

STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO

6 September 1989

EXAMINER HEARING

IN THE MATTER OF:

Application of Richmond Petroleum, Inc. CASE
9744
for compulsory pooling, San Juan County,
New Mexico, and

Application of Richmond Petroleum, Inc. CASE
for compulsory pooling, and a non-stand- 9745
ard gas proration unit, San Juan County,
New Mexico, and

Application of Richmond Petroleum, Inc. CASE
for compulsory pooling, San Juan County, 9746
New Mexico, and

Application of Meridian Oil, Inc. for CASE
compulsory pooling and a non-standard 9750
gas proration unit, San Juan County,
New Mexico.

BEFORE: Michael E. Stogner, Examiner

TRANSCRIPT OF HEARING

A P P E A R A N C E S

For the Division: Robert G. Stovall
Attorney at Law
Legal Counsel to the Division
State Land Office Building
Santa Fe, New Mexico

A P P E A R A N C E S Cont'd

For Richmond Petroleum, Inc,: Owen Lopez
Attorney at Law
HINKLE LAW FIRM
P. O. Box 2068
Santa Fe, New Mexico

For Meridian Oil, Inc.: W. Thomas Kellahin
Attorney at Law
KELLAHIN, KELLAHIN & AUBREY
P. O. Box 2265
Santa Fe, New Mexico 87504

I N D E X

STATEMENT BY MR. LOPEZ

6

JAMES B. FULLERTON

Direct Examination by Mr. Lopez 7

Cross Examination by Mr. Kellahin 26

Cross Examination by Mr. Stogner 35

GEORGE BROOME

Direct Examination by Mr. Lopez 37

Cross Examination by Mr. Kellahin 41

JAMES ADAMS

Direct Examination by Mr. Lopez 45

Cross Examination by Mr. Kellahin 57

Redirect Examination by Mr. Lopez 74

Cross Examination by Mr. Stogner 75

Redirect Examination by Mr. Lopez 83

ALAN ALEXANDER

Direct Examination by Mr. Kellahin 86

Cross Examination by Mr. Lopez 104

Redirect Examination by Mr. Kellahin 108

Cross Examination by Mr. Stogner 109

I N D E X Cont'd

Cross Examination by Mr. Stovall	115
Redirect Examination by Mr. Kellahin	123
Recross Examination by Mr. Lopez	124

JOHN CALDWELL III

Direct Examination by Mr. Kellahin	127
Cross Examination by Mr. Lopez	141
Cross Examination by Mr. Stogner	144
Cross Examination by Mr. Stovall	148
Recross Examination by Mr. Lopez	154

STATEMENT BY MR. KELLAHIN	157
---------------------------	-----

STATEMENT BY MR. LOPEZ	160
------------------------	-----

E X H I B I T S

Richmond Exhibit One, Topographical Map	8
Richmond Exhibit One-A. Map	10
Richmond Exhibit Two, List	22
Richmond Exhibit Three-A, Affidavit	25
Richmond Exhibit Three-B, Affidavit	25
Richmond Exhibit Three-C, Affidavit	25
Richmond Exhibit Four, Maps	38

E X H I B I T S Cont'd

1		
2		
3	Richmond Exhibit Five-A, AFE	48
4	Richmond Exhibit Five-B, AFE	48
5	Richmond Exhibit Five-C, AFE	48
6	Richmond Exhibit Six, Tabulation	50
7		
8	Meridian Exhibit One, Application	89
9	Meridian Exhibit Two, Land Plats	90
10	Meridian Exhibit Three, Letters	99
11	Meridian Exhibit Four, Operating Agreements	99
12	Meridian Exhibit Five, AFE	100
13	Meridian Exhibit Six, Risk Analysis	136
14	Meridian Exhibit Seven, APD	103
15	Meridian Exhibit Eight, Isopach	128
16	Meridian Exhibit Nine, Certificate of Mailing	
17	and Return Receipts	140
18		
19		
20		
21		
22		
23		
24		
25		

1 MR. STOGNER: The hearing will
2 come to order.

3 At this time I'm going to call
4 four cases in which we have decided to consolidate, and
5 they're going to be Cases Numbers 9744, 9745 and 9746,
6 which are the application of Richmond Petroleum, Incorporated
7 for compulsory pooling, and in one of them a non-
8 standard gas proration unit.

9 Also we'll call Case Number
10 9750, which is the application of Meridian Oil, Incorporated
11 for compulsory pooling and a nonstandard gas proration
12 unit.

13 All of these cases are in San
14 Juan County, New Mexico.

15 At this time I'll call for
16 appearances.

17 MR. LOPEZ: May it please the
18 Examiner, my name is Owen Lopez with the Hinkle Law Firm in
19 Santa Fe, New Mexico, appearing on behalf of the applicant,
20 Richmond Oil Company in Cases 9744, 45 and 46, and in oppo-
21 sition to Meridian's application in Case 9750.

22 MR. STOGNER: Any additional
23 appearances?

24 MR. KELLAHIN: Mr. Examiner,
25 I'm Tom Kellahin of the Santa Fe law firm of Kellahin,

1 Kellahin & Aubrey, appearing on behalf of Meridian Oil,
2 Inc.

3 MR. STOGNER: Are there any
4 other appearances?

5 Mr. Lopez, how many witnesses
6 do you have?

7 MR. LOPEZ; Three.

8 MR. STOGNER: Mr. Kellahin?

9 MR. KELLAHIN: Two, Mr. Exam-
10 iner.

11 MR. STOGNER: Will all five
12 witnesses please stand to be sworn.

13

14 (Witnesses sworn.)

15

16 MR. STOGNER: Be seated. Is
17 there any opening remark, gentlemen, before we get started?

18 If not, let's go on and pro-
19 ceed through it. Mr. Lopez, I assume you're ready to
20 start?

21 MR. LOPEZ: Okay. Mr. Exam-
22 iner, before we were certain that we were going to have
23 three cases, we had identical but differently colored
24 Exhibit Ones, which showed the request with respect to the
25 north half of Section 9 and the east half of 10, but it

1 seems to me this one exhibit serves our purpose. It's just
2 that -- the west half of 10, I mean. We just don't have
3 pretty colors for the north half of 9 and the west half of
4 10, so -- but I think we can make due.

5
6 JAMES B. FULLERTON,
7 being called as a witness and being duly sworn upon his
8 oath, testified as follows, to-wit:

9
10 DIRECT EXAMINATION

11 BY MR. LOPEZ:

12 Q Would you please state your name and
13 where you reside?

14 A My name is James B. Fullerton, Denver,
15 Colorado.

16 Q And what do you do, Mr. Fullerton?

17 A I'm an independent landman (unclear).

18 Q Were you retained by Richmond Petroleum
19 to represent them and testify on their behalf in this
20 hearing, in these hearings today?

21 A Yes.

22 Q Have you previously testified and had
23 your qualifications made a matter of record before this
24 Commission?

25 A Yes.

1 Q Are you familiar with the area in ques-
2 tion, which is the subject matter of these hearings today?

3 A Yes, I am.

4 Q And approximately how long have you been
5 involved in doing land work in this area?

6 A In this particular project approximately
7 two or three years.

8 MR. LOPEZ: Is the witness
9 considered qualified?

10 MR. STOGNER; Are there any
11 objections?

12 MR. KELLAHIN: No objections.

13 MR. STOGNER: Mr. Fullerton is
14 so qualified.

15 Q Mr. Fullerton, I'd refer you to what's
16 been marked Exhibit Number One and ask you to identify and
17 explain what this exhibit shows.

18 A This is a copy of the topographic map
19 for this area around Navajo Lake and the different colors
20 depict the spacing units requested by Richmond and
21 Meridian.

The pink outline includes the acreage in Section 8 in which Meridian is requesting be placed with the yellow acreage in the southwest quarter of Section 9.

25 The orange outline is the southeast

1 quarter of Section 9 and that, along with the southwest
2 quarter to make a south half spacing unit, is the acreage
3 requested by Richmond.

4 Q And so in these consolidated cases, what
5 is it that Richmond seeks the Division's approval for?

6 A Richmond seeks -- are you talking about
7 all three cases?

8 Q Yeah.

9 A Richmond seeks a spacing unit for
10 drilling a Fruitland well in the south half of 9, the north
11 half of 10, or excuse me, the north half of 9 and the west
12 half of Section 10, which is the section just to the east
13 of the orange color.

14 Q And where is it that Richmond proposes
15 to locate these Fruitland wells?

16 A The well in the south half of Section 9
17 would be in the southwest quarter of Section 9.

18 The well for the north half of 9 would
19 be in the northwest quarter of 9.

20 And the well for the west half of
21 Section 10 would be in the northwest quarter of Section 10.

22 Q Now, is this well to be -- proposed to
23 be drilled in the southwest quarter of 9 at a standard
24 location recognized by the Division?

25 Q Yes.

1 Q What about the wells proposed to be
2 drilled in the north half of 9 and the northwest quarter of
3 10?

4 A The well to be drilled in the north half
5 of 9, which is in the northwest quarter, and also the well
6 to be drilled in the northwest quarter of 10, are nonstand-
7 ard locations by virtue of the fact the remaining part of
8 the spacing is under water, essentially under water.

9 Q And what is a standard location?

10 A Southwest quarter, northeast quarter.

11 Q I'd refer you to what's been marked as
12 Exhibit One-A and ask you whether that exhibit is intro-
13 duced for the purpose of showing a little more clearly
14 where the water mark is with respect to the Navajo Lake in
15 the area in question?

16 A Yes. As you can see from the topo map,
17 the lake is identified throughout both Section 9 and 10,
18 which limits significantly the areas to place wells for the
19 various two or three spacing units in question.

20 Q And do I understand your testimony cor-
21 rectly to indicate that the reason for requesting nonstand-
22 ard locations in the northwest of 9 and the northwest of 10
23 is due to topological conditions and in point of fact, the
24 fact that the standard locations in the northeast quarter
25 of both sections are under water?

1 A Yes, the standard location in the
2 southwest of 10 is also under water.

3 MR. STOGNER; Excuse me, be-
4 fore we go any further, Mr. Lopez, now, cases -- of the two
5 nonstandard locations you're talking about, neither one of
6 these locations were advertised.

7 Do you wish to make -- amend
8 these applications for nonstandard locations or do you wish
9 to come in supplemental and make administrative cases --
10 applications for those, I should say?

11 MR. LOPEZ: Mr. Examiner, I
12 would like to go ahead and present testimony here today
13 with respect to our request for nonstandard locations.
14 Such request was included in our amended applications in
15 these cases and -- and therefor it can be readvertised and
16 administrative approval can be received because as --

17 MR. STOGNER: I remember we
18 talked about this and that it, of course, will have to be
19 readvertised. Have these locations been approved by the
20 BLM? Have they had their "arc" sites done? Have they gone
21 through the Bureau of Reclamation? Have we had to the
22 sites all approved and everything on the nonstandard loca-
23 tions?

24 MR. LOPEZ: I don't know
25 whether Mr. Fullerton or Mr. Adams can respond to that, but

1 there is an answer.

2 A One of the -- two of the locations are
3 -- will be on, I believe will be -- are planned to be on
4 fee surface, which would be the west half of 10 and the
5 southwest quarter of 9 -- the northwest of 10 and south-
6 west quarter of 9. So, as far as dealing with the Bureau
7 of Reclamation at this point, it looks like we'll be okay
8 as far as that's concerned.

9 MR. STOGNER; Oh, okay. Okay,
10 let me make sure I get this straight in my head.

11 In Case Number 9744, that's
12 going to be in the northwest quarter, which would be unor-
13 thodox, what is the proposed well location?

14 A As far as footage is concerned?

15 MR. STOGNER: Yes, sir.

16 MR. LOPEZ: In case, Mr. Exa-
17 miner, I would refer you to a letter hand delivered to you
18 on August 31st from Mr. James Bruce in our office, which
19 Mr. Kellahin also received a copy of, indicating in Case
20 Number 9744 the well would be located 1450 from the north
21 line and 1850 from the west line of Section 10.

22 MR. STOGNER: Okay, that's
23 1450 from the north line and 1850 from the west line.

24 MR. LOPEZ: West line of
25 Section 10. That's 9744.

1 MR. STOGNER: Okay. And that
2 little black dot on Exhibit Number One is the location?

3 MR. LOPEZ; Intended to be. I
4 understand that since that black dot was put there that
5 this actual location is more in the center of the -- of
6 that island, or wherever you want to see it in the north-
7 west quarter of 10, so it's a little to the northeast.

8 MR. STOGNER: Okay, and how
9 about the northwest quarter of Section 9?

10 MR. LOPEZ: The northwest
11 quarter of Section 9 is Case Number 9745, and Richmond
12 proposes to re-enter a well which has a surface location, a
13 Pictured Cliff well that's already shown on Exhibit One, at
14 1730 feet from the north line and 900 feet from the west
15 line of Section 9, or, as an alternative, to immediately
16 offset that well and not re-enter it and drill a new well
17 on the same drill pad, which would be, I believe, within
18 100 feet to the north of that location.

19 MR. STOGNER: And that would
20 be 1640 from the north line.

21 MR. LOPEZ: Right.

22 MR. STOGNER: And 900 from the
23 west line. Now you mentioned that was directionally
24 drilled.

25 MR. LOPEZ; No, it's a Pic-

1 tured Cliff Well.

2 MR. STOGNER: Okay, I'm sorry.
3 All right, these two cases, of course, will be readvertised
4 but --

5 MR. LOPEZ: Yeah, and then --

6 MR. STOGNER: -- we'll hear
7 the testimony today.

8 MR. LOPEZ: Right.

9 MR. KELLAHIN: Mr. Examiner,
10 perhaps now is as convenient a time as any to try to
11 straighten out the notice here. I must tell you I'm very
12 confused by what the applicant seeks to accomplish.

13 The amended application which
14 we received on the 18th of August, does not go very far in
15 describing where the well is to be and by letter received
16 on Tuesday, yesterday, by me over Mr. Bruce's signature, he
17 gives us some well locations for these wells and I must say
18 I'm still confused by where they are.

19 What ever the applicant is
20 seeking to accomplish, the docket doesn't hope to describe
21 what he's doing. For example, in 9746 we had understood
22 until yesterday afternoon that the proposed well was going
23 to be the southeast quarter of 9, which doesn't fit now. I
24 guess I understand the applicant is proposing to utilize a
25 well location that Meridian has proposed, and he now is

1 moving in the southwest quarter of 9, or at least Richmond
2 Petroleum is. So that I think there's a fatal defect in
3 Case 9746 as to the well location.

4 In Case 9745, there is no
5 reference to that case being at an unorthodox location for
6 the north half of 9 and we discover now, as of this
7 morning, that apparently there's within some area of that
8 Pictured Cliff well, which is in the wrong quarter section
9 under the Basin Coal rules, so that hasn't been advertised
10 right.

11 In Case 9744, they tell us
12 they're going to have a location at some undetermined lo-
13 cation on the docket. We now find, as of yesterday, that
14 they propose a location that is going to be unorthodox
15 under the Basin rules.

16 We don't think the case is
17 ready for hearing, Mr. Examiner. It's not been properly
18 noticed and we certainly don't know what their locations
19 were until Mr. Lopez made them, perhaps, clear at this
20 moment, yet I'm not certain I know.

21 I think they're all fatally
22 defective, Mr. Examiner.

23 MR. LOPEZ: I think -- if I
24 may respond, Mr. Examiner, the -- with respect to Case
25 9746, that seems to be a clerical error in terms of the

1 advertisement. The case was properly applied for with
2 respect to the southwest quarter of Section 9.

3 To alleviate Mr. Kellahin's
4 concerns, there has been considerable discussion between
5 Richmond Petroleum and Meridian with respect to exactly
6 what Richmond proposed to do. There has never been any
7 question during the course of these discussions that un-
8 orthodox locations at what would otherwise be standard
9 locations but not in the correct quarter sections, would be
10 contemplated inasmuch as the topography area requires it,
11 unless the applicant were forced to directionally drill.
12 That has never been the intention. The intention has been
13 to use the existing topography to the extent possible.

14 So there is -- it is difficult
15 for reasons that escape us as to how a mistake was made
16 clerically with respect to Case 9746, but with respect to
17 the other two cases, Meridian has been on notice, they are
18 here with their witnesses, they're prepared to testify and
19 oppose us, and it seems to me that we should go ahead with
20 the hearing, since we've consolidated all four cases, any-
21 way, and since we don't see any defect in the advertising
22 with respect to their case.

23 MR. STOGNER: Okay. Now, the
24 location in Case Number 9746 was caught and was readver-
25 tised September 20th and then it was changed to read a

1 standard location in the southwest quarter of Section 9.

2 MR. LOPEZ: I might also point
3 out to the Examiner that in Case 9744 it says a standard
4 279 gas spacing and proration unit. That's obviously an-
5 other self-evident clerical mistake. It's -- a 279-acre
6 spacing unit is by its definition nonstandard and I just
7 think that is --

8 MR. STOGNER: Oh, is it? And
9 what percentage does that change from 320, Mr. Lopez? Has
10 anybody got a calculator?

11 MR. KELLAHIN: It's standard
12 under the rules, Mr. Examiner.

13 A It's 87 percent.

14 MR. STOGNER: 87 percent,
15 that's standard under the rules, Mr. Lopez?

16 MR. LOPEZ: Okay, well, I'm
17 sorry about that.

18 MR. STOGNER: Now, the unor-
19 thodox proration unit size in 9745 was 74 percent differ-
20 ent; therefor that made that nonstandard, which I might add
21 the information I had to go by at the time of the applica-
22 tion was somewhat limited and the extensive research in
23 which I do just to go write the ad, you'll find this infor-
24 mation takes in quite a bit of time.

25 I'm not complaining or any-

1 thing, but it would sure be of some help if we were (un-
2 clear) the right lots, the right acreage amounts, the
3 locations in which we're talking about. I have talked to
4 Mr. --

5 MR. LOPEZ: Bruce.

6 MR. STOGNER: -- Jim Bruce
7 about the locations; that these cases were advertised as
8 such, in which the location would be approved at a later
9 time and when it was determined. So, considering that
10 these things had to be readvertised for various reasons,
11 and I am under the understanding today that we have some
12 fee acreage involved and not Federal?

13 MR. LOPEZ: Yes.

14 MR. STOGNER: So for that part
15 of the deal --

16 MR. LOPEZ: With respect to
17 two locations.

18 MR. LOPEZ: All right, in that
19 case has the application to drill been signed?

20 MR. LOPEZ: No.

21 MR. STOGNER: It has not.

22 MR. LOPEZ: For any of the
23 three. Yeah, the Meridian location in the southwest of 9
24 apparently has an APD.

25 MR. STOGNER: Is that a part

1 of the record, Mr. Kellahin?

2 MR. KELLAHIN: It's part of
3 our presentation, Mr. Examiner, that Meridian has filed for
4 and obtained approval of the well location they propose to
5 call the Allison 135 Well.

6 MR. LOPEZ: Do you have a copy
7 of that APD?

8 MR. KELLAHIN: Sure.

9 Another issue, Mr. Examiner,
10 is that there are parties to be pooled who I'm not sure
11 have been properly notified separate and apart from Meri-
12 dian of what's going on today. The APD approvals are shown
13 as our proposed Exhibit Number Seven, Mr. Examiner. It
14 shows that on April 14th the Division has approved our lo-
15 cation and our nonstandard unit.

16 MR. LOPEZ: Well, that raises
17 an interesting question as to whether or not the nonstand-
18 ard unit is in fact approved.

19 As interest owners in that
20 area, our client protested from the outset, and I don't un-
21 derstand how administrative approval under the rules could
22 have been granted without our consent.

23 MR. STOGNER: Do you have an
24 order number for that, the nonstandard proration unit, Mr.
25 Kellahin?

1 MR. KELLAHIN: No, sir.

2 MR. STOGNER; So --

3 MR. LOPEZ: And as I under-
4 stand it from Mr. Kellahin's application in 9750, he's
5 seeking approval of that as a nonstandard unit in the ad-
6 vertisement and from the application.

7 MR. KELLAHIN: The original
8 question, Mr. Examiner, was the approval of a well loca-
9 tion and it's Meridian that has obtained the approval.

10 MR. STOGNER; But at this time
11 you're wishing -- you're seeking a nonstandard proration
12 unit at this time, is that correct?

13 MR. KELLAHIN: Yes, sir.

14 MR. STOGNER: So it in fact
15 has not been approved --

16 MR. KELLAHIN: That's right.

17 MR. STOGNER: -- through the
18 proper channels --

19 MR. KELLAHIN: Right.

20 MR. STOGNER: -- as pursuant
21 to the rules and regulations of the coal -- coal gas pool
22 rules.

23 MR. KELLAHIN: That's correct.

24 MR. STOGNER: So far we've got
25 9744, 9745 readvertised with the unorthodox location and

1 that will be readvertised for October 4th, and we have 9746
2 readvertised for the 20th. We've got all parties here to-
3 day, let's go ahead and hear what we have to say.

4 Mr. Lopez.

5 MR. LOPEZ: Okay.

6 Q Mr. Fullerton, now that we've gotten
7 that out of the way, I'd like you to now refer to Exhibit
8 Two and identify it and explain what efforts you've made to
9 secure voluntary joinder of all mineral interest owners
10 underlying -- well, I guess we'll have to do these one at a
11 time -- the north half of Section, let's start with that,
12 and then just go south half, Section 9, and west half of
13 Section 10.

14 A All parties have been notified and I've
15 talked to all parties numerous times by telephone, letters,
16 leases, and all the information has been sent regarding our
17 offer to lease these interests. I discussed the matter
18 with them as far as their opportunity to join. They have
19 all received notices of the hearing and to date none have
20 agreed to participate either way.

21 Q Well, when you say none have, those
22 persons listed on Exhibit Two with respect to the various
23 proposed proration units have either refused or failed to
24 join, is that correct?

25 A Yes.

1 Q All other interest owners have joined.
2 So, would you identify with respect to the north half of
3 Section 9, those persons who have refused or failed to join
4 and their respective interest underlying the proposed pro-
5 ration unit?

6 A Okay, under the north half of 9 Jerry L
7 Young and Donna M. Young, and their percentage interest in
8 the north half of 9 is approximately 2.805833 percent.

9 Malcolm E. Smith, and again this is in
10 the north half of Section 9, is approximately 1/2 of 1 per-
11 cent.

12 Jessie Mae Wakeland, again the north
13 half of 9, approximately .10 of 1 percent.

14 Q And I notice you have no address for
15 her. Have you made reasonable efforts to try and ascertain
16 her address?

17 A Yes. Apparently she is possibly de-
18 ceased. Other heirs, relatives of hers, have indicated
19 that they haven't heard from her in years, and so are
20 unaware of whether she's still around.

21 And Irwin E. Taylor, the last one, is
22 again about .10 of 1 percent.

23 Q Okay. With respect to the south half of
24 Section 9?

25 A Case 9746 on this , Jerry L. Young and

1 Donna M. Young, 4.166667 percent.

2 Judy C. Zweiback, south half of 9 again,
3 1.953125.

4 Myrna G. Raffkind, same, 1.953125.

5 Barbara Ann Witten and Robert C. Witten,
6 approximately 8 percent.

7 Vicki Mizel, .976563.

8 f), g), and h) listed on there, those
9 additional Mizel family members each have the same inter-
10 est, .976563.

11 Ralph Bogelberg, 3.125 percent, and we
12 are unaware of where he is located.

13 Lance Reemstra, j), .2929685 percent.

14 Q Okay, and now referring to the interest
15 owners underlying the west half of Section 10.

16 A West half of 10, Judy C. Zweiback,
17 1.791863.

18 Myrna C. Raffind, the same, 1.791863.

19 Barbara Ann Witten and Robert C. Witten,
20 approximately 7.1 percent.

21 Vicki Mizel, Gary Dean Mizel, Steven
22 Mayer Mizel, and Larry Mizel, those three, each have
23 .895931 percent.

24 Catherine R. Leonard, 1.028450.

25 Huetta Bloomdahl, same, 1.028450 per-

1 cent.

2 And Malcolm E Smith, approximately .40
3 percent.

4 Jessie Mae Wakeland, .10 percent.

5 And Irwin E. Taylor, .10 percent.

6 Q And you said that you have made efforts
7 to notify these persons. Well, first of all, those of whom
8 you were able to contact you've discussed, and they have
9 either refused or not responded, is that correct?

10 A That's correct. A letter, as I said,
11 letters, correspondence has been sent out to each one of
12 them and numerous telephone calls.

13 Q And you've notified these persons of
14 this hearing.

15 A Yes.

16 MR. LOPEZ: Mr. Examiner, with
17 respect to notification, I just have one copy. I have an
18 affidavit of Mr. Bruce with return receipts that all were
19 notified with return receipts. This is Exhibit Three,
20 Affidavit of notification. There are three of them I've
21 made up. I've listed them Three-A, Three-B and Three-C,
22 for each of the respective proposed proration units.

23 MR. STOGNER: Is that every-
24 thing, Mr. Lopez?

25 MR. LOPEZ: Yes.

1 Q Were Exhibits One and Two prepared by
2 you or under your supervision?

3 A Yes.

4 Q And Exhibit Three is self-explanatory.

5 MR. LOPEZ: So I would like to
6 offer Exhibits One through three.

7 MR. STOGNER: Is there any
8 objections?

9 MR. KELLAHIN: No objection.

10 MR. STOGNER: Exhibits One,
11 Two, Three are admitted into evidence.

12 Is that the end of your
13 direct, Mr. Lopez?

14 MR. LOPEZ: Yes.

15 MR. STOGNER: Mr. Kellahin,
16 your witness.

17

18 CROSS EXAMINATION

19 BY MR. KELLAHIN:

20 Q Mr. Fullerton, have you been on the sur-
21 face of Section 9 since 1982?

22 A Yes.

23 Q When's the last time you were on the
24 surface area of Section 9?

25 A Approximately 30 days ago.

1 Q What was the purpose of going within the
2 surface of Section 9, Mr. Fullerton?

3 A Well, the purpose in going out there was
4 to identify all the locations and determine the boundaries
5 of both Section 9 and Section 10.

6 Q For whose purpose did you do that?

7 A Richmond.

8 Q And when were you first retained by
9 Richmond Petroleum, Inc.?

10 A Approximately June 15th.

11 Q Of this year?

12 A Yes.

13 Q When did they acquire their interest in
14 these leases, do you know?

15 A Approximately June the 1st.

16 Q And from whom did they acquire those
17 leases?

18 A T. H. McIlvain, Jr..

19 Q Do the McIlvain leases that petroleum --
20 Richmond Petroleum acquired, how were they identified on
21 any of your displays?

22 A If you refer to this map here, the lease
23 that -- the orange, which would be the southeast quarter of
24 9 --

25 Q Okay.

1 A -- is leases acquired by Richmond from
2 McIlvain and the portion of the yellow acreage, which is
3 the southwest quarter of 9, was acquired by McIlvain --
4 Richmond from McIlvain and a portion of the southeast
5 southeast of 8, which is in the pink, was acquired by
6 Richmond from McIlvain.

7 Q Okay. At the time Richmond Petroleum
8 acquired the leases in June of 1989, the lake, as you
9 examined it out there in Section 9 and Section 10, had
10 approximately the same configuration as we see on your
11 displays, did it not?

12 A That's correct.

13 Q So at the time they acquired the leases
14 they knew they were going to have difficulty accessing that
15 mineral ownership that underlay the lake.

16 A The assumption from the beginning was to
17 drill in the southwest quarter for the south half of
18 Section 9.

19 Q In fact, wasn't the assumption from the
20 beginning that the McIlvain and now the Richmond Petroleum
21 interests were going to be dedicated to the Meridian Well,
22 the Allison 135 Well in the southwest quarter of Section 9?

23 A No, I think the assumption was that we
24 would drill our own well.

25 Q When did you provide Meridian with an

1 AFE for your well, Mr. Fullerton?

2 A I don't believe an AFE has been pro-
3 vided.

4 Q Am I correct in understanding that
5 Richmond Petroleum never provided Meridian an AFE for this
6 well that they're proposing in the southwest quarter of 9?

7 A Well, part of the reason for that was
8 because it was obvious that there was going to be a deci-
9 sion or some sort of compromise that had to be made on the
10 spacing unit because we were aware of Meridian's spacing
11 unit being different than ours, so we -- we were aware from
12 the beginning that we had to discuss this matter with Mer-
13 idian.

14 Q Did you prepare and submit to Meridian a
15 joint operating agreement for operations of the well in the
16 south half of 9?

17 A No. Again, it was because we were --
18 hadn't made any determination with Meridian as to the
19 spacing unit

20 Q At the time Richmond Petroleum acquired
21 this interest they were aware and new the Basin Fruitland
22 Coal rules?

23 A I assume so.

24 Q Did you know the rules then?

25 A Yes.

1 Q How did you become familiar with those
2 rules?

3 A Over a period of years.

4 Q So when they hired you, you were already
5 familiar, then, with the Basin Fruitland Coal rules?

6 A You mean as far as northeast/southwest?

7 Q You knew that.

8 A Vaguely familiar, but I didn't -- it
9 didn't appear to be a big stumbling block at that point be-
10 cause we just assumed that we would be able to change it
11 around to opposite quarters.

12 Q Okay. Did you participate in any of the
13 Basin Fruitland Coal hearings with regards to how the Div-
14 ision received evidence and ultimately adopted the propo-
15 sition that wells in a section would be located either in
16 the northeast quarter or the southwest quarter?

17 A No.

18 Q Are you also aware, or were you aware in
19 June of '89, that locations to be standard had to be 790
20 feet from the outer boundaries of the spacing unit?

21 A I believe I probably was at that time.
22 I can't recall exactly. I haven't been involved that much
23 in that part of (unclear).

24 Q Now, you told me you'd gone out to Sec-
25 tion 9 to look for locations and I'm trying to determine

1 from you what standard or basis that you used to find those
2 locations.

3 A Well, I basically went out to -- to
4 determine access into quarter sections, so I wasn't out
5 there exactly getting down to the footage as far as the
6 particular location.

7 Q Let's -- let's look at the topo map,
8 apparently revised in '82, Mr. Fullerton, and if you'll
9 look in the northeast quarter of Section 9 --

10 A Uh-huh.

11 Q -- when you examined the surface did
12 you find that road that goes across and accessed that tract
13 in the northeast of the northeast of 9?

14 A I believe I found that road.

15 Q Okay. Which --

16 A But it's virtually impassable, or close
17 to it.

18 Q When you examined the southwest quarter
19 of 9, did you see any access problems for utilizing the
20 well location that is the one that I believe Mr. Bruce has
21 told us in his letter is 836 from the -- wait, that's --
22 no, I've got the wrong number.

23 I'm looking for the footage location for
24 the well in the southwest quarter.

25 A Yeah, I didn't -- I didn't see any prob-

1 lems with accessing to the southwest quarter.

2 Q Okay. You're proposing a well location
3 in the southwest quarter for the south half of 1490 feet
4 from the west line?

5 A I believe that's the exact location.

6 Q And it would be 990 from the south line?

7 A Well, from my understanding, that
8 location was the location that Meridian had, had proposed,
9 is that correct?

10 Q Well, you tell me.

11 A Well, you were the one, or before, when
12 we were discussing it, I think Richmond -- we both brought
13 up the fact that the Meridian location was being used by
14 Richmond.

15 Q All right.

16 A Okay.

17 Q And that hasn't changed. You propose to
18 still use the Meridian location.

19 A At this point, yes.

20 Q For the south half orientation.

21 A At this point, yes.

22 Q For the well in the north half of 9 --

23 A Uh-huh.

24 Q -- am I correct in understanding you're
25 proposing to use the well that's shown as a gas well symbol

1 in the southwest of the northwest of 9 on Exhibit Number
2 One?

3 A That's -- either that well or that pad,
4 yes.

5 Q Who operates that well?

6 A It's non-operating at this point.

7 Q Plugged and abandoned?

8 A Not plugged and abandoned yet, no.

9 Q Who is listed as the operator of the
10 well?

11 A Sovereign Oil Company.

12 Q All right. Is -- is your client's
13 proposal to re-enter that I think it's a Pictured Cliff
14 well, is it not?

15 A That's -- that's one of the considera-
16 tions, yes.

17 Q At this point have they retained -- ob-
18 tained the rights to re-enter that wellbore?

19 A Are you talking about with the operator?

20 Q Yes, sir.

21 A I would say yes.

22 Q Okay.

23 A The agreements have not been formally
24 signed but they're in the process of being signed right
25 now.

1 Q And as you understand it, then, the
2 intent would be to utilize that Pictured Cliff well?

3 A Possibly. Like I said, there's a pos-
4 sibility that we would drill a well on that, a separate
5 well.

6 Q Okay. In -- in examining possible
7 orientations or solutions for spacing units to be dedicated
8 to the wells in Section 9, did you make yourself familiar
9 with what the Division had done for the Dakota spacing in
10 this section?

11 A In Section 9?

12 Q Yes, sir.

13 A I was familiar with a Mesaverde spacing
14 unit that was set up which would include part of 8, I be-
15 lieve, part of 8 or part of 9.

16 Q Are you aware of any Dakota solution
17 with regards to nonstandard units approved by the Division
18 for parts of Section 9?

19 A No.

20 Q The one you're familiar with is a Mesa-
21 verde order for approving certain configurations of non-
22 standard units that include acreage in Section 9?

23 A I assume it's been approved. It never
24 was drilled. It was approved many, many years ago.

25 MR. KELLAHIN: Thank you, Mr.

1 Examiner.

2
3 CROSS EXAMINATION

4 BY MR. STOGNER:

5 Q Mr. Fullerton, of these people that have
6 not joined, when did you first try to get hold of them?

7 A I would say it's been at least a year.

8 Q And you have --

9 A I'd say most of them at least a year;
10 the others, at least three months.

11 Q Now, in trying to get hold of them for a
12 year -- hold it, let me back up here. I thought -- I
13 didn't think Richmond took over this acreage until June?

14 A Well, I originally had contacted them
15 on behalf of T. H. McIlvain, Jr.

16 Q And for what kind of a test?

17 A It's been since the beginning, if I re-
18 call, we had -- ran our Fruitland test.

19 Q On a 320?

20 A Well, I don't think that that had any
21 bearing, really, at that time as far as trying to lease it,
22 because we were in the process of leasing not only 9, but
23 10, 11, 12, 13, 14. We were -- it was a fairly large area.

24 Q So we're talking about a (unclear) --

25 A Yes.

Q Okay. And do you have correspondence of first tried to get hold of these people --

A I've got correspondence of the -- most
correspondence that I've had with every one of these

As far as the initial conversations, telephone and parties who were unwilling to further were not actually sent offers.

Q You mean verbal conversation with these
that you never followed up with a letter?

A That's correct. But since then I have.

Q Okay. And when did the first correspon-
out?

A I've got some here that's dated in August, first part of August and July. One's April. It's August 29th and that was because I -- that was the time I was able to locate that party.

The bulk of the interests that are out-
three cases, well, particularly on the
and the west half of 10, the bulk of the
ained before, are that group that I con-
time as of about two months ago by tele-
ed them a year ago and they said get back
ready to do something.

So we've been negotiating with them now

1 for two months.

2 MR. STOGNER: Are there any
3 other questions of this witness?

4 If not, he may be excused.

5 Mr. Lopez?

6 MR. LOPEZ: Yes, I do.

7
8 GEORGE BROOME,
9 being called as a witness and being duly sworn upon his
10 oath, testified as follows, to-wit:

11
12 DIRECT EXAMINATION

13 BY MR. LOPEZ:

14 Q Would you please state your name and
15 where you reside?

16 A I'm George Broome. I reside in Santa
17 Fe, New Mexico.

18 Q And by whom are you employed and in what
19 capacity?

20 A I'm employed by T. H. McIlvain Oil and
21 Gas Properties as a geological engineer.

22 Q Have you been requested by Richmond Pet-
23 roleum to appear here today and testify on their behalf?

24 A Yes, I have.

25 Q Have you previously testified before the

1 Commission and had your qualifications as a geologist ac-
2 cepted as a matter of record?

3 A Yes, I have.

4 Q Are you familiar with the Fruitland Coal
5 play in the area in questions with respect to these hear-
6 ings

7 A Yes, I am.

8 MR. LOPEZ: Mr. Examiner, do
9 you consider the witness qualified?

10 MR. STOGNER; Are there any
11 objections?

12 MR. KELLAHIN: No objection.

13 MR. STOGNER: Mr. Broome is so
14 qualified.

15 Q Mr. Broome, I'd like you to refer to
16 what's been marked for identification as Richmond's Exhibit
17 Number Four and ask you to identify and explain it.

18 A Okay, this is -- the first two sheets
19 are taken from the book called Geology of Coalbed and
20 Coalbed Methane Resources of the Northern San Juan Basin,
21 Colorado and New Mexico. It was put out by the Rocky
22 Mountain Association of Geologists in 1988.

23 And these are isopach maps of the Fruit-
24 land Coal in the San Juan Basin and one is a more recent
25 study than the other and they both indicate substantial

1 coal thickness in this area as far as the area in question
2 of -- that we're discussing today here.

3 The third sheet is a location map of
4 Fruitland wells in the -- in and around the acreage in
5 question and it indicates the location of the wells that
6 Meridian has recently completed, along with the proposed
7 location of the Allison Unit No. 135 in the southwest of 9
8 and the Sovereign well in the north half of 9 and there's
9 no wells located in Section 10.

10 The last page is a little isopach study
11 that we did based on data available and there's not a whole
12 lot of data available but there's enough available to indi-
13 cate that the coal is fairly widespread through this area
14 in the range of 20 to 30 feet thick.

15 Q What risk penalty does Richmond seek for
16 those mineral interest owners that fail or didn't consent
17 to join in the operating agreement?

18 A Richmond has indicated they would seek
19 the maximum 200 percent risk penalty due to the fact that
20 there is little data available and it's -- there is a sub-
21 stantial risk that the coals won't be as prolific as they
22 are in some of the other areas that have previously been
23 drilled.

24 Q Has your experience with McIlvain -- in
25 your experience with McIlvain, have you had opportunity to

1 participate in the drilling of any Fruitland wells in the
2 area in question?

3 A Well, we've participated in drilling --
4 in the drilling of several Fruitland wells in the 30-6 Unit
5 that Meridian operates, and so we've been privy to the in-
6 formation on those wells and we know that that area has
7 substantially thicker coals than this particular area and
8 possibly they're more over pressured. We're not certain
9 on that because there is not that much data available in
10 this area.

11 Q Are you familiar with any wells that
12 Meridian has drilled that have been drilled directionally?

13 A Right. We participated in the 404 Well
14 in the San Juan 30-6 Unit, which was a directionally
15 drilled well; not -- it was directionally drilled on pur-
16 pose in order to try to open up a larger interface of coal
17 to the -- to the borehole.

18 Q And what was the cost of that well?

19 A It was AFE'd at around \$1.2-million and
20 it came in, our records indicate that it came in pretty
21 close to the AFE.

22 Q Was Exhibit Four prepared by you or
23 under your supervision?

24 A Yes, it was, uh-huh.

25 MR. LOPEZ: Mr. Examiner, I

1 offer Exhibit Four.

2 MR. STOGNER: Are there any
3 objections?

4 MR. KELLAHIN: No objection.

5 MR. STOGNER: Exhibit Number
6 Four will be admitted into evidence

7 MR. LOPEZ: No further ques-
8 tions of this witness.

9 MR. STOGNER: Thank you, Mr.
10 Lopez.

11 Mr. Kellahin, your witness.

12

13 CROSS EXAMINATION

14 BY MR. KELLAHIN:

15 Q Mr. Broome, have you or Mr. McIlvain
16 operated your own Fruitland Coal Gas wells in the Basin?

17 A No, not at this time.

18 Q Thus far you have participated to the
19 extent of either being a working interest owner or an over-
20 riding royalty owner in other wells drilled by other oper-
21 ators?

22 A That is correct.

23 Q If I understand your coal thickness iso-
24 pachs, it appears to be rather a uniform thickness through-
25 out Section 9 and at least the west half of 10, so that

1 within the range of 20 to 30 feet you can't draw any spec-
2 ific distinctions about the quality of the coal.

3 A That's correct.

4 Q To pickup a location for a well in Sec-
5 tion 9, then, is not going to be geologically controlled.

6 A That's correct. From the data that we
7 have it's not geologically controlled. It's more topo-
8 graphically controlled.

9 Q While Mr. McIlvain had the leases that
10 are under discussion that now have been acquired by Rich-
11 mond Petroleum as a result of a farmout from McIlvain,
12 during the period of time that you, Mr. Broome, and Mr.
13 McIlvain had those lease interests did you propose to
14 Meridian that you drill a well and utilize any portion of
15 Section 9 for the acreage for that well?

16 A Yes. In November of 1988 we proposed
17 that we form a south half drilling unit in Section 9.

18 Q In looking at the opportunities to di-
19 rectionally drill a well so that you could have a bottom
20 hole location in the northeast of 9, have you examined that
21 issue?

22 A We've considered it. We've looked at
23 the possibilities of having to drill a directional hole.

24 Q Have you prepared any displays or sche-
25 matics to show us the method by which you could use a sur-

1 face location in the southwest quarter of 9 and bottom hole
2 the well in the northeast of 9?

3 A No, we have not.

4 Q Based upon your knowledge, and you tell
5 me if you don't have a basis upon which to answer the ques-
6 tion, do you see any technical or mechanical reason that a
7 well cannot be surfaced in the southwest quarter of 9 and
8 directionally drilled to bottom hole underneath the lake at
9 a standard location in the northeast quarter?

10 A From my -- I don't have, really, the
11 qualifications to say whether that's technically feasible
12 or not. I know that the cost would be considerably -- two
13 to three times what the cost of a straight hole would be.

14 Q Meridian offered to McIlvain and to you,
15 Mr. Broome, while you held the leases, the opportunity to
16 consolidate some of your leasehold interest in the south-
17 west quarter of 9 to form a unit for the Allison 135 Well,
18 did they not?

19 A They offered to purchase that acreage
20 but it was a small portion of the acreage we controlled.

21 We offered to sell them our whole block
22 of acreage and they turned it all down and said they wanted
23 to take 70 acres out of our 1600 acres and we -- we didn't
24 see that -- they wanted to pick the -- what they considered
25 the area of interest and buy that and leave us with the

1 rest.

2 Q Am I correct in understanding that the
3 -- a significant portion of the leasehold interest that
4 you're farming out to Richmond Petroleum underlies the
5 Navajo Lake?

6 A That's correct.

7 Q There's a great many of these spacing
8 units in these sections that can't be accessed by a well
9 drilled vertically.

10 A That's -- that's -- there are definitely
11 some locations that -- that could not be accessed by a ver-
12 tical location.

13 Q And you knew that at the time you ac-
14 quired these leases from these various fee owners, did you
15 not?

16 A That's correct.

17 Q And you conveyed that information to
18 Richmond Petroleum when they acquired the interest from
19 you.

20 A Right. We never held back that.

21 MR. KELLAHIN: No further
22 questions, Mr. Examiner.

23 MR. STOGNER: Thank you, Mr.
24 Kellahin.

25 I have no further questions of

1 this witness. He may be excused.

2 Mr. Lopez?

3 MR. LOPEZ: I'd like to call
4 Mr. Adams.

5
6 JAMES ADAMS,
7 being called as a witness and being duly sworn upon his
8 oath, testified as follows, to-wit:

9
10 DIRECT EXAMINATION

11 BY MR. LOPEZ:

12 Q Would you please state your name and
13 where you reside?

14 A My name is James Adams. I live in Dal-
15 las, Texas.

16 Q By whom are you employed and in what
17 capacity?

18 A I'm Executive Vice President of Richmond
19 Petroleum and a reservoir engineer.

20 Q Have you previously testified before
21 this Commission and had your qualifications accepted as a
22 matter of record?

23 A No, I have not.

24 Q Would you therefor briefly explain to us
25 your educational background and employment experience?

1 A Certainly. I acquired a Bachelor of
2 Science in chemical engineering from New Mexico State Uni-
3 versity in 1975. I was employed by Phillips Petroleum
4 while going to school at New Mexico State.

5 From -- directly out of school I went to
6 work with Exxon in west Texas, in Andrews, Texas; worked
7 primarily southeastern New Mexico. I was there for a year
8 and a half and went to Houston for another year and a half
9 working in their Minerals Department, working on the solu-
10 tion mining of uranium.

11 From there I went to American Petro Fina
12 in Wichita Falls, Texas, for about a year and a half as a
13 reservoir engineer and production engineer.

14 From there I went to Superior Oil in the
15 Houston area, back to the Houston area, for about a year
16 and a half as a reservoir engineer, working primarily in
17 the Paradox Basin area.

18 From there I went to First National Bank
19 in Dallas, where I worked in their lending department as a
20 reservoir engineer for approximately one year.

21 From there I went independent and became
22 a reservoir engineering consultant, working primarily for
23 the banking industries. I was independent for approximate-
24 ly eight years, up until just recently, when I signed on
25 with Richmond Petroleum, again doing reservoir engineering.

1 Q Are you familiar with the area that's
2 the subject of these hearings today?

3 A Yes, I am.

4 MR. LOPEZ: Is the witness
5 considered qualified?

6 MR. STOGNER: Any objections?

7 MR. KELLAHIN: No objections.

8 MR. STOGNER: Mr. Adams is so
9 qualified.

10 Q Mr. Adams, what is it that Richmond
11 seeks in these hearings today?

12 A Richmond is seeking to fulfill its farm-
13 out agreements with the McIlvains and get some wells
14 drilled out here. That's our objective.

15 Q And is there a timetable with respect to
16 your farmout agreement with the McIlvains as to when you
17 must spud wells?

18 A Yes, we have a November 1st deadline on
19 the McIlvain farmout in the State of New Mexico.

20 We have two pieces of farmout from
21 McIlvain, one in Colorado, one in New Mexico. The New
22 Mexico farmout requires that we spud two wells on or before
23 November 1st.

24 Q Are you requesting, if possible, that
25 the Division expedite its order in these cases?

1 A Most definitely.

2 Q What risk penalty is Richmond seeking in
3 these cases for those mineral owners that go nonconsent?

4 A We're seeking the -- what I understand
5 to be the maximum allowed by the State, being 200 percent.

6 Q And what is -- what do you consider your
7 justification for seeking the maximum risk factor?

8 A The farmout agreements that we have put
9 in place already carry a nonparticipation, nonconsent pen-
10 alty of 400 percent, so everybody that is involved in these
11 and other farmouts that we have made in the San Juan Basin
12 has -- is of the agreement that 400 percent is a reasonable
13 nonconsent penalty for what we are doing.

14 There's also certain mechanical risk
15 factors and other factors that would be involved in drill-
16 ing wells of this nature.

17 Q In this respect I'd like you to identify
18 or discuss and explain what has been marked for identifica-
19 tion as Richmond's Exhibit Five-A, Five-B and Five-C.

20 A I'll just talk while you're handing them
21 out. These are AFE's that Richmond has prepared regarding
22 the three locations. All three AFE's are identical in
23 cost. The surface locations are very similar; in each case
24 the bottom hole location is very similar; they all antici-
25 pate the drilling of a straight well from surface to TD.

1 Q And what kind of mechanical difficul-
2 ties are encountered with respect to these Fruitland wells,
3 if any?

4 A None that would be unique to Richmond.
5 It's the same mechanical difficulties that all operators
6 face with the -- some areas being overpressured, some areas
7 containing very high water contents which give us very high
8 operating costs, as far as being in -- particularly in the
9 early time periods involved. Oftentimes the -- and what we
10 intend to do here is to set casing on top of the coal,
11 drill through, blow with air, and run a 5-1/2 inch liner
12 and there's frequent sticking problems; just the basic
13 mechanical risks that any operator is going to face out
14 here as far as mechanical risks.

15 The other risks involved would, of
16 course, be reservoir quality risks. We don't know. There
17 hasn't been any wells drilled in this immediate vicinity
18 and so we have the reservoir unknowns.

19 Q Has there been any experience with re-
20 spect to drilling Fruitland wells that you can have a very
21 good well offsetting a very poor well?

22 A Yes. It's not uncommon in the Fruitland
23 Coal to have, if I can use the term, relative stinkers next
24 to pretty good wells, and there has not been to date, any-
25 thing that can specifically identify pre-drilling, which

1 wells are going to be the good wells and which wells are
2 not.

3 Q Now, turning your attention now to
4 Richmond's request for unorthodox well locations, would you
5 explain why you feel your application is justified in this
6 respect?

7 A Our reserve appraisals that we did to
8 acquire this acreage shows expected reserves that will
9 deliver to a 100 percent working interest a present worth
10 of approximately \$450,000.

11 Q In this respect have you prepared an
12 exhibit?

13 A Yes. If you'll look at --

14 Q I'll hand you what has been marked as
15 Exhibit Six and ask you to explain it.

16 A Okay. If you'll look on Exhibit Six you
17 see from the second line item down there's four areas
18 called 32-6 and those are all wells that are in this imme-
19 diate vicinity.

20 If I can just pick one of these out,
21 none of these are 100 percent to Richmond, but let's look
22 at the second 32 and 6 that says 4 wells, 1-91, if we take
23 that, those wells, which we have included in here at
24 \$400,000 per well, and we increase the 10 percent discount-
25 ed cash flow for the percentage of those locations that are

1 not Richmond's, we come up with a present worth for these
2 locations, according to our reservoir analyses, of approx-
3 imately \$450,000. Because of that \$450,000 number, we
4 obviously would not be able to economically justify
5 drilling a well that cost \$1.2-million, when we have a
6 \$400,000 investment included. Obviously, with a present
7 worth of \$444,000, we are already about \$600,000 negative,
8 or a \$500,000.

9 Q You heard Mr. Broome's testimony with
10 respect to the cost of a directionally drilled well to the
11 Fruitland formation in the area in question.

12 Does that sound as a reasonable number,
13 1.2-million?

14 A It might be able to be done slightly
15 under 1.2-million but it would be in the million dollar
16 range.

17 Q Have you had an opportunity to compare
18 Richmond's projected well cost for a Fruitland well and
19 compare them with Meridian?

20 A On a -- on a gross basis, yes. Meridian
21 has AFE'd the same well for about \$430,000 that we have
22 AFE'd for \$385,000.

23 Q Have you had discussions with Meridian
24 with respect to jointly trying to develop the acreage in
25 question?

1 A Yes. I personally visited Alan Alex-
2 ander with Meridian in Farmington on August 1st; Steve
3 Roach and I both visited with him. At that time we pro-
4 posed that one possible solution to this problem would be
5 for us to split Section 9 basically in half and take in 80
6 acres out of the south half of 8 and 80 acres out of the
7 north half of Section 8, and thereby create two spacing
8 units, two laydown spacing units that would be approxi-
9 mately 357 acres each. They'd be slightly bigger than than
10 standard size.

11 We would propose to drill the well at
12 the Meridian location in the southwest quarter and would
13 propose to drill an additional well directly to the north
14 in the northwest quarter, with the anticipation that both
15 Meridian and Richmond would participate according to their
16 percentage of the acreage in both those wells.

17 That proposal was taken under advisement
18 and we never got a straight answer from Meridian as to
19 whether they would or would not.

20 I met with the three representatives
21 from Meridian that are here today. I met with them this
22 morning in the hopes that we could one more time try to
23 come up with a compromise that would avoid the contested
24 hearing, again making the same proposal that we had made
25 before, trying to create two larger spacing units that

1 would get the acreage developed, would not leave out
2 anybody's acreage that's underneath the lake and to go
3 forward with that, and again we were refused.

4 Q And what was the basis as you understood
5 it of Meridian's refusal?

6 A The biggest problem that at least Meri-
7 dian voiced to me was the fact that they are trying to live
8 up to the southwest -- or, yeah, southwest/northeast
9 spacing and that by going with the southwest, that would
10 therefor force us to drill a directional well in the north-
11 east to get that acreage. That's the biggest problem that
12 they voiced to me this morning that they have with what we
13 were trying to propose.

14 One problem I have with the spacing
15 argument is that if they get the spacing unit that they're
16 wanting, they will have no acreage that's left that's un-
17 dedicated to a coalbed gas well. That means that they
18 already cannot drill a spacing unit in the northeast of 8m,
19 so they're already violating the same spacing unit that
20 they're using as an excuse to not accept this compromise.

21 In addition to that, if we drill this
22 well under the northeast quarter of Section 9, we'll have
23 three 160's across the top of 8 and across the top of 9
24 that will have no coalbed methane wells. That will open up
25 the door for somebody in the south -- southwest, excuse me,

1 of Section 23 in Colorado to come in and drill a coalbed
2 gas well that is going to recover a significant portion of
3 those reserves on the Colorado side of the state line.

4 Q A significant portion of the New Mexico
5 reserves for the Colorado well?

6 A Yes.

7 Q And so, I don't know if this has been
8 established, but I think everyone understands that the
9 northern section line is the Colorado/New Mexico border.

10 A That's correct.

11 Q Does Colorado, have the same spacing
12 pattern with respect to Fruitland coal wells?

13 A For the first township, yes. After
14 that, to the north they flip-flop it and go northwest
15 southeast.

16 Q If Richmond's applications are not
17 granted and Meridian's is, is there a possibility that
18 there will be undeveloped acreage in Section 9 which will
19 be drained and that we'll have no opportunity to partici-
20 pate?

21 A Most likely. Most likely. As I have
22 told you, our economics already show that by directionally
23 drilling a well we cannot dedicate the money to that ac-
24 cording to what our reserve analyses have shown. The
25 question will be raised, obviously, what do we plan to do

1 with that part of the acreage that is totally under the
2 lake that we have gotten from McIlvain. Let me say this,
3 that McIlvain did not allow us the option of taking only
4 that that was on dry land and leaving only that under the
5 lake, which I can thoroughly understand.

6 If we were going to take any of it, we
7 had to take all of it. If the economics do not prove to be
8 significantly better than we think they are right now,
9 chances are that acreage under the lake may not be devel-
10 oped.

11 MR. LOPEZ: Mr. Examiner, I
12 believe in your case file 9746, one of the mineral inter-
13 est owners in the southeast quarter of Section 9 has
14 written you a letter with respect to his or her concern re-
15 garding their inability to participate in any drilling
16 program unless unorthodox locations are approved due to the
17 topographical nature of the Navajo Lake intrusion.

18 MR. STOGNER: Are you -- are
19 you referring to a letter by Mr. Dale Young?

20 MR. LOPEZ: I believe so.
21 Yes.

22 MR. STOGNER: Okay, that
23 letter dated September 1st was made a part of the case file
24 in 9746 and 9750.

25 MR. LOPEZ: Okay, and I'd re-

quest it be made part of the record.

2 MR. STOGNER: So it shall.

3 A One other point that Meridian did make
4 was that if they were to agree to a compromise or whatever
5 the situation was, they would want to operate the well and
6 I have told Meridian that we would have no objection to
7 them operating either or both of the wells on Section 9.

8 Q Even though their well costs are greater
9 than yours.

10 A Yes. The farmout time constraints are
11 more crucial to us than the exact well cost right now.

12 Q In your opinion will the granting of the
13 applications be in the interest of the prevention of waste
14 and the protection of correlative rights?

15 A Yes, it will.

16 Q Were -- was exhibit -- were Exhibits
17 Five-A, B and C and Exhibit Six prepared by you or under
18 your supervision?

19 A Yes, they were.

20 MR. LOPEZ: I would offer
21 Exhibits Five-A through C, and Six?

22 MR. STOGNER: Are there any
23 objections?

24 MR. KELLAHIN: No objection.

25 MR. STOGNER: Exhibits Fives

1 and Exhibit Six will be admitted into evidence at this
2 time.

3 MR. LOPEZ: That concludes our
4 direct.

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

7 Mr. Kellahin, your witness.
8

9 CROSS EXAMINATION

10 BY MR. KELLAHIN:

11 Q Mr. Adams, I assume that you have exa-
12 mined Mr. Broome's geology that he presented at the hearing
13 today and you did so prior to the hearing, --

14 A Yes, sir.

15 Q -- did you not? Do you have any differ-
16 ence of opinion with regards to his geologic conclusion
17 that between the gross interval of 20 to 30 feet you have
18 uniform, or reasonably uniform coal thickness throughout
19 Section 9 and 10?

20 A Mr. Kellahin, I don't think anybody that
21 has ever dealt with coal can say that it's uniform. As far
22 as thickness, in a macro sense, yes, we should have 20 to
23 30 foot coal, in that range.

24 Q You said your expected profit for a well
25 drilled on 320 acre spacing, I presume --

1 A Yes.

2 Q Was going to be about \$450,000?

3 A That's correct.

4 Q That's a profit number you gave us?

5 A Yes, that's present worth after invest-
6 ment.

7 Q And the investment would be your --

8 A \$400,000.

9 Q The investment that you're making in the
10 cost of the well, is that factored into that profit?

11 A Yes, sir, that's after payout of the
12 well.

13 Q And that presumes a payout using your
14 AFE well cost?

15 A Yes, sir.

16 Q Okay. Did you attempt to make a volu-
17 metric calculations of the gas in place underlying that 320
18 acres in order to come up with a gas volume against which
19 to place your costs?

20 A That has been done by the people that
21 ran the economics, which was the Scosha Group, an indepen-
22 dent reservoir firm in Dallas.

23 Q Is -- is that shown on any of your exhi-
24 bits as to what they used for a gas volume in the calcula-
25 tions?

1 A No, sir, it's not.

2 Q What is the gas volume they used in
3 place for the 320 acres?

4 A I would not know off the top of my head,
5 sir.

6 Q What recovery factor did they use?

7 A I believe they used 50 percent.

8 Q Do you have a copy of that report avail-
9 able with you today?

10 A I did not bring one with me, no.

11 MR. KELLAHIN: Mr. Examiner,
12 we'd request that the witness provide that to the opposi-
13 tion.

14 MR. LOPEZ: Mr. Examiner, it
15 seems to me that their reservoir -- Richmond's reservoir
16 work is confidential information and need not be provided.
17 The -- we would be glad to provide specific bases from
18 which the study was made in terms of the basis for the
19 statistical analyses regarding recovery and payout, but the
20 reservoir work in itself, I think, would be way beyond any-
21 thing proper or prudent to require individual companies to
22 provide their individual in-house work product, which is
23 confidential.

24 MR. KELLAHIN: Mr. Examiner,
25 they can't have it both ways. They're relying upon the en-

1 gineering study, the economic analysis, upon which this
2 witness bases his ultimate conclusion. I've asked him
3 certain preliminary questions, like the gross volume of gas
4 in place and he can't tell me. I think I'm entitled to
5 have it and if it's proprietary, they've simply given it
6 away, Mr. Examiner. They can't use it for one purpose and
7 not let me test his credibility.

8 We think we're entitled to the
9 information.

10 MR. LOPEZ: We'll be more than
11 happy to provide the gross volume, Mr. Examiner.

12 MR. KELLAHIN: Mr. Examiner,
13 we'd like the whole report.

14 MR. LOPEZ: Mr. Examiner, per-
15 haps a solution is if Meridian is willing to exchange their
16 in-house internal volume -- internal reservoir report,
17 we'll exchange ours with them.

18 MR. KELLAHIN: Well, my wit-
19 ness has yet to testify and he has not yet admitted under
20 oath that he did not know an essential element of his eco-
21 nomic forecast or calculation for his well.

22 Let's cross that bridge when
23 we get to it.

24 MR. STOVALL: Is it your con-
25 tention, Mr. Kellahin, that this witness' testimony is

1 based upon and his conclusion is predicated upon the in-
2 formation in that report? Do I understand that's the basis
3 for your request?

4 MR. KELLAHIN: Yes, sir, and
5 that's my understanding of his testimony.

6 MR. STOVALL: Mr. Lopez, do
7 you have any response to that?

8 MR. LOPEZ: Mr. Examiner, the
9 only conclusion is the economic value and it seems to me
10 the Commission, if we provide the volumetric calculation,
11 the Examiner and the Division can give whatever weight it
12 wishes without requiring the divulgence of a sensitive and
13 confidential document.

14 MR. STOVALL: Mr. Examiner, I
15 just, listening to the legal arguments about that document,
16 I'm a little bit concerned, I think Mr. Kellahin raises a
17 valid point, if the witness is going to use a document upon
18 which to base his testimony, certainly the opposition is
19 entitled to examine the validity of the document to chal-
20 lenge the contents thereof.

21 Now, is some arrangement could
22 be made whereby -- between Mr. Lopez and Mr. Kellahin, we
23 could excise portions of it that are material to this and
24 somehow reserve the confidentiality, I think that that
25 might be a reasonable solution; otherwise, I think the pre-

1 sumption is going to be favor of making that document
2 available for the opposing party to examine and --

3 A May I make a similar argument, then,
4 that you --

5 MR. KELLAHIN: Who's the
6 attorney here, Mr. Examiner? He's the witness.

7 MR. STOGNER: Okay, you're
8 right.

9 A Sorry.

10 MR. STOGNER: If you have an
11 argument, send it through your attorney.

12 A I'm sorry.

13 MR. LOPEZ: Following Mr.
14 Stovall's argument then, it would seem that every applicant
15 before the Commission would have to provide every title
16 opinion, lease arrangement, and all the rest, in support of
17 any AFE introduced in evidence, and that to follow this
18 argument to its logical conclusion, there is nothing in the
19 files of any company that would be confidential or barred
20 from public view based on any case brought before the Com-
21 mission.

22 This is a conclusion that has
23 been made available to the public. We have stated that --
24 Mr. Kellahin requested on what the gas volume calculations
25 were. We said we would make that available. But if we're

1 going to follow this kind of logic to its ultimate conclu-
2 sion in opening all the file drawers with respect to any
3 evidence ever introduced before these hearings, it would be
4 in our interest to withdraw the exhibit and delete it from
5 evidence. It seems that the point is that to require ap-
6 plicants in the area of the Navajo Lake to be forced to
7 directionally drill their wells in order to recover the
8 reserves underlying the various proration units is clearly
9 uneconomic and would result in waste and violation of
10 correlative rights and gas going to Colorado.

11 That's -- that's the central
12 point, is not to open all the reservoir calculations with
13 respect to the leases acquired and the areas of interest.

14 MR. STOGNER: Well, so far we
15 have talked about several things.

16 You have requested a 200 per-
17 cent risk penalty.

18 MR. LOPEZ: That's right.

19 MR. STOGNER: Let's take note
20 at this point there has not been a 200 percent risk penalty
21 given on any coal gas well that's come before a compulsory
22 pooling hearing in this state.

23 Also, we are talking about an
24 unorthodox location. I'll point out a directive from the
25 Director, when was that, March?

1 MR. KELLAHIN: March of '89.

2 MR. STOGNER: March of '89,
3 about unorthodox locations and I believe --

4 MR. STOVALL: Well, let me ask
5 a question with regard to the unorthodox location, since
6 you're on that. Have you discussed with Meridian if their
7 -- well, let me preface -- back up and make sure I under-
8 stand the premise upon which my question was based; that
9 what Meridian seeks is to -- would, in effect, eliminate
10 the north half proration unit from -- from the wells that
11 would be developed under what they seek, is that correct?

12 A I'm not sure I follow your question.

13 MR. STOVALL: I wasn't real
14 crystal clear on that, is that what you're telling me?

15 MR. KELLAHIN: I will state
16 very quickly Meridian's principal objection is to the uti-
17 lization of a well in the southwest of the northwest of 9
18 as the well to develop Section 9. It's an unorthodox loca-
19 tion and it destructs the coal gas spacing and we think
20 that well ought to be in the northeast quarter.

21 MR. STOVALL: Mr. Kellahin,
22 I'm not sure who to ask, whether I want you to discuss this
23 as an attorney or whether I want to wait till you have your
24 witness on the stand with respect to that. I think I will
25 wait for the moment to discuss that specific issue.

1 I will ask the witness for
2 Richmond, whether you have had any discussions with Meri-
3 dian about some sort of cooperative agreement which would
4 enable you to drill an unorthodox location in the north-
5 west quarter of 9 considering the topography?

6 A Yes, sir, twice, on two separate
7 occasions.

8 MR. STOVALL: And Meridian has
9 opposed that, is that what I understood your testimony to
10 be?

11 A That's correct.

12 MR. STOVALL: I have no fur-
13 ther questions on that subject for this witness at this
14 time.

15 MR. LOPEZ: Mr. Stovall, if I
16 may respond to your initial question, if I understood it
17 correctly, and I just want to make sure we're all together
18 on this, Meridian seeks to include the area that's colored
19 in pink together with the southwest quarter of Section 9 as
20 an unorthodox spacing unit and to drill a well in the
21 southwest quarter of 9.

22 Richmond, on the other hand,
23 is requesting that the south half of 9 be a proration unit,
24 standard proration unit, with a standard well location, and
25 that the north half also be a standard unit but that the

1 well, because of topographical conditions be drilled in the
2 northwest rather than the northeast.

3 We are concerned that if Meri-
4 dian's application is granted, then the interest owners
5 underlying the remaining part of Section 9, the northwest
6 quarter, the northeast and the southeast, will never enjoy
7 production of their reserves because it's under water and
8 the unorthodox application won't be granted and no one will
9 directionally drill because it's noneconomic.

10 MR. STOVALL: Well, back to
11 the evidentiary question, then, if you'll pardon me,
12 gentlemen, I am taking the lead in this questioning because
13 we are in the matter of legal issues rather than a matter
14 of engineering concerns, and I feel that to assist the Exa-
15 miner I'll discuss these issues with you.

16 If I understand your argument,
17 Mr. Kellahin, it is your understanding that this witness is
18 relying on this confidential report to reach a conclusion
19 that the directional drilling of a well, starting at a
20 surface location in the northwest of 9, to an orthodox
21 location under the northeast of 9, has made a determination
22 that is uneconomic based upon this confidential report, is
23 that your -- and therefore you'd like to see the report
24 upon which he's reached that conclusion? Is that a fair
25 summary of your argument?

1 MR. KELLAHIN: That's the way
2 I heard the witness, Mr. Stovall.

3 MR. STOVALL: Mr. Lopez, I
4 would ask you, then, is to advise me or take your witness
5 through some examination when your opportunity for redirect
6 comes back, whether he can reach the same conclusion with-
7 out the information contained in that report, and I would
8 recommend to the Examiner at this time that we withhold
9 ruling on Mr. Kellahin's request until we can satisfy that
10 issue. And then if that satisfies you, Mr. Examiner, let
11 Mr. Kellahin proceed with his cross and then Mr. Lopez
12 redirect if necessary.

13 MR. STOGNER: And it does.

14 Q Mr. Adams, a long time ago --

15 A Yes, sir.

16 Q -- you and I were talking about re-
17 serves, have you, sir, independently determined the gas
18 volume in place underneath Section 9?

19 A Have I personally --

20 Q Yes, sir.

21 A -- independently? No, sir.

22 Q When we look at the proposed well
23 location in the southwest of the northwest of 9, and I wish
24 I had a name to put on that well so I don't have to try to
25 describe it, it's the Pictured Cliff well.

1 A Okay, that's -- that's as good a name as
2 any.

3 Q The Pictured Cliff well.

4 A Yes, sir.

5 Q Are you proposing at this time that you
6 would re-enter that wellbore and utilize it for completion
7 in the coal gas?

8 A We are proposing that we would do either
9 that or drill an immediate offset to that well, so the
10 location would be essentially the same, yes.

11 Q The AFE you have supplied at today's
12 hearing shows a new well at that location.

13 A Yes. Yes, sir, that is true.

14 Q Have you prepared a similar AFE to show
15 what would happen to the cost if you re-enter the Pictured
16 Cliff well?

17 A No, sir, I have not.

18 Q In forecasting the economics, when were
19 the wells to be tied into pipeline connections?

20 Do you -- is there a timeframe in which
21 this \$450,000 is generated?

22 A Yes. Yes, the timeframe is approxi-
23 mately over 17 years, if I remember correctly.

24 Q What pipeline do you propose to tie that
25 production into?

1 A Most likely Northwest.

2 Q And have you satisfied yourself that you
3 have the necessary accesses over the surface to access all
4 three of your proposed locations for each of these wells?

5 A We have not completed our pipeline
6 right-of-way, if that's what you're asking, no, with the
7 exception, pardon me, with the exception of the north half
8 of Section 9, the Pictured Cliff well is already connected
9 to Northwest.

10 Q Do your AFE's take into consideration
11 the investment tax credit that IRS allows for the drilling
12 of new Fruitland Coal gas wells?

13 A Does the investment take it into --

14 Q Yes.

15 A -- account?

16 Q Yes, sir.

17 A The investment has nothing to do with
18 the tax credit.

19 Q All right, it's calculated independently
20 of the economic forecast --

21 A Okay, the --

22 Q -- that you have generated --

23 A Okay, the economic forecast does not
24 take into consideration any benefit from the investment tax
25 credit because we will not be able to get any benefit from

1 it.

2 Q And why not, sir?

3 A Because we will not have taxable in-
4 come for many years in the future with the drilling pro-
5 gram we're under.

6 Q Have you made some arrangement or solu-
7 tion for the disposal of the produced water that's pro-
8 duced from the coal seam?

9 A The current plans are until we have such
10 volume as to justify it, we will truck the water, and then
11 we'll propose to drill a disposal well at some location,
12 which we have not yet determined.

13 Q Is Mr. Fullerton correct, or at least my
14 recollection of his testimony correct, that you have not
15 yet obtained BLM approval for any of the three well loca-
16 tions you're proposing?

17 A That is correct.

18 Q Do you have the necessary archaeological
19 approvals at this point for any of those wells?

20 A I can't answer that. I'm not positive.
21 The staking, permit for staking has been filed and the
22 archaeologist should have been contacted by now. Whether
23 or not they have actually been out there or not, I don't
24 know.

25 Q Separate and apart from the Navajo Lake

1 topographic problem, the reservoir and the reservoir en-
2 gineering for Section 9 would dictate to you as a reser-
3 voir engineer that the wells ought to be located consis-
4 tent with the well spacing requirements of the Basin Fruit-
5 land Coal Gas Pool, would they not?

6 A I would say yes, with the exception that
7 there is going to be no well in the northeast of 8, so it
8 would make sense to me to split that entire area with a
9 well in the middle rather than leave an entire section
10 without a well in it that's going to be drained by an off-
11 set well in Colorado.

12 Q Assume you could reconfigure 8, my
13 question for you is only topography has precluded, in your
14 opinion, putting a well location in the northeast of Sec-
15 tion 9.

16 A That is correct.

17 Q Have you prepared any -- any displays to
18 show how you might directionally drill a well using the
19 southwest quarter of 9 as a surface location and getting
20 yourself into a standard bottom hole location in the north-
21 east of 9?

22 A No, we have not.

23 Q As a reservoir engineer, you must have
24 some sense or feel about what drainage patterns would be
25 for these coal gas wells, do you not?

1 A If there's any reservoir engineer that
2 can answer that with certainty, he's the only one.

3 Q Well, with uncertainty, perhaps, let's
4 look at the Pictured Cliff well location.

5 A Yes, sir.

6 Q All right? If that in fact is the
7 approved location and we put together the configuration
8 that you propose, the acreage in the north half, and that's
9 the well, we now have a well that is in the wrong 160-acre
10 tract.

11 A Yes, sir.

12 Q We have a well that's going to be 900
13 feet from the western boundary of its spacing unit?

14 A Yes, sir.

15 Q All right. What is the -- what in your
16 opinion as a reservoir engineer is going to be the likely
17 shape of that drainage pattern?

18 A As it exists right now, that drainage
19 pattern would probably come primarily from the north, as
20 there are no current offsets in Colorado. Up until such
21 time that a drainage pattern will come from the east and
22 the west and the north primarily, due to the fact that we
23 anticipate there being a well to the south.

24 Q Would you agree with me that using the
25 Allison 135, which is the well in the southwest of 9, and

1 the Pictured Cliff Well, the relationship between those two
2 wells if they are drilled at those locations for coal gas
3 production, you're effectively going to have 160-acre
4 drainage pattern, are you not?

5 A As regard to the north/south direction,
6 yes, between the wells.

7 Q Yeah.

8 A As regards to east and west and north of
9 the Pictured Cliff well, no.

10 Q Do you have a proposed penalty factor to
11 be applied against the Pictured Cliff well for its Basin
12 coal gas production at the unorthodox location?

13 A As far as nonconsent penalty?

14 Q No, as far as an unorthodox location
15 penalty because it is in the wrong quarter section.

16 A No, sir.

17 MR. KELLAHIN: No further
18 questions.

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

21 Mr. Lopez, do you have any re-
22 direct at this time?

23 MR. LOPEZ: Could I have a
24 moment?

25 MR. STOGNER: Mr. Lopez?

REDIRECT EXAMINATION

BY MR. LOPEZ:

Q Mr. Adams, in order to arrive at this economic forecast that you've testified to with respect to Exhibit Six, what are the material factors that go into arriving at that calculation?

A It's a relatively simple calculation. You take the thickness of the coal, the areal extent of the coal, which will equate to the tons of coal. You'll have a cubic feet per ton of gas that you expect to be in that coal, and apply a recovery factor to that, a 50 percent recovery factor, and that will give you your -- both your gas in place and your recoverable reserves.

Q And are there other assumptions that are required?

A As far as to come down to the final economic value, yes. You'll need your investment and your gas price and your operating cost.

Q Would you be willing to provide those specific figures to the examiner?

A Yes, I would.

MR. STOVALL: Mr. Kellahin,
any response to --

MR. KELLAHIN: We'd rather see

1 the data unsanitized. You know, they've relied on it. I
2 think we're entitled to it. I won't remake the same argu-
3 ment. We still want the --

4

5

CROSS EXAMINATION

6

BY MR. STOGNER:

7

Q Now, the simple equation, you said the
8 thickness, which is -- what's the thickness?

9

A Well, it's going to be somewhere between
10 20 and 30 feet in the this area, I believe.

11

Q Is there a specific figure or do they
12 change per well or what?

13

A They change per area, yes, and I'd have
14 to look back at the specific report to see exactly what
15 they used in this area.

16

Q And how many areas are we talking about
17 in Section 9 and the west half of 10?

18

A Well, we're not -- this reserve report
19 was done for all of our interests in Colorado and New
20 Mexico. There are numerous wells, at least 37 wells that
21 we're going to be involved in. I can't possibly remember
22 the exact thickness of every location off the top of my
23 head.

24

MR. LOPEZ: But I guess what
25 we're saying is we will provide the information with re-

1 spect to the area in question.

2 Q Well, let me -- let me do some more
3 questioning here before -- let's go back to the beginning
4 of your testimony.

5 A Okay.

6 Q The mechanical risk and other risk in-
7 volved in drilling a well of this nature, that's what you
8 based your 200 percent risk penalty on. What -- let's look
9 at mechanical risk. What -- what do you figure in mechani-
10 cal risk?

11 A Mechanically there has been in the type
12 of completion we're attempting, there has been numerous
13 times that wells get stuck during the completion process,
14 primarily. That's -- that's where the biggest problem
15 arises. Other than that there's just a normal mechanical
16 risk of drilling a well.

17 Q Which is?

18 A Well, you always stand the chance of
19 equipment failures or whatever.

20 Q Okay, so completion risk and then drill-
21 ing risk.

22 A Right.

23 Q So we already have a well down in the
24 south -- I'm sorry, that would be the northwest quarter,
25 so that would alleviate completion and drilling risk. Okay

1 --

2 A If we use that well -- pardon me.

3 Q Excuse me. Now we're going to talk
4 about the other risk involved in -- in a well of this
5 nature.

6 A Okay.

7 Q Which is what?

8 A Reservoir risk.

9 Q Okay, let's break those out.

10 A Okay, we don't know the exact thickness.

11 Q I'm sorry, I thought you did, and you
12 said that you had a document that had several of these H
13 factors involved, but you couldn't figure it off the top of
14 your head at this time, but you do have them.

15 A We have a projected H factor, yes, sir.

16 Q Okay, what is it in this area?

17 A I do not know off the top of my head.

18 Q Can you obtain that information?

19 A Yes, I can.

20 Q And how was it obtained?

21 A It was obtained through well log analy-
22 sis in the vicinity.

23 Q Which well logs?

24 A I would have to look and see which
25 specific ones they used.

1 Q Is this in that report?

2 A Probably not.

3 Q Okay. So the thickness. Areal extent,
4 or let me -- okay, what other reservoir risk do we have
5 here?

6 A Reservoir quality, whether there's poro-
7 sity and permeability.

8 Q Okay.

9 A And the actual gas content of the coal.
10 Those are projected numbers that we included.

11 Q Now are these risk factors that you in-
12 cluded here was also utilized in coming up with these
13 figures?

14 A Yes, sir.

15 Q And we had a 400 -- let's see, what was
16 that -- \$450,000 --

17 A 400; 400 is what we used in the econo-
18 mics.

19 Q So obviously there is a thickness figure
20 and a quality figure and a gas content figure out there.

21 A Those had to be assumed to come up with
22 the reserves, yes, sir.

23 Q So how do I break this out with reser-
24 voir risk, drilling risk, completion risk?

25 A As far as percentages?

1 Q Yes.

2 A Or something?

3 Q Uh-huh.

4 A That's something I have never tried to
5 do --

6 Q Well, let's do it. We're talking about
7 200, so --

8 A -- on this particular prospect.

9 Q -- let's take a look at it.

10 A I'd say reservoir risk is the biggest
11 risk.

12 Q And what would you put on that?

13 A I'd say that that's probably 75 percent
14 of the real risk that we have.

15 Q And the rest would be completion and
16 drilling, or how would that be broken out?

17 A Yeah, the rest would be -- you could
18 lump it under mechanical, if you will.

19 Q Okay.

20 MR. STOGNER: I have no other
21 questions of this witness.

22 MR. STOVALL: Mr. Examiner,
23 you still have before you a request by Mr. Kellahin for
24 information contained in a report that -- Mr. Adams, would
25 you summarize what's in that report, just so that the Exa-

1 miner will have some idea of what -- what the total con-
2 tent of it is, to make some determination of what it --

3 A Yes, sir. This report covers all of the
4 properties that Richmond Oil and Gas is involved in. It
5 covers properties in the Panhandle of Texas. It covers
6 properties in west Texas and south Louisiana, as well as
7 the properties in New Mexico, and I see no reason to give
8 that to Meridian, that report.

9 MR. STOVALL: But as far as
10 the properties that are located in this -- in this area,
11 you have no problem with giving Mr. Kellahin all of the
12 information in the report with respect to those properties?

13 A I have no problem giving him the figures
14 that would enable them to come up with the same calcula-
15 tion.

16 MR. STOVALL: That's not ex-
17 actly the same --

18 A I understand that.

19 MR. STOVALL: What information
20 that's contained in that report with respect to these pro-
21 perties do you have an objection to giving him?

22 A Reservoir parameters that involve other
23 parts of the San Juan Basin besides this location.

24 We're still in an active leasehold ac-
25 quisition --

1 MR. STOVALL: You're talking
2 geographically --

3 A -- program.

4 MR. STOVALL: -- you want to
5 restrict the information from the report on a geographic
6 basis (not understood) here.

7 A I have no problem giving him everything
8 we have in Section 9.

9 MR. STOVALL: Any response,
10 Mr. Kellahin?

11 MR. KELLAHIN: I appreciate
12 the Section 9 material. There are some adjoining sections
13 that I think are so integrated and so immediate that it's
14 hard to have one with the other. I'm not sure that there's
15 any difference. I'd like to be able to -- to review the
16 area immediately adjacent to Section 9 in the west half of
17 10. I think I know from looking at the acquisition of the
18 McIlvain interests that I would assume it had been analyzed
19 collectively for that particular area, and I'm talking
20 about the spacing units on each side of Section 9. I think
21 it's a logical, well defined small area that avoids giving
22 us information that I couldn't possibly use in Colorado; I
23 don't know what I'd do with that.

24 MR. STOVALL: But you -- what
25 you would like is the information in Section 9 and the ad-

1 jacent spacing units, as it's contained in that report, is
2 that correct?

3 MR. KELLAHIN: Well, I would
4 think so and --

5 MR. STOVALL: Any problem
6 with that, Mr. Lopez?

7 MR. LOPEZ: No.

8 A No, sir.

9 MR. STOVALL: So we will as-
10 sume that you will then provide that, is that correct?

11 A Yes, sir.

12 MR. STOGNER: Okay, and that
13 will be a supplement to Exhibit Six, I would assume.

14 MR. LOPEZ: Correct.

15 MR. STOVALL: How quickly can
16 you provide that, Mr. Adams?

17 A I could probably get it to them tomor-
18 row, if they would take it by FAX.

19 MR. LOPEZ: We will provide it
20 tomorrow or the next day, but we will --

21 MR. STOVALL: And to the Div-
22 ision?

23 MR. LOPEZ: We are under a
24 real gun here, you know. I would like to ask Mr. Adams one
25 question which I think will bring into the focus the pres-

1 sure under which Richmond is existing.

2
3 REDIRECT EXAMINATION

4 BY MR. LOPEZ:

5 Q How much has Richmond expended thus far
6 with respect to developing the farmout from McIlvain re-
7 garding development of these properties?

8 A Approximately \$400,000.

9 Q And if you do not spud two wells by
10 November 1st, do you risk losing a lease and that invest-
11 ment?

12 A Yes, not only these particular sections
13 but the rest of the New Mexico acreage that we farm out
14 from McIlvain is all tied to these same -- same wells.

15 MR. STOVALL: You understand
16 that this has to be readvertised and nothing can be done
17 before the 4th of October and that kind of sets the time-
18 frame as far as --

19 MR. LOPEZ: Right, window,
20 that's right.

21 MR. STOVALL: Well, I will
22 raise one question.

23 MR. LOPEZ: Oh, I -- I think
24 there's one other thing that would help.

25 Q Why is there a problem concerning re-

1 entering the Pictured Cliff well?

2 A The Pictured Cliff well is a deviated
3 hole. It's bottom hole location is about 300 and some odd
4 feet away from the surface location. It was originally
5 drilled as a deviated hole. It was intended to be a de-
6 viated hole, I'm not sure why, but that will make the --
7 possibly make the well unusable for a rod pumping situa-
8 tion and we have significant water and that's why we're
9 considering drilling another well.

10 The other aspect being that in this area
11 we would like to try to set the casing on top of the Fruit-
12 land formation and drill out and jet the hole with air
13 rather than do a perforated and stimulated completion.

14 MR. STOGNER: Okay, you said
15 it was deviated 300 foot. In what direction?

16 A I can probably tell you that here, just
17 one moment.

18 MR. LOPEZ: Mr. Examiner,
19 we'll provide that information tomorrow, as well. He
20 doesn't seem to find it.

21 MR. STOVALL: Mr. Lopez,
22 perhaps -- Mr. Kellahin has handed us a letter dated August
23 31st from Jim Bruce of your office.

24 MR. LOPEZ: Right.

25 MR. STOVALL: To -- addressed

1 to Mr. Stogner, and I assume we have that somewhere in our
2 files.

3 MR. LOPEZ: Yes.

4 MR. STOVALL: Which describes
5 the Pictured Cliff well. Will you stipulate that this
6 information is contained in this letter?

7 MR. LOPEZ: Yes.

8 MR. STOVALL: I don't know
9 when he sent it but I'm sure we have a copy in our file.

10 MR. LOPEZ: Okay.

11 MR. STOVALL: Let me just ask
12 Mr. Kellahin one question procedurally. With respect to
13 the information which is to be provided to you, do you have
14 any thoughts as to what you want to do with it when you get
15 it, as far as responding to it or otherwise?

16 MR. KELLAHIN: I propose to
17 give it to our reservoir engineer and have him analyze it.
18 I don't know what will happen after that.

19 MR. STOVALL: Shall we assume,
20 then, that you may request that there actually be a hearing
21 on the 4th and (unclear) --

22 MR. KELLAHIN: Yes, sir, and
23 we'll do our very best to tell opposing counsel if that is
24 to be an issue. My -- my firm hope is that we can resolve
25 evidentially the entire presentation for the Examiner today

1 but I've got this unknown factual problem out there and we
2 will address it as soon as we can so as not to delay our
3 opposition.

4 MR. STOGNER: At this point
5 let's take about a fifteen minute recess.

6
7 (Thereupon a recess was taken.)

8
9 MR. STOGNER: The hearing will
10 come to order.

11 Mr. Kellahin?

12 MR. KELLAHIN: We'll call Mr.
13 Alan Alexander.

14
15 ALAN ALEXANDER,
16 being called as a witness and being duly sworn upon his
17 oath, testified as follows, to-wit:

18
19 DIRECT EXAMINATION

20 BY MR. KELLAHIN:

21 Q Will you please state your name, occupa-
22 tion, and where you reside?

23 A My name is Alan Alexander. I'm employed
24 as a Senior Land Advisor with Meridian Oil, Inc., in their
25 Farmington, New Mexico office.

1 Q Mr. Alexander, on prior occasions have
2 you testified and qualified as a petroleum landman before
3 the the Oil Conservation Division?

4 A I have.

5 Q And pursuant to your duties as a petro-
6 leum landman are you familiar with the land ownership
7 within the nonstandard proration unit that Meridian is
8 seeking with this application?

9 A I am.

10 Q Are you also generally familiar with the
11 ownership in the immediate vicinity?

12 A I have not researched the ownership in
13 those parcels of land we own no working interest under,
14 which would be basically the north half and the southeast
15 quarter of 9, nor Section 10.

16 Q Have you accepted, then, and assumed the
17 fact that McIlvain has certain acreage ownership in this
18 area that they have farmed out to Richmond Petroleum?

19 A Yes.

20 Q And you're aware of where that acreage
21 is?

22 A Yes, sir.

23 Q Are you also familiar with the opera-
24 tions and the acreage that is dedicated to the Allison
25 Unit?

1 A I am.

2 Q And have you made yourself familiar with
3 the Mesaverde and Dakota nonstandard spacing units that
4 have been applied to this particular area?

5 A I have.

6 Q And finally, have you testified before
7 the Division with regards to the nonstandard units the Com-
8 mission has heard and approved for other Allison coal gas
9 wells?

10 A Yes, I have.

11 Q With regards to the compulsory pooling
12 of interest in the nonstandard proration unit that Meridian
13 seeks for the Allison 135 Well, have you satisfied your-
14 self that you have an accurate and reliable list of those
15 interest owners?

16 A Yes.

17 Q And have you contacted all those owners?

18 A We have.

19 MR. KELLAHIN: At this point,
20 Mr. Examiner, we tender Mr. Alexander as an expert petro-
21 leum landman.

22 MR. STOGNER: Are there any
23 objections?

24 MR. LOPEZ: None.

25 MR. STOGNER: Mr. Alexander is

1 so qualified.

2 Q Mr. Alexander, let's turn to the exhi-
3 bit book, if you will, please. Would you identify for us
4 the first exhibit?

5 A Yes. That is a copy of the application
6 filed on behalf of Meridian Oil, Inc., for compulsory
7 pooling for the Allison Unit No. 135 Well.

8 Q Attached to that application is a list
9 of interest owners.

10 A That is correct.

11 Q And did you cause that list, or the
12 identity of those individuals to be communicated so that
13 the application could be prepared and filed?

14 A I did.

15 Q And you're familiar with these individ-
16 uals, then, as having interest owners (sic) in the non-
17 standard unit?

18 A Yes, sir.

19 Q Okay. Let me direct your attention to
20 page 4, which is the last page of that application. There
21 is a percentage that's shown next to the McIlvain interest.
22 It says 40+ percent?

23 A Yes, sir.

24 Q Subsequent to preparation of this have
25 you had an opportunity to more carefully allocate the

1 working interest ownership on a percentage basis among the
2 various interest owners?

3 A I have.

4 Q And it's shown on one of your other dis-
5 plays?

6 A That's correct.

7 Q Let's turn to Exhibit Number Two or at
8 the information behind Tab Number Two.

9 Apart from the application, which was
10 prepared for the hearing, was the information shown in the
11 exhibit book through Exhibit Number Four information that
12 was compiled and prepared at your direction and super-
13 vision?

14 A It was.

15 Q And you have satisfied yourself to the
16 best of your knowledge it's true and accurate?

17 A I have.

18 Q Let's turn now to the first display
19 following Exhibit Number Two tab. Would you identify that
20 for us?

21 A This is a land plat which depicts ex-
22 isting Fruitland Coal units in the immediate area of the
23 application, as well as the proposed nonstandard Fruit-
24 land coal unit that we are seeking today.

25 Q And that is outlined with the green

1 shading?

2 A That is correct.

3 Q What's the reason for this particular
4 configuration of a nonstandard unit for the well?

5 A It follows the nonstandard units,
6 drilling units that were established for the Mesaverde and
7 Dakota formation in this area.

8 Q Has that been a useful solution?

9 A It has, yes.

10 Q Why?

11 A Well it helps to track existing Divi-
12 sion order and record setups that we have within the com-
13 pany. There are people already being paid on this basis
14 and so it's helpful to follow that established unit.

15 Q Help us identify the well symbol code so
16 that we know what wells we're looking at when we look at
17 the display.

18 A The wells that are shown as a triangle
19 with a star shaped symbol in the middle of them are Fruit-
20 land coal wells.

21 The wells that are shown with a square
22 boundary around them are Dakota wells and wells that are
23 shown with a circle are Mesaverde wells.

24 Q One of the captions on the display says
25 Allison Unit?

1 A That's correct.

2 Q To what acreage does that apply, Mr.
3 Alexander?

4 A It applies to the acreage that is shown
5 in the broad dashed outline on the plats. All of the pro-
6 posed drilling unit is included within the boundaries of
7 the Allison Unit.

8 Q When we look at the area shaded -- out-
9 lined with the green outline, within that area of being
10 part of Section 8 and part of 9, help us identify those
11 tracts or parts of tracts that are not within the unit,
12 although they may be contained within the outer boundary of
13 the unit.

14 A The acreage that is not committed to the
15 Allison Unit would be the southeast quarter of the south-
16 west quarter of Section 8.

17 Q It says NM-682 something? Is that what
18 you're talking about?

19 A No, sir, that's in Section 9. If you
20 move over there to Section 8 --

21 Q Edgeberg?

22 A Edgeberg, it has that name on it, yes.

23 Q That 40-acre tract is not allocated to
24 the unit?

25 A That's -- that's correct.

1 Q All right. Who, to your knowledge, is
2 the interest owner of that 40-acre tract?

3 A It is split according to our title
4 search into several people.

5 It is also common with the ownership
6 that would be the southwest quarter of the southwest
7 quarter of Section 9, which is the adjoining 40-acre tract.
8 We're currently --

9 Q Without identifying the parties, let me
10 just get the tracts correct.

11 A All right.

12 Q When I take the 40-acre tract in the
13 southeast southeast of 8 and the tract in the southwest
14 southwest of 9, that has a same -- that has a common owner-
15 ship?

16 A Yes.

17 Q All right. Those two tracts, then would
18 track the same ownership.

19 A That's correct.

20 Q Okay. Within -- there still remains a
21 portion of Section 9 within your proposed unit that is un-
22 der different ownership?

23 A Yes, there is another tract that is also
24 not committed to the Allison Unit and it would be the tract
25 that is shown immediately north of the southwest of the

1 southwest. It is something of an L-shaped tract. You can
2 readily identify it. It is a 50-acre tract and that tract
3 is also not committed to the Allison Unit.

4 Q There are a number of small working
5 interest owners with percentages within your unit, are
6 there not?

7 A That are committed to the Allison Unit?

8 Q Yes.

9 A Yes, that's correct.

10 Q Help -- for purposes of the discussion
11 this afternoon, help us identify which tracts you asso-
12 ciate McIlvain and now Richmond Petroleum with.

13 A I associate them with some interest in
14 the southeast quarter of the southeast quarter of Section
15 8, and also with -- well, within that proration unit that
16 is the tract, and also the adjoining, the common ownership
17 tract, in the southwest of the southwest of 9 is where I
18 associate the McIlvain interest.

19 Q And have you satisfied yourself, then,
20 within the entire nonstandard proration unit you have ac-
21 curately tabulated the interest of each of the owners that
22 would be entitled to production?

23 A I believe we have.

24 Q Let's go to the next display behind Tab
25 Two, or Exhibit Two, and have you identify and describe

1 that.

2 Q That is also a land plat and it depicts
3 the existing Mesaverde or Dakota drilling units in the
4 immediate area, except that it does not -- it only extends
5 to the Allison Unit boundary and does not show the existing
6 Dakota units that are in Sections 9 and 10.

7 Q Let's start with Section 11, which is
8 the top section just south of the Colorado-New Mexico line.
9 Do you see that spacing unit?

10 A Yes, sir.

11 Q That, in fact, is a nonstandard spacing
12 unit?

13 A That's correct.

14 Q And that's for Mesaverde production?

15 A Yes, sir, that's correct.

16 Q Have you subsequently caused that to be
17 approved for a Fruitland coal gas production using the same
18 configuration as the solution for that unit?

19 A Yes, we have.

20 Q All right. Then as you step across
21 going from left to right across the township, describe for
22 us what has been the coal gas solution for each of the
23 sections.

24 A They would follow the Mesaverde or Dak-
25 ota nonstandard drilling units as depicted on the map. In

1 other words, Section 12 is a unit, a drilling unit, and if
2 you will look at the north half of Section 7 you will see
3 that a portion of that also runs into Section 8 and that is
4 a nonstandard approved unit, and in Section 8, where you
5 will see the No. 134 Fruitland Coal Well, that is also an
6 approved nonstandard drilling unit for the Fruitland Coal.

7 Q As a landman, have you got a solution
8 for the configuration of the coal gas spacing units for
9 Sections 8 and 9 that allow all acreage to be dedicated to
10 a potential gas well to be produced out of the Fruitland
11 coal formation?

12 A I do.

13 Q What has been the Dakota or Mesaverde
14 solution in Section 9 for the balance of that acreage that
15 falls outside of your proposed nonstandard unit?

16 A There is an order that sets up a unit in
17 there; actually two units are a portion of 9. One of the
18 drilling units would consist of the west half of the south-
19 east quarter and all of the remainder of the north half of
20 9.

21 Q The other adjoining unit would include
22 the east half of the southeast quarter of 9, as well as the
23 southwest quarter of the southwest quarter of 10; the north
24 half of the southwest quarter of 10; the northwest quarter
25 of 10, what remains of the northwest quarter of 10; and Lot

1 2.

2 Q What's the basis upon which the non-
3 standard units have been submitted and approved by the
4 Division? You know, what problem are you trying to solve?

5 A We're basically trying to solve a prob-
6 lem that exists because of the nonstandard governmental
7 sections and trying to allocate as closely as possible 320
8 acres to each well that would be drilled along that
9 northern township.

10 Q When you look at Richmond Petroleum's
11 proposed solution of a north half/south half orientation of
12 a spacing unit in Section 9, can you tell me approximately
13 how many acres would be in each of those two spacing units
14 if that in fact is the solution?

15 A As I understood, the solution would also
16 take in approximately 80 acres for each north half and
17 south half of Section 8, and I haven't calculated the exact
18 figure, but I understand it would be somewhere around 350
19 acres.

20 Q Your proposed nonstandard proration unit
21 contains approximately how many acres?

22 A It contains 317, just a moment, .51
23 acres.

24 Q Let's go now to the information behind
25 Exhibit Number Three, Mr. Alexander. Without directing

1 yourself to the individual letters at this point, identify
2 for us what you have shown in terms of the ownership in the
3 last paragraph of that information. What is it?

4 A Well, it is the ownership that we show
5 of all the parties that would own an interest in the non-
6 standard drilling unit for the Allison Unit No. 135 Well.

7 Q Can you tell us at this point as of
8 today's hearing either what parties have agreed to parti-
9 cipate in your nonstandard proration unit or, conversely,
10 which ones have not, so we can have some check list of
11 relationships of parties?

12 A The interest that would be participating
13 in the Allison Unit No. 135 Well would consist of the
14 ownership that's dedicated to the Allison Unit, shown as
15 59.05, approximately, as well as Southland Royalty Com-
16 pany's mineral interest, which is shown as 6.22 percent,
17 approximately.

18 And we have not received joinder from
19 any of the remainder of the parties.

20 Q Richmond Hogue (sic) is shown on this
21 list. Is that your understanding of the same interest as
22 Richmond Petroleum Company?

23 A That's correct.

24 Q All right, what -- what is the purpose
25 of the letters, then, that are copied and shown behind Ex-

1 hibit Number Three, Mr. Alexander?

2 A They are simply copies of the letters
3 that we sent proposing the well to the parties within the
4 nonstandard drilling unit. We also furnished copies of our
5 Authority for Expenditure and our joint operating agreement
6 for these parties consideration and approval.

7 Q Is that Meridian's custom and practice
8 when they're trying to get working interest owners to
9 voluntarily participate in wells, to send them AFEs and
10 joint operating agreements?

11 A That's correct.

12 Q In preparing a joint operating agree-
13 ment, is that the information shown behind Exhibit Number
14 Four?

15 A That's correct.

16 Q All right. And this joint operating
17 agreement conforms to the acreage that applies to your non-
18 standard unit?

19 A Yes, sir.

20 Q Do you have a recommendation to the Exa-
21 miner as to what overhead rates you want to propose to the
22 Examiner for inclusion in the pooling order?

23 A Yes, sir, we do. They're as set forth
24 in the COPAS agreement that is attached to the operating
25 agreement and provided for a \$3,500 drilling well rate and

1 a \$350 producing well rate.

2 Q What, in your opinion, is the basis upon
3 which those numbers are recommended?

4 A On experience in the area and acceptance
5 of the -- this type of agreement in the other coal wells
6 that we've drilled in the Basin.

7 Q Have you had other working interest
8 owners, companies, agree to and accept the 3500 and the 350
9 overhead rates?

10 A We have.

11 Q In other Fruitland coal gas wells?

12 A That's correct.

13 Q In submitting your AFE to the various
14 working interest owners to participate in the nonstandard
15 unit, have you had any objection to your AFE?

16 A Not at this point, we have not.

17 Q Have you had any parties that have com-
18 municated any objection to you about the overhead rates?

19 A We have not.

20 Q Let me ask you, sir, to go to Exhibit
21 Five and identify whether or not this is a copy of the AFE
22 that you sent to these working interest owners?

23 A It is.

24 Q There is some additional well cost in-
25 formation shown behind Exhibit Five. Which -- which, if

1 any, of these displays was the enclosure that you sent to
2 the working interest owners?

3 A It would only be that information behind
4 Exhibit Five, I believe. That's correct.

5 Q In your opinion, Mr. Alexander, would an
6 additional period of time be useful in order to allow you
7 to further efforts to obtain voluntary joinder of the
8 working interest owners in the well?

9 A It would be useful, yes.

10 Q Do you have any other working interest
11 owners that have suggested to you they need further time to
12 evaluate the proposal?

13 A Yes, we've talked with Mr. Whitney, Mr.
14 Robert Witten, and Mr. Sam Mizel, and they have not yet
15 made up their minds on how they would like to approach this
16 well.

17 Q Have you been able to obtain an agree-
18 ment with T. H. McIlvain or Richmond Petroleum with regards
19 to their participation in the proposed nonstandard unit?

20 A We have not.

21 Q What is your understanding of the se-
22 quence of how the wells, or well, was proposed among the
23 companies for the nonstandard unit? Who first proposed the
24 well?

25 A We -- the sequence of events, we

1 initiated work on this well back in October of 1988 when
2 the well was originally proposed on a 160-acre drilling
3 unit before the Fruitland -- the base of the Fruitland Coal
4 rules were implemented.

5 We have since revised our APD and
6 C-102's to reflect the Fruitland Coal 320-acre spacing,
7 which is the spacing unit that we're looking at today.

8 Our first contact with the McIlvains
9 was approximately December 15th, 1988, in which Mr.
10 McIlvain offered to sell us his acreage in this area. We
11 evaluated that sale, made a counter offer to purchase only
12 a portion of the acreage, that being primarily that was
13 dedicated to this spacing unit.

14 From there we have a sequence of corres-
15 pondence into April, July and August where both Mr. --
16 where the McIlvain Oil & Gas and Richmond have contacted us
17 concerning the proposed spacing unit and their counter-
18 proposals for spacing units in this immediate area.

19 Q As of today you've not been able to come
20 to agreement among yourselves about how to dedicate the
21 acreage to the wells or where the wells ought to be
22 drilled?

23 A That's correct.

24 Q Let me ask you to identify for us the
25 information behind Exhibit Seven. Skip Six for a minute

1 and let's go to Seven.

2 A The information behind Exhibit Seven,
3 Tab 7, is an application for permit to drill. The Com-
4 mission Form C-101 that originally proposed or originally
5 set out the information to the Commission on 160-acre
6 basis, that being the southwest quarter of Section 9, which
7 is shown on the next copy, which is a C-102 plat showing
8 the original 160-acre dedication.

9 Following that you will see that a
10 revised copy of the C-102 form was submitted to the Divi-
11 sion under the C-103 that shows the current proposed non-
12 standard spacing unit.

13 Q What was the purpose of submitting the
14 revised APD with a new acreage dedication plat to it, to
15 the Division?

16 A It was our effort to conform with the
17 change in field rules and to follow the existing Mesaverde
18 and Dakota solution in the area.

19 Q Did you participate in the Division
20 hearings that resulted in the adoption of the location
21 rules, as well as the other rules, for the Basin Fruitland
22 Coal Gas Pool?

23 A I did.

24 Q To your knowledge does the proposed
25 location for the Allison 135 Well conform to the require-

1 ments of that pool so that you have a standard well loca-
2 tion?

3 A It does, yes.

4 MR. KELLAHIN: That concludes
5 my examination of Mr. Alexander.

6 We move the introduction of
7 Exhibits One through Five and then Exhibit Seven.

8 MR. STOGNER; Exhibits One
9 through Five and Exhibit Seven are admitted into evidence
10 if there are no objections.

11 Mr. Lopez, your witness.

12

13 CROSS EXAMINATION

14 BY MR. LOPEZ:

15 Q Mr. Alexander, I believe you testified
16 that the principal reason that you want to follow the
17 Mesaverde-Dakota nonstandard unit allocation is for a
18 matter of convenience only?

19 A No, sir, it follows a predescribed plan
20 of action that was drafted by prior parties that would
21 incorporate sufficient acreage for each well. It also
22 follows the Division orders that have been issued where we
23 do have producing wells in the Allison Unit and the other
24 sections that we operate so that we would be following a
25 consistent ownership pattern and revenue pattern.

1 Q If the proration units were to be de-
2 signated as suggested by Richmond, that is, dividing the
3 northern half -- dividing Section 9 into equal north and
4 south halves and including the Section 8 acreage in those
5 proration units, such a designation or dedication could be
6 accommodated, though, in terms of making sure that all in-
7 terest owners received their pro rata payments, et cetera.

8 MR. KELLAHIN: Object to the
9 form of the question, Mr. Examiner. It's -- is presumes a
10 factual situation that's not applied for by any applicant
11 in this case. Mr. Lopez assumes the reconfiguration of
12 Section 8 while his own application proposes not to utilize
13 that acreage.

14 He's asked a question -- he
15 has asked the witness an irrelevant question.

16 MR. LOPEZ: I think the issue
17 is before the Examiner, and the Examiner, after he hears
18 the evidence today can, in his own discretion, decide how
19 it should be done and it doesn't have to follow either
20 application.

21 So I think it's a relevant
22 question, but I can rephrase it and say, leaving out Sec-
23 tion 8 and just following our application, even though it
24 doesn't conform to your described Allison Unit configura-
25 tion, that could be accommodated in terms of payment to the

1 mineral interest owners in Section 9, though.

2 A It could be accommodated.

3 Q I notice that if we do follow your con-
4 figuration, that there would be well drilled in the north-
5 west -- I mean the northeast quarter of Section 8? Is that
6 true?

7 A That's correct. That acreage is already
8 dedicated to an existing well, and would -- between an ex-
9 isting well and the well that we would be proposing.

10 MR. STOVALL: Excuse me, Mr.
11 Lopez, which section did you say again? I missed it.

12 MR. LOPEZ: Section 8.

13 MR. STOVALL: Are you talking
14 about the northwest of Section 8?

15 MR. LOPEZ: Northeast.

16 MR. STOVALL: Northeast of
17 Section 8.

18 MR. LOPEZ: According to the
19 pool rules, as I understand, Mr. Stovall, wells are to be
20 drilled in the southwest and the northeast quarter, and my
21 --

22 MR. STOVALL: I understand
23 that. I just didn't hear the section you requested.

24 MR. LOPEZ: -- yeah, and my
25 question to Mr. Alexander is even under his proposal no

1 well would be drilled in the northeast quarter of 8.

2 A We do not believe that it would be
3 necessary since it is already dedicated.

4 Q Dedicated to the well you propose to
5 drill in the southwest quarter of 9?

6 A And the well is -- the No. 134 Allison
7 Unit Well that's drilled in the southeast quarter of 8.

8 Q Do you think that the wells drilled in
9 the southwest quarter of 8 and the southwest quarter of 9
10 will more effectively drain the northwest quarter of 8,
11 other than a direct offset in Colorado to the north of that
12 --

13 MR. KELLAHIN: Objection.
14 There's no basis for this witness to answer that question.
15 He's asking a drainage question of a landman.

16 MR. LOPEZ: I can save that
17 question for their reservoir engineer.

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

20 MR. LOPEZ: I have no further
21 questions.

22 MR. STOGNER: Any redirect.
23 Mr. Kellahin?

24

25

REDIRECT EXAMINATION

BY MR. KELLAHIN:

Q Let me pursue one thought with you, Mr. Alexander. If you look at the nonstandard proration unit that is now dedicated to the Allison 134 well in Section 8 --

A Yes, sir.

Q -- and should the examiner grant the Richmond Petroleum applications in the north half of 9 and the south half of 9, follow me --

A Yes, sir.

Q -- will there be acreage in Section 8 that is not dedicated to a producing coal gas well?

A I think -- I do not exactly understand the proposed -- the proposal by Richmond so that I might answer that question for you.

Q All right. Look at Section 8. What's the acreage dedicated to Well 134?

A It would be the southwest quarter of the northwest quarter and the southeast quarter -- I'm sorry -- the southwest quarter of the northeast quarter and the southeast quarter of the northwest quarter, the -- all of the southwest quarter and the east half of the southeast quarter.

Q The west half of the southeast quarter.

1 A I'm sorry, yes, the west half of the
2 southeast quarter.

3 Q Okay. All right, that's to the 134
4 well. Now if Richmond Petroleum's applications in 9 are
5 approved, to what well, then is the east half of the east
6 half of Section 8 dedicated?

7 A Based upon their application for a north
8 half and south half dedication, then the remainder of that
9 Section would not be dedicated to a well.

10 MR. KELLAHIN: No further
11 questions.

12

13 CROSS EXAMINATION

14 BY MR. STOGNER:

15 Q Mr. Alexander, let's refer to your
16 second page on Exhibit Two, if we could. Now these are the
17 existing Mesaverde or Dakota proration units, is that cor-
18 rect?

19 A Yes, sir.

20 Q And the wells in the triangles are pro-
21 posed coal gas wells or -- yeah, that is right, isn't it?

22 A Yes, sir, that's correct.

23 Q Okay. How many of these nonstandard
24 proration units in the coal gas have been approved to date?

25 A The number -- in Section 8 you will see

1 the No. 134 Well?

2 Q Yes, sir, what's the order number?

3 A We just -- Tom, do you have a copy of
4 that?

5 MR. KELLAHIN: I'll have to
6 get it for you, Mr. Examiner. They were approved at the
7 Examiner hearings in August, were they not?

8 A Yes, that's correct.

9 Q August 23rd, the No. 134? Let's see,
10 I'm looking at the docket for August 23rd. I have an unor-
11 thodox coal gas well location -- I don't see a well name on
12 that one but that's in 32-10, so that wouldn't involve this
13 one.

14 Now, that's Section 23; here's one for
15 an East Well No. 102, that wouldn't be it.

16 Here's one for an Allison Well No. 133.

17 A Yes, sir.

18 Q That wouldn't be it, would it?

19 A It's not that one but it's the next one
20 up there.

21 Q The next one?

22 MR. KELLAHIN: I can give you
23 the case numbers.

24 Q Allison Well No. 124. I'm looking for
25 the 134 in particular here.

1 All right, Allison Well No. 103. I'm
2 sorry, I don't see one for the 104, but I do have something
3 interesting and I'll make it part of this record. It's a
4 -- out of our drilling file, we have a C-101 approved by
5 Frank and it has a note down -- I'm sorry, by Ernie Busch
6 of our Aztec Office, "Hold C-104 for NSP, and when I look
7 at the 102, I have Lots 2 and 3. I have the southwest
8 quarter of the northeast quarter; the southeast quarter of
9 the northwest quarter. I have the southwest quarter and I
10 have the west half of the southeast quarter.

11 Now if I remember right, Lot 3 was taken
12 in by Well No. 103 -- I'm sorry -- 133 in the case heard
13 before Examiner Catanach in Case Number 9730. I'm sorry,
14 this NSP, I guess, or this 102 does not show the correct
15 acreage, or what do we have here? Maybe I'm confused.

16 A You're looking for the C-102 for which
17 well, now?

18 Q The 134. You said you had an approval
19 on it and I can't seem to find it and Mr. Kellahin said it
20 was heard on August 23rd. I can't find a record of that,
21 either.

22 MR. KELLAHIN: Well, I mis-
23 spoke, Mr. Examiner. The three cases we did on August 23rd
24 was Case 9730 for the Allison 133 Well.

25 MR. STOGNER: Uh-huh.

1 MR. KELLAHIN: We had Case
2 9731 for the Allison 124 and then we had Case 9732 for the
3 Allison 103 Well.

4 MR. STOGNER: So we have not
5 had an approval for the 134 as yet, and then the 102 that
6 is in the 134 well file is not correct.

7 A I don't know about the C-102.

8 Q Well, here, let me show you a copy of
9 it. It was signed by Mr. Bradfield? Peggy Bradfield?

10 A Peggy Bradfield, yes.

11 Q This is out of the well record here in
12 our Santa Fe office.

13 A Yes, sir.

14 Q That was part of the research that I
15 said I did prior to writing ads.

16 A I believe the configuration is correct;
17 however, what appears -- well, somebody may have extended
18 its -- if the northern half of this, if this represents a
19 Colorado --

20 Q Okay, that represents Colorado, yes.

21 Q All right, that may have been some con-
22 fusion there because then this would have been the lots
23 that would have been involved in the nonstandard proration
24 unit that we're looking at today and I think the other lot
25 would have been dedicated to the 133 Well.

1 Q Okay. So I will assume that a corrected
2 C-102 at the time that we hear this case will come at that
3 time.

4 A Yes, sir.

5 Q And when do you plan to make applica-
6 tion for a nonstandard proration unit on the 134?

7 A Mr. Examiner, I don't know that date.

8 Q Okay. Let's look at your previous case
9 in which involved all the Basin Dakota and Blanco Mesa-
10 verde, are you familiar with that case?

11 A Yes, sir, I have a copy of the orders.

12 Q Okay, what is the order number on this?

13 A For the Mesaverde formation that should
14 be Case 3047, Order No. R-2717.

15 Q And Order No. R-2 -- I'm sorry, 2017?

16 MR. STOVALL: 2717.

17 A 2717, yes, sir.

18 Q That involved how many nonstandard pro-
19 ration units and who was the applicant in that case?

20 A It involves, appears to involve three
21 nonstandard Mesaverde drilling units, and the applicant was
22 El Paso Natural Gas Company.

23 Q Are you familiar with Order No. R-2046?

24 A Yes, sir, the Dakota?

25 Q Yes.

1 A Yes, sir, I have a copy of it, also.

2 Q And that involved how many nonstandard
3 proration units?

4 A It involves quite a few. It covers
5 several townships and ranges. Would you like for me to
6 count them?

7 Q No, that won't be necessary but why
8 didn't -- I'm curious of why Meridian didn't go the same
9 route and apply for a bunch or a lot of nonstandard prora-
10 tion units at one time?

11 A We're currently drafting a map across
12 the Basin proper and trying to retrieve from the Aztec
13 Office all of the nonstandard orders in the Basin and we
14 were hoping to come forward to the Commission and try to
15 address as many of those as possible at one time.

16 Q Has this been an ongoing project? I
17 mean, we look at 2046 here.

18 A Yes, sir, it has been an ongoing
19 project.

20 Q And you do have that order number, that
21 old one, that describes them, don't you?

22 A Yes, sir.

23 Q Let's look at Exhibit Number Three. Is
24 this the first line of communications that was given to the
25 interest owners about this proration unit and your proposal

1 to utilize this acreage?

2 A With the exception of the McIlvain and
3 Richmond group, it would be the first communication that we
4 had with the remainder of the parties.

5 Q August 15th, 1989?

6 A Yes, sir.

7 Q Do you feel that's adequate time for any
8 party to react on a voluntary agreement?

9 A No, sir, I believe the parties should be
10 entitled to some additional time to make up their minds on
11 whether they would like to join or not.

12 MR. STOGNER; I have no fur-
13 ther questions.

14 Are there any other questions
15 of this witness?

16 MR. STOVALL: Mr. Examiner, I
17 do have a couple further questions.

18 MR. STOGNER: Okay.

19

20

21 CROSS EXAMINATION

22 BY MR. STOVALL:

23 Q I'm looking -- I'm really looking at
24 Exhibit Two and your two maps there, Mr. Alexander. Does
25 -- let me ask you this. Does Meridian own any interest in

1 the northwest or the east half of Section 9?

2 A No, sir, we do not.

3 Q Does Meridian own any interest in the
4 east half of the east half of Section 8?

5 A Yes, sir, we do.

6 Q What you have attempted to do, if I
7 understood your testimony correctly, is that you are fol-
8 lowing the Blanco Mesaverde and the Basin Dakota nonstand-
9 ard proration units for this area, which were established
10 many years ago, is that correct?

11 A That's correct.

12 Q Why are you doing that?

13 A Well, it's a pre-established pattern and
14 it solves the problem of having to redesign proration units
15 because these are nonstandard governmental sections and
16 they would have to be redesigned in some format, and it
17 also reflects in many instances a predetermined revenue
18 string from existing wells that have already been drilled
19 on these units to other depths.

20 Q Would it be possible to calculate reve-
21 nue streams using different proration units?

22 A Yes, sir.

23 Q You could do the title work necessary.
24 If this were a fresh area you'd do that, wouldn't you?

25 A Yes, sir, we would.

1 Q Are there any Blanco Mesaverde or Basin
2 Dakota units in the northwest quarter of the east half of
3 Section 9, that you're aware of?

4 A There is an established Dakota spacing
5 unit.

6 Q Is there a well drilled on it?

7 A No, sir, not -- not to my knowledge.

8 Q If I look at the topo map that has been
9 submitted previously in the prior -- in the other case --
10 in the Richmond case, I see that those areas are pretty
11 much under water, aren't they?

12 A Most of those tracts are under water.

13 Q If -- now, the -- the NSP, nonstandard
14 proration unit, for Section 8, the No. 134 Well, has not
15 yet been approved, is that correct?

16 A I do not know the answer to that
17 question. I would have to research that and get back with
18 you to see if in fact it has been approved.

19 Q If Richmond's application were granted
20 and Meridian's denied, would it be possible for Meridian to
21 go back in and reconfigure the proration units in Section 8
22 to provide for the dedication of all of the acreage in Sec-
23 tion 8 to a well?

24 A You're saying to dedicate portions of
25 Section 8 to one or more wells, or just to a single well?

1 Q Well, let me -- let me rephrase my
2 question.

3 If -- the way you have applied for the
4 -- for the Allison 134, this excludes a portion along the
5 -- looks like Lots 1 and 2, I guess, of Section 8, and the
6 balance of the east half of the east half, is that correct?

7 A Yes, sir.

8 Q So that is not dedicated to the 134 Well
9 in Section 8.

10 A That's correct.

11 Q If we were to grant Richmond's applica-
12 tion for a north half and a south half dedication in Sec-
13 tion 9, and were to grant your dedications in Section 8 for
14 the 134 well, that would omit those portions from a well,
15 is that correct?

16 A That's correct.

17 Q They would be not dedicated to any well
18 in either Section 8 or 9.

19 A That's correct.

20 Q If we were to grant the Richmond appli-
21 cations and grant them a north half and south half unit in
22 Section 9, prior to taking action on the -- your -- on the
23 Meridian application in Section 8, would it be possible for
24 Meridian to reconfigure its proration units in Section 8 to
25 insure that all of Section 8 was dedicated to one or more

1 wells?

2 A It is a possibility. You would note that
3 the acreage that is not dedicated to the Allison Unit, if
4 that was included in a proration unit for the No. 134 Well,
5 that would change the ownership, the existing ownership of
6 that well.

7 Q The 134 is an existing well?

8 A Yes, sir, it is.

9 Q And you're saying that the portion that
10 we've talked about in Section 8 in that, basically the east
11 half of the east half and Lot 2, is -- is not in the
12 Allison Unit?

13 A It's within the Allison Unit boundaries
14 but the tracts that we've previously talked about are not
15 committed to the Allison Unit; therefor, they don't parti-
16 cipate with the remainder of the fixed interest parties in
17 the unit and they would have to be unitized in with a well.

18 Q Couldn't that be done?

19 A It can be done.

20 Q Are you the -- you heard the testimony,
21 you were here for the testimony in the Richmond cases, in
22 which they testified that they discussed with you a non-
23 standard location or discussed with Meridian a nonstandard
24 location in the northwest of 9? Did you hear that testi-
25 mony?

1 A Yes, sir, I did.

2 Q Were the party with Meridian with whom
3 they discussed that?

4 A I was one of the parties. I had a
5 meeting with Mr. Adams and Mr. Roach on August the 1st, at
6 which they listed that as one of the possibilities. We
7 discussed several possibilities for spacing units for these
8 wells and did not come to any conclusion on which one that
9 both parties might agree upon.

10 Q Did Meridian oppose -- did Meridian
11 indicate to Richmond that they would oppose an unorthodox
12 location in the northwest of Section 9?

13 A Yes, sir.

14 Q Why?

15 A We preferred to proceed. We did not
16 like the nonstandard nature of the location and its proximity
17 to the Allison Unit, and we desired to proceed with
18 the predetermined Mesaverde and Dakota drilling units, as
19 we have been doing as we've been drilling these Allison
20 wells.

21 Q Are you familiar with the topography in
22 the area and the location of the lake and --

23 A Only as I see it represented on the land
24 plats and the topo maps. I have not been out on the actual
25 locations.

1 Q Do you have any feeling that those maps
2 are not accurate or generally represent the location of the
3 lake and the area covered by the lake in Section 9?

4 A I believe they generally represent it.
5 I have no reason to believe otherwise.

6 Q Yet you would oppose the drilling of a
7 well in the northwest quarter of Section 9, which Richmond
8 has stated is the only accessible and usable surface loca-
9 tion in Section 9.

10 A Yes, sir.

11 Q Has Meridian -- does Meridian operate
12 any wells in the Fruitland Coal area?

13 A In the Basin proper?

14 Q In the Basin -- in the Basin, Fruitland
15 Coal area?

16 A Yes, sir.

17 Q Are you familiar personally with the
18 topographical conditions in the Basin area?

19 A Just on a general basis.

20 Q Do you know whether they cause problems
21 in establishing well locations?

22 A Yes, sir.

23 Q Has Meridian faced a situation in which
24 it's had to go to a nonstandard, unorthodox location, as a
25 result of topographic conditions?

1 A We have.

2 Q And you've applied to the Division for
3 approval for those locations, is that correct?

4 A That's correct.

5 Q Do you know how many times you've done
6 that?

7 A No, sir, not off the top of my head, I
8 don't.

9 Q Have you in each of those cases proposed
10 directional drilling to get the bottom hole location to an
11 orthodox location?

12 A We have drilled several directional
13 wells. I don't believe we've utilized a directional well-
14 bore. We've been able to find sufficient acreage and get
15 sufficient footages to drill the wells on existing units
16 and I believe most of the time were able to stay with the
17 northeast/southwest dedications in doing that.

18 Q Have you made any or do you know if
19 Meridian's ever made a decision not to drill a directional
20 wellbore because of economics? They would prefer to go to
21 an unorthodox vertical wellbore?

22 A I personally don't make those types of
23 the decisions. They're made by other departments. I'm
24 sure there has been consideration of that, yes.

25 Q So economics of vertical versus direc-

1 tional does play a consideration in Meridian's?

2 A Yes, sir.

3 MR. STOVALL: I have no fur-
4 ther questions, Mr. Examiner.

5 MR. STOGNER: Thank you, Mr.
6 Stovall. Are there any other questions of this witness?

7 MR. KELLAHIN: Yes, Mr.
8 Examiner.

9

10 REDIRECT EXAMINATION

11 BY MR. KELLAHIN:

12 Q Mr. Alexander, has Meridian ever filed
13 for an unorthodox well location in the wrong quarter sec-
14 tion and in the face of opposition and complaint by the -
15 setting operator had that location approved?

16 A Not to my knowledge.

17 Q Has Meridian ever filed for a location
18 and had that -- an unorthodox location similar to the facts
19 surrounding this application?

20 A I do not believe so.

21 Q To the best of your knowledge and infor-
22 mation and belief, is this the first instance in which the
23 Commission has been faced with an opposing operator seeking
24 -- opposing the use of an unorthodox well location in this
25 proximity to a coal gas spacing unit?

1 A I believe these circumstances are
2 unique. It's the first that I've been acquainted with.

3 MR. KELLAHIN: No further
4 questions.

5 MR. STOGNER: Any other
6 questions of this witness?

7 MR. LOPEZ: Mr. Examiner, yes,
8 please.

9
10 RECROSS EXAMINATION

11 BY MR. LOPEZ:

12 Q Mr. Alexander, does Meridian own any
13 acreage in Section 10?

14 A Our records indicate that we do not own
15 any acreage in Section 10.

16 Q Is that Meridian's objection to Rich-
17 mond's proposed location in the northwest quarter -- I
18 mean, yeah, the northwest quarter of Section 10, and yet
19 you have no acreage, as I understood your earlier testimony
20 in the east half of Section 9, either.

21 A Yes, sir, we're concerned about the pat-
22 tern that's being presented and would have to be followed
23 in some regard, depending upon how the Commission rules on
24 this application.

25 Q Addressing your concern for patterns,

1 what is your projection with respect to the remaining pro-
2 ration unit patterns for the remaining part of Section 9
3 and Section 10, if your application is granted, which would
4 take out the southwest quarter of 9?

5 A I would expect that you would use the
6 Dakota, existing Dakota spacing units to develop the Fruit-
7 land coal.

8 Q And I don't know what they are, do you?

9 A Yes, sir. We covered two of them, I can
10 go back over them if you would like.

11 Q Well, just with respect to Section 9 and
12 Section 10.

13 A The acreage that would not be dedicated
14 to the -- to our proposal for the Allison No. 1-35 Well in
15 Section 9, one of the spacing units, if you followed the
16 Dakota format, would include the west half of the southeast
17 quarter, and the remainder of the north half of Section 9.

18 Q And what would that eliminate?

19 A You would have in a unit adjoining that
20 to the east, you would have the east half of the southeast
21 quarter of Section 9, together with the north half of the
22 southwest quarter of 10; the southwest quarter of the
23 southwest quarter of 10; the north, what is left of the
24 northwest quarter of 10, and Lot 2, which is located over
25 in the east half of 10 at the top.

1 Q And so we would continue with nonstand-
2 ard proration units across the northern tier of sections.

3 A Yes, sir, that's our proposal.

4 Q And it could result, as in the case at
5 bar, that there would be no wells necessarily drilled in
6 the northeast quarters as would be the case with regard to
7 Section 10.

8 A Are you saying that there will not be
9 any wells drilled or that it's a possibility?

10 Q That it could -- that it's a possibil-
11 ity.

12 A I see that as a possibility.

13 Q Well, that is actually occurring in
14 Section 8, is it not?

15 A That acreage would be dedicated to one
16 of the two wells that are there, including the proposed 135
17 Well, so it would participate in a well.

18 Q It would participate in a well but there
19 would be no well actually drilled in the northeast quarter.

20 A No, sir.

21 MR. LOPEZ: No further ques-
22 tions.

23 MR. STOGNER: Thank you. Are
24 there any other questions of this witness?

25 He may be excused.

1 Mr. Kellahin?
2 MR. KELLAHIN: Call at this
3 time Mr. John Caldwell.
4 Mr. Caldwell is a reservoir
5 engineer with Meridian Oil, Inc.
6
7 JOHN CALDWELL,
8 being called as a witness and being duly sworn upon his
9 oath, testified as follows, to-wit:
10
11 DIRECT EXAMINATION
12 BY MR. KELLAHIN:
13 Q Mr. Caldwell, would you please state
14 your name and occupation?
15 A My name is John Caldwell, III. I'm
16 presently employed as Regional Reservoir Engineer for
17 Meridian Oil, Incorporated, in Farmington, New Mexico.
18 Q On prior occasions have you testified
19 and qualified as an expert reservoir engineer before the
20 Division in hearings involving Fruitland coal gas wells?
21 A Yes, sir, I have.
22 MR. KELLAHIN: We tender Mr.
23 Caldwell as an expert reservoir engineer.
24 MR. LOPEZ: No objection.
25 MR. STOGNER: Mr. Caldwell is

1 so qualified.

2 Q Mr. Caldwell, let me direct your atten-
3 tion first of all, sir, to Exhibit Number Eight, and let's
4 fold out the display.

5 Is this a map that you've caused to be
6 prepared, Mr. Caldwell?

7 A Yes, sir, it is.

8 Q And what does it show you?

9 A Exhibit Eight purports to show a net
10 isopach map of the Fruitland coal, comprising approxi-
11 mately the top two sections along the New Mexico/Colorado
12 border and the southernmost row of sections on the Colorado
13 side surrounding the area in question, which is Section 9,
14 I believe, of Township 32 North, Range 6 West.

15 Q Let's use this as a point at which to
16 discuss possible solutions with regards to the various in-
17 terests that are in competition today, Mr. Caldwell.

18 We have the Allison 135, which Meridian
19 has proposed in the southeast of the southwest.

20 A Yes, sir.

21 Q And we have Richmond Petroleum proposing
22 either use the pad or to re-enter the Pictured Cliff well
23 in the southwest of the northwest.

24 A That's correct.

25 Q Forgetting for a moment the nonstandard

1 unit stuff, in terms of appropriate well spacing and where
2 you put the well, where would you as a reservoir engineer
3 with expertise in coal gas production put the wells in
4 Section 9?

5 A Well, based on my experience, I guess,
6 in the existing drainage patterns in the Fruitland coal, I
7 think the appropriate way to develop a resource like the
8 Fruitland coal in this area is southwest/northeast, as
9 dictated by the appropriate field rules.

10 Q If the well is drilled in the southwest
11 of 9, the Allison 135, where then would you propose that
12 the second well be drilled in the section?

13 A To accommodate as best we can the radial
14 flow patterns anticipated under an idealistic case for the
15 coal with the rectangular spacing units under 320-acre
16 spacing, the optimum location for appropriate drainage
17 would be in the northeast quarter of Section 9.

18 Q What is your objection to utilizing the
19 Pictured Cliff well, the location of the Pictured Cliff
20 well, approximately 900 feet from that western boundary of
21 Section 9, what's your objection to utilizing that as the
22 point from which you drain and develop the reserves in Sec-
23 tion 9?

24 A I think the location picked by the -- as
25 indicated by the Pictured Cliff well in the northwest

1 quarter of Section 9 is inappropriate due to the fact that
2 you're not efficiently and economically draining the re-
3 serves underneath -- underlying the northeast quarter of
4 Section 9, and in fact, you're on effective 160-acre
5 spacing in competition in the west half.

6 Q What, in your opinion, is the likely
7 drainage pattern for a well located as proposed in close
8 proximity to the Pictured Cliff well?

9 A Violation of correlative rights with the
10 Allison Unit.

11 Q In what regard?

12 A Well, assuming that the coal is a frac-
13 tured reservoir, which to the best of my knowledge is prob-
14 ably the most accurate description, the best assumption
15 that we can make, not knowing otherwise, is radial flow. A
16 simple bubble map would show you that based on their loca-
17 tion in the northwest quarter, there'd be violation of
18 correlative rights in the radial flow from the Allison Unit
19 much earlier than there would ever be appropriate drainage
20 in the northeast quarter of Section 9.

21 Q Let's assume for sake of discussion, Mr.
22 Stovall's proposal to you. Mr. Stovall was proposing that
23 in Section 8 you come up with a different solution whereby
24 you develop that other than as been suggested. All right?
25 What are your alternative choices for development of Sec-

1 tion 8?

2 A My recommended alternative for Section 8
3 would be to reconfigure the Allison Unit 133 and comprise a
4 west half Section 8/east half Section 8 standup proration
5 units and drilling the Allison 134 as currently indicated
6 there in the southwest quarter, drilling a well in the
7 northeast quarter within the confines of the Allison Unit;
8 drilling the Allison 135 in Section 9; and drilling a well
9 in the northeast quarter of Section 9.

10 Q What's the benefit of doing that, Mr.
11 Caldwell?

12 A Consistency of pattern associated, again
13 with radial flow and rectangular drilling and spacing
14 units.

15 Q Do you have an opinion as a reservoir
16 engineer as to whether you can use a surface location in
17 the southwest quarter of 9 and have a standard bottom hole
18 location underneath the Navajo Lake in the northeast quar-
19 ter there?

20 A Yes, sir, I think it's technically
21 feasible.

22 Q Describe in a general way how that might
23 be accomplished.

24 A We have a well currently right off the
25 bottom edge of this map in the southwest quarter of Section

1 23 in the 32-5 Unit, which we approached the Commission and
2 got an approved order for a horizontal pilot. What we did
3 with that particular well was deviate the wellbore 1600
4 feet, of which the last 1100 feet of it was actually in the
5 coal seam, with relatively few problems associated with
6 drilling and completing the well.

7 Preliminary indications are if you were
8 to drill a well from either the Pictured Cliff location in
9 the northwest quarter or the Allison 135 Well pad in the
10 southwest quarter, you could deviate a wellbore within
11 those tolerances, 1500 to 2500 feet, reaching a target in
12 the northeast quarter of Section 9 and it would be at the
13 operator's discretion, I would suppose, as to whether or
14 not you wanted to retain a horizontal lateral for some dis-
15 tance or whether you wanted to just cut the objective zone
16 within the target.

17 Q Is the problem of how to obtain coal gas
18 production underneath Navajo Lake confined to Section 9?

19 A Certainly not.

20 Q This problem exists all throughout the
21 lake doesn't it?

22 A That's right.

23 Q Have -- have -- are you aware of any of
24 the coal gas wells, either by Meridian or any other oper-
25 ator, that have been approved at unorthodox locations in

1 the face of objection by an offsetting operator?

2 A Yes, sir.

3 Q Have those been penalized?

4 A No, sir, the particular case I'm think-
5 ing about they are not.

6 Q Which one are you thinking about?

7 A I'm thinking about the 30 and 6 Unit No.
8 406-R.

9 Q All right. Other than the 30 and 6
10 406-R, are there any other cases that you're aware of in
11 the Fruitland coal basin in which there was a well drilled
12 in the wrong quarter section over the objection of an off-
13 set operator that was approved?

14 A None that I can think of.

15 Q The 30 and 6 R was a replacement well,
16 was it not?

17 A That's correct.

18 Q All right, are those facts similar to
19 the facts before you in Section 9?

20 A No, they're not. That well was within
21 the confines of a unit. All ownership was common, and, in
22 fact, we moved away from the unit boundary almost to the
23 center of the 640-acre section.

24 Q If the Commission approves the location
25 of the well in the north half of 9 and uses a location

1 close to this Pictured Cliff well, and I'm simply taking it
2 out of Mr. Bruce's letter, it's the 900 feet from the west
3 line and -- and an appropriate distance --

4 A 1800 or thereabouts from the north?

5 Q Yeah, from the north, should that be ap-
6 proved without a penalty, in your opinion?

7 A No, sir.

8 Q How would you propose to balance the
9 equities and the correlative rights of the various parties
10 with a penalty?

11 A Well, if this were a prorated pool, I
12 would say that an arithmetic average based on some type of
13 distance factor from a northeast location to a northwest
14 location would be appropriate.

15 Q Not a prorated pool, Mr. Caldwell.

16 A It's not a prorated pool and I've
17 wrestled with an appropriate way to efficiently and econ-
18 omically drain the reserves underlying, in my mind, the
19 northeast quarter from that particular wellbore, and I
20 can't come up with an equitable solution.

21 Q Is the proposed Richmond Petroleum Well
22 at the unorthodox location, is that in your opinion as a
23 reservoir engineer a necessary well?

24 A No, sir, it's not.

25 Q Why not?

1 A Our opinions, my opinion of the proper
2 way to develop a pool such as this where thicknesses are
3 relatively constant, performance of the wells would typi-
4 cally be relatively constant, would be to maximize your
5 development of the resource through a consistent pattern,
6 which in my mind has been determined by the Fruitland coal
7 pool rules as northeast/southwest.

8 This particular well, if in fact we re-
9 configure Section 8 to comply with, say, standup units,
10 where most of the ownership is within the Allison Unit, you
11 would end up with a well in the northeast quarter of Sec-
12 tion 8 and a well in the northwest quarter of Section 9
13 would be inappropriate, inefficient, and I wouldn't think
14 -- think it would be necessary.

15 Q You're a reservoir engineer with as much
16 knowledge as anybody about this specific area. What is
17 your recommendation to the examiner about what he does with
18 this?

19 A I would recommend, particularly finding
20 out this afternoon that the Allison 134, a drilling and
21 spacing unit within the confines of the unit has not been
22 approved, that we reconfigure Section 8, providing for a
23 well half Section 8, east half Section 8, approximately
24 280-acre drilling and spacing units; form a west half/east
25 half Section 9 configuration, again approximately 278 to

1 280 acres per unit, and continue the pattern from this
2 point forward further east; drill an effective well, then,
3 in the northeast quarter of Section 8 and in the northwest
4 quarter of Section 9.

5 Q And how would you accomplish that, the
6 well in the northeast of 9?

7 A Utilizing a surface location either in
8 Colorado, the northwest quarter of Section 9 and the
9 southwest quarter of Section 9, or perhaps even the north-
10 west quarter of Section 10.

11 Q Let me direct your attention, Mr. Cald-
12 well, to the information behind Exhibit Number Six in the
13 Meridian exhibit book.

14 Have you testified on prior occasions
15 before the examiners of the Division with regards to how to
16 analyze and calculate and reach conclusions about appro-
17 priate risk factor penalties for the Basin Fruitland coal
18 gas wells?

19 A Yes, sir, I have.

20 Q Have you done so for this case?

21 A For a risk penalty, etcetera?

22 Q Yes, sir, for the Allison 135 Well?

23 A No, sir, I have not.

24 Q Let's look at what's shown on the 135
25 exhibit book, if we look behind Exhibit Number Six. Do you

1 see some information tabulated, captioned Risk Penalty
2 Analysis? Are you familiar with this methodology for
3 calculating a risk factor penalty?

4 A Yes, sir, I am.

5 Q All right. Was this prepared under your
6 direction or prepared by you?

7 A Yes, sir, it was.

8 Q Describe for us your opinion as to what
9 the Examiner should do with regards to a risk factor pen-
10 alty for a Fruitland coal gas well in Section 9, as we
11 propose for the Allison 135 Well.

12 A Typically what we have presented to the
13 Commission in the previous 22 or 23 poolings that we've
14 done, has been to try to assign risk as appropriate based
15 on some significant factors that we feel dictate perfor-
16 mance, or dictate the risk that we feel is necessary to
17 drill a well, and we've broken them up in the Allison 135,
18 Exhibit Six, to geologic risk or geological risk, reser-
19 voir risk, and operational risk.

20 The risk penalties associated with each
21 of those three major parameters are indicated on the right-
22 hand side of the exhibit.

23 You could theoretically combine the
24 geologic risk and reservoir risk into one major risk compo-
25 nent and then separate as we did in, I believe, the Rich-

1 mond case's testimony, the operational risk into yet a
2 third.

3 In the coal in the Allison Unit Area
4 that we're talking about, we have drilled approximately 33
5 wells, 34 wells within the Allison Unit and several out-
6 side the unit. At this point we have not lost a well.

7 Again, that's maybe due to the success of our drilling en-
8 gineers and the things that we've learned in drilling 300
9 and some odd wells, and we still feel that there's some
10 risk associated with that operationally in picking a com-
11 pletion method and picking the appropriate drilling method.

12 Moving on to the geologic and reservoir
13 risk, I would agree with Jim Adams that the majority of the
14 risk associated with drilling this particular well is going
15 to be in the geologic/reservoir risk category.

16 I'd have to -- I would be remiss if I
17 didn't update Exhibit Eight. There are two wells that
18 should have been included on that exhibit that have been
19 drilled that are not indicated on there, the Allison Unit
20 No. 110, located in the northwest quarter, approximately,
21 of Section 17, and the Allison 100, located in the south-
22 west quarter of Section 16.

23 Also, we didn't catch this error until
24 yesterday, but the Allison 133 Well is not located in the
25 northeast of the north -- I'm sorry, the northwest of the

1 northeast. It's actually located northeast northeast.

2 For the Commission's information, I have
3 some gauges of those four wells, the Allison 133, the Alli-
4 son 134, the Allison 110, and the Allison 100.

5 The Allison 100, our typical procedure
6 is to open hole complete these wells and to gauge them
7 using a field gauge, a blooie line, before we move the rig
8 off. The PO gauge on the Allison 100 Well, located in the
9 southwest quarter of Section 16, was 101 MCF a day. We
10 have since tied the well into the line and it is currently
11 making nothing.

12 The Allison 110, a similar type comple-
13 tion method, a 217 MCF per day. We've not tied that well
14 in at this point.

15 The Allison 133, is 217 MCF per day,
16 also. I've not been out on the rig floor but I think it's
17 one ounce increments on the field gauge.

18 The Allison 134 indicated a PO gauge of
19 344 MCF per day.

20 My purpose in going through that data
21 for you is to show you the variability within the coal and
22 also the variability associated with getting a relatively
23 economic sounding PO gauge, then connecting the well into a
24 line and not being able to deliver that type of volume to
25 it.

1 Based on those considerations, we've
2 testified numerous times that the thickness of the coal
3 isn't the determining factor. All the other associated
4 parameters of reservoir risk are what really determines
5 production and we feel there's enough of that variability
6 in this area to drive us to the 140 percent total risk
7 penalty associated with it.

8 I guess in conclusion our summary of the
9 risk analysis would be left to the discretion of the Com-
10 mission like it has been in the previous cases.

11 MR. KELLAHIN: That concludes
12 my examination of Mr. Caldwell.

13 We, also, Mr. Examiner, would
14 move the introduction of Exhibit Nine, which is our certi-
15 ficate of mailing over my signature, which shows the return
16 receipts, mailing sent to all the parties to be affected by
17 our proposed case.

18 We would move the introduction
19 of Exhibits Six, Eight and Nine at this point.

20 MR. STOGNER: Are there any
21 objections?

22 MR. LOPEZ: No, sir.

23 MR. STOGNER: Exhibits Six,
24 Eight and Nine will be admitted into evidence at this time.

25 Mr. Lopez, your witness.

CROSS EXAMINATION

BY MR. LOPEZ:

Q What control points have you used, Mr. Caldwell, with respect to preparing your isopach map, and I'm particularly interested in -- with respect to the area included in Sections 9, 10, 15, 16, and the Colorado Sections 23 and 24?

A Well, what we have, Meridian has a computerized data base where we've mapped the entire basin, and typically what we've done in the Fruitland Coal, and typically what we've done is we've picked representative log sections on an increasing or decreasing density basis based on our particular well control on that point.

What you see in front of you, then, is a blowup on a CAD CAM type system of this particular area, and what happens, fortunately or unfortunately, is that the closest contour line is the closed 20-foot thickness line that you see centered in Section 7. Now there are some -- some 10-foot contour lines off the map and some 30-foot lines over in the far western side of the map, but I don't even know what the total control is for the data base we have. I'd say thousands of wells. We've worked on it approximately two years.

Q Now, I believe you testified that in an

1 idealistic case the pool rules with respect to the Fruit-
2 land coal, would be best followed; that is, a well in the
3 southwest and northeast quarter sections of each section.

4 Would you agree with me that this may
5 not be an idealistic case, particularly based on the topo-
6 graphy?

7 A I guess I would agree that the reser-
8 voir performance would follow pretty similarly to the
9 idealistic case. The topography would be a surface condi-
10 tion.

11 Q In drilling directional wells, does
12 Meridian consider the economics of the situation?

13 A Most certainly.

14 Q Would you in this instance recommend a
15 directionally drilled well from the locations you've sug-
16 gested to your management if you were trying to drill a
17 well in the northwest quarter -- from the northeast quarter
18 of Section 9?

19 A My group evaluated the McIlvain farmout
20 terms in January of this year and we recommended no, we did
21 not want to take the farmout for reasons including timing.
22 At that point economic concerns that we had about whether
23 we could drill those wells based on the data set that we
24 had eight or nine months ago. We've since tied in about 70
25 or 80 wells.

1 My decision now would have to be predi-
2 cated on a new analysis.

3 Q Would it change?

4 A I don't know, I haven't done the ana-
5 lysis.

6 Q I notice that you haven't followed an
7 idealistic pattern with respect to the location of wells in
8 the northern tier of sections. Is there any reason for
9 that?

10 A Well, there's some inertia associated
11 with the Mesaverde-Dakota proration units. I think probably
12 the Allison 124 and the 125 would be the two short sec-
13 tions that may not follow that.

14 Q Isn't it possible if you were to adopt
15 Richmond's proposed settlement of dividing Section 9 in
16 two and including your acreage in the east half and the
17 northeast quarter of Section 8, to form two approximately
18 equal sections of 258 acres each -- I mean 358 acres each,
19 that two standard proration units could be drilled and the
20 northeast quarter could be drained by a well located in the
21 northwest quarter of Section 9?

22 A I guess I remain unconvinced that a well
23 located 900 feet out of the corner of Section 2 -- I'm
24 sorry, of Section 9, would be appropriate to drain the
25 northeast quarter of Section 9. I'm referring to the Pic-

1 tured Cliff re-entry project.

2 I think a much better solution would be
3 to accelerate the dewatering process and go to smaller than
4 320-acre units rather than larger, particularly if we're
5 anticipating competition from the Colorado side of the
6 border.

7 I think 280-acre sections -- or 280-acre
8 units would be a better solution.

9 MR. LOPEZ: I have no further
10 questions.

11 MR. STOGNER; Thank you, Mr.
12 Lopez.

13 Mr. Kellahin, any redirect?

14 MR. KELLAHIN: No, sir.

15

16 CROSS EXAMINATION

17 BY MR. STOGNER:

18 Q Mr. Caldwell, you referred to a direc-
19 tional drilled well which was off the map down to the
20 south, that was a horizontal pilot project?

21 A Yes, sir.

22 Q How much more money did that cost,
23 roughly, as compared to a regular vertical well?

24 A I'm -- I don't have those figures in
25 front of me, unfortunately. I believe --

1 Q Was it somewhat more expensive?

2 A I believe our AFE was around \$800,000
3 for that well.

4 Q And is this well producing presently?

5 A So it was economical?

6 A Well, that's always a tough call on the
7 coal, but right now we're encouraged.

8 Q Okay.

9 A It's making gas.

10 Q Now I understand that you -- this is one
11 of the suggestions you have made, Richmond directionally
12 drill a well. Now is the economics in this particular
13 area, after all you've done quite a bit of extensive re-
14 search in this, would it be feasible to do, or are the
15 economics about the same between your horizontal well to
16 the south and this area up here?

17 A I would think, and again, as I answered
18 the opposition's question there, I haven't done a re-anal-
19 ysis based on the Allison wells and the 32-5 Unit wells
20 that we have actually physically connected to the line and
21 gotten 30 to 60 days worth of data on.

22 One of the things that Meridian uses as
23 a determinant to drill wells is surface expression of
24 limits, which can be gotten from Landsat photography, as
25 well as topo maps.

1 One of the nice things, if you will,
2 about this particular area, the Allison Unit is -- you're
3 right on the lake, indicating some rather large surface
4 expressions of lineament. I would think the northeast
5 quarter would be more advantageous for a well based on my
6 knowledge than the northwest quarter and in fact probably
7 better than a location within the Allison Unit, and that's
8 a subjective judgment. I've not done a new analysis.

9 Based on that I would -- I would, I
10 guess, hesitate to answer whether or not the whole pro-
11 ject would be economic. Obviously we chose not to take the
12 farmout six or seven months ago.

13 Q But you are suggesting that they take
14 the expense of the directional drilling for the sake of
15 standardizing the pattern out here?

16 A Or for the protection of correlative
17 rights as concerns the Allison Unit.

18 Q Uh-huh.

19 A As you know, we -- we did our direction-
20 al wells within the unit confines, two out of the three
21 wells we did.

22 Q Now, let's talk about the pattern out
23 there. We have northwest -- I mean, I'm sorry -- north-
24 east/southwest pattern.

25 A Okay.

1 Q And with what I heard here today, you
2 think we should definitely stick to that in this area. Is
3 that also basinwide that we should definitely stick to that
4 rule?

5 A Basinwide.

6 Q After all it is a pool. Okay, I take
7 that as a yes. Was that a yes or no?

8 A I'm sorry, yes, sir.

9 Q Okay. Now sometimes topography does not
10 allow us to drill or allow, I'm sorry, allow the operator
11 to drill at a standard location, and has to be moved to an
12 unorthodox location.

13 To keep with this pattern, scheme,
14 should it be feasible, directional drilling definitely be
15 considered on all of these topography situations that pop
16 up in the northwest?

17 A We have, I believe, on the last three
18 that we've presented to the Commission addressed the
19 directional drilling side of that issue.

20 Q Okay. I'll take that as a yes.

21 A That's correct.

22 Q Okay.

23 A And I think it ought to be considered.

24 MR. STOVALL: May I ask a
25 follow-up question to that, Mr. Examiner?

1 MR. STOGNER: Please do, Mr.
2 Stovall.

3

4

CROSS EXAMINATION

5

BY MR. STOVALL:

6

7

8

9

Q If we're taking a well in the nonstand-
ard spacing pattern, that is a well in the northeast or
southwest, it's an unorthodox location, is that not cor-
rect?

10

11

A I'm sorry, I didn't understand your
question.

12

13

14

Q If -- a well in the northeast or the
southwest quarter section is an unorthodox location, is
that not correct?

15

16

17

A Northwest or the southeast?

18

19

20

Q Excuse me, northwest or southeast, yeah,

21

22

23

I'm sorry.

A Yes, that's correct.

24

25

Q We seem to have trouble with that some-
times up here.

And you're suggesting that such wells
should be directionally drilled to -- to an orthodox loca-
tion.

A I'm suggesting that that opportunity
ought to be explored and some sufficient data should be pre-

1 sented to you folks for you to make a reasonable informed
2 decision as to which way it ought to be handled.

3 Q What do you consider reasonable data?

4 A Well, the data that we've chosen to
5 present to you in the cases that we've come in front of
6 you, and I can think of three of them right now.

7 If, in fact, your economics are showing
8 that you cannot feasibly, economically drill a directional
9 well to protect your interest under there, then there ought
10 to be some sort of penalty associated with allowing a ver-
11 tical well in an advantageous position, which is exactly
12 what we're -- what we're presented with here.

13 The two cases that Meridian presented to
14 you, the 32-5 108 and the 30 and 6 No. 406-R, luckily or
15 unluckily, happen to be within a unit and a lot of those
16 correlative rights problems go away, and, in fact, in the
17 406-R, we were moving into the interior part of the unit
18 based on an eagle aerie and a cliff right by the dam, and
19 so on and so forth.

20 But we evaluated the opportunities of
21 drilling a directional well.

22 Q And chose not to.

23 A Our argument at that point was the
24 acceleration associated with what we thought would be a
25 horizontal well within the confines of the unit, would not

1 be as advantageous as the savings of the cost to the unit
2 working interest owners.

3 We felt we could drill, if successful
4 drilling a horizontal well or highly deviated well, we
5 could drill a better well deviated, due to increased sur-
6 face area and all the other things that you've heard about
7 horizontal pilot, but we chose -- I mean the well was going
8 to cost in that particular area two or three times what a
9 vertical well would do, and both of the projects would be
10 economic. Argument at that point was in the interest of
11 making the right decision for the working interest owners
12 in the 30 and 6 Unit, our recommendation to drill a verti-
13 cal well, which in fact we have.

14 Q To go back to your, I think, your ori-
15 ginal statement was to the effect that where there is a
16 correlative rights issue involved, these unorthodox wells
17 should be directionally drilled to an orthodox location, is
18 that correct?

19 A Or that economic evaluation should be
20 performed in enough detail for your benefit.

21 If in fact it cannot be supported, my
22 recommendation would be to arrive at some type of penalized
23 allowable. Different states to different things. My re-
24 commendation was in a prorated pool to use an arithmetic
25 average, similar to what Arkansas does, and maybe New

1 Mexico does, also.

2 Q Is your opinion at all affected by what
3 I believe to be the unique producing characteristics of a
4 coal well in that the water situation and potential nega-
5 tive effects of restricting production, does that have
6 any effect on those opinions at all --

7 A No.

8 Q -- as far as developing a penalty?

9 A No, not really. My -- my problem was
10 trying to arrive at something -- your allowable would be
11 300 over 2000 feet, say, as an order of magnitude, and the
12 allowable associated with that may, you know, the well may
13 make 100 MCF a day and your penalized allowable may be 10
14 MCF a day and that's not an economic venture.

15 And that's why my testimony was -- I
16 wrestled with that and I can't come up with an equitable
17 solution.

18 Q Let me ask you, if -- first to premise
19 my question, is it not true that although the coal thick-
20 ness seems to be somewhat uniform through there with some
21 variations, that the producing characteristics of differ-
22 ent wells can vary. You may get a very good well offset-
23 ting a weaker well even through the same coal thickness, is
24 that not correct?

25 A That's certainly true, based on our

1 experience.

2 Q Do you feel that if there were to be
3 some sort of penalty formula arrived at that some minimum
4 could be established based upon the theory that perhaps the
5 weaker well is probably not draining as great an area, the
6 fractures aren't there, or whatever the problem?

7 A I can certainly agree to that. Some
8 threshold Q, perhaps, that anything above that was penal-
9 ized based on some formula.

10 Q Do you have any idea what that threshold
11 might be? Do you have an opinion just --

12 A To allow an economic return on the pro-
13 ject in a vertical wellbore sense, and also to address the
14 correlative rights associated with radial drainage in a
15 competitive situation, no, I'm really not prepared to spec-
16 ulate. I --

17 Q Okay, that's an acceptable answer.

18 I believe, now correct me if your under-
19 standing is different, but I believe I heard testimony in
20 the Richmond cases that they -- if an agreement could be
21 worked out as to the proration units in this area, that
22 they would be willing to let Meridian operate.

23 A Yeah, that's correct.

24 Q Did you hear them testify as to that?

25 A Correct, they'd be using our well pad

1 and our (unclear) one of the wells, at least.

2 Q Would -- if Meridian were operating,
3 would you -- would Meridian, in your opinion, and to the
4 extent that you can speak for the company, be -- consider
5 directionally drilling to the northeast of Section 9?

6 A Not by November 1st. I don't think
7 there's any way if you started right now you could get any-
8 thing drilled by November 1st in that country, and that's
9 based on my personal and tangential interaction with the
10 folks I work with in my office, and I believe that there
11 is, in big game wintering ground they shut you down Decem-
12 ber 1st.

13 Q But you would consider directionally
14 drilling, not -- notwithstanding the time restraints, you
15 have a -- as an engineer for Meridian, you would recommend
16 a directional well, if you were the operator?

17 A I have not done the economic analysis,
18 like I mentioned, in the last six or seven months, and one
19 of the reasons that we said no to the farmout was, as I
20 mentioned, the timing, and the very onerous terms, and the
21 technological advantage that we had to prove to ourselves
22 with a directional well, which is -- the jury's still out,
23 as far as we're concerned, in the coal.

24 MR. STOVALL: I have no fur-
25 ther questions.

1 MR. STOGNER: Thank you. Are
2 there any other questions of this witness?

3 Mr. Lopez?
4

5 RECROSS EXAMINATION

6 BY MR. LOPEZ:

7 Q What about a vertical well? I think --
8 Mr. Caldwell was addressing a directional well and my ques-
9 tion was what would Meridian's approach be to a vertical
10 well as proposed by Richmond in the northwest quarter of
11 Section 9?

12 A I'd stand by my original statement. If
13 you started today on an APD for the northwest quarter, I
14 don't think there's any way you could get the well drilled
15 by November 1st.

16 Q But assuming much of the APD work was
17 already underway?

18 A We've had a lot of APD work underway for
19 a year in this country and were this far away for a year.
20 I guess my personal feeling is unless you have the APD in
21 hand it's hard to project when you're going to get it.

22 Q I'd like you to explain to me, too, Mr.
23 Caldwell, in the event that Richmond's proposed compromise
24 were adopted by the Commission, how would Meridian's cor-
25 relative rights be jeopardized with a well in the northwest

1 and the southwest of Section 9?

2 A I guess I'm unsure as to what you're
3 spacing or drilling and spacing units would be. Would they
4 be with or without any acreage in Section 8?

5 Q They would include the acreage the
6 acreage in Section 8.

7 A Therefor, if they included the acreage
8 in Section 8, there would be no well drilled in the north-
9 east quarter of Section 8.

10 Q Well, under -- unless we have this re-
11 configuration of Section 8, as you just testified to, but
12 has not been on paper before, just your testimony, there's
13 not going to be a well in the northeast quarter of Section
14 8 to begin with.

15 A I guess one of the beauties of being the
16 operator of the Allison Unit is you could drill a well, a
17 second well on a 320, maybe, or reconfigure the unit to not
18 affect the ownership of wells already drilled, as is the
19 case with the Allison 134 if you were to go to an east
20 half/west half unit.

21 Obviously it poses problems with getting
22 the Allison 135 drilled, but I would think the appropriate
23 place for a well in Section 8 would be the northeast
24 quarter -- I'm sorry, to protect that acreage would be the
25 northeast quarter, and therefor, if you were to drill a

1 well, to answer your original question, in the northwest
2 quarter of Section 9, the Allison Unit boundary is 900 feet
3 away from both borders from where you're proposing to drill
4 a well and that would -- in my mind, it may take 90 days or
5 it may 300 days, but the correlative rights would be vio-
6 lated within the Allison Unit by that well.

7 MR. STOGNER: Any other ques-
8 tions of this witness?

9 MR. KELLAHIN No, sir.

10 MR. STOGNER: If not, he may
11 be excused.

12 Anything further, Mr. Kella-
13 hin?

14 MR. KELLAHIN: No further wit-
15 nesses.

16 MR. STOGNER: Mr. Lopez?

17 In light of the majority of
18 these cases being continued to the Examiner's Hearing
19 scheduled for October 4th, 1989, I'm going to leave the
20 case file open on all of these cases so they may be taken
21 under consolidation and they are in the same area.

22 At this time are we ready for
23 any closing remarks that might be appropriate at this
24 point?

25 MR. KELLAHIN: Well, a few

1 comments, Mr. Examiner.

2 MR. STOGNER: Mr. Kellahin,
3 you may go first. Mr. Lopez, you may be last.

4 MR. KELLAHIN: I know it's
5 late in the day and you have a docket to finish and you've
6 heard this case for a number of hours.

7 There are a few points I'd
8 like to share with you that have impressed me about this
9 case and one is that the predicament that Richmond Petro-
10 leum has put themselves in is of their own doing. The
11 emergency they have generated for themselves about meeting
12 what be characterized as onerous farmout obligations is not
13 your crisis. They accepted those terms knowing full well
14 the lake existed. They accepted those terms realizing that
15 they had lease expiration problems. And they now want to
16 generate a solution. The solution is one they propose
17 which will violate the correlative rights of Meridian.
18 This case is not a question of orientation of spacing
19 units, it's a question of having a well in the wrong place,
20 and the Pictured Cliff well is in the wrong place.

21 It's Richmond Petroleum's ob-
22 ligation, absolute burden of proof, to satisfy you that
23 they have given you sufficient technical information, re-
24 servoir calculations, gas recovery information, economic
25 analysis, that absolutely convince you that they have ex-

1 hausted the opportunity to directionally drill to a bottom
2 hole location in the northeast quarter. And they have not
3 done that. They have not given you an AFE on what it's
4 going to cost to directionally this specific well. They
5 have not given you a -- a directional survey profile to
6 show that it's not feasible to do it.

7 Hopefully, with some of the
8 technical data they're going to provide us, we can start
9 doing some of the calculations that you were asking Mr.
10 Caldwell if he could perform, and with that data we'll make
11 those calculations and see if it's feasible economically,
12 but that's -- that's not our burden; that's theirs and they
13 haven't satisfied that, and it really doesn't make any
14 matter as to whether you lay them up or stand them down,
15 it's what you do with the Pictured Cliff well, and we
16 think they have not sustained their burden of proof of con-
17 vincing you that they've got to have an unorthodox loca-
18 tion.

19 If you disagree with me and
20 believe that that's the only way we're going to do it for
21 this section, you're going to have to construct a penalty
22 and as best I can remember, this is the first case in which
23 an operator in the face of opposition is proposing to be
24 some 2640 feet off the proper location. They're some 2600
25 feet too close to the west line of their spacing unit, and

1 you've got to figure out some way to make that penalty
2 fair. Mr. Caldwell says it's an unnecessary well drilled
3 at an improper location. If you ignore his opinion and
4 disregard his conclusions and allow the location, then
5 you're going to have to construct some type of penalty that
6 is fair to our interest and I just don't know quite how to
7 do it. We've struggled with it. I think it is not the
8 proper solution. I think the applicant, Richmond Petro-
9 leum, needs to be required to come before you with more
10 data and if they don't produce it, then I don't think you
11 have any other choice than what you are faced with now, and
12 that is to deny their application.

13 And their technical presenta-
14 tion, I think, is characteristic of the way the entire
15 process has gone. We were never given an AFE about the
16 wells. We weren't sure of the locations. The thing
17 changes every time we have a conversation about what they
18 want or what they propose. I don't know that they've told
19 you today what their overhead rates are that they propose
20 to operate under. I think it's a mess, Mr. Examiner, and
21 maybe, perhaps, the only solution is to deny this kind of
22 application as a signal to the parties that if they're
23 going to make a deal like this, they buy it as is, and they
24 came into this understanding the predicament they were in
25 and we don't have to go create a novel, unique solution in

1 order to bail them out of something that they walked into
2 with their eyes open.

3 Thank you.

4 MR. STOGNER: Thank you, Mr.
5 Kellahin.

6 Mr. Lopez?

7 MR. LOPEZ: Mr. Stogner, I
8 believe Meridian has thrown a red herring. I agree that
9 the timing of the expiration of the farmout is not your
10 concern or your crisis.

11 We were just hoping for some
12 sort of expeditious resolution of the problem.

13 To seek unorthodox well loca-
14 tions based on topographical requirements and conditions is
15 not uncommon before the Commission. It's done with fair
16 regularity.

17 The only opposition that --
18 the only basis for Meridian's not agreeing to our proposed
19 settlement is either on the basis of convenience because it
20 doesn't conform with their unit boundary, or other conven-
21 ience, or because Meridian wants to control the whole de-
22 velopment of the Fruitland coal and the San Juan Basin.

23 It just seems patently unfair.
24 It seems to us that a laydown unit so that all the interest
25 owners in Section 9 can participate in two wells that would

1 efficiently and effectively drain that unit, including the
2 only location in the west half of Section 10 is the obvious
3 way to go.

4 Meridian has no interest in
5 Section 10 or hasn't indicated any interest to the east of
6 Section 10 that would affect the location of those three
7 wells.

8 It is also clear that they
9 never intended to drill a well in the northeast quarter of
10 Section 8 because they've based their unorthodox or non-
11 standard unit to include that acreage with a well to be
12 drilled in the southwest quarter of Section 9.

13 It seems to us that a laydown
14 unit, to include their east half of 8 acreage is the proper
15 and only way to go and I think we showed that clearly be-
16 fore you.

17 MR. STOGNER: Thank you, Mr.
18 Lopez.

19 Is there anything further in
20 any of these four cases at this point?

21 Before we adjourn these cases
22 today, Mr. Lopez, I do not have the overhead charges from
23 Richmond on the proposed well. I will suggest that you
24 have to have a witness prepared by the October 4th hearing
25 when we hear this case, to supply that information.

1 MR. LOPEZ: I will. That was
2 an oversight on my part.

3 MR. STOGNER: Thank you.
4 Anything further in this case at this -- these cases at
5 this time?

6 These cases are adjourned.

7

8 (Hearing concluded.)

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

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 Case Nos. 9744, 9745, 9746, 9750
heard by me on 6 September 1989.

Michael E. Hopper, Examiner
Oil Conservation Division