location?

A Well, we've been drilling those wells over the last five or six years and we've had all sorts of changes in the industry. We've had cost of casing double in price and drop back again. We've had changes in mud system, as I kind of pointed out, drilling.

The only way I could compare at all, and it's a tough comparison, is to go with the closest things we have, which are these four wells right here.

Q Okay, and to the best of your ability from the limited information you've had, how do you explain the apparent difference between Yates' cost in drilling these wells and similar wells drilled by BHP?

A Okay. As of about December through the

research that I've been doing to develop a -- a new technology, if you would, it turned into that, we had done some experimenting with a new polymer. It's not a new polymer, it's been around, but we started trying different types of polymers to see what kind of effect they had. In the process of doing that we found some very interesting stuff on some samples.

We decided to try it in -- Pathfinder

No. 1 was the first well we tried it in; had some very interesting results from it. It eliminated pretty much as you would drill, if you made connections you'd get fill; if you made the trip with fill, and sometimes you tried to do a DST, you couldn't get back down; or try to get a log, sometimes it would take 3 or 4 attempts to get logs because of shales, washouts, make it difficult.

We saw from using it, we were kind of primitive at that time because it was the first time that the polymer in combination with the brine allowed us to eliminate the oil and the KCL and we did that on the next well, the Energy No. 1 that we drilled, and with each one, the last one, the Energy No. 2, I don't believe that we had fill on any of our trips at all, but the nice thing about it, it really is kind of an exciting thing. I do not have enough data to present a technical paper on it; at the moment we're developing it, but it's going -- it has shown

the drilling contractors that we use that it has made their risk so much less that they have dropped their cost to us considerably, in the range of -- just here in the last few months -- of \$1.00 to \$1.50 a foot, plus they are willing to take more of the responsibility for getting logs down and pulling DST's off than they used to be able to, primarily through the fact that they're slowly becoming comfortable. We're just getting into it and I think, as we develop it more, they will become more comfortable for it and I think it's really going to promote drilling in the area, to be honest with you, and it's got other things for other areas, too.

Q As I understand it, anyone drilling in this area was faced with a problem, heaving shale, whatever, caused by water absorption into these Abo and Wolfcamp formations?

A That's correct.

Q And your development of this technique is an attempt to avoid or decrease some of those problems which come up in the drilling?

A Now, it's primary advantage is that it reduces the risk involved in drilling considerably.

Q All right, and how does that correlate to a cost saving in drilling the well?

A Well, I don't have the numbers yet.

2 w 3 r 4 c 5 s 6 k 7 c

That's why I'm using these numbers as exhibits for, oh, a way to get at an idea of what -- how it does change the risk. The things it does do is it may save on an extra day of day work if you have to make an extra attempt on a DST; save extra money for mud because you had to mud up more because of the shale. It saves extra money because you don't have these tremendous wash-ups, if you look on the logs, in the Abo and Wolfcamp. We are both cementing our wells back to surface right now. It saves on that cost quite a bit on cement that goes back to the wash-up, plus you get better bonding because your hole is more (unclear).

And from your review of this limited information, Mr. Springer, is it your opinion that the cost of Yates drilling the wells in accordance with its techniques developed in this area would lead to a substantial cost savings if those techniques are not used by BHP in drilling its well?

A Yes, it would. It would definitely add to both of our cost savings, plus it's a (not clearly understood.)

Q And any costs saved incurred in drilling and completing these wells would correlate, would it not, to prevent economic waste caused by expending those unnecessary costs?

A Exactly.

67 1 Move admis-DICKERSON: MR. 2 sion of Yates Exhibits Seven and Eight, Mr. Catanach. I 3 have nothing further of Mr. Springer. Exhibit Nine consists of affi-5 davits of mailing to the parties in accordance with Rule 6 1207 and I believe the parties involved are here. MR. CATANACH: Exhibits Seven. 8 Eight and Nine will be admitted into evidence. 9 Mr. Kellahin? 10 MR. KELLAHIN: Thank you, Mr. 11 Examiner. 12 13 CROSS EXAMINATION 14 BY MR. KELLAHIN: 15 Mr. Springer, when we look at Exhibit Q 16 Number Seven, the first two pages are the AFE you proposed 17 for the subject well? 18 Α Just one page. 19 The second page on mine doesn't have Q 20 anything on it. 21 Α Yeah. That's correct, on yours and one 22 on mine. 23 And then on the last two pages are Mr. Q

Hal Crabb's AFE for the same well.

Correct.

Α

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1	Q	I heard you express two, if not three,
2	times in your dire	ct case, Mr. Springer, that the compari-
3	son between the t	wo AFE's and the position of information
4	of both engineers	that did the work, this was a difficult
5	task.	
6	A	Yes, it is, indeed it is, to be precise
7	and correct on it.	Without the information, without having
8	access to your info	ermation.
9	Q	Let me make sure I understand the se-
10	quence.	
11		Mr. Crabb's AFE is, at least the revised
12	one we have here,	is dated February 21st of '89. Shown in
13	the middle of the t	hird page next to his signature.
14		Am I correct in understanding you had
15	available to you	his AFE at the time you were working on
16	your AFE dated Marc	th 7th of '89?
17	A	No, I did not.
18	Q	You worked independently of his AFE?
19	A	Yes, I did.
20	Q	When did you receive his AFE?
21	A	I did not see his AFE until just the
22	other day.	
23	Q	How many days ago was that?
24	A	Three days.
25	Q	Do you know when you received the AFE

1 from BHP into Yates Petroleum Corporation? 2 I don't know when Yates Petroleum re-3 ceived it, no, I do not, unless it's stamped. I don't see a stamp. 5 Q Do you know Mr. Crabb with BHP? No, I don't. I do not. Α 7 The gentleman sitting right here; never Q 8 met him before? Α No, I have not. 10 Did you call him and seek to obtain in-11 formation from him on how he prepared his AFE? 12 No, I did not. Α 13 Your AFE shows that you haven't allo-Q 14 cated any expenditures to drill stem test the well? Is 15 that correct? 16 Α That's correct. 17 Is it not the customary practice of the Q 18 operators to drill stem test these wells? 19 Α Ιt is and it isn't. It depends on the 20 well. 21 Q Why have you chosen not to drill stem 22 test this particular well? 23 Α I do not recall exactly why I left that 24 one off. 25 I might tell you how we develop these

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1
    AFE's.
2
                       Well, if I ask you that question, you
             Q
3
    can answer that.
4
                       When we look at Exhibit Number Eight,
5
    the Yates Petroleum well in the top right column, the
6
    Energy "AFY" State 1 Well? I'm looking here at only the --
7
             Α
                       Yes.
8
             0
                       I don't have completion costs on this,
9
    right?
10
                       That is correct.
             Α
11
                       Okay.
             Q
12
                       That's a rig release from drilling.
             Α
13
                       All right. Does that well in this cost
             Q
14
    number have a charge for a drill stem test?
15
             Α
                       I believe it did. In fact, we've got
16
          variables in here. These are the best ones I had.
17
    believe both of the wells were DST'd.
18
             Q
                       Both of the Yates wells on the display
19
    here?
20
                       Both of your wells, one of our wells
             Α
21
    was.
22
                       The State No. 2 was not, or you don't
             Q
23
    know, just one of those was not.
24
             Α
                       No. 2 was not.
25
                       Okay. All right, when we look at the
             Q
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1 Ervin Ranch State No. 1 Well, that's the -- that's the well 2 in Section 5. That's -- that's the wildcat exploratory 3 well, is it not? Yes, it is. Α 5 All right. When we look at the develop-Q ment well, which is the north offset, the Yates "36" State 7 1 Well? 8 Uh-huh. Α 9 It looks like that number is about \$6000 10 less than the comparable charges for the Energy "AFY" State 11 No. 2 Well. 12 A Okay. What I did, when I pulled these 13 off the drilling reports --14 Yes, sir. Q 15 -- I added in -- they did not have a 16 figure cumulative in there for casing. I put in a figure, 17 and that's why the stars are there, for a conservative 18 price for that casing to make an attempt at making it com-19 parable. If you look at the --20 0 Let's back it up the other way, Mr. 21 Springer. What's the casing charge on the State No. 2 22 Well, so I can back it out of the number? 23 Α Probably about \$38,000. 24 Q Okay. Is that a similar casing charge 25 for the State No. 1?

at it.

A Yes. I would assume so without looking

Q All right. So we come up with a price differential of about 20,000 plus, maybe?

A 24 is about right.

Q 24 between the two AFE's? Into which major components, then, of the AFE do you attribute that cost difference?

A It's hard to contribute. You've got, probably, 101 different components that make up those costs. I feel because of the mud programs, I'm trying to get at a representative risk. It's like determining risk geologically, it's hard to say this number is going to say how much risk is. This is just an indicator to me of the potential savings one might have. It's still a little bit early. Full potential savings are to be seen in the next few wells.

Q You said initially in your direct examination words to the effect that Yates has continued to modify and change its drilling program and its AFE's for these type of wells.

A That's correct.

Q All right. How far back can we take this AFE from March of '89 in time to find out when you have stopped making significant alterations in the AFE's?

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A Well, this exact AFE? I'm not -- I couldn't tell you, exactly, but I imagine four months, maybe.

Q Okay. Can you describe for us in a general way what significant alterations, if any, that resulted in material price differences, have existed between early '88 in the type of wells you were drilling, and the type of well you propose to drill here under the current AFE?

A In early '88. Cost of casing was probably changing then, I'm not sure. That is usually a dominant factor in a lot of these things.

Other than the cost of casing, drilling contractors that you use make a difference, too, availability of drilling contractors, and I'm not sure what the availability was then.

Q Okay. At the bottom of your Exhibit Seven on the first page just above your signature, it has a note in here. It says, "Approval of this AFE constitutes approval of the operator's option to charge the joint account with tubular goods from operator's warehouse stock at the rate stated above."

A Yes, sir, it says that.

Q I know what it says, I don't know what it means, though. What does that mean, Mr. Springer?

1 Well, I couldn't honestly -- I didn't Α 2 What it is, it says basically that we can there. 3 charge you for casing at these rates so posted. Well, in my own simple way --Q 5 Α As I understand it. 6 Q Well, are you buying at wholesale and 7 charging the working --8 Α No, we're not. 9 O -- interest owners retail on tubular 10 goods? 11 I do not personally buy. You can go Α 12 through a purchasing agent, but we bid out all our tubular 13 goods (not clearly understood), all the tubular goods from 14 local people, Houston, Midland, north Texas, all over the 15 place, and we go (not clearly understood) figures (unclear) 16 have it delivered directly from the factory. 17 Let me ask you this. On the tubular 0 18 goods, when you start preparing an AFE, you know approxi-19 quantity of tubular goods you're going to use mately the 20 and you put a price on it and fill in the column, right? 21 Yeah. Α 22 Q It's in here. 23 Uh-huh. Α 24 Okay, when you get the price from the Q 25 warehouse, is there a profit factor applied to the number

so that it's different than what you paid for it?

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Α Not to my knowledge.

3

Okay, so you --Q

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Α I don't do that but I don't believe it's not to my knowledge. I'm not responsible for done. but that.

6 7

All right, so the figure in here is what Q you had to pay for those tubular goods.

8 9

Α No.

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It's not? 0

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Α No. The figure that's in there is the figure that I guessed might be the approximate value at the time.

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Springer, let me show you an AFE Q Mr. that you prepared dated February 16th, 1988, which is on the Sunnyside State Unit 1 Well. That's going to be up in your Sunnyside Unit up to the north and west of -- of the subject well. It's dated February 16th and it shows a total dry hole cost of \$237,000 and a completed well cost

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of \$394,000.

20 21

Does that represent your work for that well?

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I do not recall how (unclear) the cost Α comparison. did not. By saying does it represent my Ι work, does that mean if I made up these numbers or are you

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1 asking me does it compare with the actual costs? 2 No, I'm asking you did you do it. Your 3 name's on it. Is that your signature? Α Yes. 5 Okay, that represents your work? 0 6 Uh-huh. 7 That's a similar type well to the well Q 8 that you're proposing that Yates operate in this case, is 9 it not? 10 Α It's similar. It has one difference 11 that I can think of, but it's similar, yes. 12 Okay. What is the material difference Q 13 that you can think of? 14 Well, vague differences. One of them Α 15 that we have potential for some lost circulation up at this 16 point to the north in the surface hole. And then the 17 shales are slightly -- they tend to grade as you go to the 18 north and east, slightly more sensitive to water, but basi-19 cally they're similar, yes. 20 Q Okay. When we look at Exhibit Number 21 Eight, are either one of your Yates wells classified in 22 your understanding as wildcat wells? 23 Α The No. 1 definitely was a wildcat. 24 Okay. How about the number --Q 25 No. 2, I don't know how we classified Α

77 1 it. It could have been. 2 MR. KELLAHIN: Thank you, Mr. 3 Examiner. 4 MR. CATANACH: I have no ques-5 tions. Anything further, Mr. Dickerson? 6 MR. DICKERSON: No. 7 MR. CATANACH: The witness may 8 be excused. MR. DICKERSON: We rest, Mr. 10 Catanach. 11 MR. CATANACH: Let's take a 12 short break here. 13 14 (Thereupon a recess was taken.) 15 16 MR. CATANACH: Go ahead. 17 MR. KELLAHIN: Mr. Examiner, 18 at this time I'd like to call Mr. Randall Davis, who is a 19 petroleum landman with BHP Petroleum Corporation. 20 21 RANDALL L. DAVIS, 22 being called as a witness and being duly sworn upon his 23 oath, testified as follows, to-wit: 24 25

## DIRECT EXAMINATION

BY MR. KELLAHIN:

Q Mr. Davis, for the record would you please state your name and occupation?

A My name is Randall Davis. I'm the Regional Land Manager for BHP Petroleum in Midland, Texas.

Q Mr. Davis, would you summarize for us what has been your educational background?

Yes. I was graduated from Texas Tech University in December of 1984 with a degree in business management and I have worked for Cities Service Company -- I worked for Cities Service Company from January of '75 to February of '79 and have been with BHP Monsanto, combined companies, since February of '79.

Q Has it been your direct responsibility as a petroleum landman for your company to negotiate, obtain title opinions, obtain administrative approvals, for various well locations and, in essence, manage the land title matters with regards to BHP's development of what is called the Ervin Ranch prospect?

A Yes, sir.

Q When did your first involvement with that prospect begin?

A My first involvement with the prospect actually began several years ago with Monsanto Oil Company,

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 who actually developed the prospect under the name Monsanto Oil Company.

Monsanto was acquired in December of '85 by BHP Petroleum and I have been in the capacity of Regional Land Manager with BHP Petroleum since the acquisition.

Q When we make reference to the Ervin Ranch prospect, can you take what is marked as BHP Exhibit Number Five and show us generally what area that describes?

A Yes, sir. On Exhibit Number Five, what we have here, the acreage that's colored in yellow is the acreage that BHP Petroleum actually has under lease or has obtained by way of farm in from other companies, and has either drilled the wells on the acreage and earned the acreage, or is in the process of drilling wells -- a well on the acreage to earn the acreage.

The area that's outlined in red is the working interest unit that's in question today. The blue acreage is the State Lease LG-6319, of which Yates, the Yates, et al, group has the interest in.

The northeast quarter of Section 36 is the acreage that BHP has acquired by farm in from Valley Oil & Gas.

Q Have you continued with your involvement and responsibility for the land management matters with regards to the Ervin Ranch prospect all the way down through

ified.

the negotiations with Yates Petroleum Corporation and the other Yates entities for participation in the well in the east half of 36?

A Yes, sir. Basically, for BHP I have been the project leader for this particular prospect from the onset, from the time that we sought a partnership with Yates till the time that we have drilled all of the Ervin Ranch discovery well, the subsequent Yates "36" Well, the well that we're currently drilling in the north half of Section 8, and the well that we've proposed in the east half of Section 36.

MR. KELLAHIN: At this time, Mr. Examiner, we tender Mr. Randall Davis as an expert petroleum landman.

MR. CATANACH: He is so qual-

In order to bring us down to your current position on behalf of your company with regards to the development of the east half of 36, would you begin by explaining to us in chronological order the first occasion in which you had reason to contact any of the Yates personnel concerning their interest ownership in the oil and gas minerals to be developed in this particular area?

A Yes. My first contact was actually in January of 1988 with Randy Patterson, first by telephone

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conservation of January the 20th, and a follow-up letter of January 21st, 1988, in which we proposed the formation of a working interest unit for the drilling of the initial Ervin Ranch State No. 1 Well.

Q What was the general area to be included in this working interest unit area?

The initial contact that we made with actually only going to cover the east half of Yates was Section 5, and Section 5 is an odd section, so I'm referring to that quarter section and the odd lots to the north, and the southwest quarter of Section 36.

Q And Yates' interest at that time in the property was in the southwest quarter of 36?

> That's correct. Α

Q All right. Tell us what proceeded.

Α Okay. What proceeded after we proposed formation of the working interest unit was that Yates the had wanted to review our seismic before making a decision. In a normal course of business generally you make an agreement with the company if they're going to review your seismic and you get them to agree that they will, after having reviewed your seismic, they will either agree to participate or to farm out on some specific terms.

We did work out an arrangement whereby Yates did review the seismic. We took the seismic to Artesia. Bill Morris and one of our other landmen took the seismic for the initial prospect to Artesia. We had worked out an agreement with Yates whereby Yates would either agree to participate or to farm out based upon a 30 percent back-in.

After Yates had reviewed the seismic, they had made the decision, actually the decision was around May the 27th, to go ahead and farm out to BHP, but at that time they had asked BHP to consider the formation of a State working interest -- or State exploratory unit, which would include the west half of Section 36, because there was some question. Initially there was some question about whether the production would be oil or gas and we went ahead and included the west half of the section as well as all of the -- all of Section 5, in the event that we established gas production or it would have been 40-acres spacing if it had been oil production. So we needed to have the whole proration unit for additional drilling.

It turned out, though, that after some thought there would be some segregation problems by not including all of State Lease LG-6319, which is the west half and southeast quarter of Section 36. So all parties eventually agreed in July that Yates would grant BHP an option farm out of the southwest quarter of Section 36 if we

got an oil discovery in Ervin Ranch, or they would grant us an option farm out of the west half of Section 36 if we made a gas discovery, and at that time we entered into the agreement. BHP drilled the Ervin Ranch well in Section 5 and made the initial well discovery.

Q Was Yates at that time interested in being either operator of the well or participating in the well?

A No. Yates did farm out to us. They did not -- they did not participate in the initial well. Under our agreement with Yates we had until November the 15th in which to actually drill on the Yates lease in the west half of Section 36, having completed the well as a gas well.

Q This is November 15th of 1988.

A '88, that's correct, in the west half of Section 36, and State Lease LG-6319 had an expiration date of 2-1-89, contrary to what it has on the Midland land map. It actually had an expiration of February 1st, not -- not January the 1st.

We picked our location of 1980 from the south and 990 from the west in Section 36. It was on November the 9th that we got a call from one of the Yates landmen who advised us that Yates management believed that our proposed location of 1980 from the south and 990 from the west would actually not make a well and that Yates

would lose a valuable lease. We advised Yates the next day by letter that we were going to go ahead and proceed with that particular location that we had chosen.

At the time that we had the conversation with the landman from Yates we had been requested to
actually swap some acreage as opposed to having the west
half be the farmout area, make the south half be the farmout area and we felt like, well, if they felt like we
weren't going to make a well, why would you want to swap
the acreage and have them participate in the south half
location. So we chose not to swap the acreage and just to
continue on with the west half as we had planned.

We did go ahead and drill and complete the well, the Yates "36" State No. 1 Well, in the southwest quarter as a shut-in Montoya gas producer.

Q That was completed when, Mr. Davis?

A That was completed, the actual completion reports, I believe, were filed on January the 20th, 1989. And that, we had talked about the Valley farmout or farm in agreement that BHP had and the time constraint that we had under our farmout agreement from Valley.

Q Let's talk about the terms of the Valley farmout agreement. What were you required to do?

A Okay. We were required to furnish Valley with information from the drilling of the well that

 we were drilling, the Yates "36" State No. 1 Well. By furnishing them that information we would have the right to drill a well, to begin the drilling operations of a well within 120 days from the completion date, which would have been the January 20th date, so it would have put it, you know, circa around May 19th or 20th for our obligation date to actually drill on the Valley lease or on something that would be pooled with the Valley lease.

Under our farmout agreement from Valley we have a consent to assign, so in order for us to even change operations at all or in order for us to have brought in the partner Samedan that we did, we had to have Valley consent to Samedan's, to our consenting to assign to Samedan, and we would have to do the same thing if we ever changed operations in here.

Q Well, let me make sure I understand the point.

If the Division grants Yates' request to be operator of the well in the east half of 36, is there currently in place a contractual arrangement with Valley that will allow BHP to earn an interest in the Valley lease if Yates operates it?

A Yates -- Valley would have to consent to Yates' operation under our farmout agreement.

Q And nothing the Commission order --

A No.

Q -- would do would require, then, the commitment of Valley to allow you to participate in that acreage.

A That is correct.

Q Where is the well to be located, Mr.

A The well in the east half of 36?

Q Yes, sir.

A It's to be located 1650 from the north line and 2310 from the east line.

Q When did you first propose to Yates Petroleum Corporation and the other Yates entities that they participate with BHP in the drilling of the well in the east half of 36?

A I had an initial telephone conversation on January the 10th with one of the Yates landmen in which I advised that we were nearing the completion of the Yates "36" State No. 1 Well and that we would shortly after the well was completed, we would be proposing a location in the east half of Section 36. We did follow up that conversation, a letter did go from our Land Department to Yates and that letter is Exhibit One-A, B and C.

Q All right, let me distribute the exhibit package, Mr. Davis.

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1	This first set of documents comes from
2	your file.
3	A Yes.
4	Q And it's marked Exhibit One.
5	A One-A, B, C, D, E.
6	Q All right.
7	A And the markings are on the backs of the
8	exhibits starting from One-A on the top.
9	The letter of January the 20th was from
10	Robert Elliott from BHP Petroleum, who works directly for
11	me, to Robert Bullock at Yates Petroleum, proposing the
12	formation of the working interest unit in the east half of
13	Section 36 and our initial proposal was the location of
14	1980 from the south and 1980 from the east line, and the
15	initial AFE that went out with that, which is Exhibit
16	One-B, does indicate that location of 1980 from the south
17	and 1980 from the east.
18	The operating
19	Q The initial AFE that went out was on
20	January 19th?
21	A January the 20th.
22	Q January 20th
23	A Yes.
24	Q of 1989
25	A 19 yes.

and the second s

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You caused Mr. Elliott Q to send this letter along with the AFE to --

> Α Along with the --

0 -- Yates.

And the operating agreement that are Α attached thereto.

And the AFE is dated on January 19th of 0 '89.

> Α That's correct.

All right, what then happened? 0

Α After we had sent the proposal to Yates we had several subsequent telephone conversations in the Land Department. On February the 2nd was the actual first time that we had been advised by Yates that they wanted to operate the well in the east half and they wanted to operate -- the primary reason for operations at that time that we were informed of, was that they would be able to get, by their operations not only Yates but anybody else's gas that they sold under the working interest unit, a premium through Transwestern.

Q Did they raise with you at that time the contentions made this morning in the hearing that the primary reason that they chose to seek operations were they were a majority interest owner in the east half of Section 36?

 A We have had a telephone conversation concerning that. That was not the primary reason for operations. That was my understanding and in my telephone conversations, my subordinate telephone conversations with the Yates representatives, that the primary reason was not what we've just discussed but was instead the trend's western gas premium.

Q Was it ever a subject of contention as you understand it between you and Yates that they should have operation based upon the fact that they believe they had a 50 percent interest in the acreage in the east half?

Bentz, had raised that point at the time that they were -- at the time Leslie was in the Midland office in our February 21st meeting, stating the fact that Yates had 50 percent interest. My contention of that was that we also had a 50 percent interest committed to the working interest unit with the BHP and Samedan partnership.

I do not know what relationship the four Yates corporations have and why they are separate. I presume that they are separate for tax purposes or for some other unknown reason to me. But we looked at it, the situation that, you know, here was the fact that we were proposing the working interest unit. We had done all the groundwork for the working interest unit, and it is not a

highly unusual situation for even in the end result, if that were the case, it's not a terribly, highly unusual circumstance for an operator to have less interest than some other parties in a unit agreement.

BHP is the operator of the Madden Unit in Wyoming, which at one time, it may still be, the largest Federal on-shore unit, and we have a 12 percent interest compared to with some other parties that have a 25 percent interest.

Q Did the Yates personnel ever raise with you their contention that they ought to operate the property in the east half of 36 based upon the fact that they were contending that their overhead costs attached to the operating agreement were significantly lower than the rates you propose?

A No, they did not. As a matter of fact, from the time that we sent the operating agreement on January the 20th to them with the overhead rates that we had in the operating agreement of \$4100 and \$410, we never received anything from Yates until after March. So there was a long -- there was almost a month and a half lag time before we even saw Yates' overhead rates.

Q Describe for us your understanding and recollection of whether or not Yates ever made a contention that their AFE costs for the well were so significantly be-

 low yours that that should be the reason by which they should operate the property.

A Again, we sent the AFE to Yates on the -- the first AFE with the 1980 and 1980 location, to Yates on January the 20th. We revised the AFE the day that Leslie was in our office on February the 21st and re-sent them that same AFE, same cost, the only thing we changed was the well location, and, again, we did not receive an AFE from Yates until after the March 7th date when they sent the AFE by mail to us.

Q After the correspondence of January 20th, 1989, and the subsequent meeting in February, I believe it was, refresh my recollection on the February meeting, what that the 2nd or the 21st?

A That was the 21st.

Q You've referred to the 21st meeting, okay.

What was the next bit of correspondence that transpired between you and Yates Petroleum and the other Yates entities with regards to the drilling of the well in the east half of 36?

A Okay. At that particular meeting of February the 21st, we left the meeting with several understandings at least from BHP's point of view. The Yates group had asked that, again, that we exchange some acreage,

the southeast quarter and the northwest quarter, and lay down our Yates "36" State No. 1 Well and just make the north half the proration unit for the well that would be drilled. That would create quite a bit of additional paperwork for us, for the Commission. We would have had to gone back and gotten a nonstandard location approved for the well that had already been drilled. We had, at the meeting of the 21st, advised Yates that we would not exchange the acreage.

Leslie had brought up the point about the location and moving it from 1980 from the south and 1980 from the east to the 2310 and 1650. When she brought her data here, or to Midland, we had already made an exchange of seismic data for three BHP lines for one Yates line in order to give us a little bit better handle on where a better location might be. Certainly any operator would want to have all the facts available to them that were possible prior to spudding a well. The object is, of course, to drill producing wells, not to drill dry holes.

At the end of the meeting it was my impression that I felt like I had left upon the participants of the meeting that BHP would consider very strongly the new proposed location and that we would so advise Yates of what our position would be.

At that particular meeting I was asked

from that point, the next day, the

Santa Fe was the state land sale and

location.

standard location that we had discussed in the February 21st meeting, and we proceeded with that and our next conversations pursued basically were by -- we then also received in turn forced pooling procedures at the 1980 from the north and 1980 from the east location from Mr. Dicker-

order to establish the rights of operations here.

So

very next day, in

We had not, to my recollection, talked about the standard location of 1980 from the north and 1980 from the east, at least in the February 21st meeting. Perhaps the geologists had talked about that independently. I do not know.

son's office, as well as Yates had proposed the nonstandard

the Yates people (unclear) and get on the docket in

Robert Elliott from my office did advise Robert Bullock in

person that BHP was in fact force pooling Yates at the non-

But from that point on we began to have various conversations with the Yates representatives through the Land Departments and I specifically was told by telephone conversations from Yates representatives that they believed that the Transwestern premium was the key issue to operations, but, in turn, they could not fully disclose the Transwestern issues because it was a confidential

settlement and therefore we were in a Catch 22 situation. BHP could not make a reasonable business decision about what Yates was offering to us without actually knowing what the terms of the settlement agreement were. We didn't know, for example, if the contract had takes or pays in it. Did those takes or pays apply only to Yates' gas? We didn't know if the contract settlement between Transwestern and Yates gave Yates a preferential right into the Transwestern line and when Yates -- when Transwestern was ready to cut other people off, that they could cut off other people's gas without cutting off Yates.

Those were questions that were unknown to us and we asked to see either the settlement or for Yates to put something in writing to the effect so that we could make a rational business decision upon -- about operations for the east half of Section 36.

Q Were either of those forthcoming?

A No. On March the 8th we received by certified mail Yates' two proposals, two working interest proposals covering the east half of Section 36.

Q Those are marked, are they, Mr. Davis,

- A Yes, they are, they're --
- O -- Exhibit Two-A --
- A A through C, and Exhibit Three-A

Q -- through C?

A -- through C, and they're highlighted in blue on the cover letter to tell you which exhibit applies to which well.

O Go ahead.

A Again, this was the first notice that we had had of an operating agreement or an AFE from the Yates group.

Q All right, what was the next thing that transpired, then, Mr. Davis?

A Okay. After we received the Yates AFE's and operating agreements, of course we made an analysis of the operating agreements, the differences between the two operating agreements, and we made a quick analysis of the AFE's; at least we did through the Land Department, and not being an expert on AFE's we at least had sources that we could refer to on AFE cost in the particular area.

We had been invited a year before to join Yates in the Sunnyside Unit in the acreage north of us and they had sent us an operating agreement and an AFE. The only thin that they never told us initially was where the initial well was going to be drilled. We had asked them to tell us where the well would be drilled, we could make a decision. They went to the hearing and then carved our acreage out of the State working interest unit, but we

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did have the benefit of the operating agreement and the AFE that were utilized for the Sunnyside Unit.

We went back to some current operations in the surrounding are and I visited with some representatives of Terra Resources and tried to determine what their AFE costs were for a well that had been drilled up in Section 35, Township 9 South, 26 East, and their AFE costs were actually a little bit -- they were higher than ours and Yates was a participant in that particular well, and I don't know the well name but it is in Section 35, 9 reallv South, 26 East, but their -- their AFE cost, and I don't know what the actual well costs were, but their AFE costs were \$244,000 dry and \$419,000 completed well cost.

What is represented by the package of Q exhibits marked Exhibit Three-A through C?

> Three-A through C? Α

Yes, sir.

Three-A through C, that is the and the AFE and the operating agreement from Yates Petroleum to BHP at the standard location of 1980 from the north and 1980 from the east.

Again the operating agreements and the AFE's and the letters are essentially the same except the locations are different. One is the standard location, one is the unorthodox location.

Q All right. Where do you stand with the other interest owners apart from the Yates entities with regards to their participation in the well in the east half of 36 with BHP as the operator, including their approvals, if any, of the AFE you submitted and the overhead charges you have recommended?

A Okay, I would submit, then, Exhibit Four, which is three pages, which is a letter from Samedan to Yates, a signed AFE from Samedan from BHP's operatorship perspective on the nonstandard location of 1650 from the north and 2310 from the east, and Samedan does advise Yates that their are going to join the BHP proposal because we had proposed the working interest unit first, and we had a joint area of operations with Samedan in this particular area.

Q What is your understanding, then, of the status of the remaining 50 percent interest in the spacing unit in the east half of 36?

A Well, I presume that the remaining 50 percent is tied up with Yates, but on the operating agreement that we received, only Yates Petroleum signed the operating agreement and none of the other Yates corporations signed the operating agreement, as well as I don't have the signatures for the Yates companies, I don't believe, on the AFE's; only Yates Petroleum signed the AFE

that we have and, again, I presume that being Yates corporations, that was a matter of business and they have probably signed the operating agreements and AFE's long before this date.

Q Let me ask you whether or not you undertook any type of investigation to determine what overhead rates to recommend and to apply for among the interest owners in the operating agreement and before the Examiner this afternoon?

A Yes, we did. As a matter of fact, we did also utilize the Ernst and Whinney book that you referred to earlier for the rates, and the rates that we're using at 4100 and 410 are actually directly out of the Ernst and Whinney book, just rounded to the -- to the nearest \$10.00 figure.

Q We further did your investigation again based upon what we knew about the area. We had access to the operating agreement for the Sunnyside State exploratory unit, which the rates in there were different.

We had access --

Q What -- what Yates -- what rates are Yates using for the Sunnyside Unit up to the northwest of this well?

A I believe if you'll bear with me one second, I believe it was \$5400 and \$540. Yes, that was --

that was the --

Q Go to the documents on the Sunnyside Unit, Mr. Davis, and refresh your recollection.

A And again the only thing that I can say about this, this is the information that we have in house. This perhaps could have been changed after the unit was approved. I do not know that information.

Additionally, we utilized the same rates of the 4100 and the 410 for the operating agreement covering the west half, of which all the parties in the room have signed.

We farmed out, gave Yates and option farmout offsetting their Dragonfly State No. 2 Well, of which our farmout agreement had language that when the operating agreement would be entered into the drilling and producing well rates would be 4100 and 410.

So we used what we had available in the area.

Q Have you continued your discussions with Yates personnel to determine whether or not you're going to be able to reach a voluntary agreement with regards to the drilling of this well without the assistance of a compulsory pooling order?

A Yes, sir, we have had numerous telephone conversations with representatives of Yates. I personally

 have had several telephone conversations with representatives of Yates where again the primary reason that Yates has proposed the operatorship for the Yates Petroleum Corporation is the premium. Our contention is that we cannot make that business decision without knowing the facts and we cannot be expected to do anything less than that.

Q Do you have an opinion as a petroleum landman as to why the Examiner ought to award operations of this well in the east half of 36 to your company?

A Yes, I do. For one thing, number one, BHP initiated the prospect. It was a prospect that our geological group and land group put together. It was a situation where we went and asked Yates from the onset before drilling the initial well, before drilling the initial discovery well in the prospect, we asked them to join us in the operations here, but Yates chose to farm out their interest to us.

we drilled and we completed the discovery well. We drilled and completed the confirmation well on State Lease LG-6319, which was actually going to expire on February the 1st, 1989.

It was a situation where we have proposed the working interest unit. I know there's some consideration about, well, who proposed the well location. It is not unusual for an operator, once an operator has addi-

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tional information, to change the well location based upon the best information that they have on hand, and we certainly seek out the best information that we have on hand and if somebody can provide us with some additional information and we as a group confirm that by shooting the additional seismic line.

BHP, from our position is developing a field. We're not developing a one well situation. looking to get that product to market for the field that will not only make BHP money, it will make our partner Samedan, it will make Yates, as well as the royalty interest owners, who are the State of New Mexico and the Federal government. We cannot take a -- make a business decision based upon hearsay from Yates about a premium that they can get for themselves and for all the parties. There are many marketing details that we must know before we could ever make a decision that would have -- that could ultimately have some effect on the field development as well as -- as opposed to a single well development.

Q What is the position with regards to your company and the Valley farmout agreement and what impact will the forced pooling operations have on that farmout agreement?

A We have gone to Valley five times to ask for an extension of time because of the hearing that we're

having today. The hearing, of course, was set two weeks ago and we continued it.

we have now approached them five different times for an extension of the May 20th deadline date. They have told us that it is too far away for them to think about an extension, that we could come to them ten to fifteen days before our farmout agreement is going to expire but they gave me no guarantee that they would grant us that extension.

We have spent a lot of time, a lot of money, and a lot of manpower in this effort to -- to develop this field and to drill this Yates Valley State No. 1 Well.

Q In the event the Division does not award operations to BHP Petroleum Company for this well, do you have currently in place contractual arrangements with Valley that will allow you to preserve an interest in the northeast quarter of the section in compliance with the farmout agreement?

A Only if Valley consents to the assignment to Yates Petroleum. Short of that we have no guarantee.

Q At this point, then, in order to earn the interest under the farmout agreement BHP Petroleum must be the operator?

We must drill the well. Α

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my examination of Mr. Davis, Mr. Catanach.

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MR. KELLAHIN: That concludes

We move the introduction of

his Exhibits One through Five.

MR. DICKERSON: No. objection.

Exhibits One MR. CATANACH:

through Five will be admitted into evidence.

Mr. Dickerson?

## CROSS EXAMINATION

BY MR. DICKERSON:

Mr. Davis, do I understand the terms of Q the Valley farmout to be that you think restrict BHP's rights to participate in this well as a non-operator with Yates operating?

They could. There is a consent to assign provision in the operating agreement. Yates has it in their agreements, we have it in our agreements. It becomes, the farmout (unclear) choice, again it's a business decision that they must make.

Q But you're not -- you haven't heard anyfrom Yates, have you, that they expect to earn any interest under your farmout from Valley?

No, they will not earn anything under

1 our interest, that's correct. We are proposing the working interest unit through our farmout from Valley. But the usual and customary restriction on assignments of rights under that, if Yates were merely 5 the operator and carrying its 50 percent collective inter-6 est in the well, would not require an assignment of 7 Valley's interest to Yates, would it? 8 The well would actually be being drilled 9 on Valley's lands, so, yes, Valley would have to -- Valley 10 would have to consent to that. 11 Have you sought their consent or raised Q 12 the question --13 Α We have not at this particular point but 14 the point that we have been seeking with Valley is to try 15 to get the extension of time. 16 Do you know, Mr. Davis, how much, appro-17 ximately, gas BHP delivers through wells operated or the 18 working interest is owned by BHP in Chaves County? 19 Α I do not. 20 Do you have any idea how many wells BHP Q 21 operates in Chaves County? 22 Α I do not. 23 there any wells in addition to the Q Are 24 existing two wells that we've talked about today? 25

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I don't know if we still have any of the

 wells that we operated in the, I believe, in the Peterson Field, and I just -- I really don't know. We have sold quite a bit of our producing properties in Chaves County in the last few years and so I -- I just do not know that.

Q You do know, don't you, that Yates is the biggest operator delivering gas in --

A Yes, sir.

Q -- Chaves County?

A Yes.

Q Would it follow from that that by reasons of the scale of the gas delivered by Yates that an advantage in marketing may exist there?

A No, sir, big does not make you good.

Q Are you saying that it does not give you any advantage at all?

A I am saying that this is a situation for a development of a new field and I don't believe that whether or not we have ten wells or 400 wells, as far as the purpose of operations here, and this is my opinion, and I believe that we're dealing on some principles here of the development of the field and the prudent operation and development of that particular field.

We are looking at the sale of the gas on a field-wide basis. We're not looking at the sale of the gas because Yates operates 350 wells in the New Mexico and

sells gas to Transwestern.

We may be able to sell gas under one well, the Yates well, if Yates operates it, but what are we going to do with the rest of the field if Yates has a preferential right to a pipeline and we do not. We must -- there are two -- there are options as opposed to Transwestern in the field. So I can only answer from my particular point of view. Because Yates has this tremendous volume of wells, that's wonderful between Yates and Transwestern and we recognize that they -- or we understand that they have a preferential right into the Transwestern line. That does not guarantee BHP's interest, BHP's royalty, Valley, or any of the offset wells that preferential right into that Transwestern line.

Q Let's assume that BHP is designated the operator of this proposed third well so that in this pool that's the subject of these hearings there will be three BHP operated wells. Would BHP propose to, if requested by Yates and if the situation were reversed so that BHP had the opportunity to sell its gas and that of non-working interest owners, would BHP offer to Yates the opportunity to participate in any arrangement that you might make with any of the gas purchasers?

A We are in the process right now through the development of this particular field of exploring all

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of the avenues of how to get our product to market. We are looking at independents building lines to this particular area to connect with either Transwestern or El Paso. We are looking to find the most economical way to do that.

It is a situation where you must look at all of the variables. If it means looking at the possibility of a partnership between BHP, Samedan, Yates, or whoever the developers of the field, the working interest parties of the field are, that, I'm sure, would be a consideration. That is out of my line of expertise. That actually falls into the marketing department of our corporation, but I would presume that we as a prudent operator, as a party that wants to get that product to market as quickly as possible so that we can all realize revenue from it, that we will due what a prudent operator would do in that situation.

Q With due regard, not only for its own interest, but with those interests of its other owners in the well?

A We must protect the interest of all the interest -- of all the parties that have an interest in our well. We can't make side agreements for ourselves at the expense of our royalty owners or we can't make side agreements at the expense of our working interest partners, but I can't tell you how we'll market the gas. We're not going

to -- we're not in the business to dupe people. We're in the business to sell a product and to make money for us, as well as for our partners, our partnerships.

Q How would BHP make the decision among the three existing wells, assuming a successful completion on the east half of Section 36? What -- what rates of delivery of gas from those wells, how would that be determined?

A I do not know. That again would be out of my line of expertise. Again, I think you have to refer to probably four wells because we are actually in the process of drilling today the well in the northeast quarter of Section 8 of which we operate with 50 percent interest.

Q In the course of the conservations that you've detailed, Mr. Davis, do you recall an offer by Yates to commit in the event that it is designated operator of this proposed well in the east half of Section 36 to -- to not hook up that well and sell gas from it with the possibility of draining gas from this common reservoir until BHP was successful in obtaining the pipeline for its well?

A Yes, on March the 22nd in a conversation that I had with one of the Yates representatives through his chain of command and management, yes, I was told that Yates would agree in writing if they were the operator to hook up all three wells at the same time to

1 prevent drainage. I don't know if that is -- again, I 2 can't response to that because I don't know if that falls 3 outside of the rules and regulations of the State of New Mexico, because if you're under an oil and gas lease with a 5 shut-in provision, and you have a market, say, in this 6 particular case three of the companies had a market and two 7 of them didn't, the three companies that had the market are 8 saying that they won't send their gas to market until the other two do, and I think that, that violates the State of 10 New Mexico Oil and Gas Lease. 11 Well, the offer was made in an attempt 12

Q Well, the offer was made in an attempt to be conciliatory -- I mean to represent that Yates would not sell its gas, if able, to the detriment of BHP, who at that time might not be able to --

A Well --

Q -- sell it.

A Yes, and I understand that, yes, on March the 22nd I was informed on that.

Q Okay.

MR. DICKERSON: I have no fur-

21 | ther questions.

MR. CATANACH: Anything fur-

23 ther?

MR. KELLAHIN: No, sir.

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## CROSS EXAMINATION

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BY MR. CATANACH:

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again.

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Q Mr. Davis, I just want to verify a question that Mr. Kellahin asked you.

unit, Valley has to consent to this before you gain an in-

the northeast quarter of Section 36 of which we're sharing

50/50 with Samedan. Under the farmout agreement there is a

consent to assign provision. The way I would understand

it, because somebody else is coming in and operating on

this particular lease that they have no interest in, and,

be my understanding and it would be my understanding that

certainly we, as the farmoutee (sic) in this particular in-

stance would certainly advise Valley of that particular

situation and give Valley the opportunity to respond to

that based upon the language of consent to assign. Again,

we would need to get Valley's approval for Yates to

technically that may not be correct but that would

and operate on the farmout that we have.

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Yates is appointed operator of this

We have a farmout agreement that covers

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Q That's all I have.

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MR. KELLAHIN: Let me follow

up on that question, Mr. Examiner.

it's an interpreted matter.

Let me make sure I understand what your

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## REDIRECT EXAMINATION

BY MR. KELLAHIN:

opinion.

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 Q Thank you.

mank you.

MR. KELLAHIN: I have nothing

further.

Is it possible under this farmout arrangement to have a situation where Yates has force pooled the interest owners in the east half and if they are the operator, then, you have not fulfilled the terms and the conditions of the farmout agreement and therefore BHP would not earn an interest in the east half but that the interest, then, is one where Valley has 50 percent of the well and Yates has the other 50 percent. You know, that was a statement but I intended it for a question for you to answer, if you can, based upon your knowledge of that agreement and your expertise as a landman.

opinion on that subject is, Mr. Davis, if you have an

A Based upon my knowledge of the agreement and based upon my lack of information on the situation like this particular situation that we're involved in today, I do not know what the implications of the forced pooling would have upon us.

One question,

Mr. Catanach.

## RECROSS EXAMINATION

MR.

DICKERSON:

BY MR. DICKERSON:

Q Mr. Davis, you have given your interpretation. Is there any objection to anything BHP would object to simply submitting the farmout agreement in question?

A To submitting the farmout agreement in question?

Q Sure.

A For what?

Q Well, so that we can all see the language if we're arguing over whether it does or does not and you asked Mr. Catanach to follow your interpretation of it and we certainly don't have a copy of it.

A If Valley has no objection to that, I will, I will send you a copy of that agreement, but I would like at least to check with Valley to get their consent.

MR. KELLAHIN: I like Mr. Dickerson's notion that we need to further examine the legal aspects of that language. I pales me to think that we could get force pooled out of the well entirely and if you will check with Valley and get their concurrence, I'd

1 like to submit that document to Mr. Dickerson and to the 2 Commission and let us all look at it and see if based upon 3 our own particular expertise we see any kind of glitch that 4 creates that unfortunate situation where you're out of the 5 wells. 6 We certainly would not want that to А 7 happen with what we have gone through up to the point. 8 MR. CATANACH: Can you also 9 submit an interpretation of that? 10 MR. KELLAHIN: Can certainly 11 look at it; be happy to. 12 I'll defer that to my attorney. Α 13 DICKERSON: Which side do MR. 14 you want? 15 MR. KELLAHIN: I don't care. 16 17 WILLIAM J. MORRIS, 18 being called as a witness and being duly sworn upon his 19 oath, testified as follows, to-wit: 20 21 DIRECT EXAMINATION 22 BY MR. KELLAHIN: 23 Q Mr. Morris, for the record would you 24 please state your name and occupation? 25 My name is William J. Morris. Α I'm a

1 petroleum geologist for BHP Petroleum Company in Midland, 2 Morris, you have on prior occasion Mr. 3 testified before the Division as a petroleum geologist? 4 Yes, I have. 5 Would you refresh our recollection and 0 6 tell us generally on what occasions that you testified be-7 fore the Division as a geologist? 8 The most recent case was on the Okav. unorthodox location on the Ervin Ranch Well in Section 5 10 that's in this pool. 11 I've also testified on a case in the 12 Indian Basin Field in Eddy County. That was an unorthodox 13 location that was contested by Amoco. 14 Have you been the geologist that has Q 15 involved from the inception of the exploration for been 16 production out of this formation in the Ervin Ranch area? 17 Yes, I've been working on this prospect 18 I've been responsible for it for the last five for -- or 19 years, approximately. 20 MR. KELLAHIN: We tender Mr. 21 Morris as an expert petroleum geologist. 22 MR. CATANACH: He is so qual-23 ified. 24 Mr. Morris, let me have you identify and 0 25 describe the display that you've marked as Exhibit Number Six.

A Okay. Exhibit Six is a base of the Penn structure map. We have two well values on here for the two wells that we've discussed that we drilled at -2338, the base of the Pennsylvanian section top and our well in Section 5 at -2368, the Yates State Well in Section 36.

The other values that are on the map are interpretational based upon seismic data that we have shot or have obtained in this area.

Q Before we describe all the details and conclusions about Six, let me have you go ahead and describe for us the Exhibit Seven.

A Okay. Exhibit Seven is our structure map on top of the Montoya formation, which is the dolomite pay section in the two wells.

Q All right, then, finally I'll ask you to find a copy of Ms. Bentz' Exhibit Number Five, which is her structure map on top of the PrePenn. Do you have a copy of that?

A Yes, I do.

Q Okay. On each of your two displays you've located a well spot by the red arrow?

A Right, that is the proposed unorthodox location.

Q And that's the current location that

1 both you and Ms. Bentz concur on at this point? 2 Α That's correct. 3 Describe four us in a general way, Mr. Morris, what information is important for us to understand 5 in looking at Exhibits Six and Seven. 6 Α Well, the Exhibit Six generally shows 7 the structural attitude of the reservoir in this vicinity. 8 Exhibit Seven is more precisely on the 9 producing reservoir zone and --10 Where does Ms. Bentz' structure map 11 integrate itself with these other two structures? 12 А It is the same as our Exhibit Six. 13 -- yes, her map and our Exhibit Six are on the same -- same 14 zone. 15 Let's look at the more specific struc-Q 16 ture map on the top of the Montoya, which is Exhibit Number 17 Seven. 18 Α Okay. 19 All right, what is your opinion with 20 regards to the preference of accepting the unorthodox 21 location as opposed to the closest standard location? 22 Α It is -- the unorthodox location is 23 structurally much better. 24 Describe for us or quantify for us in 25 what particular way it's much better.

 A No, I do not.

Q

In looking at the general geology for

A We should be anywhere from, oh, you know, 20 to 50 feet in a higher structural position than what an orthodox location would give us, and that's the advantage to going to the unorthodox location.

Q Ms. Bentz commented on the occurrence of a gas/water contact generally lying in the eastern portion of the east half of 36 and she approximated for us where on her contour line on her structure map she thought it might be located.

Can -- can you undertake a similar discussion with me and locate for me, first of all, whether or not you concur that there is a gas/water contact in the vicinity of the east half of 36?

A I'm in -- generally in excellent agreement with Ms. Bentz' estimation of where the contact is. I personally would put it a little bit further to the west, which would be a little bit more pessimistic interpretation, but, you know, that's just the differences between one geologist and another.

Q Do you see any other standard location in the east half of 36 that provides an equal opportunity for the production of hydrocarbons from this formation that the unorthodox location demonstrates?

 this specific formation in the entire Section 36, do you have an opinion as to whether the approval of this location without a penalty will give the owners in the east half of 36 an unfair advantage over the owners in the west half of 36?

A You're moving closer to the lease line but I think that location will give them the opportunity to produce the gas that is on their lease and not, you know, overly drain the up dip acreage too much. I mean it will drain some.

Q Is there a -- is there a structural relationship between the existing Yates State "36" Well in the west half of 36 to the proposed location in the east half?

A Based on the seismic interpretation, we should be, you know, 20 to 25 feet higher in our -- in the well that we've drilled to the unorthodox location.

Are you comfortable, Mr. Morris, with the concept that the well in the southwest quarter of 36 is going to have the opportunity to produce its share of the hydrocarbons in the west half of 36 without undue interference from the well in the east half of 36?

A Yeah, there shouldn't be any problem. I don't see any major drainage problem. That well is a decent distance away.

Q Ultimately, then, do you have an opinion as to whether or not this location ought to be penalized?

A I don't object to it being penalized, I guess, but I'm not, you know, there's no need for it to be.

Q Well, my question is not the objection but the need in order to balance the correlative rights between the owners in each portion, whether there is a compelling need that you see as a geologist for the penalty on the well.

A No, I don't see a definite need.

Q Let's look at Exhibit Number Eight, Mr. Morris, and have you identify and describe that for us.

A Okay, that's a schematic diagram of three wells in the area. The two wells on the left are the wells that we have drilled and the well further to the right falls just off the right edge of the map here in Section 31. That would be due -- well, it's approximately 9000 feet east/northeast of our Yates State Well.

I've drawn the unorthodox location on there to show that it should be down dip from the two wells that we've drilled. There's a good chance that the Mississippian section is going to get thicker there and that's going to move the Montoya pay zone a little bit lower and those are some of the reasons why we need the unorthodox

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1	location approved.		
2	Q Am I correct in understanding, then,		
3	that you and Ms. Bentz come to the same ultimate geologic		
4	conclusion about the location?		
5	A Absolutely.		
6	Q There is no material difference in your		
7	conclusions having examined the new seismic information		
8	that's been made available?		
9	A I think the new seismic data has con-		
10	firmed that we need to go to the unorthodox location.		
11	MR. KELLAHIN: That concludes		
12	my examination of Mr. Morris.		
13	We move the introduction of		
14	his Exhibits Six, Seven and Eight.		
15	MR. DICKERSON: No objection.		
16	MR. CATANACH: Exhibits Six,		
17	Seven and Eight will be admitted into evidence.		
18	MR. DICKERSON: I have no		
19	questions of Mr. Morris.		
20			
21	CROSS EXAMINATION		
22	BY MR. CATANACH:		
23	Q Mr. Morris, one question.		
24	A Sure.		
25	Q Was it just Yates and BHP that were		

1 involved in choosing this location or was Samedan also 2 involved? 3 Α Samedan was involved, yes. Q And do they concur? 5 They concur, yes, absolutely. They were Α 6 the ones who recommended shooting this seismic line and we 7 have talked to them since that and they are in full agree-8 ment with us to join at that location. 9 Thank you. Q 10 MR. CATANACH: That's all I 11 have. 12 MR. KELLAHIN: Mr. Examiner, 13 at this time we'll call Mr. Hal Crabb. He's a petroleum 14 engineer with BHP Petroleum Corporation. 15 16 HAL CRABB. 17 being called as a witness and being duly sworn upon his 18 oath, testified as follows, to-wit: 19 20 DIRECT EXAMINATION 21 BY MR. KELLAHIN: 22 Q Mr. Crabb, for the record would you 23 please state your name and occupation? 24 My name is Hal Crabb and I'm a petroleum 25 engineer for BHP Petroleum.

١ Have you on prior occasions testified Q 2 before the Division as a petroleum engineer? 3 Yes, I have. 4 0 Pursuant to your employment did 5 and have circulated the AFE that was attached to prepare the Yates Petroleum Corporation Exhibit Number Seven? 7 Yes, I did. Α 8 And you also prepared the original AFE Q 9 that was dated in January of the same year for the subject 10 well? 11 Α Yes. 12 In addition, pursuant to your employ-0 13 ment, have you studied in general the engineering aspects 14 of this particular Ervin Ranch Field and the three produc-15 ing wells in the field? 16 Yes. I have. Α 17 MR. KELLAHIN: We tender Mr. 18 Crabb as an expert petroleum engineer. 19 MR. CATANACH: He is so qual-20 ified. 21 Q Mr. Crabb, let me commence my discussion 22 with you by going directly to the topic of the AFE's that 23 each of the companies have proposed.

Did you receive and have an opportunity

to examine the AFE that Mr. Springer prepared for his com-

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pany for the well?

A Yes, I did.

Q Will you take us through a discussion and show us what in your opinion as an engineer are the material differences that occur in the two AFE's?

A Yes. First I would like to direct your attention to Exhibit Number Eight, which was submitted by Yates.

Q That's the four well comparison of costs?

A Yes, it is.

Q All right.

A I think this is very revealing and we can explain the differences between the two well costs to show that the dry hole cost for all of these wells is essentially the same, and the first thing that I'd like to do is direct your attention to the dry hole cost here on BHP Petroleum Ervin Ranch State No. 1 of \$263,883, which I will accept as a reasonable estimate, and we compare that with Yates Petroleum, the Energy "AFY" State No. 1, where we had the cost of \$239,220.

Now I'm not familiar with the well that Yates drilled here, but I will comment on the difference.

That gives us a difference, or a delta between the two well costs of \$24,663.

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Now, first of all, we DST'd this particular well, the Ervin Ranch, our discovery well in the field, on two separate occasions. There were two DST's and two separate zones were tested and potentialed and these two DST's, plus the day work involved, would in my quick estimation, which I believe is reasonably correct, account for \$18,000 of that difference. That would leave a difference of \$6,663, which could easily be accounted for with differences in the open hole log suite chosen, location, building location differences. There are going to be reasonable differences or discrepancies between any AFE and there are reasonable differences, or choices, that prudent operators can make as to what they decide to do with respect to logging or other -- or other things along this line.

Now let's go to the next well, the Yates "36" State No. 1, which you've estimated as costing \$268,374 through casing point. Compared with your Energy "AFY" State No. 2, which you've estimated as costing \$239,892, and you have stated that this was a confirmation well, or development well. Once again I'm not familiar with your particular well here; however, the differences between the two wells amount of \$28,482.

Now, on the Yates "36" State No. 1, we cored this particular well and the coring plus the day work

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also would rough out to about \$18,000, which would take the difference down to, let's say about \$10,000, and we DST'd this well, also. Now the DST and the day work involved would account for \$9000 of this remaining \$10,000 difference. So that leave us with a remaining difference of approximately \$1000, which once again is a very minor difference, can be accounted for in differences in logging program, location costs, and things such as this.

And once again we're talking about dry hole costs and the completed well costs haven't been addressed here.

As far as our drilling in the field, we have not had any real problems as far as slushing shale or sticking our drill pipe or not being able to get down with our DST. I believe our mud costs, our mud programs, are approximately the same cost as Yates and like I said, we've -- we've been successful. As I recall we didn't have any problems with our Ervin Ranch, which was down to TD in 18 days, including the two DST's.

Now, --

Q Do you have some actual costs on the Ervin Ranch Well?

Α The Ervin Ranch? Yes, I do. We have completed well costs of, I believe, \$422,000, which, like I said, includes extensive testing and completion, completion

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work, because we were dealing and treating two separate
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    producing intervals within the Montoya formation.
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                      When you compare the estimated dry hole
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    cost to the actual costs up to the last item on the dry
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    hole entires, what is the total cost there? Have you
    separated that out?
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             Α
                      Would you run that by me again?
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             Q
                      Yes, sir. When we look at the Ervin
    Ranch Well --
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             Α
                      On the AFE?
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                      -- on the AFE, we've got $263,000 plus?
             Q
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                      Yes.
             Α
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             Q
                      What is the comparable actual cost,
14
    then, for those items that compose that portion of the ex-
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    hibit?
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             Α
                       Are you talking about on the AFE or --
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                       Yes, sir, on the AFE, now.
             Q
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             Α
                       Okay, I'm not sure I followed the ques-
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    tion. I'm sorry.
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                       All right, the actual cost on the Ervin
             Q
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    Ranch Well --
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             Α
                       Uh-huh.
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             Q
                       -- when you back out the completion
24
    costs --
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             Α
                      Oh, okay.
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1	Q -	- and the stimulation costs, those
2	items that are at	tributable to dry hole were estimated.
3	Now what were the ac	tual numbers?
4	A T	he actual numbers were, let me guess, I
5	don't have it at my fingertips here.	
6	Q W	ell, at the break you gave them to me.
7	A O	kay, well, let me see that.
8	Q S	ee if that refreshes your recollection.
9	A C	h, these are these are just mud
10	costs.	
11	Q C	h, all right, I misunderstood what
12	you're doing.	
13	A Y	ou threw me there.
14	Q W	ell, you and I are not talking the same
15	thing.	
16	A Y	eah, these are just mud costs
17	Q C	okay.
18	A -	- that I gave you.
19	Q A	all right.
20	A S	so I would I would I feel comfor-
21	table with the nu	mbers that we've used here on Exhibit
22	Eight as far as s	showing the differences in the costs and
23	how they were accoun	ited for.
24	Q A	all right. Do you see any material
25	difference, then, be	tween the two AFE's that should be used

as a significant factor by this Examiner in deciding who operates the well?

A No, I don't. I think that the Exhibit Eight here really shows that we can operate or we can drill and we can complete the well just as cheaply as Yates. We've shown that on the two wells that we've drilled with the lack of problems that we've had while drilling and I've shown here by accounting for the differences that we can drill the wells competitive with Yates.

Q Let's talk about BHP's experience as an operator in the immediate area. How successful have you been with your other wells?

A Well, we've been very successful. We drilled the, of course, the discovery well, Ervin Ranch State No. 1, which was a significant discovery of a new reservoir and we confirmed it shortly thereafter with the Yates "36" State No. 1, which was drilled without incident and made a successful confirmation well in Section -- the west half of Section 36.

Q What's the current status of the well in the northeast quarter of 8 down to the south?

A It is currently being drilled. We're drilling the Conoco 8 Federal No. 1.

Q And what is its current status as of now, do you recall?

A Well, it's in the process of being drilled. That's all I can say.

Q You're not at the point where you're ready to complete the well?

A No, not at this time.

Q Mr. Crabb, let me ask you, sir, do you have an opinion as an engineer as to why you believe your company ought to be the operator for the well in the east half of 36?

A Well, yes, I do.

Q And what is the reason? What is that opinion?

A My opinion is that BHP should be the operator on this well for a number of reasons, many of which were enunciated by Mr. Davis: The fact that we have developed the field; we have the expertise in the immediate area; we drilled two successful wells; we're in the process of drilling a third one; and also, going back to what we thought was the primary reason for this -- Yates wanting to have operations here, was this premium that they were to get for their gas price. We feel that this is not going to necessarily be, or it will not be, for the good of the entire field. It will just possibly benefit Yates and maybe the other operators if what they say is true, but it could even be detrimental to the other two wells that we current-

1 ly have shut in that are waiting on a pipeline. 2 Q Let me ask you to identify and describe 3 is marked as Exhibit Number Nine, Mr. Crabb. Let ask you, sir, am I correct in understanding that 5 Section 36 that's the subject of this hearing is located at 6 this point on the display where I've placed the numbers 7 "36"? 8 Α Yes, that is correct. Right. 9 Let me do that on all the copies so that Q 10 11 Α Now these are townships here but --12 Excuse me, let me borrow that back from Q 13 you so we won't have to search for Section 36. 14 What is Exhibit Number Nine, Mr. Crabb? 15 Α Exhibit Number Nine is a schematic of 16 pipelines in the area and the gas well there which 17 you've highlighted is the approximate location of the field 18 at this point. 19 has BHP undertaken the task to 0 Has 20 study the physical arrangement as well as the economic cost 21 of installing a gathering line system to take field produc-22 tion --23 Yes, we have. Α 24 -- to the transmission line? 0 25 Α Yes.

Q What are the two choices of available potential markets in the area?

A Well, the line to the north, which is running from the northwest to the southeast there, is Transwestern's line and the line to the south below it, which takes a sharper drop to the south, is the El Paso line, and as you can see, the field sits pretty much equidistant from the two lines.

Q Has BHP undertaken an analysis of the costs that are going to be required to install a gathering system to take the production in the field to either one of these pipelines?

- A Yes, we have.
- Q And what does that study show?

A Well, it shows us that it's going to require a substantial investment in order to be able to put in this pipeline to -- to install the treating facilities, the tie-in, and the other miscellaneous expenses. Our study told us that -- well, the briefly summarize the results of this study, it was concluded that an initial investment of \$1.75-million would be required for the pipeline construction, the tie-in, the amine (sic) plant, et cetera, and that we ran some preliminary economics based on this capital outlay and the scenario that we used was based on ultimate recovery of 7 to 7-1/2 BCF and an initial rate,

deliverability, of 10-million cubic feet per day, and based on these parameters, the economics of the installation of such a facility are very marginal unless you charge a transportation fee of around 50 cents per MCF, and of course that's a very high transportation fee, unreasonable, and in order to get a more reasonable fee, along the order of 25 cents per MCF transportation, an initial rate of 15-million to 20 a day would really be desirable to make this economic for someone to do, and of course more the more deliverability you have, the more favorable the economics are going to look.

Now, the pipeline is not going to put in a line like this, either one of them, at this time, and in the existing economic climate. So it will either be up to one operator, such as BHP, or a joint effort to share the cost and to put in a line and a processing plant. Until that happens all the wells are going to remain shut-in in that field.

Now where I'm going with all this and the reason that it's important is that due to the high cost involved, a pipeline is not going to be constructed in this area and all this large capital outlay is not going to come about or be installed based on the reserves or the deliverability of one well, such as the Valley State No. 1, or the well in the east half of Section -- Section 36. In fact a

large number of wells, an entire field, will have to be included before we can make it -- make the economics attractive enough to -- to engage in such a venture.

So whether or not Yates plans to have a good deal with Transwestern for selling this gas at a premium will by itself not move one MCF of gas and we have to think about the benefit to the -- to the whole field in general.

Q What is the current deliverability of the two wells that currently are completed and shut-in now in the field?

A Well, let me give you a little information about these -- these wells to really show why they need to be given a major consideration as far as the purchaser, which we eventually choose in this field.

Of course as we've already stated, the discovery well, Ervin Ranch State No. 1, was potentialed in December of '88 for a little over 4-million cubic feet per day CAOF in the lower zone, which I alluded to previously, and over 10-million cubic feet per day in the upper zone, both in the Montoya formation, and the pressure transient testing and reservoir limits analysis that we did indicated substantial reserves for this particular well, along the order of 6-to-7 BCF, and we estimate that the combined deliverability of both zones in the Ervin Ranch State No. 1

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24 25 to be on the order of 3-to-4-million cubic feet per day.

Now the confirmation well in Section 36 was potentialed for over 37-million cubic feet per day CAOF in January of 1989 and this was from the single zone in the Upper Montoya and reservoir limits testing on this well, as well volumetrics, indicate reserves on the order of 3 as or better, and this particular well could have a deliverability of anywhere from 2 to 5-million cubic feet per day, we estimate. Now it's reasonable we're a little uncertain on this one as it's down structure, it's closer to the water table, we're going to be more careful about how we produce this particular well.

So for the field, as it stands, to date reserves from these two wells of 9 to 10 BCF, we estimate, with a combined deliverability of around 5-million cubic feet per day, so we're talking about substantial reserves here and any decisions we may make as to the pipeline that we choose would have to consider the benefit to these wells. This would have to weigh in there very greatly.

Q Do you currently have sufficient daily deliverability into a pipeline to make the cost of bringing that gathering system to the field economic at this point?

No, we don't. We will continue to develop the field and hopefully soon we'll be at the point

1 where we can justify the installation of this facility. 2 In your opinion as a petroleum engineer, 3 significant matter to you to have the operations for the subject well decided based upon the contention that 5 Yates has a 50 percent interest collectively in the well? 6 Α No, we do not. 7 0 Do you believe as a reservoir engineer 8 that the operation of the well ought to be decided based upon overhead costs or the difference between the existing 10 AFE's? 11 Α No, we do not, because we have shown 12 that those are insignificant. 13 What to you are the significant factors 14 that ought to be decided in determining who the operator is 15 for the well? 16 Well, the significant factors would be Α 17 individual that discovered the field, which is us: the 18 fact that we have the expertise in the immediate area; our 19 success in drilling of these wells; and looking at the mar-20 keting of the primary product on a fieldwide basis and not 21 on an individual well basis. 22 Is

Q there anything else that you'd like to comment on, Mr. Crabb?

> Α No.

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All right, sir. Q

A I believe that covers it.

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MR. KELLAHIN: That concludes

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my examination of Mr. Crabb.

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We'd move the introduction of

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Exhibit Number Nine.

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MR. CATANACH: Exhibit Number

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Nine will be admitted into evidence.

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MR. DICKERSON: I don't have

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any questions, Mr. Catanach.

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MR. CATANACH: I have no

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questions of the witness. He may be excused.

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Do you want to make closing

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statements?

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MR. KELLAHIN: Yes, sir. Let

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me get my certificate in that we have noticed all the right

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parties for this.

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MR. CATANACH: Okav.

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MR. KELLAHIN: It's marked as

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Exhibit Number Ten, Mr. Examiner. It's my certificate

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showing that we have attached a tabulation of the interest

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owners to be pooled. Exhibit B represents the offset oper-

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ators that would be affected and then the return receipt

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cards for the mailing, and that concludes the submission of the documents for our case.

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MR. CATANACH: Exhibit Ten

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will be admitted as evidence.

Would you like to go first, Mr Kellahin? Do you have a statement?

MR. KELLAHIN: Just briefly, Mr. Examiner, we've spent a good part of the day talking about this particular case and I think you've found that there is an overwhelming number of items upon which both sides agree and that's why it makes a decision of this case as to the operations even more difficult.

We do not have the more common situation of a great disparity in the ownership between the parties desiring to operate the well. I appreciate Mr. Dickerson's landman's position with regard to dividing the Yates interests among the various Yates entities and then collectively adding them up to say 50 percent, but the actual truth of the matter is that my client controls 50 percent of the property and Mr. Dickerson has the other 50 percent. So if you're trying to decide how to balance the scales, tipping the scale based upon who controls what percentage is not a meaningful way to decide this case.

Sometimes you're able to decide a forced pooling case based upon the fact that there is a material and significant difference in the operating agreement and the overhead charges that the company proposed to charge. In this case we have utilized the Ernst

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and Whinney overhead rates. We have used the same overhead rates that Yates has agreed to in the west half of this section and the overhead rates, notwithstanding the contention of Ms. Colbert this morning, I don't think is a material basis upon which to decide the case.

Another way in which the Commission on occasion decides pooling cases is to say that there is a significant and material difference in the cost of the wells. I think you can see from Mr. Crabb's testimony that if you adjust some of the numbers based upon whether or not you run a particular type of log or a drill stem test, make some reasonable judgments as operator, you're going to come in with either AFE. There is not an appropriate way to make a material difference in the two AFE's by which to decide the case.

One way we sometimes decide these cases is decide which operator is the operator with the greatest experience. It's conceded that Yates is a good operator, a prudent operator, and certainly knowledgeable.

We contend, however, that the fact that BHP undertook the risk of exploring for and developing this prospect and this field with the discovery well and the confirmation well, ought to be awarded. They ought to be awarded in having the operations for the well

in the east half of 36 granted to them as a continuing benefit for their ability to gather sufficient daily production to take the gas to market. We think it is important that you remember that it was Yates who was given the opportunity to share that risk with BHP and they elected not to do that. They elected to farmout their interest in the west half of 36 and it was BHP that took that risk for the benefit, then, ultimately of themselves when they were successful and certainly of Yates. Had they not been successful then the adverse economic consequences of that decision would have been on BHP alone.

We think that ought to be rewarded, particularly in view of the fact that the only contentions that Yates asserts for being awarded operations of the well is they mistakenly believe that they have a significant controlling interest in the well and that there is a material difference in the overhead cost in the AFE.

Those are not material differences by which you should seize operations from the company that proposed the well first. This is third, fourth well in the immediate area and we are the company that went to Yates and asked them if they would like to participate with us. We proposed the well first and when all things otherwise are equal, the Commission historically, and I think fairly, has awarded operations to the party that proposes

the well initially and we, it is uncontested that we proposed a well in the east half of this section prior to Yates.

What does Yates do? They take the AFE that we have provided them, the operating agreement that we have provided with them, and they send us back an operating agreement in which they attach our own exhibit to their operating agreement. You know, they're trying to take away the operations from us and we don't understand and believe that there is a material justification to allow it to occur.

We would like to operate this property. We think it's important for us to continue the operations of the field. We think it's of material importance to us that we preserve our farmout rights under the Valley farmout. We will obtain that document for you and brief our legal opinions on the consequences of a decision to allow Yates to operate over BHP with regards to the effects of that Valley farmout.

But setting aside that issue for a moment, we think that the parties have no dispute on the location. We don't believe that either party desires or seeks that the well be penalized. You can't resolve the case based upon the location of the well because through joint study further development of data, all parties agree

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the well location. Sometimes we can decide these cases based upon that. This does not present you that choice.

Therefor we conclude and hope that you will also conclude that operations belong to the party first proposing the well and that is beyond dispute BHP Petroleum Company.

Thank you.

MR. CATANACH: Thank you.

Dickerson?

MR. DICKERSON: Mr. Catanach, the testimony again uncontroverted as much of the testimony was today, was that Yates has drilled approximately 12 Ordovician wells, 10 of which are producers in the general area with similar geologic and drilling considerations involved in the drilling of those wells.

BHP, on the other hand, has drilled 2.

As did Mr. Kellahin, we concede that BHP is a prudent operator. It's certainly qualified to operate oil and gas wells, but -- and it's true that BHP first proposed a well in the east half of Section 36. But think about the testimony as to what happened. that point all parties were in possession of roughly equal data in that they had shared among themselves the existing seismic data. If anything, BHP had some advantage to the

extent that it had all the actual results, at least by that point had actually drilled its well in the northeast quartof Section 5 and the Yates "36" 1 Well in the west half Section 36, and yet the location that BHP proposed was of at a standard location. Now, upon consideration by the parties and Yates' objection to that standard, the parties got together, and reasonable people are supposed to get together, but we would submit that that is an indication that Yates experience in the area counts for something. counted for enough to convince BHP that, yes, the location proposed by Yates is superior to the one initially proposed by BHP, and changed its mind; a reasonable and prudent thing to; that's what we should all do when confronted with differing opinions which upon review appear to be substantiated. It's what happened here.

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I also agree with Mr. Kellahin and I offer a case that you might find instructive, Mr. Catanach, in Order No. R-119 -- 8119, which Mr. Kellahin and I are both familiar with, several findings, beginning on about the Findings 8 or 9, were made concerning the relative merits of the positions of the parties. Now in that case the parties were diametrically opposed on each and every point in contention, the location of the well, not only who should be operator. But the substance of the order entered was that absent any compelling reason to do it,

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situation such we have here our geologists are in total agreement.

The well costs, while we contend that Yates can drill for something less and complete these wells than can BHP, I wouldn't guarrel with -- it's opinion at this point and history will tell, but that order goes further and points out that there is another significant factor and notwithstanding the fact that it's denegrated by BHP, the fact remains that Yates Pet controls 50 percent of the acreage. Yeah, the other 50 percent is owned by other parties, but Samedan controls its own interest half the size of the Yates interest. BHP controls the remaining 25 percent interest and in the absence of other compelling reasons to decide a case based on any other factors, that would be a perfectly reasonable case in which to provide this one.

We've also pointed out, Mr. Catanach, that here we have a new pool, discovery, through the efforts not along of BHP, but through its drilling, which has resulted in two producers that did not exist before, and yet because of the realities of the situation and the economics of the oil business these days, there is an advantage to a party to have control over the operations. We submit that for whatever advantage that would be, it would be equitable and fair in these circumstances to allow

Yates Pet, a prudent and well qualified operator, to operate wells and develop its reserves in the east half. It's committed to complying, not because of any engineering or geologic reason that Yates has to drill that well currently, but conceding to the time problems that BHP has, Yates has agreed to comply with those problems, get that well drilled within the time frame of their existing agreements without requiring them to get an extension from Valley, which they say may or many not be possible.

Given these factors we think the reasonable conclusion here and equitable to all parties would be to allow Yates to operate this third well for the benefit of all the interest owners (unclear).

MR. CATANACH: Thank you.

Is there anything further in this case, any of these cases?

If not, they will be taken under advisement.

(Hearing concluded.)

(Hearing Concluded

CERTIFICATE

I, SALLY W. BOYD, C. S. R. DO HEREBY CERTIFY that the foregoing Transcript of Hearing before the Oil Conservation Division (Commission) was reported by me; that the said transcript is a full, true and correct record of the hearing, prepared by me to the best of my ability.

Snely W. Boyd CSK.

I do he say certify that the foregoing is a constitue record of the proceedings in the Examiner hearing of Case No. 9630, 9630, heard by me on 1906, 963

Oil Conservation Division, Examiner

1 2 3 4	STATE OF NEW MEXICO ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT OIL CONSERVATION DIVISION STATE LAND OFFICE BUILDING SANTA FE, NEW MEXICO  15 March 1989			
5	EXAMINER HEARING			
6				
7	IN THE MATTER OF:			
8	In the matter of cases called on this CASES			
9	date and continued or dismissed with- 9610 out testimony presented. 9619			
10	9624 9 <b>5</b> 26			
11	9 <b>∲</b> 27 9628			
12	9629 9630 0631			
13	9631)			
14	BEFORE: Michael E. Stogner, Examiner			
15				
16				
17	TRANSCRIPT OF HEARING			
18				
19	APPEARANCES			
20	For the Division: Robert G. Stovall			
21	Attorney at Law Legal Counsel to the Division			
22	State Land Office Bldg. Santa Fe, New Mexico			
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MR. STOGNER: This hearing will come to order for Docket No. 9-89. I'm Michael E. Stogner and it's March 15th, 1989, and we'll go through the continuances and dismissals first.

We'll call Case Number 9610.

MR. STOVALL In the matter of the hearing called by the Oil Conservation Division on its own motion to permit Knights Bridge Petroleum Corporation and James Marchbanks and all other interested parties to appear and show cause why the Triple Crown Well No. 1, Quay County, New Mexico, should not be plugged and abandoned in accordance with a Division approved plugging program.

The Division requests this case be continued to the April 12th, 1989 hearing.

MR. STOGNER: Case Number 9610 will be continued to the examiner's hearing scheduled for April 12th, 1989.

9619.

MR. STOGNER: Call next Case

MR. STOVALL: Application of

Santa Fe Exploration Company for compulsory pooling and an

unorthodox gas well location, Eddy County, New Mexico.

This case is going to be con-

tinued and readvertised for March 29th.

MR. STOGNER: Case Number 9619

will be continued and readvertised for the examiner's

hearing scheduled for March 29th, 1989.

MR. STOGNER: Call next Case Number 9624. STOVALL: Application of MR. A. Moncrief, Jr., for compulsory pooling, Lea County, New Mexico. Applicant requests this case be dismissed. MR. STOGNER: Case Number 9624 will be dismissed. (Hearing concluded.) 

MR. STOGNER: Call next Case

MR. STOVALL: The application

of Mobil Producing Texas and New Mexico, Inc., for compul-

sory pooling, Lea County, New Mexico.

Applicant requests this case

be dismissed.

Number 9626.

MR. STOGNER: Case Number 9626

will be dismissed.

MR. STOGNER: Call next Case Number 9627. MR. STOVALL: Application of Yates Petroleum Corporation for an unorthodox gas well location, Chaves County, New Mexico. Applicant requests this case be continued to March 29th, 1989. MR. STOGNER: Case Number 9627 will be so continued. (Hearing concluded.) 

3 Number 9628.

will be so continued.

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MR. STOGNER: Call next Case

MR. STOVALL: Application of Yates Petroleum Corporation for an unorthodox gas well location, Eddy County, New Mexico.

Applicant requests this case be continued to March 29th.

MR. STOGNER: Case Number 9628

MR. STOGNER: Call next Case

Number 9629.

MR. STOVALL: Application of

Yates Petroleum Corporation for compulsory pooling, Chaves

County, New Mexico.

Applicant requests this case

be continued to March 29th.

MR. STOGNER: Case Number 9629

10 | will be so continued.

(Hearing concluded.)

MR. STOGNER: Call next Case

Number 9630.

MR. STOVALL: Application of Yates Petroleum Corporation for an unorthodox gas well

location, Chaves County, New Mexico.

Applicant requests this case

be continued to March 29th.

MR. STOGNER: Case 9630 will

be so continued.

(Hearing concluded.)

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MR. STOGNER: Call next Case 9631. MR. STOVALL: Application of BHP Petroleum, Inc. for compulsory pooling and unorthodox gas well location, Chaves County, New Mexico. Applicant requests this case be continued to March 29th. MR. STOGNER: Case Number 9631 will be so continued. (Hearing concluded.) 

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CERTIFICATE

I, SALLY W. BOYD, C. S. R. DO HEREBY CERTIFY that the foregoing Transcript of Hearing before the Oil Conservation Division (Commission) was reported by me; that the said transcript is a full, true and correct record of the hearing, prepared by me to the best of my ability.

Saly W. Boyd Cop

I do hereby certify that the foregoing is a complete record of the proceedings in

the Examiner hearing of Case Nos # 9619, 9619, 9624, 96 62 9627 heard by me on 15 March 19 89 . 2628, 9627, 2636

, Examiner

Oil Conservation Division