

1 STATE OF NEW MEXICO  
2 ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT  
3 OIL CONSERVATION DIVISION  
4 STATE LAND OFFICE BUILDING  
5 SANTA FE, NEW MEXICO

6 22 November 1988

7 EXAMINER HEARING

8 IN THE MATTER OF:

9 Application of Meridian Oil, Inc. for CASE  
10 compulsory pooling, San Juan County, 9543  
11 New Mexico, and  
12 Application of Meridian Oil, Inc. for CASE  
13 compulsory pooling, San Juan County, 9544  
14 New Mexico.

15 BEFORE: Michael E. Stogner, Examiner

16 TRANSCRIPT OF HEARING

17 A P P E A R A N C E S

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1 MR. STOGNER: We've called  
2 Case Numbers 9543 and 9544 and have continued them to this  
3 time.

4 Let's see, at this point we  
5 have an appearance by Mr. Tom Kellahin for the Applicant  
6 and Jim Bruce for --

7 MR. BRUCE: Fina Oil and  
8 Chemical Company.

9 MR. STOGNER: Okay. Have we  
10 sworn all the witnesses? We have for the Meridian.

11 MR. KELLAHIN: Yes, we have.

12 MR. BRUCE: We have not sworn  
13 mine, potential witnesses.

14 MR. STOGNER: Is it Fina or  
15 American Petrofina?

16 MR. HOPKINS: It is Fina Oil  
17 and Chemical Company --

18 MR. STOGNER: Okay.

19 MR. HOPKINS: -- and that's  
20 all spelled out.

21 MR. STOGNER: Okay.

22

23 (Witnesses sworn.)

24

25 MR. STOGNER: Mr. Kellahin?

1 MR. KELLAHIN: Thank you, Mr.  
2 Examiner.

3 We'll call as our first wit-  
4 ness Robert Hopkins.

5 MR. STOGNER: Let the record  
6 show that Mr. Hopkins was previously sworn in and had his  
7 credentials accepted.

8 Are there any objections to  
9 Mr. Hopkins' credentials, Mr. Bruce?

10 MR. BRUCE: No, there are not.

11

12 ROBERT HOPKINS,  
13 being called as a witness and being previously sworn and  
14 remaining under oath, testified as follows, to-wit:

15

16 DIRECT EXAMINATION

17 BY MR. KELLAHIN:

18 Q Mr. Hopkins, let me direct your atten-  
19 tion to the exhibit book that's in the binder for Case  
20 9543. If you'll turn to Exhibit One, what do we find under  
21 tab -- for Exhibit Number One?

22 A Exhibit Number One is an application for  
23 compulsory pooling.

24 Q We're dealing here with the west half of  
25 Section 16 of 32 North, 10 West, San Juan County?

1           A           Yes, sir.

2           Q           And the proposal is to drill a Basin  
3 Fruitland Coal Gas Well?

4           A           Yes, sir.

5           Q           Are you the landman principally respon-  
6 sible for the consolidation of acreage for this case and  
7 for Case 9544?

8           A           I am responsible directly for this case;  
9 not directly for the Burroughs Com Well in the west half of  
10 the section.

11          Q           The east half of the section involves  
12 Case 9544.

13          A           Correct.

14          Q           And whose responsibility is that one?

15          A           John Myrick.

16          Q           John Myrick?

17          A           Yes, sir.

18          Q           And is John here today?

19          A           Yes, he is.

20          Q           All right. To what extent have you and  
21 John worked together in your efforts to get voluntary join-  
22 der by Fina of their interest in the well?

23          A           We used the same procedures with Fina  
24 that we've used with other parties. We make an initial  
25 proposal letter with an AFE and a proposed operating agree-

1 ment. Those agreements were furnished to Fina on EPNG Com  
2 "C" No. 100 Well in April of 1988, and on the Burroughs Com  
3 Well in June of 1988.

4 Q Because we're dealing with wells in the  
5 same section, let me attempt with you, Mr. Hopkins, to have  
6 you discuss both wells in relation to your efforts to get  
7 voluntary joinder, and if there is a question I ask you for  
8 which you do not know the answer, we'll ask it of John and  
9 see if between the two of you we can provide Meridian's  
10 perspective on the negotiations.

11 A Okay.

12 Q Let's turn, then, to the exhibit book  
13 for Case 9544 and if you'll turn beyond the application to  
14 the attachment Exhibit A to the application, you have set  
15 forth the addresses and the percentages for the various  
16 parties, have you not?

17 A Yes, I have.

18 Q Describe for me for the well in the west  
19 half of 16 what the ownership is.

20 A In the west half of 16 is Case 9543.

21 Q That's correct.

22 A In the west half of Section 16 of 32  
23 North, 10 West, El Paso Production Company owns State  
24 leases 40 acres in size, in the northwest of the northwest  
25 and in the northeast of the northwest Chevron USA, Inc.,

1 owns an 80-acre State lease in the south half of the north-  
2 west quarter.

3 El Paso Production Company then has two  
4 more State leases of 40 acres in size in the northwest of  
5 the southwest and in the northeast of the southwest and  
6 again in the southwest of the southwest also 40 acres in  
7 size.

8 Fina Oil and Chemical owns a 40-acre  
9 State lease in the southeast quarter of the southwest  
10 quarter.

11 Q All right, now let's go to the east half  
12 of 16, which will be case 9544, and have you identify for  
13 us what the interest ownership is for that half section.

14 A Fina Oil and Chemical owns a 40-acre  
15 lease in the northwest quarter of the southeast quarter.  
16 The remaining acreage is owned by El Paso Production Com-  
17 pany. There are three separate State leases involved there  
18 for a combined total of 280 acres.

19 Q Let's turn now to Exhibit Number Two.  
20 Again you've shown the plats of the area, the proposed well  
21 location, and then a more formalized tabulation of the  
22 interest and the acreage?

23 A Yes.

24 Q Let's go now to Exhibit Three in each of  
25 the exhibit books and let's start with the El Paso Com "C"

1 No. 100 Well in the west half?

2 A Yes, sir.

3 Q All right. Describe for us what efforts  
4 have been made on behalf of your company to get the volun-  
5 tary agreements, then, of Chevron and Fina for the drilling  
6 of the well.

7 A On April 28th, 1988, a proposal letter  
8 was sent to Fina Oil and Chemical in Midland. That pro-  
9 posal letter included an AFE and an operating agreement.

10 An identical letter was sent to Chevron,  
11 USA, Inc. the following day, April 29th, 1988.

12 On May 27th, approximately one month  
13 after I had sent the initial letters, I sent a follow-up  
14 letter, just very general follow-up letter, indicating that  
15 I hadn't heard anything and asked that they review the pro-  
16 posal.

17 On July 15th, 1988, I furnished a re-  
18 vised AFE to the partners. We had a request August 5th,  
19 1988, for additional information from Jerry Nevans of Fina  
20 Oil and Gas.

21 On August 17th, 1988, Chevron executed  
22 our proposal letter and the AFE and we began negotiations  
23 on the operating agreement.

24 On September 26th, 1988, Chevron fur-  
25 nished a proposed amendment to the operating agreement,

1 which we've been reviewing since that time.

2                   On September 28th, 1988, we furnished  
3 additional information to Fine concerning drilling costs  
4 and make-up of the location and the facilities.

5                   And on November 11th, 1988 we met in  
6 Farmington, New Mexico, with them and discussed both pro-  
7 posals.

8                   Q           Were you present at the November 11th  
9 meeting in Farmington with the Fina representatives?

10                  A           Yes, I was.

11                  Q           And who from Fina appeared?

12                  A           Jerry Nevans and --

13                  Q           There are others that you do not remem-  
14 ber their specific names?

15                  A           The three gentlemen with Fina here today  
16 are the --

17                  Q           The same three that you've discussed  
18 this deal with in November.

19                  A           Yes.

20                  Q           At this point as of today's hearing, Mr.  
21 Hopkins, what is the status of your negotiations with  
22 Chevron, USA, on their interest?

23                  A           We're currently working with them. We  
24 had three changes to their actual letter and we are nego-  
25 tiating with Chevron. They're considering our proposals

1 and we hope to hear from them soon.

2 Q Has Chevron executed your AFE for you?

3 A Yes, they have.

4 Q And we're now to discussing the specific  
5 terms and details of the operating agreement.

6 A Yes.

7 Q Where do we stand on Fina and what is-  
8 sues are of continuing concern to Fina as conveyed to you?

9 A The best of my recollection is that  
10 their main concern, possibly, was the timing of the well,  
11 that they'd rather see the well drilled possibly next year,  
12 the middle of next year.

13 Q In discussions with Fina was there any  
14 concern about the operations, who operated the well?

15 A No, sir.

16 Q Have they raised with you any concerns  
17 about the AFE costs that you proposed for the well?

18 A No, sir, not to me.

19 Q Has there been any objection to the  
20 orientation of the spacing unit?

21 A No, sir.

22 Q To the well locations?

23 A No, sir.

24 Q As best you remember, the only objection  
25 conveyed to you by Fina was the issue as to when the well

1 would be drilled and therefore when the financial commit-  
2 ment would have to be made by their company?

3 A Yes, sir.

4 Q Let's go now to the Burroughs Com "A"  
5 No. 100 Well, which is the west half of the section -- I'm  
6 sorry, the east half of the section in Case 9544. When we  
7 look at the chronology under Tab Three, Exhibit Three?

8 A Yes, sir.

9 Q Summarize for us what has been the acti-  
10 vity in your efforts to get a voluntary agreement.

11 A On June 2nd, 1988, a proposal letter was  
12 sent to Fina by a landman in our office. A follow-up let-  
13 ter was sent September 20th, 1988, and again we had our  
14 meeting November 11th, 1988.

15 There was numerous phone conversations  
16 with them in between, trying to exchange information.

17 Q To the best of your knowledge at this  
18 point, Mr. Hopkins, have you and Mr. Myrick furnished to  
19 Fina all the information that they've requested of you?

20 A Yes, I think we have.

21 Q When we look at the working interest  
22 owners to commit their interest to this well for Case 9544,  
23 we turn to Tab Four?

24 A Yes, sir.

25 Q Exhibit Four? And apart from Meridian,

1 the outstanding interest is Fina Oil and Chemical Company,  
2 is it not?

3 A Yes, sir, it is.

4 Q Exhibit Five in each exhibit book is  
5 what, Mr. Hopkins?

6 A That's our Authority for Expenditure  
7 form with the estimated well cost breakdown attached and  
8 a facilities well cost estimate attached to that.

9 Q And Exhibit Six in each of the exhibit  
10 books is what, sir?

11 A Exhibit Six would be a model form oper-  
12 ating agreement that we've proposed to the partners.

13 Q Within that model form operating agree-  
14 ment have you included in the COPAS attachments proposed  
15 overhead charges?

16 A Yes, sir, we have.

17 Q And what are those rates, sir?

18 A The drilling well rate is \$3500 to be  
19 prorated for less than a full month and a producing well  
20 rate of \$300.

21 Q Have you received any objection from any  
22 of the parties that you've utilized this rate for for this  
23 type of well?

24 A No, sir, we have not.

25 Q And have you received any objection from

1 Fina for use of these rates?

2 A No, sir, we have not.

3 Q Are these your recommendations to the  
4 Examiner for the overhead rates in the event Fina should  
5 elect to go nonconsent and to be subject to the pooling  
6 order?

7 A Yes, they would be.

8 Q And then finally Exhibit Seven in each  
9 instance, then, is the notification of hearing?

10 A Yes, sir, it is.

11 MR. KELLAHIN: That concludes  
12 my examination of Mr. Hopkins, Mr. Examiner. We would move  
13 the introduction of Exhibits One through Seven in each of  
14 the two cases.

15 MR. STOGNER: Are there any  
16 objections?

17 MR. BRUCE: None.

18 MR. STOGNER: Exhibits One  
19 through Seven in both Cases 9543 and 9544 will be taken un-  
20 der advisement -- will be admitted into evidence at this  
21 time.

22 Mr. Bruce, your witness.

23

24

CROSS EXAMINATION

25 BY MR. BRUCE:

1           Q           Mr. Hopkins, is there a tax credit for  
2 wells drilled and completed in this formation?

3           A           Yes, there is.

4           Q           What is the basis for that tax credit or  
5 the amount, if you know?

6           A           I don't know.

7           Q           Would that -- if Fina is force pooled,  
8 would that tax credit be used or computed in determining  
9 when the well pays out?

10          A           I don't know the answer to that.

11          Q           And maybe this isn't your field, Mr.  
12 Hopkins, but I believe Fina was also told of some other  
13 charges that Meridian would make; for instance, a charge or  
14 processing fee to remove carbon dioxide, is that correct?

15          A           Yes, we tell our partners of that but I  
16 don't have the expertise to talk about it.

17          Q           And would the same go for salt water  
18 disposal charges?

19          A           Yes.

20          Q           And that's somebody else's area?

21          A           Yes, sir.

22          Q           And that's somebody here today?

23          A           I believe so.

24          Q           Is he going to be a witness?

25          A           Yes, I think so.

1           Q           You said you were present at a meeting  
2 November 11th, I believe, and at that meeting was Mr.  
3 Nevans, Mr. Martin, and Robert Dempsey?

4           A           Yes.

5           Q           Was there a Dana Craney present that  
6 day?

7           A           Yes, there was.

8           Q           And is he employed by Meridian?

9           A           Yes, he is.

10          Q           And what is his position with Meridian?

11          A           He's a geologist.

12          Q           Did Mr. Craney at that meeting tell the  
13 representatives of Fina that both of the wells we are talk-  
14 ing about were "a sure shot"?

15          A           I don't remember that.

16          Q           Is there a market for all gas? Assuming  
17 these wells are completed as producers, is there a market  
18 for this gas?

19          A           I don't think that's within my exper-  
20 tise. I don't know.

21                           MR. BRUCE: I have nothing  
22 further, Mr. Examiner.

23                           MR. STOGNER: Mr. Kellahin,  
24 any redirect.

25                           MR. KELLAHIN: No, sir.

1 MR. STOGNER: I have no  
2 further questions of this witness. You may be excused.

3 Mr. Kellahin?

4 MR. KELLAHIN: Mr. Bent hasn't  
5 been sworn, I believe, Mr. Examiner. I'd like to have him  
6 sworn in.

7

8 (Mr. Patrick Bent sworn.)

9

10 PATRICK BENT,  
11 being called as a witness and being duly sworn upon his  
12 oath, testified as follows, to-wit:

13

14 DIRECT EXAMINATION

15 BY MR. KELLAHIN:

16 Q For the record would you please state  
17 your name and occupation?

18 A Patrick Bent, petroleum engineer. I'm  
19 the Regional Drilling Engineer for Meridian Oil.

20 Q Mr. Bent, I'd like to show you what is  
21 marked as Exhibit Number Five in each of the exhibit books  
22 for Case 9543 and 9544.

23 MR. STOGNER: I'm sorry, exhi-  
24 bit number what?

25 MR. KELLAHIN: It should be

1 Exhibit Number Five in the exhibit book.

2 Q Are you familiar with these AFE's, Mr.  
3 Bent?

4 A Yes, I am.

5 Q What is it that you do for your company?

6 A I supervise a staff of three drilling  
7 engineers who put together AFEs, well cost estimates, pro-  
8 jects, drilling projects, and rate supervision.

9 MR. KELLAHIN: Mr. Stogner, we  
10 tender Mr. Bent as an expert drilling engineer.

11 MR. STOGNER: Are there any  
12 objections?

13 MR. BRUCE: I have no objec-  
14 tion.

15 Q Mr. Bent, why don't you give us some  
16 background of what has been your personal experience and  
17 successes in the drilling of Fruitland Coal Gas wells  
18 and their relation to the cost as experienced by Meridian?

19 A I've been involved with the Fruitland  
20 Coal project from its inception in the late part of 1985,  
21 early part of 1986, and then all of the wells drilled in  
22 1987, an additional 16, 4 in the first phase, 16 in the  
23 second, and so far this year in excess of 130 wells.

24 Q You originally testified before the  
25 Examiner of the Division with regards to some horizontal

1 wells to be drilled by Meridian, did you not?

2 A That's correct. I was the project  
3 engineer on the San Juan 30-6 Unit No. 404, high angle,  
4 which was an operational success.

5 I also testified as to the 32-5 Unit No.  
6 100 application and the Sunray H-201 horizontal application  
7 which both have been approved.

8 Q When the original project was implemen-  
9 ted, what was the range of expectation for the cost of  
10 drilling this type of well?

11 A We hadn't estimated that, exactly what  
12 it was going to cost us. We didn't know. It was a re-  
13 search and development project and so the costs were --  
14 were not unknown but varied widely.

15 Q What was your actual experience  
16 initially, then, with actual cost for drilling wells like  
17 this?

18 A The actual cost for the four initial  
19 wells was approximately \$1,000,000 per well.

20 Q As a result of that project and subse-  
21 quent drilling, what do you now estimate to be the cost of  
22 drilling the wells that are the subject of these two cases?

23 A Approximately 245,000.

24 Q And what is a completed well AFE for  
25 those two wells?

1           A           With facilities included, I believe it  
2 would be in the neighborhood of \$400,000.

3           Q           Mr. Bent, are each of these AFE's pre-  
4 pared in the same fashion?

5           A           No, the Burroughs Well is prepared by  
6 using an earlier format, this format being during the  
7 higher cost phase of our wells.

8           Q           Okay, let's go to the AFE now behind Tab  
9 Five of each of the exhibit books and for the Burroughs Com  
10 "A" 100 Well --

11          A           Uh-huh.

12          Q           -- if you'll find that one. What are  
13 the total completed well costs?

14          A           Total completed well costs, including  
15 facilities, \$515,486.

16          Q           When we look to compare that estimate  
17 with the El Paso Com "C" 100 Well, what are the estimated  
18 total costs for that well?

19          A           The total estimated costs are \$402,324.

20          Q           What is the explanation, Mr. Bent, for  
21 the \$110,000 difference in price between the two wells?

22          A           The high learning curve that we exper-  
23 ienced in the initial phase of the project, as we drilled  
24 more wells we gained experience in the technique that we  
25 employ and as a result the AFE amounts were reduced sub-

1       stantially.

2                   Q           All right, so what we're looking at when  
3 we look at the Com "A" 100 Well, we're looking at an AFE  
4 from February of '88 and now by June 30th of '88 for the Com  
5 "C" 100 Well, we're seeing continued and further price re-  
6 ductions in the cost of these wells.

7                   A           That's correct.

8                   Q           Do you have a recommendation today as to  
9 what Fina can expect in terms of the total cost for each of  
10 these wells?

11                  A           I could use the total dollar amount on  
12 the EPNG well, approximately \$400,000.

13                  Q           Is that your recommendation to the Exa-  
14 miner, is notwithstanding the AFE for the Com "A" 100 Well,  
15 prepared in February of this year, that --

16                  A           That is correct, depending on the dis-  
17 tance, again, from the water tie-ins, there will be some  
18 variance in the (unclear).

19                  Q           So we're looking at a range of a well  
20 cost in the range of \$400,000.

21                  A           That's correct.

22                  Q           And is that prepared in such a way as to  
23 be competitive with other operators that are drilling  
24 Fruitland Coal Gas wells?

25                  A           We feel so.

1           Q           And in terms of a contract rate, is this  
2 done on a footage basis or on a day work basis or some  
3 combination?

4           A           It is a combination of footage and day  
5 work.

6           Q           Are you using the same drilling contrac-  
7 tor for all these wells or does it vary?

8           A           It varies.

9           Q           And do you get competitive prices on a  
10 bidding basis from all your contractors?

11          A           Yes, we do.

12          Q           That concludes -- oh, let me ask you  
13 this, in terms of drilling these wells now, is there any  
14 risk involved that the Examiner ought to consider in as-  
15 sassing a penalty factor against nonconsenting owners for  
16 the mechanical risk evolving in drilling this type of well?

17          A           Yes, sir. As the mechanical risk is  
18 such that using the completion method that Meridian em-  
19 ploys, in cases can be substantial.

20          Q           Mr. Caldwell in an earlier case attemp-  
21 ted to apportion different items of risk into the 200 per-  
22 cent risk factor penalty. Were you here for that discus-  
23 sion?

24          A           Yes, I was.

25          Q           Let me ask you, sir, in separating out

1 the risk factor penalty in a pooling case from the risk of  
2 a dry hole, the risk of encountering production but having  
3 that be uneconomic, and then the third portion being the  
4 mechanical risk of having difficulty in drilling this well  
5 to the point in some instances you have to abandon the  
6 wellbore, those are the three parts of the puzzle, and you  
7 as a drilling engineer would assess what percentage of that  
8 maximum risk and allocate it to the drilling portion of the  
9 risk?

10 A I think I would agree with John on that.

11 Q About a third of that?

12 A Yes, sir.

13 MR. KELLAHIN: That concludes  
14 my examination of Mr. Bent.

15 MR. STOGNER: Thank you, Mr.  
16 Kellahin.

17 Mr. Bruce, your witness.

18

19 CROSS EXAMINATION

20 BY MR. BRUCE;

21 Q Mr. Bent, I believe you said the mechan-  
22 ical risk was due to your completion procedure.

23 A That's correct.

24 Q Could you describe that procedure for  
25 us?

1           A           In drilling the Fruitland formation  
2 under balance, the formation is allowed to influx and in  
3 doing so, the risk of stuck pipe is -- is a constant worry.

4           Q           In the region, the general area of these  
5 two wells, Mr. Bent, are there any dry holes or uneconomic  
6 wells which in your opinion are due to poor completions?

7           A           I really wouldn't feel comfortable on  
8 that one. I'm not familiar with the production results as  
9 we haven't tied all the wells in.

10          Q           And it is your position to work out the  
11 well economics, is that correct?

12          A           To work out the well cost estimates,  
13 that's correct.

14          Q           You don't do the well economics?

15          A           No, I do not.

16          Q           Has Meridian ever lost a well because of  
17 mechanical difficulties?

18          A           No, not that I'm aware of as far as a  
19 Fruitland Coal Well is concerned. We've spent extreme  
20 amounts of time, in excess of 80 days, on specific wells  
21 when mechanical problems were excessive.

22          Q           But the mechanical problems were solved?

23          A           Eventually. When you look at 80 days as  
24 compared to a 4-day drilling operation, you can obviously  
25 see the impact.

1 Q And you said you were involved in esti-  
2 mates for approximately 130 wells, is that right?

3 A The well cost estimates, no; involved  
4 in the drilling --

5 Q Drilling of --

6 A -- of 130 wells; well cost estimates in  
7 excess of 700.

8 Q Okay. Of those 130 wells you were in-  
9 volved in drilling, how many of them were dry holes?

10 A One that I can specifically think of,  
11 due to an interest problem. The others, I'm not really  
12 qualified to speak on. We have not tied in a substantial  
13 majority of these wells and so I really can't say whether  
14 or not they were dry holes.

15 Q Many of them are shut in.

16 A That's correct, not tied in, as yet.

17 MR. BRUCE: Nothing further.

18 MR. STOGNER; Thank you, Mr.  
19 Bruce.

20 Mr. Kellahin, do you have any  
21 redirect?

22 MR. KELLAHIN: No, sir.

23 MR. STOGNER: Mr. Kellahin.  
24  
25

1 LYNN MEIBOS,

2 being called as a witness, being previously sworn and re-  
3 maining under oath, testified as follows, to-wit:

4  
5 DIRECT EXAMINATION

6 BY MR. KELLAHIN;

7 Q Please state your name and occupation.

8 A Lynn Meibos, geologist for Meridian Oil.

9 MR. KELLAHIN: Mr. Examiner,  
10 may the record reflect that Mr. Meibos is qualified as a  
11 petroleum geologist and has been acceptable previously?

12 MR. STOGNER: Are there any  
13 objections?

14 MR. BRUCE: No, Mr. Examiner.

15 MR. STOGNER: His  
16 qualifications are acceptable.

17 Q Mr. Meibos, would you take a moment and  
18 go to the Exhibit Number Eight that's displayed on the  
19 wall. Let's find Section 16 of 32 North, 10 West.

20 All right, you've pointed that out to us  
21 on Exhibit Nine. Let's find it also on Exhibit Eight,  
22 which is the montage. Let's use Exhibit Number Nine, if  
23 you will, sir, and let's look specifically at the two wells  
24 in Section 16 and the relationship of those wells to exist-  
25 ing wells in any of the adjoining sections.

1                   We are north of the Cedar Hills Fruit-  
2 land Coal Gas Pool with this section?

3                   A           Yes, sir. North of the Cedar Hills GAS  
4 Pool, south of some wells that are drilled in what we call  
5 our Carter Ute area. The wells in the Cedar Hill area are  
6 known to be productive from the Fruitland Coal and have  
7 established production for several years in the -- out of  
8 the Fruitland Coal.

9                   The production rates within the Cedar  
10 Hill Pool vary markedly from well to well, as have the  
11 production rates for some of the wells that we've drilled,  
12 or production flow tests that -- for some of the wells  
13 we've drilled in the Carter Ute area.

14                  Q           Do you have flow tests on all the wells  
15 adjacent to Section 16? I'm looking at the three wells in  
16 Colorado. Are there flow tests in all three of those  
17 wells?

18                  A           No. I've only got access to information  
19 on one and that is the -- I think this would be Section --  
20 the northeast part of Section 24, 32, 10, in Colorado.

21                  Q           Do you have a geologic opinion as to  
22 what is a reasonable risk factor penalty to assess for non-  
23 consenting interest owners in either of the two wells in  
24 Section 16 should there be parties electing not to partici-  
25 pate?

1           A           Yes, sir, I do. I think that a risk  
2 penalty factor should be 200 percent above the well cost.

3           Q           Describe for us the reasons that you  
4 have that opinion with regards, first of all, to the Bur-  
5 roughs Com "A" 100 Well.

6           A           Based on the variance of production  
7 within the Cedar Hill Pool, though there is established  
8 production there, it's apparent that production is coming  
9 from the fractured coals within the Fruitland formation.

10                   The fractures are not everywhere the  
11 same within the Cedar Hill Pool. They are present to one  
12 degree or another but not everywhere the same. Based on  
13 the discontinuity and randomness of this fracture system,  
14 it's likely that we might encounter fractures, we might not  
15 encounter fractures, with the wells in Section 16.

16           Q           Has a decision been made by your company  
17 to drill both the Burroughs Com "A" Well and the Com "C"  
18 100 Well in that section regardless of the outcome of the  
19 other?

20           A           That's correct.

21           Q           You're going to drill both?

22           A           Yes, sir.

23           Q           Does it diminish the risk for you as a  
24 geologist to have one well drilled, evaluated, and then the  
25 second well drilled in reliance on the information from the

1 first well?

2 A Not in the case of the Fruitland Coal.

3 Q Explain to us why that doesn't work.

4 A Closeology which often works in a sand-  
5 stone reservoir apparently hasn't worked in the case of the  
6 -- with the Fruitland Coal, as is evidenced by the produc-  
7 tion, differing production rates of the Cedar Hill area, as  
8 well as the -- the production tests and after flow test  
9 information that we've been able to gather on the wells  
10 that we've drilled so far this year.

11 Q In relating the geology to the coal  
12 thickness map, Exhibit Number Eight --

13 A Uh-huh.

14 Q -- can you determine for us whether or  
15 not the location of the well in terms of the coal net  
16 thickness on the isopach would diminish your risk?

17 A The net thickness isopach shows approxi-  
18 mately 80 feet of net clean coal in the Cedar Hill area.  
19 Based on the section of logs that I've put here there's a  
20 little less than the 80 feet as mapped by Kelso and others,  
21 but based on the thickness of the coal, I could not risk it  
22 one way or another.

23 Q Have you seen the other geology maps of  
24 the coal in an effort to quantify the quality of those  
25 wells in relation to either isopaching or structure, coal

1 thickness, what are the kinds of tools being used by you as  
2 a geologist to evaluated these kinds of wells?

3 A There's three things that we use: An  
4 isopach map, the production or the drilling information  
5 gained from previous wells drilled through the Fruitland  
6 Coal for all out information, kick information, and then  
7 we're using Landsat lineament information to help us try  
8 and find the better areas where we ought to have some --  
9 some fracture, at least, of the coal.

10 Q Despite having those sophisticated tools  
11 at your disposal and the fact of Meridian's expertise in  
12 drilling the Fruitland Coal Gas wells, is there still an  
13 element of that exceeds the maximum penalty in order for  
14 you to carry the nonconsenting working interest owners  
15 share of the cost of a well?

16 A Yes, sir, I think so.

17 MR. KELLAHIN; That concludes  
18 my examination of Mr. Meibos.

19 We would move the introduction  
20 of Exhibits Eight and Nine in these two cases.

21 MR. STOGNER: Are there any  
22 objections?

23 MR. BRUCE: None.

24 MR. STOGNER: Exhibits Eight  
25 and Nine will be admitted into evidence.

1                   Let the record show also that  
2 Exhibits Eight and Nine will probably be in the record of  
3 the other cases.

4                   MR. KELLAHIN: We'll provide  
5 additional copies, Mr. Examiner.

6                   MR. STOGNER: Okay, but they  
7 are the same Exhibits Eight and Nine in the other cases  
8 that there are in these two, is that correct?

9                   MR. KELLAHIN: Yes, sir.

10                  MR. STOGNER: Thank you. Mr.  
11 Bruce, your witness.

12  
13                                   CROSS EXAMINATION

14 BY MR. BRUCE:

15                  Q           Mr. Meibos, would you briefly go over  
16 for me the criteria you use in choosing locations in the  
17 Fruitland Coal in this area?

18                  A           We check, first of all, the net coal  
19 thickness to see and make sure that we do have coal present  
20 and that the thickness of the coal, coupled with the  
21 desorption value of the coal meets a reserve figure gen-  
22 erated by the reservoir department, a reserve figure being  
23 used to generally predict how a well might produce if we  
24 were able to encounter natural fractures.

25                  Q           And what effect do these natural

1 fractures have?

2           A           Natural fractures provide the perme-  
3 ability of the coal. Coal as a rock has no permeability  
4 and and of itself. The coal must be fractured or cleated  
5 in order for it to have permeability and allow the gas  
6 which is present within the matrix of the coal to flow out  
7 of the coal.

8                       Coal may be present but there may be low  
9 or no permeability within the coal.

10           Q           In your opinion are these two locations  
11 in Section 16 the best locations?

12           A           Yes, they are.

13           Q           In that section.

14           A           In that section.

15           Q           And another way of looking at it, are  
16 these the least risky locations?

17           A           I would say yes. Another factor, I  
18 didn't finish answering the question that you asked before  
19 with regard to what else we use, we use as much topographic  
20 and Landsat information as we can to best predict where we  
21 might encounter natural fractures, but to help improve our  
22 possibility of making a good well.

23                       That still, in my opinion, doesn't  
24 diminish the risk.

25           Q           Tell me more about the Landsat data and

1 the lineaments information.

2 A In what respect?

3 Q Is there any relationship between the  
4 lineaments and fracturing?

5 A There might be but based on some infor-  
6 mation that I obtained at a fractured reservoir school that  
7 I attended put on by the AAPG this summer in Great Falls,  
8 Montana, Ron Nelson of -- who was teaching the course for  
9 the AAPG, noted that a study done in southern Utah showed  
10 that only 50 percent of the lineaments that they mapped  
11 from Landsat photos were really on the surface. In other  
12 words, some of the lineaments that we may map from a Land-  
13 sat photo may be real lineaments, some may not be. So  
14 there's a risk involved with that based on the information  
15 that Mr. Nelson provided at that school.

16 Q Is there some general relationship  
17 between the two?

18 A Generally, yes, there's a general rela-  
19 tionship.

20 Q For these two wells in Section 16 what  
21 values do you have for net coal thickness?

22 A I don't have that information with me.

23 Q Do you have it in memory?

24 A No. I can provide that for you, if  
25 you'd like, at a later time. It's not a big deal.

1           Q           And what about the absorption value of  
2 the coal, do you recall that number?

3           A           Not exactly offhand, but it's greater  
4 than 350 in that area of the San Juan Basin, if I recall  
5 correctly, 300 cubic feet per ton.

6           Q           Regarding these two proposed locations,  
7 are there any dry holes, Fruitland dry holes, within the  
8 immediate area?

9           A           Not that I'm aware of. There are some  
10 wells that produce at rates less than 100 MCF a day.

11          Q           Now you've just talked about fracturing  
12 being a big factor in production from the Fruitland wells  
13 --

14          A           Uh-huh.

15          Q           -- is that correct? Is there a rela-  
16 tionship to local Pictured Cliff structural highs under-  
17 neath the Fruitland formation and a good potential for  
18 fracturing within the Fruitland Coal?

19          A           There might be in some places of the  
20 Basin but I would say that that's not always the case.

21          Q           Is that the case here?

22          A           I would venture -- I -- I don't know.  
23 We don't map -- we don't use the structural high on the  
24 Pictured Cliffs to determine what the fracturing capabili-  
25 ties might be of the coal.

1 Q Is there any relationship between coal  
2 thickness and fracturing?

3 A No. The -- none that I'm aware of.

4 Q Mr. Meibos, I was listening earlier to-  
5 day to one of the cases and I believe you said that coal  
6 thickness does not seem to affect the productive capabili-  
7 ty of wells.

8 A That's correct.

9 Q But is there some minimum value you  
10 need?

11 A A minimum value would be better talked  
12 about by our reservoir engineer, who's -- who is more fami-  
13 liar with the economic parameters we're using than I am.

14 Q And are you familiar with the El Paso  
15 No. 2 Burroughs State and the El Paso No. 4 El Paso State,  
16 which directly offset these two locations?

17 A Not in all their details; maybe their  
18 location.

19 Q Do you know if coal is present in each  
20 of those wells?

21 A Yes, there is coal present in both of  
22 those wells.

23 Q And do the logs of those wells indicate  
24 fracturing?

25 A You can't determine fractures from logs

1 in the coal.

2 Q Do you have other information which  
3 would reveal whether there is fracturing in those wells?

4 A Not with me at this time.

5 Q Was there fracturing of the coal in  
6 those wells?

7 A I don't know. I haven't studied them,  
8 those two particular wells well enough to give an answer at  
9 this time.

10 What section are those in?

11 Q 16.

12 A 16? Those are Mesaverde wells, okay, I  
13 thought you were talking about PC wells. You can't tell  
14 from the Mesaverde logs whether or not the wells would be  
15 fractured.

16 Q I asked you previously regarding the  
17 coal thickness and desorption values you used for these  
18 particular wells and you told me you weren't sure of those  
19 numbers.

20 Do you know if they are higher relative  
21 to other wells Meridian has drilled in this immediate area?

22 A No.

23 Q They are not higher or you don't know?

24 A I don't know.

25 Q Does Meridian feel that these two

1 locations are better than the other wells it has drilled in  
2 the immediate vicinity to the Fruitland?

3           A           I couldn't say. I think that Meridian  
4 would consider these locations with equal risk, that would  
5 have equal risk as the other wells were drilled in this  
6 area based on the fracture and the fractures in the coal  
7 and that are present or not present.

8                           MR. BRUCE: That's all I have,  
9 Mr. Examiner.

10                           MR. STOGNER: Are there any  
11 redirect, Mr. Kellahin?

12                           MR. KELLAHIN: No, sir.

13                           MR. STOGNER: No further ques-  
14 tions of this witness, he may be excused.

15                           Mr. Kellahin?

16                           MR. KELLAHIN: I have nothing  
17 further, Mr. Stogner.

18                           MR. STOGNER: Mr. Bruce, you  
19 have three witnesses, is that correct?

20                           MR. BRUCE: Yeah, they should  
21 be brief.

22                           MR. STOGNER: Okay, I'll be  
23 back in a minute.

24

25

(Thereupon a recess was taken.)

1  
2 MR. STOGNER: On the home  
3 stretch. Mr. Bruce.

4 MR. BRUCE: Okay.

5  
6 ROBERT E. DEMPSEY,  
7 being called as a witness and being duly sworn upon his  
8 oath, testified as follows, to-wit:

9  
10 DIRECT EXAMINATION

11  
12 BY MR. BRUCE:

13 Q Would you please state your full name  
14 and city of residence?

15 A My full name is Robert E. Dempsey. City  
16 of residence is Midland, Texas.

17 Q And what is your occupation and who are  
18 you employed by?

19 A I'm a Land Manager in west Texas for  
20 Fina Oil and Chemical Company.

21 Q In your capacity as Land Manager did you  
22 attend the November 11, 1988, meeting with representatives  
23 of Meridian?

24 A Yes, I did.

25 Q Could you tell me a little bit more

1 about that meeting and particularly what Mr. Dana Craney  
2 said?

3 A It was a meeting in general to discuss  
4 both the wells which are the subject of this hearing. As  
5 to Mr. Craney's comments, he said, and it was a quote,  
6 "these wells were a sure shot."

7 Q So he sounded rather confident about  
8 these being completed as good wells.

9 A Yes.

10 Q One last question just to verify, what  
11 does Fina -- what is Fina's working interest ownership in  
12 each half section?

13 A Fina has one 40-acre tract out of the  
14 320-acre spacing unit (unclear).

15 Q Thank you, Mr. Dempsey.

16 MR. KELLAHIN: No. questions.

17 MR. STOGNER: Did we accept  
18 his credentials?

19 MR. BRUCE: I -- I can go fur-  
20 ther.

21 MR. KELLAHIN: I don't know if  
22 he was tendered as an expert.

23 MR. BRUCE; I -- I --

24 MR. STOGNER: All right, would  
25 you?

1 MR. BRUCE: I will if you want  
2 me to, Mr. Examiner. I consider he testified as to the --

3 MR. STOGNER: Just so that's  
4 it, the record will so show. Okay.

5 No questions.

6 MR. BRUCE: I'll next call Mr.  
7 Nevans.

8  
9 JERRY WAYNE NEVANS,  
10 being called as a witness and being duly sworn upon his  
11 oath, testified as follows, to-wit:

12  
13 DIRECT EXAMINATION

14 BY MR. BRUCE:

15 Q Mr. Nevans, would you please give your  
16 full name and city of residence?

17 A Jerry Wayne Nevans and I live in Mid-  
18 land. Midland.

19 Q And who are you employed by and in what  
20 capacity?

21 A Fina Oil and Chemical and I'm a petro-  
22 leum engineer.

23 Q And have you previously testified before  
24 the New Mexico OCD?

25 A No, I haven't.

1           Q           Would you please briefly describe your  
2 educational and work background?

3           A           I have a Bachelor of Science in petro-  
4 leum engineering from Texas Tech University and graduated  
5 in December '81.

6                        Went to work for Getty Oil Company then,  
7 worked for them until 1984 when they were bought by Texaco.

8                        I worked until early '85 when I went to  
9 work with Fina. I've been employed as an area engineer for  
10 Fina since then.

11           Q           And does your area of responsibility in-  
12 clude New Mexico?

13           A           Yes, it does.

14           Q           And are you familiar with engineering  
15 matters related to these two cases?

16           A           Yes.

17                        MR. BRUCE:   Mr. Examiner, I  
18 tender Mr. Nevans.

19                        MR. STOGNER:  Mr. Nevans, what  
20 district office or area office of Getty's did you work in?

21           A           I worked in Odessa, Texas.

22                        MR. STOGNER:  With Mr. Baker?

23           A           Yes, sir, W. A. Baker.

24                        MR. STOGNER:  Okay. Are there  
25 any objections?

1 MR. KELLAHIN: Mr. Nevans'  
2 qualifications are so accepted.

3 Q Mr. Nevans, in you capacity as a petro-  
4 leum engineer for Fina did you request certain completion  
5 data from Meridian?

6 A Yes. I have several times.

7 Q What type of information did you request  
8 from him?

9 A Well, what we were mainly interested in  
10 was any -- any different type of completion methods that  
11 they were using that permitted them to have, that they  
12 seemed to have, and by their own admission have by far the  
13 best wells in the Cedar Hills area in all their Fruitland  
14 Coal wells.

15 We were for the most part told this was  
16 proprietary information.

17 Q And so you didn't get that completion  
18 data from them.

19 A No.

20 Q And did you request any other type of  
21 data?

22 A Yes, we did. I had requested more than  
23 once on the phone and then wrote a letter requesting Meri-  
24 dian to give us an idea of what they felt like the wells in  
25 initial potential, initial production would be, projected

1 to clients in the area, or estimated reserves, any informa-  
2 tion that would help us run the economics on a well, and  
3 was again told that was proprietary information.

4 Q Has this lack of information limited  
5 Fina's ability to respond to these well proposals?

6 A Yes, it has.

7 Q Did Meridian -- at this in -- were you  
8 at this November 11, 1988, meeting which was previously  
9 referenced?

10 A Yes.

11 Q And what did Meridian's representatives  
12 tell you about these two particular locations?

13 A Well, we were told that they had drilled  
14 several wells that were not near as good locations as  
15 these, that these proposed locations were superior, that  
16 they had drilled the other wells just because they were,  
17 you know, couldn't get a commitment from us.

18 Q Did they say that these were good loca-  
19 tions?

20 A They said they were excellent locations.  
21 and very much superior to the wells, some of the wells that  
22 they had drilled.

23 Q Mr. Nevans, I hand you what's been  
24 marked Fina Exhibit Number Four. Would you please describe  
25 that for the Examiner?

1           A           Well, it's basically just a production  
2 map. We were looking at the Fruitland Coal wells in the  
3 Cedar Hill area and it's got the proposed locations on it,  
4 and then I've also got the -- the wells with the blue ar-  
5 rows are the Meridian operated wells in the field. The  
6 numbers written beneath the wells are the current  
7 production rates as best we could ascertain them, based on  
8 Dwight's information, Dwight's pools.

9           Q           Do you consider the Meridian wells good,  
10 good wells?

11          A           Yes, they're -- the four wells that  
12 we've got the production on here, the three in the Cedar  
13 Hill and then the Carter Ute 103, are all three good wells  
14 that are considerably better than the average well in the  
15 field.

16          Q           There are two offset wells to the south.  
17 I believe that's in Sections 20 and 21.

18          A           Uh-huh.

19          Q           Those wells do not appear to be very  
20 good wells, are they?

21          A           No, they're not. They're Union Texas  
22 wells and that was one of our primary concerns when we were  
23 looking at these locations but one of the points that came  
24 out in our November meeting with Meridian was that they  
25 felt these two wells were inferior wells based on inferior

1 completion techniques that are currently being used by  
2 Union Texas.

3 Q And Meridian thought they could do a  
4 better job of completing.

5 A They felt like, for one thing, that  
6 Union Texas was cementing the -- cementing their liners  
7 and/or pay zones in the well and plugging up the cleat  
8 system or the natural fracture system down there beyond,  
9 you know, the formation down beyond what (not clearly  
10 understood) frac job (unclear) stimulation.

11 Q Did Meridian also discuss any other  
12 operating charges or processing charges?

13 A Yes. We've been 39-1/2 cents an MCF for  
14 stripping out the CO<sub>2</sub>, is what we've been giving for that  
15 operating expense, and then we were told at the meeting  
16 there even though they were putting in a water gathering  
17 system, that we should use about \$1.00 a barrel to dispose  
18 of produced water from the wells.

19 Q Did Meridian give you its actual costs  
20 for these processing and service charges?

21 A No.

22 Q Do you know if they are reasonable  
23 charges?

24 A Well, the -- no, to tell you the truth,  
25 the -- it seems excessive on the water, water disposal

1 charge. We do not, you know, we don't operate any plants,  
2 so as far as 39-1/2 cents an MCF, I don't have a feel for  
3 that.

4 Q In your opinion, Mr. Nevans, based on  
5 the information you have in hand now, do you think a 200  
6 percent penalty is reasonable?

7 A No, I don't.

8 Q Was Exhibit Number Four prepared by you  
9 or under your direction?

10 A Yes.

11 MR. BRUCE: Mr. Examiner, I  
12 move the admission of Exhibit Number Four.

13 MR. STOGNER: Are there any  
14 objections?

15 MR. KELLAHIN: No objection.

16 MR. STOGNER: Exhibit Number  
17 Four will be admitted into evidence.

18 Does that complete your exa-  
19 mination, Mr. Bruce?

20 MR. BRUCE: Yes, Mr. Examiner.

21 MR. STOGNER: Mr. Kellahin,  
22 your witness.

23 MR. KELLAHIN: Thank you.

24

25

CROSS EXAMINATION

1 BY MR. KELLAHIN:

2 Q Mr. Nevans, I take it that you have no  
3 personal experience with drilling Fruitland coal gas wells  
4 in the San Juan Basin.

5 A No, sir, I do not.

6 Q And does Fina as a company have any ex-  
7 perience in drilling Fruitland coal gas wells in the basin?

8 A No, sir.

9 Q What was the date of your first efforts  
10 to educate yourself about Fruitland Coal production in the  
11 basin?

12 A I would estimate that it would be June  
13 or July of this year, when I took over the Hobbs area.

14 Q And what have you done to educate your-  
15 self about the intricacies of drilling and producing coal  
16 gas from the coal bed Fruitland formations in the San Juan  
17 Basin?

18 A Well, we have accumulated as much liter-  
19 ature as we could, especially Robert Martin and I, and then  
20 we also have talked with -- like we looked at the Tenneco  
21 package and we went up there, and we had a massive effort  
22 to educate ourselves on Fruitland coal, since that was a  
23 major portion of that package when we were looking at pur-  
24 chasing that package.

25 Q Is it a practice for Fina to share pro-

1 proprietary reserve calculations with working interest owners  
2 you're trying to attract into properties that you propose  
3 to to drill?

4 A Yes. When we propose a well to a work-  
5 interest owner, we supply what we think the initial produc-  
6 tion will be; what the decline rate will be and what the  
7 estimated reserves are.

8 Q Have you -- do you understand as a en-  
9 gineer how difficult it is to project recoverable reserves  
10 using conventional decline curve analysis for Fruitland gas  
11 production?

12 A Yes, I do.

13 Q Meridian's told you that, have they not?

14 A I'm sure they have.

15 Q And you've learned it from others.

16 A Right.

17 Q Have you sought to utilize the data  
18 that's available here at the Oil Commission in the Amoco  
19 Cedar Hills cases that were presented to this Division?

20 A No.

21 Q Do you know that they have reserve cal-  
22 culations in those files and interference information and  
23 all kinds of reservoir studies.

24 A Yes, I've -- we've got some of that in-  
25 formation that we got from Tenneco and then we researched

1 the Tenneco wells and estimated reserves on those wells;  
2 however, the -- we, you know, by Meridian's own confusion  
3 or profession, their wells are very much superior to any  
4 other operator in the area, and I'm really not concerned  
5 with what Amoco's estimated reserves are.

6 Q From your investigations of Meridian,  
7 they appear to be a good operator of Fruitland coal gas  
8 wells.

9 A Yes.

10 Q Very successful.

11 A Yes, very good operator.

12 Q If I calculate correctly, based upon Mr.  
13 Bent's well estimates of about 400,000, your 12-1/2 percent  
14 is going to be about \$50,000 per well, is that not true?

15 A Yes.

16 Q That is your financial exposure if you  
17 cut them a check and participate, is that not true?

18 A Per well.

19 Q Yeah. It escapes me, why don't -- why  
20 don't you participate if these are so well operated and  
21 these are such good wells with such low risk, why don't you  
22 send them a check for \$100,000 and let's participate in the  
23 success of these wells?

24 A Well, that's really not my decision; it  
25 never has been.

1           Q           Has it ever been your recommendation to  
2 the people that make those decisions, that you participate?

3           A           Well, my recommendation initially was  
4 greatly hampered by the fact that we had no experience in  
5 this area and that's when I was initially asking for Meri-  
6 dian's estimate of production and reserves.

7                       At this point we are trying to, you  
8 know, we are trying to ascertain what it is that Meridian  
9 is doing that allows them to be such a better operator in  
10 this area, and I've been fairly unsuccessful at it, at  
11 finding that out, and it makes it very difficult to make a  
12 decision, and, no, I have not recommended that we go along  
13 with these wells, based, you know, you can't argue with  
14 their track record, they have an outstanding track record,  
15 but we feel like as a working interest owner that we should  
16 be privy to at least some -- enough of the information  
17 where we can make a decision on our own.

18           Q           But you're not a working interest owner  
19 yet, are you?

20           A           No, but we would be.

21           Q           Yeah, if you sign the operating agree-  
22 ment you would be a working interest owner and then you get  
23 all these goodies. Right?

24           A           Well, no, I don't know that we would. I  
25 don't know that we'd find out any more information after we

1 signed. You know, if they're so concerned with giving this  
2 information out, we do not feel that we would have any more  
3 information down the line than we have right now.

4 Q Well, Mr. Nevans, I'm at a loss to un-  
5 derstand, you've told us earlier that they weren't giving  
6 you the data on their wonderful success for completion  
7 techniques. Didn't you tell Mr. Bruce that?

8 A I have -- the only completion technique  
9 that I've got is a basically generic, very no detail tech-  
10 nique that they sent when I asked for production informa-  
11 tion.

12 Q Well, Exhibit Three to Case 9543,  
13 there's a letter dated September 28th, Mr. Hopkins wrote it  
14 to you, in which he says, "Enclosed pursuant to your re-  
15 quest please find an informational packet containing well  
16 diagrams, drilling and completion procedures, and a layout  
17 of facility installations. I hope this will make you more  
18 comfortable with our procedures."

19 He then ends with, "If I can be of fur-  
20 ther assistance, please advise."

21 You got that letter, right?

22 A That's the one, exactly what I'm saying.  
23 I called, asking for production information, reserve infor-  
24 mation, (unclear) scenarios. None of that; I got this  
25 letter with a very generic, no detail, I mean there's no

1 stimulation techniques mentioned in there. It doesn't talk  
2 about where we're going to frac. We, you know, as far as  
3 what they're doing to position themselves, to make better  
4 wells than other operators in the area, I don't have any  
5 idea, you know. You've got an entire drilling and comple-  
6 tion procedure written on one page there. That's a very  
7 non-detailed, generic --

8 Q Well, I'm surprised, quite frankly, that  
9 you've not found it, because Meridian has testified before  
10 this very Division on numerous occasions about their open  
11 hole completion techniques and, you know, I'm surprised you  
12 don't have it, but the point of my question is, if you  
13 think 200 percent is unreasonable, Mr. Nevans, what is your  
14 recommendation for a penalty?

15 A My recommendation would be 50 to 100  
16 percent.

17 Q That's -- that's recovery out of produc-  
18 tion, your share of the cost, plus an additional 50 to 100  
19 percent, is that what you're saying?

20 A Yes.

21 Q Okay. Do you have any objection to Mer-  
22 idian being the operator?

23 A No, I don't.

24 Q Don't have any objection to the spacing  
25 unit configuration or the size?

1           A           No.

2           Q           No objection to the well location?

3           A           No.

4           Q           No objection to the proposed costs?

5           A           No. I -- at one time I called with some  
6 objections on the initial AFE and was told at that time,  
7 well, I could knock, you know, 100 or maybe more thousand  
8 off of that, and I don't know, within a couple of weeks I  
9 got the revised AFE.

10          Q           Okay, and you're comfortable with those  
11 wells costs, then?

12          A           Yes, I am.

13          Q           Do you have any difficulty in the time  
14 frame for the commencement of the wells? I believe they've  
15 anticipated trying to commence the wells before bad weather  
16 here in January and December?

17          A           Well, that's -- that was not my consid-  
18 eration.

19                           MR.       KELLAHIN:       Nothing  
20 further, Mr. Examiner.

21                           MR.   STOGNER:    Mr. Bruce, any  
22 redirect?

23                           MR. BRUCE:    No, Mr. Examiner.

24                           MR.   STOGNER:    I have no ques-  
25 tions of this witness.

1                   ROBERT L. W. MARTIN, II,  
2 being called as a witness and being duly sworn upon his  
3 oath, testified as follows, to-wit:

4

5

DIRECT EXAMINATION

6

BY MR. BRUCE:

7

8

Q            Would you please state your full name  
and city of residence?

9

10

A            Robert L. W. Martin, II. I live in  
Midland, Texas.

11

12

Q            And who are you employed by and in what  
position?

13

14

A            I'm employed by Fina Oil and Chemical  
Company as a petroleum geologist.

15

16

Q            And have you previously testified before  
the New Mexico OCD?

17

18

A            No, I have not.

19

20

Q            Will you please outline your educational  
and work background?

21

22

A            Okay. I graduated from Texas Tech in  
May of '82 with a Bachelor of Science degree in geology and  
a minor in biology.

23

24

25

Started work in Midland as an explora-  
tion geologist with Bill C. Burns in Midland for fifteen  
months and then joined Fina in October of 1983 as an ex-

1 ploration and production geologist, working in Texas and  
2 New Mexico areas.

3 Q And have you studied the geology in this  
4 area and become familiar with it?

5 A Yes, I have.

6 Q And are you familiar with the geology  
7 involved in Section 16 in these two cases?

8 A Yes, I am.

9 MR. BRUCE: Mr. Examiner, are  
10 the witness' credentials acceptable?

11 MR. STOGNER: Are there any  
12 objections?

13 MR. KELLAHIN: No, sir.

14 MR. STOGNER: They are.

15 Q Mr. Martin, looking at Exhibit Number  
16 One, please describe it for the Examiner briefly.

17 A Okay, basically, the Exhibit Number One  
18 is a basal isopach map -- I'm sorry, it's a composite map  
19 showing the total coal thickness isopachs for the Fruitland  
20 formation coal and it also shows by the green line the top  
21 of the largest stratigraphic horizon, the Pictured Cliffs.

22 And this is from the RMAG's Geology and  
23 Coalbed Methane Resources of the Northern San Juan Basin,  
24 Colorado and New Mexico, Page 32.

25 And basically what it shows is that

1 within the area that I've outlined in yellow, we are in the  
2 thicker part of the coal; the green line representing the  
3 stratigraphic horizon, the Pictured Cliffs, which shows why  
4 the coal is thick in that area, due to the fact that you  
5 had stabilization of the shoreline.

6 Landward of that shoreline the coal also  
7 had a chance to start building up and that's the reason for  
8 the coal thick. I just wanted to show that we are within  
9 an area that does have the coal.

10 Q And from your study of the literature,  
11 are the areas to the southwest of that green line the  
12 better locations?

13 A Yes.

14 Q Better well locations for Fruitland coal  
15 gas wells?

16 A Yes.

17 Q And in your -- after making your study,  
18 do you agree with the material represented on this exhibit?

19 A Yes, I did.

20 Q Would you please move on to Exhibit Two  
21 and discuss its contents?

22 A Exhibit Two is an isopach map showing  
23 the net coal thickness of the Basal Fruitland Coal Seam  
24 within the Cedar Hills area, and within the Cedar Hills  
25 area the biggest part of the production comes from the

1 basal part of the -- or what they might call the lower  
2 Fruitland Coal Seam, which is just above the Pictured  
3 Cliffs, and what I wanted to show by this map, which I've  
4 put the two locations for their wells, the Meridian wells,  
5 is that the basal part of the coal is present within Sec-  
6 tion 16.

7 Q And who prepared this map, Mr. Martin?

8 A I did.

9 Q And would you please now move on to Ex-  
10 hibit Number Three and discuss its contents?

11 A Okay. Number Three is a map that hasn't  
12 been brought out yet about the coal rank map of the Fruit-  
13 land Coal formation.

14 This is from the Gas Research Insti-  
15 tute's book titled, A Geologic Assessment of Natural Gas  
16 from the Coal Seams in the Fruitland Formation, San Juan  
17 Basin, and I copied this from Page 36.

18 Basically this just shows that we are in  
19 an area outlined in yellow that has a higher -- the high  
20 volatile 8 (sic) bituminous coal, which for the most part  
21 tells us that within this area you can produce better gas  
22 from this type of coal than you would if you went to the  
23 southwest.

24 Q And based upon your study of this area,  
25 Mr. Martin, what would you recommend as a penalty to be

1 assessed against nonconsenting interest owners?

2 A I would recommend between 50 and 100  
3 percent.

4 Q And what do you base this on?

5 A Well, in looking at the evidence that  
6 the coal is present, that within the Pictured Cliffs that  
7 was mentioned earlier, on a map that I've done that was not  
8 brought, it shows that there are some local structural  
9 highs within the Pictured Cliffs which can possibly enhance  
10 the fractures out of the Fruitland Coal. I do believe that  
11 these are superior locations and that they will yield some  
12 economic gas from these locations.

13 Q In your opinion would the reduction of  
14 the penalty to the magnitude you've discussed be in the  
15 interest of conservation and the prevention of waste?

16 A Yes, sir.

17 MR. BRUCE: Mr, Examiner, I  
18 have nothing further of this witness.

19 I move the admission of Fina  
20 Exhibits One, Two, Three.

21 MR. STOGNER: Are there any  
22 objections?

23 MR. KELLAHIN: No objections.

24 MR. STOGNER: Exhibits One  
25 through Three will be admitted into evidence at this time.

1 Mr. Kellahin, your witness.

2  
3 CROSS EXAMINATION

4 BY MR. KELLAHIN:

5 Q Mr. Martin, describe for us what per-  
6 sonal experience you've had as a geologist with regards to  
7 the drilling of any of the Fruitland Coal Gas wells in the  
8 Basin.

9 A That wouldn't be in my expertise. I  
10 don't -- all I have is just geological background.

11 Q With a risk as low as you've assessed it  
12 based upon a study of the literature, have you recommended  
13 to your management that they participate in these wells  
14 with Meridian?

15 A No, I have not. Our management has per  
16 se --

17 Q Are you in a position to make that re-  
18 commendation?

19 A My recommendation usually goes to the  
20 engineer. The hierarchy of the way that Fina runs is to  
21 make recommendations to the engineer who would then take it  
22 to management.

23 Q And have you made that recommendation to  
24 your engineer?

25 A The only recommendation I have made is

1 that we would either participate or just farm this out, and  
2 that's -- yeah, that's it.

3 Q This meets whatever geologic criteria  
4 you've placed upon it to cause you to participate. That's  
5 one of the options to you, is it not, It's not of such a  
6 great risk that you would choose not to participate.

7 A Right.

8 Q Are there capital restraints on your  
9 drilling monies that you don't have funds available to  
10 participate in this well?

11 A I don't have access to that information.

12 Q You don't know? You've estimated a  
13 range of nonconsent penalty between 50 and 100 percent?

14 A Yes.

15 Q And that is based upon your study of  
16 this particular literature that you've told us about today?

17 A Right, plus some of the only -- my own  
18 studies upon using geophysical logs and sample logs as data  
19 within this area to show that the Fruitland Coal is pre-  
20 sent.

21 Q Well, we can find the Fruitland Coal all  
22 right. The issue, as Mr. Meibos has shared with you is the  
23 productivity of those wells in the coal.

24 A Right.

25 Q Have you studied it as Mr. Meibos does?



1 MR. STOGNER: Any redirect,  
2 Mr. Bruce?

3 MR. BRUCE: No, Mr. Examiner.  
4

5 CROSS EXAMINATION

6 BY MR. STOGNER:

7 Q Mr. Martin, who actually in your organi-  
8 zation sent you all down here today?

9 A Our managers.

10 Q And who are they?

11 A Tom Wadsworth.

12 Q And these -- Mr. Wadsworth would be the  
13 one to say we'll either participate or we won't, is that  
14 correct?

15 A Yes.

16 Q Why isn't he here today?

17 A I really couldn't tell you. My only  
18 thought would be that with Tenneco's -- with what we bought  
19 he's just been going back and forth to San Antonio. I'm  
20 sure he's involved in that.

21 MR. STOGNER: I have no  
22 further questions of this witness.

23 Are there any other questions  
24 of Mr. Martin?

25 MR. KELLAHIN: No, sir.

1 MR. STOGNER: He may be ex-  
2 cused.

3 Mr. Bruce, do you have any-  
4 thing further?

5 MR. BRUCE: No further witnes-  
6 ses.

7 MR. STOGNER: Mr. Kellahin, do  
8 you wish to call any of your witnesses?

9 MR. KELLAHIN: No, sir, we're  
10 finished, Mr. Examiner. Thank you.

11 MR. STOGNER: Are we prepared  
12 to do some closing statements or --

13 MR. BRUCE: Sure, I'll be  
14 brief about it.

15 MR. STOGNER: Okay, Mr. Bruce,  
16 you may.

17 MR. BRUCE: Mr. Examiner, Mr.  
18 Kellahin attempted to make the issue of whether or not  
19 there should be a higher penalty based upon whether a com-  
20 pany will farm out or no farm out. I think the penalty  
21 should be assessed based upon the risk involved in drilling  
22 this well.

23 Now Fina desired certain in-  
24 formation on which to make an informed decision but this  
25 information was not given by Fina -- not given to Fina by

1 Meridian.

2                   However, I think the testimony you've  
3 heard today, Mr. Examiner, shows the following: It shows  
4 that Meridian told Fina that each of these wells was "a  
5 sure shot"; that they had drilled 130 wells in this area  
6 and only one of those wells was a dry hole; and Mr. Meibos  
7 stated that these two wells are equal in risk to the other  
8 wells Meridian has drilled in this area.

9                   And it seems like they have a pretty  
10 good drilling and completion program out there and they  
11 really know how to drill good wells, and based on this I  
12 don't think you can assess a 200 percent penalty and I  
13 think you can look at a penalty as in the order of magni-  
14 tude of what my witnesses have recommended and that is 50  
15 to 100 percent.

16                   And I think there's another issue in  
17 here which we really didn't get into, but Mr. Meibos testi-  
18 fied that there's a tax credit which is applicable to these  
19 wells, and I think we have to be careful in looking at the  
20 -- if Fina does not join in the wells and goes nonconsent,  
21 I think you have to factor that tax credit into the compli-  
22 cation (not clearly heard.)

23                   And one final issue, is these operating  
24 costs regarding processing of carbon dioxide and salt water  
25 disposal charges. I think Meridian, although they did not

1 choose to put on any evidence about those charges, should  
2 be required to show that those are reasonable pursuant to  
3 statute.

4 Thank you, Mr. Examiner.

5 MR. STOGNER: Thank you, Mr.  
6 Bruce.

7 Mr. Kellahin?

8 MR. KELLAHIN: I'll be very  
9 brief, Mr. Examiner.

10 Fina obviously comes before  
11 you today with very little information about coal gas pro-  
12 duction in the basin.

13 These are nice guys but they  
14 have not come equipped to discuss with you the issue of  
15 what is an appropriate risk factor penalty in this area.  
16 We invite you to rely upon the expertise of the operator  
17 that's drilled the most wells of this character and, hope-  
18 fully, success. It's no surprise to me that Dana Craney  
19 would, as an exploration geologist, want to encourage  
20 people to participate. He truly believes that every loca-  
21 tion he picks is going to be a sure shot, and in fact,  
22 they've had considerable success in finding, although we  
23 have testified to this, you're the one that brought it up,  
24 it's right here in the record, Mr. Craney's the one that  
25 they testified to told them they had a sure shot. If it's

1 a sure shot, so be it. You're going to find the reservoir.  
2 We certainly haven't denied that you wouldn't find the re-  
3 servoir. The question is the production capabilities of  
4 those wells and we have told you repeatedly today of the  
5 inherent risk involved with these wells and being in close  
6 proximity to each other and having one well that produces  
7 well and the next one not.

8 I guess it's hard to understand when you  
9 come from a matrix sand producing portion of the country  
10 and would expect to play "closeology" and a high degree of  
11 reliability in assessing risk, because when you go into the  
12 coal production areas of the basin, closeology doesn't  
13 work.

14 We believe that it's appropriate to  
15 assess a 200 percent risk factor penalty in this case and  
16 we would ask you to do so.

17 Thank you.

18 MR. STOGNER: Thank you, Mr.  
19 Kellahin.

20 Does anybody else have  
21 anything further in Case Number 9543 or 9544?

22 These cases will be taken  
23 under advisement.

24  
25 (Hearing concluded.)

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## C E R T I F I C A T E

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.

Sally W. Boyd CSR

I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Cases Nos. 9543 and 9544 heard by me on 22 November 1988.

Marion E. Stogrow, Examiner  
Oil Conservation Division