

NEW MEXICO OIL CONSERVATION DIVISION

STATE LAND OFFICE BUILDING

STATE OF NEW MEXICO

CASE NO. 10628 and 10629

Consolidated Cases

IN THE MATTER OF:

The Application of Yates Petroleum Corporation, for Compulsory Pooling and an Unorthodox Gas Well Location, Eddy County, New Mexico.

The Application of Santa Fe Energy Operating Partners, L.P., for Compulsory Pooling and an Unorthodox Gas Well Location, Eddy County, New Mexico.

BEFORE:

MICHAEL E. STOGNER

Hearing Examiner

State Land Office Building

December 18, 1992

REPORTED BY:

CARLA DIANE RODRIGUEZ
Certified Court Reporter
for the State of New Mexico



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1 EXAMINER STOGNER: This hearing will
2 come to order. Call next case, No. 10629, which
3 is the application to Santa Fe Energy Operating
4 Partners, L.P., for compulsory pooling and an
5 unorthodox gas well location, Eddy County, New
6 Mexico.

7 At this time I'll call for
8 appearances.

9 MR. BRUCE: Mr. Examiner, Jim Bruce
10 from the Hinkle Law Firm in Santa Fe,
11 representing the Applicant. I have three
12 witnesses to be sworn.

13 MR. CARR: May it please the Examiner,
14 my name is William F. Carr with the Santa Fe law
15 firm, Campbell, Carr, Berge & Sheridan. I
16 represent Yates Petroleum Corporation and I have
17 three witnesses.

18 There's a companion case on this
19 docket, Case 10628, which is the application to
20 Yates Petroleum Corporation seeking an order
21 approving the same acreage and approving another
22 unorthodox well location, "another" being other
23 than the one proposed by Santa Fe. Accordingly,
24 we would request that the cases be consolidated
25 for purposes of hearing.

1 EXAMINER STOGNER: Mr. Bruce, do you
2 concur?

3 MR. BRUCE: Yes.

4 EXAMINER STOGNER: At this time I'll
5 call the concurrent case, No. 10628, which is the
6 application of Yates Petroleum Corporation for
7 compulsory pooling and an unorthodox gas well
8 location, in Eddy County, New Mexico.

9 Do you wish to enter your appearance in
10 that one, Mr. Bruce?

11 MR. BRUCE: Yes, sir.

12 EXAMINER STOGNER: And, Mr. Carr, do
13 you have any witnesses?

14 MR. CARR: Yes, sir. I have three
15 witnesses.

16 EXAMINER STOGNER: Are there any other
17 appearances in either Case 10627 or 10628?

18 Will the witnesses please stand to be
19 sworn in.

20 [And the witnesses were duly sworn.]

21 EXAMINER STOGNER: Mr. Bruce, I
22 understand that you will be presenting your
23 testimony or your witnesses first?

24 MR. BRUCE: That's correct. One
25 preliminary matter, Mr. Examiner. Santa Fe's

1 original well location was 660 feet from the west
2 line and I believe 500 feet from the south line.
3 Santa Fe would like to amend its application to
4 move the location 204 feet from the south line.
5 The other distance remains the same.

6 I've spoken with Mr. Carr about it and
7 he has no objection to going forward, and we have
8 a waiver from the offsetting interest owner with
9 respect to this matter.

10 EXAMINER STOGNER: Okay. The location
11 would be changed to 660 from the west line, 204
12 from the south?

13 MR. BRUCE: That's correct.

14 EXAMINER STOGNER: Since that's more
15 unorthodox, we'll have to readvertise it.

16 GARY GREEN

17 Having been first duly sworn upon his oath, was
18 examined and testified as follows:

19 EXAMINATION

20 BY MR. BRUCE:

21 Q. Would you please state your name and
22 your city to residence?

23 A. My name is Gary Green. I live in
24 Midland, Texas.

25 Q. Who are you employed by and in what

1 capacity?

2 A. Santa Fe Energy as a division landman.

3 Q. Have you previously testified before
4 the Division as an expert petroleum landman?

5 A. Yes, I have.

6 Q. Are you familiar with the land matters
7 involved in this application?

8 A. Yes, I am.

9 MR. BRUCE: Mr. Examiner, I tender Mr.
10 Green as an expert landman.

11 EXAMINER STOGNER: Are there any
12 objections?

13 MR. CARR: No objection.

14 EXAMINER STOGNER: Mr. Green is so
15 qualified.

16 Q. Mr. Green, briefly, what does Santa Fe
17 seek in this case?

18 A. Santa Fe seeks to pool all to Section
19 27, Township 21 South, Range 24 East, Eddy
20 County, New Mexico, to form a unit for all pools
21 spaced on 640 acres in the west half to Section
22 27 for all pools the formation spaced on 320
23 acres.

24 Santa Fe also seeks approval for an
25 unorthodox well location for a well to be located

1 204 feet from the south line and 660 feet from
2 the west line to Section 27.

3 Q. Moving to your exhibits, what is
4 Exhibit 1?

5 A. Exhibit 1 is a 1 - 4,000 land plat.
6 The acreage colored in yellow highlights Santa
7 Fe's acreage and also indicates a six-section
8 outline to the working interest that Santa Fe,
9 Neste, and North Central currently operates
10 under. It also shows the location to Santa Fe's
11 Right Hand Canyon Federal 34 #1. It also shows
12 the proposed location to Santa Fe's Rocky Top
13 Federal Com 27 #1.

14 The other acreage in there that's
15 indicated in white, that's not colored yellow,
16 would belong to Yates.

17 Q. So Santa Fe and the Yates group are the
18 two primary landowners in this area?

19 A. Yes.

20 Q. Specifically, what parties does Santa
21 Fe seek to pool?

22 A. Santa Fe seeks to pool Yates Petroleum
23 Corporation, Yates Drilling Company, Abo
24 Petroleum Corporation and Myco Industries, who
25 own all to the south half, except for the

1 southwest quarter of the southwest quarter.

2 Santa Fe owns all to the north half and
3 the southwest to the southwest quarter, with the
4 exception of the northwest/northeast quarter.

5 Q. As to the unorthodox location portion
6 of this case, who are the offset operators or
7 lessees?

8 A. The offset operators to the south and
9 east is Santa Fe, which owns the acreage there.
10 The offset operators to the west and southwest in
11 Sections 28 and 33 is Marathon, the operator to
12 the Indian Hills Unit.

13 Q. What is Marathon's position in this
14 case?

15 A. Marathon has waived any objection to
16 Santa Fe's location. We have a waiver letter
17 which will be marked as Exhibit 2.

18 Q. Okay. Would you please discuss your
19 efforts to get the Yates group to join in the
20 proposed well?

21 A. We have been negotiating, talking to
22 Yates for almost a year, since January to 1992.
23 Originally we proposed a six-section federal
24 unit, six-section working interest unit. We have
25 gone time and time again to get their support in

1 the form to joining in some sort of unit farming
2 out.

3 Q. Is that the unit that's outlined by the
4 hatch marks on Exhibit 1?

5 A. Yes, it is.

6 Q. Was the outline of this unit based on
7 geology?

8 A. Yes, it was.

9 Q. Will Santa Fe's geologist discuss this
10 briefly later?

11 A. Yes.

12 Q. Okay, please continue. What happened
13 during the course of your discussions with Yates?

14 A. Basically we could never get a
15 commitment out of Yates. The answer was usually
16 yeah, we want to do something, but we're going to
17 have 50 percent and we're going to operate. Our
18 response usually was, "You don't own 50 percent
19 in the six sections here, and we're going to
20 operate."

21 Q. You mentioned a couple to other
22 parties, North Central and Neste, I believe.
23 What is the relationship there?

24 A. Santa Fe sold out its interest to Neste
25 and North Central, and they joined Santa Fe in a

1 six-section working interest unit and joined in
2 an operating agreement covering this area which
3 will be Exhibit 4.

4 Q. First, what is Exhibit 3?

5 A. Exhibit 3 is a letter from Neste, a
6 letter from North Central, who are the other
7 working interest owners in the six-section area,
8 basically supporting the formation of the
9 640-acre Section 27 as a unit, and also
10 supporting Santa Fe as operator.

11 Q. Had you informed Yates that Santa Fe
12 was interested in selling out its interest?

13 A. Yes, we did.

14 Q. Is Exhibit 4 the operating agreement
15 that Santa Fe has with North Central and Neste?

16 A. Yes, it is.

17 Q. Now, when was the interest sold to
18 North Central and Neste?

19 A. The interest was sold in March, April,
20 May, sometime in that area. I believe it was in
21 May.

22 Q. From that period on, what
23 correspondence or what phone calls did you have
24 with Yates?

25 A. I've had a number to telephone

1 conversations with Mr. Bullock with Yates. In
2 April, I sent Yates a letter officially proposing
3 the working interest unit, six-section working
4 interest unit, asking them to join in that unit
5 or to farm out.

6 We could never get any support to join
7 in the working interest unit. In June we asked
8 for support in the form to a farm out, option
9 farm out, in the south half to Section 27.

10 Q. Was this the result to a phone
11 discussion with Mr. Bullock?

12 A. Yes, it was. We were trying to figure
13 out some way to get Yates to participate in some
14 form or fashion. They suggested we request a
15 farm out, which we got no response to.

16 Then I had a number to telephone
17 conversations, and after we drilled the well we
18 again proposed to Yates to form a one-section
19 working interest unit covering Section 27 and
20 drill a Morrow well.

21 Q. You mentioned "after drilling the
22 well." Which well are you speaking about?

23 A. After Santa Fe drilled the initial test
24 well and prospect, which is the Right Hand Canyon
25 Federal 34 #1.

1 Q. Did Santa Fe get any support from Yates
2 for that well?

3 A. No, we did not.

4 Q. From the beginning of your discussions
5 with Yates, had Santa Fe offered to show its
6 geology to Yates?

7 A. Yes, Santa Fe offered to show its
8 geology to Yates from the very beginning, if
9 Yates would agree to participate in some form or
10 fashion, either join in the working interest unit
11 or farm out its interest.

12 Q. Did this include its geology from the
13 Right Hand Canyon well?

14 A. Yes, it did.

15 Q. You mentioned after the Right Hand
16 Canyon well was drilled, you wanted to form a
17 one-section working interest unit. What was the
18 reason for that unit?

19 A. The reason for the one-section working
20 interest unit, the spacing for the Canyon
21 Formation out there, the Upper Penn is 640 acres.

22 Q. What did the Right Hand Canyon well
23 show with respect to the Cisco Canyon?

24 A. We were unable to adequately test the
25 Cisco Canyon because to severe loss circulation.

1 Q. On the Right Hand Canyon well, what is
2 its current status?

3 A. The Right Hand Canyon well is currently
4 being completed in the Upper Morrow.

5 Q. And with respect to the one section
6 unit, did you write to Yates proposing that well?

7 A. Yes, I wrote to Yates a letter dated
8 September 11th.

9 Q. And, since that letter, have there been
10 subsequent discussions with Mr. Bullock?

11 A. Yes, there have.

12 Q. Now, to your knowledge, does Yates have
13 any new completions in the immediate area?

14 A. Yes. My understanding is that they
15 have recompleted a well in Section 17, Township
16 22 South, Range 24 East.

17 Q. Has Yates turned over the data on that
18 one?

19 A. No, they have not.

20 Q. Will your geologist be discussing that?

21 A. Yes, he will.

22 Q. In summary, Mr. Green, what has Yates'
23 position been?

24 A. I think Yates' position has always been
25 that they are not willing to participate or

1 support unless they were given a 50-percent
2 position and operatorship to the Hill Unit.
3 They've basically written us down on the initial
4 test and prospect and given us no support.

5 Q. Is your correspondence with Yates
6 marked Exhibit 5?

7 A. Yes.

8 Q. In your opinion, have you made a good
9 faith effort to obtain Yates' voluntary
10 commitment to Santa Fe's proposed well?

11 A. Yes, I believe we have. We've worked
12 on this for almost a year now.

13 Q. Is Santa Fe in any other Yates-operated
14 wells?

15 A. Yes. Over the last two or three years
16 we've participated in approximately 29 wells with
17 Yates. Yates has operated all to those wells.
18 Even though Santa Fe has had an equal or greater
19 interest in some, we've always conceded
20 operations to Yates. We just feel like it's time
21 for Santa Fe--it's Santa Fe's turn to operate.

22 Q. In this particular area, in this
23 six-section area, who is the majority working
24 interest owner?

25 A. Santa Fe would own the majority to the

1 working interest.

2 Q. Will Santa Fe's engineer discuss well
3 costs and operating charges?

4 A. Yes, he will.

5 Q. Was notice given to Yates and Marathon
6 for this hearing?

7 A. Yes, it was. It's marked Exhibit 6.

8 Q. That's your affidavit to notice with
9 the return receipts?

10 A. Yes.

11 Q. In your opinion, is the granting of
12 Santa Fe's application in the interests to
13 conservation and the prevention to waste?

14 A. Yes, it is.

15 Q. Mr. Green, were Exhibits 1 through 6
16 prepared by you or under your direction?

17 A. Yes.

18 MR. BRUCE: Mr. Examiner, I would move
19 the admission to Santa Fe's Exhibits 1 through
20 6.

21 MR. CARR: No objection.

22 EXAMINER STOGNER: Exhibits 1 through 6
23 will be admitted into evidence.

24 EXAMINER STOGNER: Mr. Carr, your
25 witness.

EXAMINATION

BY MR. CARR:

Q. Mr. Green, when did Santa Fe decide to move the well to the current location?

A. It was only decided in the last couple to weeks because to topographical reasons and geological reasons, which our geologist will discuss.

Q. Were you involved in those decisions?

A. No, I was not.

Q. Initially, Santa Fe was proposing a six-section working interest owner unit? Is that what you indicated?

A. Yes.

Q. Today, however, we're really only discussing Section 27, is that correct?

A. Yes.

Q. And in Section 27, the working interest ownership is split 50/50?

A. Yes, it is.

Q. You have everything in the north half except 40?

A. Yes.

Q. We have everything in the south half except 40?

1 A. Yes.

2 Q. You have been negotiating and working,
3 trying to put together a voluntary agreement for
4 the development of this section for now a year
5 plus?

6 A. This particular section, no. Since
7 we've drilled our well, this well was drilled in
8 July, and we have been negotiating about five
9 months on Section 27.

10 Q. The bottom line is, there's no
11 voluntary agreement for the development of this
12 section?

13 A. No, there is not.

14 Q. Your requested pooling, if I understood
15 it, is the west half unit if it's 320 spacing,
16 the entire unit if it's 640-acre spacing?

17 A. Yes, sir.

18 Q. And I guess if this should be an oil
19 well, do you know what the spacing would be out
20 here?

21 A. I think that would have to be
22 determined.

23 Q. You indicated that you proposed to
24 Yates that they participate and you would share
25 your geology with them. That would be shared

1 after they had reached an agreement or agreed to
2 participate?

3 A. After they had agreed to do one of two
4 things, either participate in the unit as a
5 working interest owner or farm out.

6 Q. The information that Yates has on the
7 Right Hand Canyon well in 34 was obtained
8 pursuant to a subpoena to the Division?

9 A. Yes, it was.

10 Q. It wasn't voluntarily provided?

11 A. No, it was not.

12 Q. There was also an effort by Santa Fe to
13 subpoena data from Yates, is that correct?

14 A. Yes, it was.

15 Q. And a portion to that subpoena was
16 quashed?

17 A. Yes, that's correct.

18 MR. CARR: That's all I have.

19 EXAMINATION

20 BY EXAMINER STOGNER:

21 Q. Exhibit No. 4, this is your proposed
22 unit agreement or has this unit agreement been
23 approved?

24 A. This is an existing working interest
25 unit, joint venture operating agreement covering

1 those six sections between Santa Fe, Neste and
2 North Central.

3 Q. Was this unit approved by the BLM?

4 A. No, it was not. It's strictly a joint
5 operating agreement working interest unit.

6 Q. We're dealing just with Section 27
7 today?

8 A. Yes, sir.

9 EXAMINER STOGNER: Mr. Carr or Mr.
10 Bruce, we need to flip over here to the list to
11 Exhibit A to that agreement. I don't see this
12 very often but when I do, I get a little
13 disturbed.

14 Paragraph 17, my last name appears as a
15 lessor. It's a very uncommon name, but I do not
16 know of anybody by the name of Leona L. Stogner,
17 irrevocable trust. This is not the acreage
18 involved in this, but I think this needs to go on
19 the record. Do you know if this name appears
20 anywhere else, Mr. Bruce?

21 MR. BRUCE: Not to my knowledge, but I
22 would ask Mr. Green.

23 THE WITNESS: No, it does not appear
24 anywhere else.

25 EXAMINER STOGNER: Mr. Carr, do you

1 have any comments or do you see any problem?

2 MR. CARR: I have no comment and no
3 problem.

4 EXAMINER STOGNER: I do not know this
5 Leona L. Stogner, but since it's not in this area
6 today, I think it just needs to be brought out.

7 You mentioned, and I'll hold off and
8 ask one of your other witnesses on the location
9 of the wells, since you did mention there was
10 topographic and geological information as to
11 that. I'll hold off until that time. I have no
12 questions to Mr. Green at this point.

13 Mr. Bruce?

14 MR. BRUCE: Just one final question,
15 Mr. Green.

16 FURTHER EXAMINATION

17 BY MR. BRUCE:

18 Q. Mr. Green, is it common to show the
19 geology or offer to show the geology after
20 someone agrees to farm out or join?

21 A. Yes.

22 MR. BRUCE: That's all I have, Mr.
23 Examiner.

24 EXAMINER STOGNER: You may be excused.
25 Mr. Bruce?

1 MR. BRUCE: Call Gene Davis to the
2 stand.

3 GENE DAVIS

4 Having been first duly sworn upon his oath, was
5 examined and testified as follows:

6 EXAMINATION

7 BY MR. BRUCE:

8 Q. Would you please state your name and
9 city to residence for the record?

10 A. My name is Gene Davis, and I live in
11 Midland, Texas.

12 Q. What is your occupation and who are you
13 employed by?

14 A. I am the geological and geophysical
15 manager for the Permian District for Santa Fe
16 Energy Resources.

17 Q. Have you previously testified before
18 the Division as a geologist?

19 A. No, I have not.

20 Q. Would you please outline for the
21 Examiner your educational background and your
22 work experience?

23 A. I received a bachelor's degree in
24 geology from the University of Dayton in 1975. I
25 have a master's in geological sciences from the

1 University of Texas in El Paso. I received that
2 in 1979.

3 I worked for Phillips Uranium in
4 Albuquerque, New Mexico and Minneapolis,
5 Minnesota for a year and a half. I then became
6 employed by Superior Oil Company in Midland,
7 Texas, for a period of 14 months.

8 I then went to work for Heritage
9 Resources, an independent oil and gas producer
10 and in Midland, Texas, and Dallas, Texas, and
11 worked for them for seven and a half years. I
12 then became employed by Santa Fe Energy three
13 years ago.

14 Q. What are your duties at Santa Fe?

15 A. My duties at Santa Fe are regional
16 exploration and development geology throughout
17 West Texas and Southeast New Mexico, and I
18 supervise a number to geologists doing the same.

19 Q. Are you familiar with the geology
20 involved in this application?

21 A. Yes, I am.

22 MR. BRUCE: Mr. Examiner, I tender Mr.
23 Davis as an expert geologist.

24 MR. CARR: No objection.

25 EXAMINER STOGNER: Mr. Davis is so

1 qualified.

2 Q. Mr. Davis, first off, what are the
3 primary target zone or zones in the proposed
4 well?

5 A. The proposed well has two primary
6 objectives, the Cisco Canyon dolomite and the
7 Morrow sands.

8 Q. And referring to your locator map,
9 Exhibit No. 7, would you describe its contents
10 for the Examiner?

11 A. Mr. Examiner, and other parties,
12 provided to you there are a set of maps that I've
13 marked as exhibits. Those maps are also on the
14 wall and I'll probably use the wall copies to
15 talk from, if that's all right. You can also
16 refer to the maps that are in front of you, the
17 smaller exhibits. They are exact duplicates.

18 EXAMINER STOGNER: I'll remind you, Mr.
19 Davis, please do talk loud for our transcriber,
20 and also refrain from pointing to something and
21 saying "here" and "here." You need to describe
22 it.

23 THE WITNESS: Yes, sir, thank you.

24 A. Exhibit 7 is a structure map on top to
25 the Cisco Canyon dolomite, in the Dagger Draw,

1 Indian Basin area. This area is basically 15
2 miles or so due west to Carlsbad, New Mexico.

3 The Cisco Canyon formation in this area
4 is basically composed to three different facies,
5 there's a shale facies, there's also a limestone
6 facies and finally there's a dolomite facies.
7 The dolomite facies is a very, very productive
8 reservoir facies in the area. The limestone is
9 shale or lime.

10 What is depicted on this particular
11 structure map, of course the structure on top to
12 that reservoir unit is the Cisco Canyon
13 dolomite. You'll note on that map that there is
14 a dark black line beyond which there is some
15 printing which says "no dolomite." You can see
16 that that exists both on the east and the west to
17 a trend that goes basically north and south
18 through the area.

19 There are two major fields or actually
20 three major fields that are located within this
21 dolomite reservoir. Shown in red there is the
22 Indian Basin gas field, which is a very, very
23 large gas field. To the north to that there is
24 the North and South Dagger Draw oil fields.

25 The Indian Basin gas field is indicated

1 in red. It is gas productive with plus or minus
2 60 degree gravity condensate production. The
3 North and South Dagger Draw fields are both gas
4 and oil productive. There is an oil leg which is
5 shown in green, and that is productive to 42
6 degree gravity oil.

7 The blue leg that we show above that or
8 rather to the west to the green leg is a gas
9 productive interval with plus or minus 42 degree
10 gravity oil produced with it as well.

11 If I can, I want to call your attention
12 to the east flank, the southeast and the east
13 flank to the Indian Basin gas field, just east to
14 the area labeled "Indian Hills." That would be
15 in Township 21 South, Range 24 East, and Township
16 22 South, Range 24 East.

17 You can see that there is an area that
18 is hachured in green. That area there is an area
19 that we think could potentially be oil
20 productive, with the presence to an oil leg lying
21 structurally down dip to the Indian Basin gas
22 field.

23 You'll note that there is a six-section
24 outline which is an outline to a working interest
25 unit that Santa Fe, Neste and North Central have

1 that Mr. Green has discussed. There is a
2 section, which is Section 27, that is colored in
3 yellow. We also indicate the location to the
4 well that we're interested in proposing which is
5 in Section 27, and it is shown by a triangle.

6 Q. One thing, Mr. Davis, there are several
7 wells surrounded by hexagons. What do those
8 wells indicate?

9 A. Referring again to this east and
10 southeast flank to the Indian Basin gas field,
11 you will notice that there are six wells with
12 hexagons. Those six wells are wells where there
13 have been DSTs to the Cisco Canyon dolomite where
14 oil, gas and water has been recovered by DST.

15 Those DSTs are very similar to DSTs
16 that have been taken in the Dagger Draw field,
17 both North and South and are very, very similar
18 to that kind of production.

19 Q. Basically, Mr. Davis, probably what
20 both Santa Fe and Yates are hoping to replicate
21 or to find is another Dagger Draw field, isn't
22 it?

23 A. That's very much the case. In fact, I
24 visited with Brent May about that very thing, and
25 he agrees that that's what we're looking at very

1 possibly here.

2 Q. Do you have anything further on Exhibit
3 7 that you would like to discuss?

4 A. I don't believe so. Thank you.

5 Q. Now, as you said, there are two
6 formations, one of which is the Morrow. Would
7 you refer to Exhibits 8 and 9, just briefly
8 identify them for the Examiner, and discuss the
9 Morrow geology in this area to interest?

10 A. Exhibit No. 8 is an isopach map. It is
11 a net porous sand isopach with porosity
12 cross-plotted greater than seven percent. It is
13 the Morrow sand that we're working with there, is
14 a Basal Upper Morrow sand.

15 The exhibit labeled No. 9 is a
16 stratigraphic cross-section labeled B - B'.
17 You'll note that on Exhibit No. 8, the line to
18 that cross-section is shown as a dashed line with
19 the label B - B' on it as well.

20 The Morrow here is broken up into three
21 different units; there is an Upper Morrow unit.
22 This particular cross-section is a stratigraphic
23 one that is hung on the top to a Middle Morrow
24 limestone marker. Beneath that marker there are
25 two more units in the Morrow, the Middle Morrow

1 clastic unit and the Lower Morrow clastic unit,
2 and those overlie the Barnett shale.

3 The particular sand that we're
4 interested in or that we have a great deal to
5 interest in is a sand that occurs at the basal
6 portion to the Upper Morrow formation encased
7 basically by limes and a little bit of shale, and
8 that is labeled the Basal Morrow sand and it is
9 colored in yellow on the cross-section.

10 Let me describe a little bit to you
11 about the Exhibit No. 8, if you will. There's a
12 lot to symbology on there. This map also has a
13 structure, the structure on top to the Basal
14 Upper Morrow sand superimposed on it, and those
15 contours are in blue and they are labeled in
16 50-foot contour intervals.

17 As far as symbology is concerned,
18 there's the six-section outline that's the
19 working interest unit by Santa Fe and its
20 partners. Indicated as a square is the location
21 to the Santa Fe Right Hand Canyon Federal 34 #1
22 well. Indicated as a triangle, colored red, is
23 the proposed location of the Rocky Top Federal 27
24 #1 well in Section 27.

25 There are a number to Morrow

1 penetrations on this map. Those that are
2 basically a square standing on one end, they have
3 a symbol around them, are Morrow penetrations
4 where there is no test to that Basal Upper Morrow
5 sand.

6 We have circles which are Cisco Canyon
7 tests which were not deep enough to penetrate
8 through the Morrow formation. There are hexagons
9 which are Morrow penetrations, where there were
10 gas shows and DSTs to the Basal Upper Morrow
11 sand, and there are two wells that have that kind
12 of an indication, the first being the Right Hand
13 Canyon well in Section 34 drilled by Santa Fe,
14 and then the well in Section 22 which is the
15 Ralph Lowe No. 1 Staple well which was drilled in
16 1963.

17 Lastly there are Morrow penetrations
18 that are actual Basal Upper Morrow sand
19 completions, and those are shown as a star. One
20 of those on this particular map is in Section
21 16. If I may go back to Exhibit 7 for a second,
22 please, and refer to the one on the wall again.

23 There are a number to gas wells that
24 are shown to exist in Township 21 South, Range 24
25 East, in Sections 4 and 5, 6, 7, 8, 17 and 18.

1 These are producing in the Cemetery Morrow gas
2 field. They are relevant to this in the fact
3 that my understanding, the way I believe that the
4 Basal Upper Morrow sand has been deposited here,
5 is that this Basal Upper Morrow sand unit is a
6 long shore bar associated with a barrier bar
7 complex, a barrier bar or barrier island complex.

8 That barrier bar or barrier island
9 complex is actually located just to the north and
10 west of this particular barrier bar that we have
11 encountered in Section 34, and in Section 27 and
12 22. That barrier bar and island complex
13 basically is trending in a northeast to southwest
14 direction, and that is the same direction that I
15 believe that the barrier bar or long shore bar
16 that we're looking at, in that the Basal Upper
17 Morrow sand is in Section 34 and 27 trends as
18 well.

19 Q. So you've mapped that island or bar as
20 continuous across sections 34, 27 and 22?

21 A. That's correct. The data, as we have
22 presented here, you'll notice that there are
23 three wells that have penetrated the Basal Upper
24 Morrow sand in the area that we're involved in.

25 Section 34, the Right Hand Canyon well,

1 encountered 14 feet to net porous sand. The well
2 in Section 27 north half, Anadarko's #1 Pardue
3 Farms well encountered 14 feet as well; and then
4 the well in Section 22, the Ralph Lowe Staple,
5 encountered zero feet of net porous sand but did
6 have six feet to gross sand present in it.

7 If I can refer to the cross-section,
8 B - B', and just describe it a little more to
9 you, this again is a north/south cross-section
10 and we'll talk about the four wells that will be
11 located on your right-hand side to the
12 cross-section, starting with the Santa Fe Right
13 Hand Canyon 34 #1 well.

14 You can see that the Basal Upper Morrow
15 sand is located at about 9650 feet. We
16 penetrated about 16 feet to good, clean sand
17 which had, as I said, 14 feet to greater than
18 seven percent porosity. It had water saturation
19 to 41 percent calculated using standard
20 equations.

21 This zone was DST'd by Santa Fe and it
22 flowed at a rate of 1.5 million a day on DST,
23 with no water at all. It had very good flowing
24 pressures and also good shut-in pressures.
25 Currently, Santa Fe has perforated that zone and

1 is in the process to completing it.

2 The proposed location in the Rocky Top
3 27 Federal #1 well is located about approximately
4 2200 feet due north of the Santa Fe well, as
5 indicated on the cross-section as well. I
6 believe, from my mapping, that we will encounter
7 something on the order to about 14 to 15, maybe a
8 little greater than 15 feet to net porous sand
9 greater than seven percent.

10 The Anadarko Production Pardue Farms #1
11 well in Section 27, in the north half, was
12 drilled in 1978. You can see from looking at the
13 cross-section that they encountered the same
14 Basal Upper Morrow sand at a point of about 9535
15 feet or so, and encountered again around 14 feet
16 to gross sand and had about 14 feet to net porous
17 sand greater than seven percent as well.

18 That zone was not DST'd. It had a
19 very, very poor mud log show and was not DST'd by
20 Anadarko. They continued to drill the well down
21 into the Morrow and took a large drill stem test
22 over the Middle and Lower Morrow clastics,
23 received very little show and went ahead and
24 plugged the well.

25 Standard water saturation calculations

1 on that well show it to have a water saturation
2 to 45 percent, and I believe that well was just a
3 bypass producer. I believe that it had the same
4 potential as the Right Hand Canyon 34 #1 well
5 that we drilled in Section 34.

6 The last well, the Ralph Lowe Staple #1
7 well in Section 22, you can see that they
8 encountered six feet to gross sand. This is an
9 old sonic log whereas the previous two logs were
10 neutron density logs. The old sonic log shows it
11 to have about six percent porosity, not quite
12 seven percent, so it shows zero feet to net
13 porous sand on our isopach map, Exhibit No. 8.

14 You can see that they did conduct a DST
15 across this Basal Upper Morrow sand. The DST
16 also included some sands in the Middle Morrow.
17 The zone flowed gas at 1.6 million a day with
18 reasonable flowing and shut-in pressures.

19 They took another test that did not
20 include the Upper Morrow sand that actually
21 included the entire Lower and Middle Morrow
22 interval. That zone flowed at about 600,000 a
23 day and it seems to me it does show that those
24 two DSTs indicate there's some potential in the
25 Ralph Lowe Staple #1 well for some gas production

1 and indicates to me that that clean sand goes to
2 the north as well.

3 Q. Now, Santa Fe's proposed well is about
4 midway between the Anadarko well, in the north
5 half of Section 20, and the Right Hand Canyon
6 well, is that correct?

7 A. That's correct.

8 Q. In your opinion, is that an optimum
9 location for the well?

10 A. I believe that we have a very good
11 location there to test the Morrow. From my
12 mapping, it will be structurally high to both the
13 Santa Fe well in Section 34 and also the Anadarko
14 Pardue Farms well in the north half to Section
15 27. I think we'll encounter plenty to reservoir
16 rock as well.

17 Q. Now, Santa Fe's proposed location is
18 quite unorthodox. Do you have any comments on
19 this?

20 A. The proposed well is, about as I said,
21 2200 feet north to the Santa Fe Right Hand Canyon
22 34 Federal #1 well. We believe that to be
23 sufficient to prevent interference between the
24 two wells.

25 Q. And obviously Santa Fe has no objection

1 with respect to its Right Hand Canyon well?

2 A. No, we've waived objections, as has
3 Marathon as well.

4 Q. Are there also topographic reasons for
5 the proposed well location?

6 A. Yes, there are, and our engineer will
7 discuss those.

8 Q. Now, if Santa Fe's application is
9 granted, is there a second Morrow location in the
10 east half to Section 27?

11 A. I believe that we could drill a
12 successful Morrow test in the northeast quarter
13 to Section 27.

14 Q. And, of course, after this Section 27
15 well is drilled, there will be more data will
16 there not?

17 A. That's correct. It will give us a
18 great deal to information as to the extent to
19 that sand.

20 Q. You've also discussed the Cisco Canyon
21 as the other primary objective. Would you go
22 into more detail on this? and I refer you to your
23 Exhibits 10, 11 and 12. Please identify those
24 exhibits first, and then start off with Exhibit
25 10.

1 A. Okay. Exhibit 10 is a structure map on
2 top to the Cisco Canyon dolomite. Exhibit No. 11
3 is an isopach map to the Cisco Canyon dolomite
4 interval, and Exhibit No. 12 is a structural
5 cross-section labeled A to A' which is roughly a
6 north/south cross-section across the area in
7 question. It takes into account the Cisco Canyon
8 interval.

9 Q. Moving to Exhibit 10, the structure
10 map, what does that show?

11 A. Again, if I may digress for one second
12 to Exhibit 7, just to get us located again, both
13 to these are structure maps on top of the Cisco
14 Canyon dolomite, both Exhibits 7 and Exhibit 10.

15 We're looking at the east flank to the
16 Indian Basin gas field, and we're concentrating
17 on Section 27, where there are, as again on the
18 east flank, that gas field, there are six wells
19 that have tested oil, gas and water from the
20 Cisco Canyon dolomite.

21 On both maps, and we'll look at Exhibit
22 No. 10 now, you'll note there is a green line at
23 minus 34. Let me digress for one second and go
24 back and talk about the symbology on both to
25 these maps, Exhibits 10 and 11, to get that

1 cleared up.

2 Again, we're showing stippled acreage
3 that belongs to Neste, North Central, and Santa
4 Fe. Within a dashed outline, which is that
5 working interest unit, the Santa Fe Right Hand
6 Canyon Federal 34 #1 well is the square; the
7 colored red triangle is the proposed location to
8 the Rocky Top Federal 27 #1 well. There are a
9 number to penetrations to the Cisco Canyon on
10 this east flank to the Indian Basin gas field.
11 Those with a circle around them are Cisco Canyon
12 penetrations where no oil and gas tests were
13 recorded or reported.

14 The hexagons are, again, the Cisco
15 Canyon penetrations where oil, gas and water were
16 recovered by DST. There are five to those on
17 this particular map, two in Section 27, one in
18 Section 35 to Township 21 South, 24 East. One in
19 Section 2 and one in Section 3 to Township 22
20 South, Range 24 East.

21 Finally, there are four Cisco Canyon
22 producers that are shown as six point stars, and
23 those are located in Sections 21, 28 and 33 to
24 Township 21 South, 24 East, and one in Section 4
25 which is now plugged out, in Township 22 South,

1 Range 24 East.

2 Those four gas wells are gas wells that
3 are producing from the Cisco Canyon within the
4 Indian Basin gas field. "NDE," if you see it
5 located on the map, that would indicate it's not
6 deep enough. That particular comment on the
7 isopach map, which is labeled Exhibit 11, are
8 wells that encountered the Cisco Canyon but did
9 not go deep enough in order to get all the way
10 through it to give us the ability to get an
11 isopach-ish interval.

12 Q. What are the red and green lines?

13 A. The green line at minus 4034 is the
14 lowest point tested by DST on the east flank of
15 the Indian Basin gas field that recovered oil,
16 gas and water on that DST.

17 Q. Does that mean that the area to the
18 east would not recover that?

19 A. No, it does not mean that. All that is
20 stating, basically, is that at that point, that
21 is the lowest point we know there has been oil,
22 gas and water recovered.

23 Q. There's no data to the east?

24 A. There is no data to the east to give
25 you any other information, other than there is a

1 DST and a well in Section 1 to Township 22 South,
2 Range 24 East, and it did recover water and there
3 were no shows to hydrocarbons, and that was over
4 a fairly broad interval.

5 Q. What else does the structure map show
6 with respect to Santa Fe's location versus Yates'
7 proposed location?

8 A. The red line shown on there is minus
9 3754, which is the lowest known perforations to
10 the Cisco Canyon within the East Indian Hills
11 portion to the Indian Basin gas field. That
12 shows where the known gas production is.

13 With respect to the locations that
14 we're looking at, you'll notice that the well in
15 Section 27, the proposed well in Section 27, is
16 located in the extreme south and west quarter.
17 The well that we drilled in Section 34, indicated
18 by a square, the Right Hand Canyon 34 Federal No.
19 1 well, that well topped the Cisco Canyon at 3818
20 and it proved up that we had a structural high
21 that basically runs off the high at East Indian
22 Hills in the Indian Basin gas field, and that
23 high runs basically along in a southwest trend
24 through Section 34 and down into Sections 2 and 3
25 to the south.

1 The indicated well in Section 27 would
2 appear, from my geologic work in the area and my
3 contouring, that we should encounter the Cisco
4 Canyon in our well and Section 27 the proposed
5 well, at about 3850, thereabouts. That would be
6 basically 35 feet or so, low to the well in
7 Section 34. The well we drilled, the Right Hand
8 Canyon Federal well.

9 The proposed well that Yates is
10 planning to reenter in Section 27, the Pan
11 American No. 1 Pardue gas unit U.S.A well, that
12 particular well topped the Cisco Canyon dolomite
13 at minus 3941, which would mean that we would
14 gain about 75 feet to structure to that point to
15 that well by drilling a well at the proposed
16 location.

17 Q. Do you consider that important?

18 A. Very much so. If we can look at the
19 cross-section labeled A - A', you'll notice this
20 cross-section kind of zigzags across the acreage
21 and across the area.

22 Look at the relationship, if you could,
23 between the middle three wells, the Santa Fe
24 Energy Right Hand Canyon Federal 34 #1 well, the
25 proposed location, the Pan American Petroleum

1 Pardue Gas Unit U.S.A #1 well, and the Anadarko
2 Petroleum Pardue Farms #1.

3 You'll notice that the Anadarko
4 Petroleum Pardue Farms #1 well drilled down
5 through the shales that lie above the Cisco
6 Canyon, topped the Cisco Canyon, and was
7 immediately in the dolomite reservoir.

8 They DST'd it a couple to times, had
9 good shows of oil, gas and water. They attempted
10 a completion and, at the end to their completion
11 attempts they were swabbing at a rate of 1,600
12 barrels to sulfur water with a minor amount to
13 oil from perforations within the upper, say, 80
14 feet to the formation, the Cisco Canyon
15 dolomite. That well was drilled in 1978.

16 The Pan American Petroleum well, Pardue
17 Gas Unit well, which is the well that Yates
18 proposes to reenter, that well topped the Cisco
19 Canyon at a structural position somewhat superior
20 to the Anadarko Pardue Farms well, but they
21 drilled into limestone rather than dolomite. And
22 limestone, of course, is a nonreservoir facies.

23 They drilled 100 feet into the Cisco
24 Canyon before encountering massive dolomite.
25 They ran a DST over that massive dolomite

1 interval, recovered good shows to oil, gas and
2 water, but it was not something that they were
3 willing to go ahead and attempt a completion on,
4 and they plugged the well and it was plugged and
5 abandoned. That well was drilled in 1966.

6 The Santa Fe well in Section 34, you
7 can see we drilled into the top to the Cisco
8 Canyon, encountered about 10 or 12 feet to
9 limestone and then went into massive dolomite.
10 We were able to drill about plus or minus 20 feet
11 to that massive dolomite and lost all returns and
12 ended up having to dry drill down to 8290 feet
13 before we could set casing through that
14 interval.

15 The original location that I had picked
16 for this well, for the proposed location in
17 Section 27 to our well, was fairly close to the
18 Pan American Pardue Gas Unit #1 well.

19 Q. Yates' location?

20 A. That's correct.

21 Q. But subsequent to my discussing that
22 location with Brent May on the phone, having
23 proposed that location, I was able to obtain a
24 sample log on this well. One of the things about
25 the logging tools or the logs that are available

1 on these wells, both the Santa Fe Energy well and
2 the Anadarko Pardue Farms well, both have neutron
3 density logs on them and it's easy to tell when
4 you're in dolomite because to the cross-over to
5 the curves.

6 However, the Pan American Petroleum
7 Pardue Gas Unit well drilled in 1966, had only a
8 sonic log, so it was very difficult to tell
9 whether they were in massive dolomite at the top
10 or limestone.

11 By obtaining a sample log, I was able
12 to tell that they were, in fact, in limestone in
13 nonreservoir facies, and when you look at where
14 they topped the mapped horizon, the Cisco Canyon
15 dolomite, the reservoir facies, you could see
16 that both the Pardue Gas Unit well drove by Pan
17 American, and the Anadarko Pardue Farms well,
18 both are basically flat at a minus 3940 or -41
19 feet below sea level.

20 It seems to me at that point I decided
21 that I would change the location because that
22 actually changed my mapping somewhat, and I felt
23 that a location--and I still feel that a location
24 in Section 27 drilled in the southwest
25 quarter--is going to be the most, the highest

1 structural position that we could gain in Section
2 27.

3 Q. You mean the southwest to the
4 southwest?

5 A. The southwest to the southwest, I'm
6 sorry.

7 Q. Now, you were talking about the
8 cross-section, Exhibit 12. Let's move back to
9 Exhibit 11, the isopach map. They both show
10 plenty to reservoir at either Yates' or Santa
11 Fe's location?

12 A. Yes. That's correct. There are two
13 wells in Section 27, one well in Section 27 and
14 the well in Section 34, both penetrated the
15 entire section to the Cisco Canyon formation.

16 The Anadarko well in the north half of
17 27 had 510 feet; the Santa Fe well in Section 34
18 had 629 feet. I believe there will be sufficient
19 reservoir, something on the order of about 600
20 feet at the location we'll be drilling in Section
21 27. I don't see any problem with that.

22 Q. But at Santa Fe's location you won't
23 have that limestone, will you?

24 A. That's correct, and I think that's very
25 important. One of the things that we don't have

1 a real good handle on is exactly how the Cisco
2 Canyon formation will form out here, and we would
3 like to be in the most advantageous structural
4 position as possible in order to test the
5 formatiolabeled A - A', you'll notice this
20 crossified
7 briefly and I think, to your knowledge, at one
8 point during discussions to the working interest
9 unit, Yates requested that Sections 24 and 25 be
10 included, is that correct, immediately to the
11 east to the--

12 A. That's correct. They did, initially.

13 Q. Why did you recommend that they not be
14 included?

15 A. I feel that Section 24 and 25 have--for
16 one thing, they're structurally very low and I'm
17 very skeptical as to whether or not those will
18 actually be productive to oil, gas and water such
19 as we would expect here from the Cisco Canyon.

20 Secondly, the way I have it mapped,
21 most of Section 24, there's very little dolomite
22 in Section 24 and about three-quarters to Section
23 25 has dolomite but with thicknesses less than
24 250 feet.

25 Q. So, geologically, you couldn't justify

1 it?

2 A. I couldn't, no. I don't feel it was
3 prudent to put them in.

4 Q. Now, I believe you had some discussions
5 with Mr. May regarding Yates' Hickory reentry?

6 A. Yes. I visited with him about that a
7 couple to times. I asked him if there was any
8 information he could give me on their reentry
9 there.

10 Yates has proposed the reentry to three
11 different wells on the south and southeast flank
12 of the Indian Basin gas field, one of them being
13 the well in Section 17 which is a old Pan
14 American well, the No. 1 Hollow well, so now
15 renamed the Hickory ALV by Yates.

16 I felt if there was any information
17 available on that well, whether it be new logging
18 information or production information, it would
19 give us some additional information as to how we
20 might go about drilling and completing and
21 production testing our well in Section 27, the
22 proposed well in Section 27.

23 Q. So, you would have found that data
24 useful in doing the Section 27 mapping?

25 A. Yes, I would.

1 Q. What additional discussions did you
2 have with Mr. May regarding making a
3 determination as to how good the Cisco Canyon may
4 be in this area?

5 A. Well, both Mr. May and I agreed that we
6 think that there is the opportunity that we could
7 have a Dagger Draw look alike, if you will,
8 located on this eastern flank to the Indian Basin
9 gas field. Those DSTs indicated in those wells
10 seem to indicate that there is that potential.

11 We talked about how you would go about
12 testing a well in Section 27, and I told him that
13 what our intentions were to do was to make a
14 completion attempt in that well and production
15 test the well for something on the order to 90 to
16 120 days, to determine what kind of production we
17 would get from the well in ratios to water to
18 hydrocarbon and the like. He agreed with me and
19 said that's exactly what Yates had in mind as
20 well.

21 Q. I guess what you're saying is that
22 Santa Fe isn't really certain to what's going on
23 with the Cisco Canyon reservoir here, is that
24 correct?

25 A. Well, we know that, similar to the

1 Dagger Draw, you're going to produce water, gas
2 and oil. We also know that, at least from our
3 work that we've gotten from Dagger Draw, that
4 it's a very complex reservoir. So we know that
5 you're going to have to go in there, perforate
6 the well, production test it to see what kind of
7 a mix you get. Obviously if you can produce
8 enough hydrocarbons, the water won't make that
9 much difference.

10 Q. And that's why it's so important to get
11 a good Cisco Canyon test in Section 27?

12 A. I believe it's very important to get a
13 good test there so we'll be able to do something
14 with that formation in this area.

15 Q. Again, is the structure critical, the
16 structure gained from Yates' location and Santa
17 Fe's location, critical?

18 A. Knowing as little as we know about the
19 Cisco Canyon in this area of the world, I think
20 it's as important as can be.

21 Q. Now, once again, this location is
22 pretty darn unorthodox with respect to the Cisco
23 Canyon. Do you have any comments on that issue?

24 A. Well, if this area turns out to be
25 similar to Dagger Draw, I think that if you look

1 at Dagger Draw, if you look at Exhibit No. 7
2 again and just look at the Dagger Draw field,
3 you'll notice that it appears to be--at this
4 point it is actually being developed on 40-acre
5 spacing even though the field rules are based on
6 proration.

7 I think the that same thing will happen
8 here if we're successful in proving this up as a
9 Dagger Draw look alike. In that case, this
10 location will not be very unorthodox at all with
11 respect to those type of rules.

12 Q. Now, if the Yates group is pooled and
13 goes nonconsent under the order, what penalty
14 would you recommend against any nonconsenting
15 party?

16 A. I think there's obviously some
17 substantial geological risks associated with this
18 prospect, and I think that the maximum penalty
19 allowed would be in order.

20 Q. In your opinion, is the granting to
21 Santa Fe's application in the interest of
22 conservation, the prevention to waste and the
23 protection to correlative rights?

24 A. Yes, I think so.

25 Q. Were Exhibits 7 through 12 prepared by

1 you or under your direction?

2 A. Yes, they were.

3 MR. BRUCE: Mr. Examiner, at this time
4 I move the admission to Santa Fe Exhibits 7
5 through 12.

6 MR. CARR: No objection.

7 EXAMINER STOGNER: 7 through 12 will be
8 admitted into evidence at this time.

9 Mr. Carr, your witness.

10 EXAMINATION

11 BY MR. CARR:

12 Q. Mr. Davis, if we could go to your
13 Exhibit No. 7, if I understand it, the area with
14 sort of a green hashed line is the area that,
15 based on your interpretation, might be the Dagger
16 Draw look alike or hopefully would be, is that
17 correct?

18 A. That's correct.

19 Q. At the present time, are there any
20 wells producing oil from the Cisco Canyon in that
21 area that is shaded in green?

22 A. There are none to my knowledge.

23 Q. If we go to your well that you've shown
24 in Section 34 due south of the proposed acreage,
25 what is the current status to that well?

1 A. That well is currently being completed
2 from the Morrow.

3 Q. Is there any plan to attempt a
4 completion in the Cisco?

5 A. No, there is not.

6 Q. I'm sorry, in the Canyon?

7 A. Cisco Canyon is fine. No, there is
8 not.

9 Q. That's where you lost circulation, is
10 it not?

11 A. That's correct.

12 Q. You had to run a liner in the well at
13 that point?

14 A. That's correct.

15 Q. If we go now to your Exhibit No. 8,
16 this is the isopach map on top to the Morrow, and
17 we look at the wells you have to use for control,
18 if we go on the trace for the cross-section, the
19 well immediately north to the proposed location,
20 the second well, B' and the one below that, it's
21 in the north half of 27--

22 A. Yes, sir.

23 Q. --has that well ever produced from the
24 Morrow formation?

25 A. No, it has not.

1 Q. Was it wet, do you know?

2 A. Wet from the Morrow itself?

3 Q. Yes.

4 A. From the Lower Morrow and Middle Morrow
5 it did test some gas to surface, and had gas cut
6 mud and no water production at all, or at least
7 no water indicated on the DST. They did not DST
8 the basal Upper Morrow sand, which is the sand
9 that we are attempting to complete in the Right
10 Hand Canyon 34 #1 well.

11 Q. If we go down to that well, you had
12 multiple Morrow zones in that well, did you not?

13 A. Yes, we did.

14 Q. And in attempting to complete that well
15 you did communicate those zones, did you not?

16 A. It certainly appears that way, yes.

17 Q. You have perhaps damaged them because
18 of the water as a result of a communication?

19 A. That, I wouldn't be able to talk about
20 or at least address.

21 Q. If we look at your geologic
22 presentation, isn't it fair to say that the
23 Morrow was really the secondary objective and
24 that what we're really hoping for is some Dagger
25 Draw-like oil wells out there?

1 A. The well in Section 27?

2 Q. Yes.

3 A. I consider them both to be primary
4 objectives, because I believe that this Morrow
5 sand is capable to being quite a decent producer
6 in this area.

7 If you look at the wells to the north
8 and west where this sand also produces, it
9 produces in volumes ranging from 1.3 Bcf to 9
10 Bcf. So it can be a very good producer.

11 Q. What about the Morrow well in Section
12 22, the end well on that cross-section? That's
13 also a Morrow well, is it not? Has that ever
14 produced? I'm talking about the Morrow well
15 shown on Section 22.

16 A. That's the Ralph Lowe Staple #1 well.

17 Q. Did that ever produce in the Morrow?

18 A. No. That well was drilled in 1963,
19 they attempted four different DSTs in the
20 Morrow. They did have gas rates as high as 1.6
21 million on DST but they elected not to complete
22 the well.

23 Q. What are you looking for on this
24 isopach if you're going to have your best shot at
25 reservoir quality rock? The thickest section?

1 Is that what you're shooting for?

2 A. Yes, sir. The thickest possible
3 interval to sand.

4 Q. And that's why you testified that there
5 was a possible Morrow location in the northeast
6 quarter to Section 27?

7 A. Yes, I believe that there is a good,
8 viable location in the northeast quarter.

9 Q. If this acreage was developed with two
10 lay down units in the Morrow, you'd be able to
11 drill a well up there at that good location and
12 have 7/8 to the working interest, would you not,
13 with a lay down unit?

14 A. Yes, you could.

15 Q. How would you characterize the control
16 you have for the placement of this Morrow sand?
17 Is it adequate for your purposes as a geologist?

18 A. Yes, I think it's adequate.

19 Q. Do you think that it's possible that
20 that Morrow channel might swing farther to the
21 west or to the east, or do you feel like you've
22 got that pretty well nailed down?

23 A. I feel pretty comfortable and confident
24 that I have a pretty good idea what the trend is,
25 based on the other wells in the area.

1 Q. If we're looking for the thickest
2 portion to the sand for the purpose to making a
3 successful Morrow well, wouldn't the proposed
4 Yates' location in the Pardue well be virtually
5 comparable with the location that you are
6 proposing in this Morrow sand in your proposed
7 well?

8 A. That's correct, it would be, yes.

9 Q. I think you testified that looking at
10 this Morrow location, your proposed location,
11 that you would anticipate that it is far enough
12 away from the well you're trying to complete in
13 the Morrow in 34, to not be interfering with that
14 well?

15 A. That is correct.

16 Q. You don't believe that that is an
17 ineffective drainage or well location pattern for
18 producing the Morrow in this area?

19 A. In my discussion with the engineers in
20 our company, no, I don't think so.

21 Q. So you're not seeing interference?
22 You're not anticipating it?

23 A. We're not anticipating any, no.

24 Q. If Yates was successful in this case
25 and had a south half Morrow unit, based on the

1 fact that you don't see any interference, then, I
2 assume Santa Fe would have no objection to our
3 placing a well there?

4 A. Placing a well where?

5 Q. Where you're proposing it, 204 feet
6 from the line, if you're not seeing interference.

7 A. No, we would not.

8 Q. So, if we were successful, you would
9 not object to a location by Yates at that point?

10 A. No, we would not.

11 Q. Let's go now to your Exhibit No. 10.
12 This is the Cisco Canyon structure map. If we
13 look at the wells on the western perimeter of
14 this exhibit, you've got four that are producing
15 from the Cisco Canyon. I think you testified
16 that these are gas wells, isn't that correct?

17 A. That's correct.

18 Q. Are these wells all currently
19 producing?

20 A. I believe that the well in Section 4 is
21 plugged and abandoned.

22 Q. Was that because to water problems?

23 A. I don't know what kind of problems they
24 had.

25 Q. It's your understanding that the other

1 three wells are, in fact, producing?

2 A. At the moment it is, that's correct.

3 Q. And the green line indicates just the
4 lowest point tested in the reservoir where there
5 is a show to oil, gas and water?

6 A. That's correct.

7 Q. Both to the proposed locations are
8 substantially above that line, is that not right?

9 A. That's correct, they are.

10 Q. You looked at the information on the
11 Pardue well, the Yates proposed reentry. You did
12 testify that there were good shows to oil in that
13 well, is that right?

14 A. There was a reasonably good show to
15 oil, gas and water from the Cisco Canyon below a
16 depth to minus 3941.

17 Q. If we go to the well that you have
18 drilled, that Santa Fe has drilled in Section 34,
19 that's the well in which you lost your
20 circulation in this interval, is that not right?

21 A. That's correct. We lost circulation in
22 the Cisco Canyon dolomite.

23 Q. Does that mean that you don't have a
24 test on that well to tell us if we have an oil
25 show there?

1 A. When we drilled in the top to that
2 well, we did see a little bit of gas from that
3 horizon, and then we lost all circulations and
4 there was no opportunity to look at the samples
5 or anything.

6 Q. Now, in terms of the data points and
7 the control you have for actually placing your
8 contours in this area, you really have
9 fairly--well, you have no control between the
10 Pardue well in 27 and the Santa Fe well in 34,
11 isn't that correct?

12 A. There are no wells located directly
13 between the two, no.

14 Q. And as to the existence to the
15 limestone stringer that was encountered in the
16 Pardue well, you're really having to just make an
17 educated guess as to how far out that might
18 extend from the Pardue?

19 A. That's correct. It's thinning,
20 obviously, between the Pardue well and the well
21 we drilled in Section 34; it has thinned
22 substantially.

23 Q. You wouldn't know what it would be
24 under that proposed location?

25 A. I wouldn't know what it would be

1 underneath that proposed location, but I do know
2 how thick it is at the Pan Am one.

3 Q. I believe you testified that both
4 locations have--I don't want to use the wrong
5 words here, but--reservoir present at the
6 proposed locations in the Cisco?

7 A. Yes, I believe there will be reservoir
8 present.

9 Q. You do know there is an oil show in the
10 Yates location and there was a slight gas show at
11 the location to the south? We do know that?

12 A. That's correct.

13 Q. If we look at your cross-section,
14 Exhibit 12, we look at first the Pan American
15 Pardue Gas #1, the well that Yates is proposing
16 to reenter--

17 A. Yes, sir.

18 Q. --you said there were good shows to oil
19 and gas in this well at the interval above, I
20 believe, the blue area, which is indicated as
21 where circulation was lost?

22 A. Are we talking about the Pan Am Pardue
23 Gas Unit well?

24 Q. Yes.

25 A. Okay. To my knowledge, they did not

1 lose any circulation in that wellbore. The well
2 drilled down into limestone, there was a small
3 stringer to dolomite it appears, about 50 feet
4 in. They went back into limestone and after
5 another 50 feet or so they drilled into the more
6 massive interval to dolomite.

7 DSTs were taken across an interval at
8 7908 to 7951, which would have been in the
9 limestone. That was a straddle-packed DST, where
10 they had recovered some gas cut mud, and some
11 slight oil and gas cut mud, and some heavy oil
12 and gas cut mud with fairly tight flowing
13 pressures and decent shut-in pressures. They
14 also took a DST in deeper portions that would
15 extend down into the massive dolomite, and it did
16 actually get gas flowing to surface and recover
17 free oil gas cut mud and a sufficient amount of
18 salt water.

19 Q. On this cross-section, you have placed
20 a line that you have entitled loss circulation
21 zone?

22 A. Yes, sir.

23 Q. Now, I'm trying to understand where
24 that line is supposed to go. It crosses the
25 proposed location?

1 A. That's correct.

2 Q. It crosses the Pan American Pardue
3 well?

4 A. Yes.

5 Q. Does it cross the Santa Fe Energy Right
6 Hand Canyon Federal well?

7 A. That's correct.

8 Q. And it crosses this, what is it, above
9 that or below that that you have the loss
10 circulation zone?

11 A. If you look at the Anadarko Petroleum
12 Pardue Farms #1 well, in the upper portion, as
13 they encounter the dolomite there, you'll notice
14 it says they lost 30 barrels to mud at 7664?

15 Q. Yes.

16 A. And it also indicates that they lost
17 some mud at an interval--and I would have to look
18 at it to be exact, but it's probably around 7690
19 or so. They did report on both their drilling
20 reports and their mud logs that they lost some
21 mud at that point.

22 The point where that goes, if you were
23 to take a look at that log you would notice a
24 tremendous amount to deflection to those log
25 curves to the center portion to the log, to the

1 left, and that indicates the presence to some
2 porosity at that point.

3 If you carry that correlative point
4 across to the Santa Fe Canyon Fed 34 #1 well,
5 you'll also see a number to deflections to the
6 neutron curve at that point as well. That's the
7 dashed curve that would be on the right-hand side
8 to the log. That indicates also there's the
9 presence of some porosity there as well. All I
10 did was correlate between the two and say that
11 was another potential loss circulation zone.

12 In our well, the Right Hand Canyon 34
13 Federal #1 well, once we started losing returns,
14 we lost returns all the way along, so we don't
15 have any idea to say whether we lost more or less
16 at that point.

17 Q. Mr. Davis, if I look at your Santa Fe
18 Energy Right Hand Canyon Federal 34, you've got a
19 couple to bars on the log section that shows that
20 that's where you lost all return circulation in
21 the Canyon?

22 A. That's correct.

23 Q. In this well, my problem is, I've got a
24 loss circulation substantially above what is
25 characterized as the loss circulation zone. In

1 the Santa Fe Energy well, doesn't the loss
2 circulation zone start occurring substantially
3 above the line that you've indicated?

4 A. It occurs above the line that's
5 indicated, that's correct, in 7621.

6 Q. And the zone in which you started
7 losing and the zone in which you lost all
8 circulation has been penetrated? In fact, the
9 Yates well is through that zone?

10 A. The Yates well did not encounter the
11 actual dolomite until it was significantly below
12 that point. In fact, the loss circulation zone
13 that you're having some difficulty with, you can
14 see where it extends across the Anadarko Pardue
15 Farms well, and the Right Hand Canyon 34 #1 is
16 lying just beneath the TD to the Pan Am well, the
17 proposed reentry by Yates.

18 Q. If we go to the isopach map on the
19 existing Cisco Canyon dolomite, here again we
20 have a comparable thickness. Both of the wells
21 are located on the 600 foot contour?

22 A. That would be correct.

23 Q. You were involved in the selection to
24 the well locations, were you not?

25 A. That's correct.

1 Q. Has topography really been the factor
2 in making these location determinations, or has
3 geology been the controlling--

4 A. They've both had an equal share.

5 Q. As to the present location, is that
6 topography or geology?

7 A. Both topography and geology.

8 Q. You've gained geological structure?
9 You're higher in the Canyon?

10 A. I believe it will encounter the Cisco
11 Canyon dolomite at a higher structural position.

12 Q. What sort of topographical problems
13 were there at the location that we thought we
14 were talking about yesterday?

15 A. At 500 feet from the south line?

16 Q. Yes.

17 A. My engineer will discuss it at greater
18 length, but basically I said I was trying to
19 stake it out in the middle to the air.

20 Q. Do you do that often?

21 A. I don't try to, sir. It appeared on
22 the topo sheet that you could stake a location at
23 that point.

24 Q. In terms to the prior locations, you've
25 moved the well several times?

1 A. That's correct.

2 Q. There was one location that was within
3 200 feet to the Yates Pardue well?

4 A. That's correct.

5 Q. And you moved from that location? That
6 was not topographical, that move, was it?

7 A. That was geological.

8 Q. That was because to a remapping that
9 you did?

10 A. That's correct.

11 Q. What new information did you have to
12 cause you to remap at that time?

13 A. I was able to obtain a sample log on
14 the Pan American Pardue well that I did not
15 previously have.

16 Q. And that was the only new information?

17 A. That was the only new information,
18 that's correct.

19 Q. In terms to what will effectively be
20 drained by this well, that may be an engineering
21 question, is that right?

22 A. That's correct.

23 MR. CARR: That's all I have.

24 EXAMINER STOGNER: That you, Mr. Carr.
25 Mr. Bruce, any redirect?

1 MR. BRUCE: Just one, Mr. Examiner.

2 FURTHER EXAMINATION

3 BY MR. BRUCE:

4 Q. Mr. Davis, when Mr. Carr was asking you
5 some questions about the Morrow, you said
6 basically the Morrow looked equally good at Santa
7 Fe's location and Yates' location, is that
8 correct?

9 A. I believe that's how I answered, yes.

10 Q. But that would ignore the Cisco Canyon,
11 is that correct?

12 A. That's correct. That's ignoring the
13 Cisco Canyon.

14 MR. BRUCE: That's all, Mr. Examiner.

15 EXAMINATION

16 BY EXAMINER STOGNER:

17 Q. Mr. Davis, you said that you were not
18 privy or did not have a log on that Pardue Gas
19 Com, that old Pan American well. What log are
20 you talking about?

21 A. You're talking about the well in
22 Section 22, is that correct? 27 rather?

23 Q. Yes.

24 A. What I did not have was a sample log,
25 which is a description to the mud samples. That

1 is a commercially available log. I have since
2 found out, through the sample library in Midland,
3 and I was able to obtain a copy to that log from
4 them, and that's where I found the information
5 that gave me some more geological enlightenment,
6 if you will.

7 Q. You're not referring to an electrolog?

8 A. No.

9 Q. In your direct testimony, you mentioned
10 something about the Morrow could be produced with
11 another well in the northeast quarter to Section
12 27, was that correct? Did I hear that right?

13 A. I believe that a successful Morrow well
14 could be drilled in the northeast quarter of
15 Section 27, that's correct.

16 Q. Would that be subsequent to the Morrow
17 completion in the southwest quarter?

18 A. That's correct.

19 Q. Why would you have two wells in the
20 Morrow in Section 27?

21 A. I believe that you can drill--well, a
22 Morrow well can be drilled on a 320-acre spacing,
23 and I think we could drill a well in the west
24 half and also in the east half.

25 Q. So this was 320-acre spacing that you

1 know of, then?

2 A. In the Morrow, that's correct. I
3 believe so.

4 EXAMINER STOGNER: No other questions.

5 DARRELL ROBERTS

6 Having been first duly sworn upon his oath, was
7 examined and testified as follows:

8 EXAMINATION

9 BY MR. BRUCE:

10 Q. Would you please state your name and
11 city to residence for the record?

12 A. My name is Darrell Roberts. I live in
13 Midland, Texas.

14 Q. Who are you employed by?

15 A. By Santa Fe Energy Resources.

16 Q. What is your job there?

17 A. I'm a drilling engineer.

18 Q. Have you previously testified before
19 the Division as an engineer?

20 A. Yes, I have.

21 Q. Are you familiar with the matters
22 involved in the drilling to the proposed Santa Fe
23 well?

24 A. Yes, I am.

25 MR. BRUCE: Mr. Examiner, I tender the

1 witness as an expert petroleum engineer.

2 EXAMINER STOGNER: Are there any
3 objections?

4 MR. CARR: No objection.

5 Q. Mr. Roberts, let's first address the
6 location of the well. Would you refer to Exhibit
7 13 and describe the topography in this area?

8 A. Okay. This is a topographic map to
9 Section 27, surrounded by the six other sections
10 or what not, the nine other sections around
11 there.

12 Basically we have--our location is on
13 top to a ridge, and north and south of that is a
14 deep canyon. We have extreme relief in this
15 area, and the topographic map is depicted with a
16 minor 20-foot contours, and then the major
17 contour lines are a hundred feet. You'll notice
18 in some places they don't even bother to put the
19 minor 20-foot contour lines on the map because
20 it's so steep. That's both north and south of
21 our proposed location.

22 Q. There's a yellow line on part to this
23 map. What does that indicate?

24 A. I outlined that, and that would be the
25 possible places you could place a drilling rig or

1 drill a well.

2 Q. In the southwest quarter to the
3 section?

4 A. Right.

5 Q. The location that Mr. Davis picked, I
6 think he stated, was originally 500 feet, or I
7 should say his second location was 500 feet from
8 the south line. Is that correct?

9 A. I think it was actually 550 is where he
10 depicted it, looking at his geology and then off
11 to this topo map.

12 Q. As you'll show, as he said, that was in
13 the middle to the air?

14 A. Yes, it was. We have other exhibits as
15 pictures. When I went out to stake the well, it
16 turned out that at 550 from the south line and
17 660 from the west line we were, as Gene said, we
18 were out in the middle to the air, so I moved the
19 location.

20 Q. Let's describe that in a little more
21 detail. Would you refer to the pictures marked
22 Exhibits 14A, B and C, and discuss what we're
23 looking at here, then describe the direction
24 we're looking at it, et cetera?

25 A. Okay. The first picture is with me

1 standing on our proposed location looking to the
2 northeast at the abandoned location, the Pardue
3 Gas Unit well. You can see it up through the
4 northeast. There's a flat place that Pan
5 American built 26 years ago, and then there's a
6 dry hole marker there. This shows the distance
7 from Yates' proposed reentry versus our location,
8 and also the topography. You can see that to the
9 north there we drop off to this ridge and there's
10 a corresponding ridge a couple to miles away.

11 Q. Why don't you move on to Exhibit 14B?

12 A. This is a picture looking northeast
13 from the abandoned location. I'm standing on the
14 edge of the pad, looking northeast.

15 Q. From Yates' proposed location?

16 A. Proposed location. This is the canyon
17 that's north to their proposed location and the
18 white line in the front is the Brantley Dam, but
19 you can see the extreme relief in the area.

20 Q. So, actually locations to the north to
21 Yates' proposed location are extremely limited?

22 A. Right.

23 Q. What is Exhibit 14C?

24 A. Here again I'm standing on the pad to
25 the abandoned well looking south at our proposed

1 location. You can barely see the four-wheel
2 drive vehicle in the middle to the picture on the
3 top to the ridge. That is where our proposed
4 location would be.

5 The draw that's to the right is where a
6 standard location would have been located and
7 also where Gene's first proposed location is 660
8 from the west and 550 from the south. It would
9 have been in the middle to that draw and would
10 have been cost-prohibitive to try to place a
11 location in that area, so I moved it to the south
12 at the present location.

13 Q. So, in your opinion, based on Mr.
14 Davis' geology, it's not only good geologically,
15 it's good topographically?

16 A. Right.

17 Q. Now, ignoring geology for a moment, why
18 not reenter the well in the southwest quarter to
19 Section 27 as Yates has proposed?

20 A. From an operations standpoint the
21 primary reason that I see is the fact that the
22 well is 26 years old. It was plugged back then
23 and the casing integrity would be in doubt. And
24 also the fact that we propose to take the well to
25 the Morrow.

1 It has 8-5/8" casing in it and there's
2 no contingency to run a 7" intermediate casing
3 string in case loss circulation is experienced in
4 the Cisco Canyon, on your way to the Morrow.

5 Q. So, you propose using 9-5/8" casing, is
6 that correct?

7 A. Yes, I do.

8 Q. Now, you talk about structural
9 integrity. Have any other wells in this area
10 experienced any problems?

11 A. Yes, sir, there has. There's a well in
12 the southeast quarter to Section 34, the Anadarko
13 AE #1 which was drilled in 68 and was plugged
14 back then, too. It was drilled to the Cisco
15 Canyon.

16 In the meantime, since that time the
17 BLM has experienced or has noticed oil to the
18 surface leaking to the surface, and made Anadarko
19 go back in and replug the well. So that tells me
20 that they had reservoir fluids up to the casing
21 and was probably not--had lost integrity.

22 Q. You don't want to jeopardize the Cisco
23 Canyon test by using inadequate equipment, is
24 that correct?

25 A. That's true.

1 Q. So, besides geological and
2 topographical reasons, there's operational
3 reasons for the new location?

4 A. Right.

5 Q. Would you please refer to Exhibit 15
6 and describe what it is for the Examiner?

7 A. Okay. This is a cost estimate that I
8 prepared for the Rocky Top 27 Federal Com #1.
9 This is taking into account contingency in case
10 we do lose circulation on our way to the Morrow,
11 to drill the Morrow to 10,220 feet.

12 These costs are based on our experience
13 with our well in Section 34, the Right Hand
14 Canyon 34 Fed No. 1.

15 Q. You anticipate this \$998,000 completed
16 well cost as the maximum?

17 A. That's correct.

18 Q. If you don't need to use the 7" liner,
19 et cetera, you don't encounter the problems you
20 did in the Right Hand Canyon well, what would be
21 the approximate completed well cost?

22 A. It would be \$200,000 less than that,
23 which would be \$750,000.

24 Q. Now, would you refer to Exhibit 16 and
25 identify that for the Examiner?

1 A. Exhibit 16 is a cost estimate from
2 Yates Petroleum to reenter the Pan American
3 Pardue ALZ Fed #1 located in Section 27.

4 Q. And their completed well cost is about
5 \$435,000, is that correct?

6 A. That's correct.

7 Q. Do you see anything on this AFE that
8 you think is inadequate or something that should
9 be on there?

10 A. Well, to me, everything is not
11 accounted for, in my mind, if they were going to
12 take the well to the Morrow as they state here,
13 to 10,300 feet. The well was drilled at 8,000
14 feet and plugged, and in order to get to the
15 Morrow you've got to be able to drill to that
16 point. And nowhere on here that I can see are
17 bits or mud logs; not enough supervision or
18 contingency listed on this cost estimate. I
19 think everybody would agree that those are needed
20 or would be necessary to get to the Morrow.

21 Therefore, I would state that not
22 everything is accounted for on this cost
23 estimate.

24 Q. As a rough estimate, how much do those
25 contingencies, or whatever you discussed, add to

1 the proposed well cost?

2 A. I would say around \$60,000, which would
3 bring their cost up to around \$500,000, completed
4 well cost.

5 Q. Now, you mentioned the added \$200,000
6 plus well cost. Once again, that's added to
7 Santa Fe's AFE? Once again, that's based on your
8 experience with the Right Hand Canyon, is that
9 correct?

10 A. That's correct.

11 Q. Other than what you've discussed on
12 Yates' AFEs, do you have any other objections to
13 Yates' proposed well costs?

14 A. Yes. Santa Fe is a partner in 29 wells
15 in the Dagger Draw that has been stated before.
16 Our experience with their accuracy in indicating
17 their cost estimates is less than desirable,
18 I'll say that.

19 Q. Would you refer to Exhibits 17, 18 and
20 19 and discuss those further?

21 A. Exhibit 17 is a spread sheet that
22 compares 25 wells that Santa Fe is a partner in
23 with Yates being the operator.

24 Q. And these are in the Dagger Draw area?

25 A. That's true. That's in the Dagger Draw

1 area. They're listed by spud date, and the
2 things listed on the spread sheet are the spud
3 date--well, first off is the well name, spud
4 date, our working interest--our net working
5 interest.

6 Q. Santa Fe's?

7 A. Right.

8 Q. The gross proposed AFE cost is the
9 third column, and then the fourth column is what
10 we've calculated as being Yates' actual gross
11 cost. These costs were gathered from our net
12 joint interest billing and grossed up to a gross
13 amount.

14 And then the other column is a variance
15 between their actual amount versus the projected
16 amount to their proposed AFE, and then the last
17 column is the amount that was overspent, actual
18 versus projected.

19 Q. And the average to that is a 30 percent
20 overexpenditure, is that correct?

21 A. Yeah, the average of that is 30
22 percent. Some to the wells are 80 percent over
23 and one is two percent under.

24 Q. So, based on your experience in the
25 Dagger Draw area, it's possible that Yates' costs

1 for the reentry could well be closer to \$650,000
2 rather than the \$450,000 they predict?

3 A. Right. If you added 30 percent to the
4 \$500,000, I would think that would be an accurate
5 cost estimate based on their past track record.

6 Q. And meanwhile, hopefully, if Santa Fe
7 drills its well, and no loss circulation, et
8 cetera, Santa Fe's cost for a new well would be
9 more like \$750,000 to \$800,000, is that correct?

10 A. That's true.

11 Q. That's \$100- or \$150,000 difference.
12 It's still a substantial amount?

13 A. Yes.

14 Q. How would you justify that?

15 A. Well, our well is a new well. We have
16 contingency for the loss circulation. The casing
17 will be new. We don't have any risk to having
18 junk in the hole that I think they could
19 encounter in the reentry.

20 I would like to point out, one well
21 that we have a prior case to them entering a
22 well, the Sara AHA Com #1, it's the sixth well
23 down on the spread sheet. This was done and
24 spudded in 1990.

25 As you can see, their proposed cost was

1 \$210,000. The actual cost, by our numbers, is
2 \$377,000, for an 80 percent overexpenditure,
3 which if you apply that 80 percent
4 overexpenditure, that would bring their completed
5 cost up to, by my calculations, up to \$784,000,
6 based on that prior history.

7 Q. But by Santa Fe drilling a new well,
8 based on Mr. Davis' testimony, you would get a
9 better geological location, is that correct?

10 A. That's correct.

11 Q. It would ensure a good test to the
12 Cisco Canyon, is that correct?

13 A. Yes. This location honors his geology,
14 and then gives us a new well. It gives us
15 contingencies for loss circulation to take the
16 well down to the Morrow.

17 Q. Before we move on, Exhibits 18 and 19,
18 are they bar charts to the data from table 17?

19 A. Yes, that's correct. The main thing we
20 were doing, these are just charts prepared from
21 this spread sheet. The main thing we were trying
22 to convey with this is that over the
23 two-and-a-half-year period, their ability to
24 predict their actual cost versus their AFEs has
25 not gotten any better.

1 This one, I guess, Exhibit No. 18,
2 shows the actual versus projected, and then the
3 amount they were overexpended at the top. And
4 Exhibit 19, there again it shows the percent
5 overexpended, and then also listed by spud date
6 for all 25 wells.

7 Q. And this data is presented to show
8 that, in your opinion, the final well costs won't
9 be much different between Yates and Santa Fe?

10 A. Right. We have a new wellbore and
11 preferred geology, I think.

12 Q. In your opinion, is Santa Fe's proposed
13 well cost reasonable and in line with costs for
14 other wells drilled to this depth in this part to
15 Eddy County?

16 A. Yes, I do.

17 Q. And what are Santa Fe's proposed
18 overhead rates?

19 A. \$4,500 a month for drilling the well
20 and \$450 a month for operating a well.

21 Q. Are these Ernst & Young rates?

22 A. Not exactly Ernst & Young rates but
23 they're comparable. They're a little lower for
24 Morrow wells--

25 Q. Lower?

1 A. They're a little lower for Morrow
2 wells, and slightly higher than is recommended by
3 Ernst & Young for Upper Penn.

4 Q. Is there any other reason Santa Fe
5 would prefer to operate this well rather than
6 have Yates operate the well?

7 A. Well, we have experience in the area.
8 We have drilled the one well. We have the
9 majority of the interest in the six sections.
10 There again, we're only talking about the one
11 section, but in the six-section unit that we've
12 proposed, I think we would have an average of 71
13 percent working interest and Yates would have 29
14 percent.

15 Q. One additional item, your proposed
16 penalty in case Yates' group did not join in the
17 well, based on mechanical risk, et cetera, what
18 penalty would you recommend against nonconsenting
19 interest owners?

20 A. I would say recommend what I understand
21 would be cost plus 200 percent.

22 Q. And were Exhibits 13 through 19, except
23 Exhibit 16, the Yates AFE, prepared by you or
24 under your direction?

25 A. Yes, they were.

1 Q. And Exhibit 16, I believe, is an AFE
2 that Yates provided to Santa Fe?

3 A. Yes, it is.

4 Q. One final thing, Mr. Roberts. You
5 mentioned the well costs in Dagger Draw. Do you
6 have any final comment on that?

7 A. Well, the cost estimate that we
8 prepared is an extreme case. If we don't lose
9 circulation, then it will be \$250,000 less than
10 that. It's based on actual wells.

11 Q. Has Santa Fe audited Yates' costs?

12 A. Yes, we have.

13 Q. And just very briefly, was an audit
14 conducted?

15 A. Yes, it was.

16 Q. What did it involve?

17 A. This audit covered 14 wells to 29 wells
18 that we're a partner in.

19 Q. 14 to the 29?

20 A. Yes.

21 Q. In the Dagger Draw?

22 A. In the Dagger Draw area. It's only
23 been recently completed. I think a copy to it
24 has been provided to Yates. They have not had a
25 chance to respond to it. The bottom line is, our

1 auditors have about a million-and-a-half dollars'
2 worth of exceptions that we would like to have
3 addressed.

4 Santa Fe is quite adamant about
5 operating this well because of these things that
6 were listed on the audit and also because to the
7 inability to accurately predict the cost to doing
8 the wells.

9 Q. In your opinion, is the granting to
10 Santa Fe's application in the interests of
11 conservation and the prevention of waste?

12 A. Yes, it is.

13 MR. BRUCE: At this time, Mr. Examiner,
14 I would move the admission of Santa Fe Exhibits
15 13 through 19.

16 MR. CARR: I have no objection.

17 EXAMINER STOGNER: Exhibits 13 through
18 19 will be admitted into evidence at this time.

19 Your witness, Mr. Carr.

20 EXAMINATION

21 BY MR. CARR:

22 Q. Mr. Roberts, Exhibit 13, the area
23 inside the yellow contour, that's where
24 topography would permit the drilling of a well?
25 Is that what your testimony was?

1 A. Yes, except as it turned out, even
2 inside that yellow line, as you can see from the
3 picture, Exhibit 14C, that even though the
4 location that Gene had picked, 550 from the south
5 is within that yellow line, it's not acceptable.

6 Q. Why not?

7 A. Because of the relief. It would be
8 cost-prohibitive to try to put a location there,
9 and unsafe, too.

10 Q. So topography was a factor in
11 determining that the well had to be moved, and
12 geology told you where you were going to move it?

13 A. Right. We were trying to honor the
14 geology and stay on the predicted highs and yet
15 find a relatively flat place to place the well.
16 That's how we came up with the 204 feet.

17 Q. Do you have any opinion as to what
18 acreage a well at this location might, in fact,
19 drain in any to these formations?

20 A. No, I really don't.

21 Q. Would you expect a well at this
22 location to drain all 640 acres if you get a gas
23 well in the Canyon?

24 A. No.

25 Q. If we look at the AFE figures, you told

1 us that you were participants with Yates in 29
2 wells in the Dagger Draw, and you've listed 25.
3 Why did you only list 25?

4 A. Some to those 29 wells are not Dagger
5 Draw wells. I know the one, the Red Hat was in
6 the audit, and it's not a Dagger Draw well.

7 Q. So you're participants with Yates in 25
8 Dagger Draw wells?

9 A. Yes.

10 Q. And you have voluntarily participated
11 in the drilling to these wells?

12 A. Yes, we have.

13 Q. And you have continued to commit your
14 working interest to a Yates-operated well as
15 recently as August 11, 1992?

16 A. Yes, sir.

17 Q. When was the audit conducted?

18 A. It was just completed last weekend.

19 Q. When was it actually conducted or
20 requested, do you know?

21 A. Let me see when the date was. It was
22 covering properties for the period of January 1,
23 1990 through December 31, 1991. We just received
24 a copy of this this past week.

25 Q. Do you know when it was requested?

1 A. No, I don't.

2 Q. An AFE is really just an estimate to
3 what you think the costs are going to be, is that
4 correct?

5 A. That's correct.

6 Q. You're not required by Yates to prepay,
7 are you, based on an AFE?

8 A. No.

9 Q. So you're billed actual costs?

10 A. That's true.

11 Q. When you've requested supporting data,
12 has it ever been denied to you?

13 A. I don't think so.

14 Q. Have you, even with the audit in hand,
15 ever lodged objections to Yates about any
16 particular costs?

17 A. I'm not familiar with that. I'm mainly
18 just a drilling engineer.

19 Q. Do you know to any objection that's
20 been made to Yates on any costs? Do you know?

21 A. Not a formal objection.

22 Q. Now, you have agreed to participate
23 with Yates in 25 wells as shown in your Exhibit
24 17. What kind of a success rate have you
25 experienced with those wells, do you know?

1 A. The wells are very successful. It's a
2 very good field.

3 Q. When Yates goes over, they have billed
4 you for additional costs?

5 A. Yes, they have.

6 Q. And you have paid those costs?

7 A. Yes, we have.

8 Q. Do you know when they close their AFE?
9 That is, do you know how long they leave it open
10 to build completion costs in, in terms of actual
11 billing?

12 A. No, I don't.

13 Q. When we look at AFEs and compare them,
14 we're really making our best guess as to what it
15 would cost, isn't that fair?

16 A. That's correct.

17 Q. Suppose, and just for the purpose to
18 this question you can assume that Yates should
19 prevail here and a pooling order was entered, are
20 you familiar with pooling orders?

21 A. Yes.

22 Q. If you were required to pay your share
23 based on their AFE, you would pay 50 percent,
24 wouldn't you? That's your ownership, isn't it,
25 or whatever it would be in the dedicated acreage?

1 A. Yes.

2 Q. And if their AFE is lower, then to
3 avoid the risk penalty you would pay less, isn't
4 that correct?

5 A. Yes.

6 Q. And if we're unsuccessful and we're
7 asked to pay based on your AFE to avoid the risk
8 penalty, we would pay more, because you've got
9 your contingencies in?

10 A. Right.

11 Q. And you don't know whether or not
12 you're going to need a liner, do you?

13 A. No, we don't.

14 Q. If you're going to incur the costs to
15 9-5/8", whatever it is, casing, just in case you
16 do, isn't that right?

17 A. Yes, the 7" casing.

18 Q. And we really don't know what exactly
19 will be encountered when we get into the Yates
20 well, isn't that right?

21 A. That's true.

22 Q. So we really don't know what the costs
23 are going to be?

24 A. No.

25 Q. They're going to be billed either way,

1 not probably paid in advance, unless somebody's
2 force pooled, isn't that right?

3 A. That's correct.

4 Q. And, in that scenario, not knowing what
5 these numbers are going to be, it still remains a
6 fact that to reenter the well will cost less,
7 isn't that right?

8 A. Not the way I see it.

9 Q. Do you think it will cost less to drill
10 a new well, based on your figures, than to
11 reenter the Yates well?

12 A. It could.

13 Q. And that would mean only if you
14 encounter no problem?

15 A. Yes.

16 Q. And only if Yates does?

17 A. Well, not even if--they didn't even
18 encounter problems in their reentry and their
19 costs were higher.

20 Q. Higher than a new well?

21 A. Well, let's see. No.

22 Q. I'm asking you as an expert witness, a
23 drilling engineer, isn't it your experience that
24 it is less expensive, usually, to reenter a well
25 like this than to drill a new one?

1 A. I don't know. I guess so.

2 Q. Now, you think that Santa Fe should be
3 the operator to the well because they have
4 experience in the area, didn't you state that?

5 A. Uh-huh.

6 Q. And the experience is the well they
7 drilled in 34?

8 A. That's true.

9 Q. And that's the well that you've
10 communicated the Morrow zone to, isn't that
11 right?

12 A. Uh-huh.

13 Q. One wet zone and one dry zone isn't
14 that right?

15 A. Uh-huh.

16 Q. And you're having problems with that,
17 isn't that right, because to the downhole
18 communication to a wet Morrow zone and a dry
19 Morrow zone?

20 A. Yes.

21 Q. And that's your experience?

22 A. Uh-huh.

23 Q. Now, you indicated that you ought to be
24 able to prevail or ought to be operator because
25 you have a majority interest in the six sections

1 that you originally proposed to Yates, isn't that
2 right?

3 A. Uh-huh.

4 Q. Have you completed the interest
5 ownerships in the six sections that Yates then
6 proposed to you, including two additional
7 sections off to the east?

8 A. No, I haven't.

9 Q. Those figures would change, would they
10 not?

11 A. I guess.

12 Q. You've looked at Section 27, haven't
13 you?

14 A. Yes, I have.

15 Q. The ownership in 27 is 50/50, isn't
16 that right?

17 A. I'm not aware of that.

18 Q. You don't know what the working
19 interest ownership is in Section 27?

20 A. No, I don't.

21 Q. You only looked at the six sections
22 that you were proposing?

23 A. Yes.

24 Q. Not what we're considering here today
25 in this area?

1 A. Gary was doing that.

2 MR. CARR: That's all I have.

3 EXAMINATION

4 BY EXAMINER STOGNER:

5 Q. Mr. Roberts, where with the BLM is this
6 application for your proposed well?

7 A. We haven't proposed it yet.

8 Q. Has it been staked? Has the notice of
9 staking been made with the BLM office yet?

10 A. It's only been staked. The notice of
11 staking has not been submitted.

12 Q. So, no surface inspection by the BLM or
13 any archaeological needs have been presented to
14 them at this point?

15 A. No, they haven't.

16 Q. Have you made applications to drill out
17 in this area with the BLM before?

18 A. Yes, in Section 34.

19 Q. So, you're familiar with the procedure?

20 A. Yes, I am.

21 Q. Do you think they would let you drill
22 that 500 foot from the south line?

23 A. No.

24 Q. How come?

25 A. It's been too big of a cut.

1 Q. Do you think they'll let you drill this
2 one?

3 A. Yes, sir.

4 Q. Based just on topographic at this
5 point?

6 A. Based on the amount of cut to make a
7 location.

8 Q. We don't know of any artifacts out here
9 nor are you an archaeologist or is anybody in
10 this room?

11 A. No.

12 Q. But there are other items that the BLM
13 will be looking at for the location of a well out
14 here, such as archaeology, wildlife needs and
15 such as that, is that correct?

16 A. That's correct. They had a concern
17 about us drilling the well in Section 34 due to
18 wildlife and walnut trees, but they eventually
19 let us drill the well.

20 Q. And when were you made aware of this
21 location, the 206-foot location?

22 A. The 204 feet?

23 Q. Yes. I'm sorry.

24 A. I was out there with the surveyors.

25 Q. And when was that?

1 A. It was staked on November the 13th, and
2 I was out there and determined that 550 from the
3 south would not be an acceptable location, and
4 that's how we came up with the 204 to find a
5 place that we could put a location.

6 Q. Who in Santa Fe's organization makes
7 the actual application with or files the APD with
8 the BLM or has a notice or provides the notice of
9 staking to them?

10 A. I do.

11 Q. You do. And so between November 13th
12 and today, December 18th, that has not been done?

13 A. That has not been done.

14 Q. Is that normal?

15 A. No.

16 Q. How come you haven't made an APD or at
17 least filed the paperwork to get it going with
18 the BLM?

19 A. We've had a lot of rigs going, and then
20 also knowing the fact that we were going to a
21 hearing on this location, it would take some
22 time. We had other things to do, to put it
23 briefly. We're real empty on staff at this time.

24 Q. So, this is not that important of an
25 issue today for Santa Fe?

1 A. Yes, it is.

2 Q. Well, I'm sorry, you said you had other
3 things to do.

4 A. We've got three people here; it's real
5 important. But as far as applying for the
6 permit, I thought we had some time before that
7 well would actually be drilled.

8 EXAMINER STOGNER: Are there any other
9 questions for Mr. Roberts?

10 MR. BRUCE: I have a few, Mr. Examiner.

11 FURTHER EXAMINATION

12 BY MR. BRUCE:

13 Q. With respect to the issue to not
14 applying to the BLM, Mr. Roberts, obviously if
15 Yates' location is approved, you won't need BLM
16 approval for Santa Fe's location, is that
17 correct?

18 A. Right.

19 Q. And I guess what you're saying with
20 respect to the 500 or 550 foot location, it would
21 have been on a steep hillside or a canyon?

22 A. Yes, a very steep hillside.

23 Q. Looking at your Exhibit 13, Santa Fe's
24 location is apparently fairly close to an
25 existing road, is that correct?

1 A. Yes, it's a two-track road going along
2 the top of the ridge there.

3 Q. And that would minimize surface
4 disturbance, would it not?

5 A. Right.

6 Q. With respect to a couple of questions
7 by Mr. Carr, the Right Hand Canyon well isn't
8 Santa Fe's only Morrow well in Eddy County, is
9 it?

10 A. No, it's not.

11 Q. Santa Fe has drilled and operates a
12 number of wells in Eddy County, does it not?

13 A. Yes.

14 Q. And other formations also?

15 A. That's true.

16 Q. One final question. Santa Fe has
17 elected to continue to participate in these
18 Dagger Draw wells with Yates as you testified,
19 correct?

20 A. Yes.

21 Q. Dagger Draw is a prolific pool, isn't
22 it?

23 A. It sure is.

24 Q. In your opinion, would it be foolish
25 not to participate in the wells?

1 A. Yes, it would.

2 MR. BRUCE: I have nothing further, Mr.
3 Examiner.

4 FURTHER EXAMINATION
5 BY EXAMINER STOGNER:

6 Q. This two-track road that you mentioned,
7 is that a fairly accessible road, or is it a
8 four-wheel drive?

9 A. Well, I was able to get there in a
10 Chevrolet Impala. It's real rough. Going down
11 Section 26, you can't go down that road without a
12 four-wheel drive vehicle, but there is a road
13 back to the west that goes along the ridge.
14 Ranchers use this road.

15 Q. Anybody else use it?

16 A. Not that I know of. Our surveyors use
17 it to find their corners.

18 EXAMINER STOGNER: Does anybody else
19 have any questions of Mr. Roberts?

20 MR. CARR: No questions.

21 EXAMINER STOGNER: You may be excused.
22 Let's take a 20-minute recess.

23 [A recess was taken.]

24 EXAMINER STOGNER: The hearing will
25 come to order. Mr. Carr?

1 MR. CARR: Thank you, Mr. Stogner.

2 ROBERT BULLOCK

3 Having been first duly sworn upon his oath, was
4 examined and testified as follows:

5 EXAMINATION

6 BY MR. CARR:

7 Q. State your name for the record,
8 please.

9 A. My name is Robert Bullock.

10 Q. Where do you reside?

11 A. In Artesia, New Mexico.

12 Q. Mr. Bullock, by whom are you employed
13 and in what capacity?

14 A. By Yates Petroleum, as a landman.

15 Q. Have you previously testified before
16 this Division?

17 A. Yes, sir.

18 Q. At the time of that testimony were your
19 credentials as a petroleum landman accepted and
20 made a matter of record?

21 A. Yes, they were.

22 Q. Are you familiar with the applications
23 that are the subject of today's hearings?

24 A. Yes.

25 Q. Are you familiar with the status of the

1 lands and the subject area?

2 A. Yes, sir.

3 MR. CARR: Are the witness'
4 qualifications acceptable?

5 EXAMINER STOGNER: Any objections?

6 MR. BRUCE: No objection.

7 EXAMINER STOGNER: Since there are no
8 objections, Mr. Bullock is so qualified.

9 Q. Mr. Bullock, will you briefly state
10 what Yates seeks with this application?

11 A. Yates is seeking a compulsory pooling
12 of the working interest in Section 27, Township
13 21 South, Range 24 East, for a proposed reentry
14 of the Pan Am Pardue ALZ Fed Com No. 1 well to be
15 reentered and deepened at an unorthodox location,
16 being 1140 feet from the south line and 1350 feet
17 from the west line.

18 Q. Have you prepared certain exhibits for
19 presentation here today?

20 A. Yes, sir.

21 Q. Could you refer to what has been marked
22 as Yates Petroleum Corporation Exhibit 1 and
23 identify this and review it for Mr. Stogner?

24 A. Our Exhibit A is our land plat, of the
25 nine sections surrounding our proposed reentry

1 and deepening of the Pan Am Pardue ALZ well.

2 That well located there in Section 27 shows the
3 footage, being 1140 from the south, 1350 from the
4 west line. It shows the leases involved and the
5 owners of those leases, expiration dates of those
6 leases.

7 Q. Yates is seeking an order approving all
8 of Section 27 on formations developed on 640-acre
9 spacing. What would the ownership breakdown be
10 under Section 27?

11 A. It would be 50 percent Yates Petroleum
12 Corporation and 50 percent Santa Fe Energy and
13 their partners.

14 Q. If Yates' application is granted, Yates
15 is also seeking a south half 320-acre unit for
16 all tracts developed on 320 acres. What would be
17 the ownership breakdown in the south half unit?

18 A. It'll be 87-1/2 percent Yates
19 Petroleum, 12-1/2 percent Santa Fe Energy and
20 their partners.

21 Q. Santa Fe is proposing a west half stand
22 up. If that application was granted, Yates would
23 have 3/8?

24 A. Yates would have 3/8 and Santa Fe would
25 have 5/8.

1 Q. The primary objectives in the well are,
2 as with the Santa Fe application, the Upper Penn
3 and the Morrow, is that not correct?

4 A. That is correct.

5 Q. Could you briefly summarize your
6 efforts with Santa Fe to reach voluntary
7 agreement for the development of this acreage
8 with Yates as operator?

9 And I think in this regard, Mr.
10 Bullock, you do not have to repeat all of the
11 testimony that was presented by the Santa Fe land
12 person to the extent it is the same.

13 A. Okay, we sent them a proposal via a
14 letter of October 27th proposing the reentry and
15 deepening of the captioned well. Along with that
16 letter we sent them an AFE and an operating
17 agreement inviting their participation in this
18 well.

19 We also suggested that if they didn't
20 want to participate, we would propose an acreage
21 trade whereby we would swap 40-acre tracts in the
22 north half and the south half, where we would
23 have all the south half and they would have all
24 the north half. We received no response from
25 that proposal.

1 Q. That letter is your Exhibit B?

2 A. That is correct.

3 Q. Then your Exhibit C, is what?

4 A. Exhibit C is the AFE that was sent with
5 that October 27 letter.

6 Q. This is the same AFE that was reviewed
7 in the Santa Fe presentation, is that right?

8 A. Yes, sir.

9 Q. And then Exhibit D?

10 A. Exhibit D is the notification that
11 Yates was seeking application from the OCD for
12 compulsory pooling and the unorthodox oil gas
13 well location as of the date of that hearing.

14 Q. Mr. Bullock, the bottom line is, you've
15 been talking with Santa Fe, as Mr. Green
16 testified, for several months, is that right?

17 A. That is correct.

18 Q. At this time there's no agreement
19 between the parties for voluntary development of
20 this section?

21 A. That is correct.

22 Q. What percentage of the acreage would be
23 voluntarily committed to a well if Yates'
24 proposal is granted?

25 A. It would be 50 percent.

- 1 Q. That would be in Section 27?
- 2 A. That's correct.
- 3 Q. And in the south half you would have
- 4 87-1/2 percent?
- 5 A. That is correct.
- 6 Q. On the AFE, these are the totals that
- 7 were reviewed by Mr. Roberts?
- 8 A. That is correct.
- 9 Q. It shows dry hole costs of \$160,000 and
- 10 \$435,500 for a completed well?
- 11 A. Yes, that is right.
- 12 Q. Will Yates call a witness to further
- 13 review the Yates AFE charges?
- 14 A. Yes, they will.
- 15 Q. Is Exhibit E an affidavit confirming
- 16 that notice of today's hearing has been provided
- 17 in accordance with OCD rules?
- 18 A. Yes, sir.
- 19 Q. Have you made an estimate of overhead
- 20 and administrative costs to be incurred while the
- 21 well is being drilled, and also while producing?
- 22 A. Those rates were submitted in our
- 23 operating agreement as \$5,400 per month for
- 24 drilling and \$540 for operating.
- 25 Q. Those are above the AFE costs proposed

1 by Santa Fe?

2 A. Yes, they are.

3 Q. How did you derive these figures?

4 A. Those are the figures that Yates uses
5 straight across the board on all the wells for
6 this depth. We're not going to change them, and
7 they're not going to be changed just for this
8 hearing. That's what we use, \$5,400 and \$540.

9 Q. These are above the Ernst and Young--

10 A. I believe that they're slightly above
11 it.

12 Q. And you would request that the Yates
13 figures be incorporated in an order?

14 A. Yes.

15 Q. If the Examiner desires to go to the
16 Ernst and Young figures, you would also accept
17 that?

18 A. We would probably accept that.

19 Q. Does Yates Petroleum Corporation seek
20 to be designated operator of this well?

21 A. Yes, sir.

22 Q. Will Yates also call geological and
23 engineering witnesses to review questions
24 concerning operations and the risks involved?

25 A. Yes, sir.

1 Q. Were Exhibits A through E prepared by
2 you or compiled at your direction?

3 A. Yes, sir.

4 MR. CARR: At this time, Mr. Stogner,
5 we would move the admission of Yates' Exhibits A
6 through E.

7 MR. BRUCE: No objection.

8 EXAMINER STOGNER: Exhibits A through E
9 will be admitted into evidence.

10 MR. CARR: That concludes my direct
11 examination of Mr. Bullock.

12 EXAMINER STOGNER: Mr. Bruce, your
13 witness.

14 EXAMINATION

15 BY MR. BRUCE:

16 Q. Mr. Bullock, has Yates had any
17 discussions with Marathon regarding the
18 unorthodox location?

19 A. We submitted information to them
20 indicating our proposed location. We received no
21 objection.

22 Q. You don't have a written waiver from
23 them?

24 A. Well, let's see. I believe that's part
25 of our--is that included in the affidavit of

1 mailing?

2 MR. CARR: That's just notice.

3 A. That was just the notice. No, we do
4 not have a--they were notified. We've received
5 nothing back from them.

6 MR. BRUCE: Mr. Examiner, I would like
7 to note for the record that Mr. Kellahin has
8 entered an appearance in these two cases on
9 behalf of Marathon, a written entry of
10 appearance.

11 EXAMINER STOGNER: I'm not sure I've
12 seen it. Oh, yes I do have it, dated--

13 MR. BRUCE: December 11th, I believe?

14 EXAMINER STOGNER: We received it on
15 December 11th, and that's in Case 10628. I'm
16 assuming I have a plan in 10629. Yes, I do.
17 I'll take notice of that, and it's made part of
18 the record, Mr. Bruce.

19 MR. BRUCE: Okay.

20 Q. And although it's not in evidence, Mr.
21 Bullock, you submitted to Santa Fe an operating
22 agreement together with your proposal letter, did
23 you not?

24 A. That's correct.

25 Q. And that operating agreement only

1 covered the south half, is that correct?

2 A. Yes, that is correct.

3 Q. Why didn't it cover all of Section 27?

4 A. Well, our proposed well was a Morrow
5 proposal, and that was what we were drilling, to
6 the Morrow, and that's all it covered was the
7 Morrow.

8 Q. Were you aware at the time you
9 submitted this that the Cisco Canyon spacing was
10 640 acres?

11 A. I believe I was, yes. Uh-huh.

12 Q. Has Yates made any proposal as to how
13 there would be a cost sharing between Yates and
14 Santa Fe, between the Morrow, which is on 320 and
15 the Canyon which is on 640-acre spacing,
16 considering the difference in ownership between
17 those two formations?

18 A. That operating agreement did not
19 provide for that, no, it did not.

20 Q. You don't have any proposal?

21 A. Our proposal would be, if it's spaced
22 on 640 the costs would be shared 50/50. Based
23 upon the south half, the cost would be shared
24 87-1/2 Yates and 12-1/2 percent Santa Fe.

25 Q. Now, your letter to Santa Fe also made

1 a proposal to trade acreage?

2 A. That's correct.

3 Q. Did you ever make that proposal before
4 Santa Fe completed or drilled the Right Hand
5 Canyon well?

6 A. I am going to look at my notes here.
7 That proposal was probably made at a later date.

8 Q. After Yates was aware that Santa Fe had
9 drilled the Right Hand Canyon well?

10 A. That's probably correct, yes.

11 Q. And Yates' proposed unit does maximize
12 Yates' acreage in the Morrow, does it not?

13 A. As far as a south half location, yes,
14 it would.

15 Q. And it obviously benefits from the
16 Morrow test well, the Right Hand Canyon well, is
17 that correct?

18 A. It may, yes. That's a possibility.

19 Q. Does Yates have BLM approval of its
20 surface location?

21 A. No, it does not. We submitted the APD
22 on 10/29/92, and as of this date we do not have
23 approval from the BLM for this application.

24 Q. Now, in your discussions with Mr.
25 Green, did you also relate to him that Yates

1 wanted to include acreage in Sections 24 and 25
2 to this proposed six-section working interest
3 unit?

4 A. It was always, because of our acreage
5 holdings in that area, Mr. Yates wanted for this
6 well to be roughly 50/50. And, yes, we did
7 suggest that some of our lease be included in the
8 six-section working interest unit to bring it up
9 to that level.

10 Q. And you're referring to Mr. John Yates?

11 A. That's correct. And I would like to
12 clarify a point that Mr. Green made here, if you
13 want to get into that.

14 It was not our intention to operate the
15 entire unit, as he testified. Mr. Yates and I
16 communicated this to Mr. Green several times. We
17 would operate where our interest was greater on a
18 spacing unit, and likewise Santa Fe would operate
19 where their interest was greater. That is what I
20 communicated to him several times.

21 Q. Now, Mr. Yates' proposal to join
22 Sections 24 and 25, was that made without the
23 benefit of any geology?

24 A. Yes.

25 MR. BRUCE: I don't have anything

1 further.

2 EXAMINER STOGNER: Mr. Carr?

3 MR. CARR: I don't have anything
4 further, Mr. Stogner.

5 EXAMINATION

6 BY EXAMINER STOGNER:

7 Q. I want to double-check and make sure I
8 got the overhead charges again, of \$5,400 for
9 drilling?

10 A. \$5,400 and \$540.

11 EXAMINER STOGNER: I have no other
12 questions. You may be excused.

13 Mr. Carr?

14 MR. CARR: At this time we would call
15 Mr. May.

16 BRENT MAY

17 Having been first duly sworn upon his oath, was
18 examined and testified as follows:

19 EXAMINATION

20 BY MR. CARR:

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

23 A. Brent May.

24 Q. Where do you reside?

25 A. Artesia, New Mexico.

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

3 A. Yates Petroleum, as a petroleum
4 geologist.

5 Q. Have you previously testified before
6 this Division?

7 A. Yes, I have.

8 Q. At the time of that testimony were your
9 credentials as a petroleum geologist accepted and
10 made a matter of record?

11 A. Yes, they were.

12 Q. Are you familiar with each of the
13 applications filed in these consolidated cases?

14 A. Yes, I am.

15 Q. And have you made a geological study of
16 the area that is involved in this case?

17 A. Yes, I have.

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

20 EXAMINER STOGNER: Any objections?

21 MR. BRUCE: No, sir.

22 EXAMINER STOGNER: Mr. May is so
23 qualified.

24 Q. Mr. May, you were present here today
25 when Mr. Davis testified. Do you agree with his

1 testimony that the proposed wells are projected
2 into what appears to be, actually--hopefully
3 would be an oil zone, somewhat like Dagger Draw?

4 A. As far as relating the Dagger Draw to
5 this area, I agree with that, yes.

6 Q. How do the rock characteristics
7 compare?

8 A. They're very similar. It's the same
9 dolomite. The dolomite that is present in Dagger
10 Draw carries down into the Indian Basin.

11 Q. Could you relate or explain where the
12 Yates well's location is in regard to the
13 boundaries of the Indian Basin Upper Penn pool?

14 A. It's to the east.

15 Q. Is it close to the edge of the--

16 A. It's close to the edge of the gas pool,
17 yes.

18 Q. What is the current status of this
19 well?

20 A. It's currently the Old Pan American
21 Pardue Gas Unit #1, which was a plugged and
22 abandoned well. Yates plans to reenter it. Its
23 present depth is in the Upper Penn or Canyon
24 formation at 8038 feet.

25 Q. And about to what depth do you intend

1 to take the well?

2 A. As I said before, Yates plans to
3 reenter the well and deepen it to approximately
4 10,350 feet to test the hydrocarbon potential of
5 the Upper Penn, or Canyon, and the Morrow
6 formation.

7 Q. As for the Santa Fe proposal, the
8 primary objectives are the Upper Penn and the
9 Morrow, is that right?

10 A. Yes.

11 Q. Could you just generally describe the
12 geological characteristics of the Morrow and the
13 Upper Penn?

14 A. You want me to go through my exhibits
15 with this?

16 Q. Well, I think if you could just give us
17 a general overview as to what we're talking
18 about?

19 A. Okay. The Canyon dolomite, both the
20 dolomite and the Morrow are primary objectives.
21 The dolomite of the Canyon is the reservoir, as
22 Mr. Davis stated earlier, and the limestone and
23 shales are not of reservoir quality.

24 The dolomite in this lease is actually
25 the east edge of the Indian Basin, Upper Penn

1 pool, the same dolomite. Basically the lens are
2 porous and permeable dolomite pinching out into a
3 tight limestone.

4 The Morrow sands, in my opinion, are
5 fluvial-deltaic deposits.

6 Q. Let's go to what has been marked as
7 Yates Exhibit No. 1, your cross-section. I would
8 ask you to first identify that and then review
9 the information on that exhibit for the Examiner.
10 All right. Let's go to Exhibit No. 1 and if you
11 would review it, please?

12 A. This is cross-section A - A'. It's a
13 north/south stratigraphic cross-section with the
14 top section showing the Canyon dolomite and
15 limestone, and the bottom section showing the
16 Morrow.

17 In the upper section the Canyon
18 dolomite is shaded in blue and the limestone is
19 uncolored. North is on the left side, ranging to
20 south on the right. On the extreme left side we
21 have the Ralph Lowe Staple No. 1 in Section 22.
22 Proceeding into the north half of Section 27, we
23 have the Anadarko Pardue Farms #1. Then to the
24 south half of Section 27, the Pan American Pardue
25 Gas Unit #1, which is the proposed Yates

1 reentry.

2 And then down into Section 34, the
3 Santa Fe Energy Right Hand Canyon Federal 34 #1,
4 and then down into Township 22 South, 24 East in
5 Section 3, the Curtis Inman Walt Canyon Unit #1.

6 The datum on the Canyon is the top of
7 the Canyon carbonate. I would like to point out,
8 the DST intervals and perforated intervals are
9 marked in the Anadarko Pardue Farms #1. There's
10 two DSTs in the proposed Yates reentry, there are
11 two DSTs in the Canyon, and in the Walt Canyon
12 Unit #1 there are three DSTs in the Canyon.

13 You might note that the dolomite from
14 north to south, going from Section 22 into 27 is
15 thickening, especially when it gets into Section
16 27.

17 Q. Going back to the DSTs, and especially
18 in the Anadarko Pardue Farms #1 and Pan American
19 Pardue Gas Unit #1, the first DST in the Anadarko
20 well at the top of the dolomite produced 110,000
21 cubic feet of gas, 1800 feet of heavy oil and gas
22 cut mud.

23 The second DST, a little bit further
24 down, recovered 130,000 cubic feet of gas and
25 2600 feet of heavy oil and gas cut mud.

1 Moving over to the proposed Yates
2 reentry, the first DST taken was actually the
3 bottom one and it produced 275,000 cubic feet of
4 gas which decreased to too small of a measure at
5 the end of the test, and it recovered 280 feet of
6 oil and gas cut mud and 1830 feet of sulfur
7 water. And this is actually in the dolomite
8 section.

9 The second test, which was a straddle
10 test, which appears to be in the Canyon lime,
11 produced 114,000 cubic feet of gas. That again
12 decreased to too small to measure at the end of
13 the test, plus 60 feet of gas cut mud, 90 feet of
14 slightly oil and gas cut mud, and 90 feet of
15 heavy oil and gas cut mud.

16 I might note that my dolomite lime, the
17 top of the dolomite in this proposed Yates
18 reentry is a little bit higher than what the
19 sample logs show, and that's my interpretation
20 going off this sonic log. The Gamma Ray was a
21 little bit cleaner going higher up, so, in my
22 opinion, the dolomite could be a little bit
23 higher than what the sample log described it.
24 The sample log actually showed the dolomite
25 starting at a depth of 8000 feet.

1 Over in the Santa Fe Energy Right Hand
2 Canyon well, basically all they had was a cased
3 hole Gamma Ray neutron log through this interval
4 since they lost circulation. You can't determine
5 the difference between limestone and dolomite
6 from this log, and I did not have access to
7 sample logs or mud logs, so I made the assumption
8 that the dolomite was continuous through this
9 whole section. That's why I have the question
10 marks at the base of the dolomite lime through
11 this area.

12 Q. Are there wells in the area where the
13 sands were actually wet?

14 A. I'll get to the Morrow on that in just
15 a minute. I guess that's about all I wanted to
16 say. Oh, I just wanted to point out, too, on the
17 Walt Canyon they had substantial shows of oil in
18 the top of the dolomite in that well, too.

19 Moving down to the Morrow cross-section
20 at the bottom of this page, the datum was the top
21 of what I call the Morrow clastic section, which
22 is a little bit different from Mr. Davis'. I
23 divided the Morrow clastics loosely up into an A
24 and a B section.

25 EXAMINER STOGNER: Hold on a second

1 while I close the door.

2 MR. CARR: And could we turn up the
3 heat, please?

4 [Discussion off the record.]

5 Q. All right. Do you want to continue,
6 Mr. May?

7 A. Yes. I just want to point out, we have
8 the Lower Morrow marked and a section below that,
9 which is loosely a Yates' in-house term called
10 the Austin cycle, which is just the lower section
11 of the Penn. When we penetrate that we're
12 assured that we're through most of the productive
13 sands in the Morrow.

14 I would like to point out that the sand
15 that Mr. Davis, I believe, called his basal Upper
16 Morrow sand, is shown in my Morrow clastics A
17 Section. In the Anadarko Pardue Farms #1, it
18 appears to have very good porosity, but it does
19 on log calculations calculate to be a little wet
20 in my opinion.

21 Going over to Santa Fe's well, the same
22 sand appears and looks even better and again, in
23 my opinion, I think that that sand is a little on
24 the wet side. They did DST it and recovered a
25 good amount of gas, but it appears that it may

1 produce a little bit of water, too.

2 Q. All right. Let's go to your structure
3 map of the Canyon, which is Exhibit No. 2. Can
4 you identify the contour interval and then
5 identify that and review that exhibit for Mr.
6 Stogner.

7 A. This is a Canyon structure map. The
8 top of the Canyon carbonate again is the datum.
9 It shows a general structural dip to the east
10 with a large nose down to the south of Section
11 27.

12 The proposed Yates reentry is circled
13 in blue, and the Santa Fe location, not their
14 present location now, but the location of 500
15 feet from the south line is circled in orange.

16 I might point out that the Yates
17 reentry along with the Pardue Farms #1, which is
18 in the north half of 27, the dry hole symbol, as
19 I stated on the cross-section, both had shows of
20 oil on drill stem tests in the Canyon.

21 In my opinion, relying on those two
22 tests and plus with the one test down in Section
23 3 in the Walt Canyon Inman well, which is just
24 above the minus 4000 structure line, both the
25 Santa Fe location and the Yates location should

1 be structurally high enough to produce oil out of
2 this zone.

3 Q. Let's move to the Canyon isolith map,
4 your Exhibit No. 3.

5 A. I might point out again the two
6 locations are circled in blue and orange, and the
7 red triangles showed the wells that had shows of
8 oil on DST.

9 This isolith map represents the Canyon
10 dolomite and shows its thicknesses and limits. I
11 also might point out that the value signs that
12 have pluses beside them indicate that the
13 dolomite was not fully penetrated and so the true
14 thickness is unknown.

15 Looking at this map, most of the
16 locations in 27 should have a sufficient
17 thickness of dolomite for potential oil
18 production.

19 Q. All right, Mr. May, let's go down to
20 the Morrow. If you could refer to your Morrow
21 structure map, Exhibit No. 4, identify and review
22 this for Mr. Stogner.

23 A. This is the Morrow structure map with
24 the top of the Lower Morrow as a datum. It shows
25 a general structural dip to the east and again a

1 nose down to the south of Section 27. Basically
2 what I'm showing here, is both the Yates reentry
3 and the Santa Fe Energy location should be updip
4 of the Pardue Farms #1, which I pointed out I
5 thought had a wet sand in it, and Santa Fe's
6 Right Hand Canyon well, which I think could
7 produce some water in that.

8 So I think structurally these two
9 locations are similar and should be updip from
10 those two wells.

11 Q. Let's go now to Exhibit No. 5, the
12 isolith on the Morrow. Review that, please.

13 A. This map represents the sands of the
14 total Morrow clastic section and shows the limits
15 of that sand deposition. This isolith is a clean
16 sand map with a gamma ray cutoff of 58 PI units
17 or less, and it shows a sand thick trending
18 through the area of the proposed locations.

19 The map shows that a well located
20 within the 50-foot contour interval could have a
21 better chance for encountering reservoir quality
22 sands. The Staple #1 up in Section 22, in my
23 opinion, and which I forgot to point out on the
24 cross-section, but I think Mr. Davis alluded to
25 it, that well had a DST and it looks like it came

1 from a thick Morrow sand in the Morrow clastic
2 section, and that produced up to 1.6 million off
3 that DST. In my opinion, that should have been a
4 Morrow completion.

5 The Anadarko Pardue Farms #1 in the
6 north half of Section 27 had the one quality sand
7 which Mr. Davis termed the basal Upper Morrow
8 sand; but as I referred to earlier, it looks wet
9 to me. It had a few other sands, but they were
10 very low porosity values.

11 Moving down to Santa Fe's Right Hand
12 Canyon well in the northwest quarter of Section
13 34, that well had basically two sands. The one
14 which they had a good DST off of and I think
15 could produce some water. And another one below
16 it, which was a little on the tight side, but
17 both have sufficient thicknesses.

18 Using those wells, that's kind of what
19 I based the 50 contour cutoff on, and plus my
20 knowledge of the area. Some of the other areas
21 that I've worked in this immediate region, I've
22 used the same cutoff.

23 You might note that the Yates reentry
24 should have approximately 55 feet of sand
25 present, possibly giving it a better chance of

1 encountering quality sands, as opposed to the
2 proposed Santa Fe Energy location, which will
3 have--I said 45 feet at this location but their
4 new location may have a little bit more. I want
5 to state, there is a little bit of a difference
6 between these two locations, but in my opinion
7 they're very similar.

8 Q. Let's go to what has been marked as
9 Yates' Exhibit No. 6. Identify this exhibit and
10 then explain to Mr. Stogner what you're trying to
11 show with this?

12 A. This just shows the different Santa Fe
13 locations that I've learned all through the
14 course of our negotiations, and of course it
15 doesn't have the last one on it. The source of
16 this information was through verbal communication
17 with Mr. Davis in phone conversations during the
18 week of October 26th through the 30th, 1992.

19 I might point out first that the
20 locations are the orange circles and they are
21 chronologically numbered. And the Yates reentry
22 is the red dry hole marker in the south half of
23 27.

24 Their first location, the way I
25 understand it, was located 660 feet from the

1 south line and 1980 from the west line of Section
2 27. That is an orthodox location for a lay-down
3 320-acre Morrow spacing unit.

4 In the course of our conversation Mr.
5 Davis said that the BLM requested that they move
6 that location, because of topography, to 1300
7 feet from the south line and 1350 from the west.
8 And if I'm incorrect on some of these footages,
9 I'm sure Mr. Davis can correct me. That's
10 basically 200 feet away from the proposed Yates
11 reentry.

12 In a later phone conversation a couple
13 of days past the first one, Mr. Davis stated that
14 the location had then been moved to 500 feet from
15 the south line and 660 feet from the west line,
16 because he had remapped the area.

17 The conclusion I draw from this, they
18 had gone from one, two, three and now four
19 locations in the south half of the southwest
20 quarter of Section 27. It appears to me that
21 they're geologically comfortable with any
22 location in that area, and that's basically the
23 crux of my presentation here.

24 I think the Yates' location and the
25 Santa Fe location are very similar, geologically.

1 Q. Mr. May, is Exhibit No. 7 a written
2 summary of your geological presentation?

3 A. Yes, it is.

4 Q. What geological conclusions can you
5 reach or have you just stated those?

6 A. I think I just stated them.

7 Q. In essence, both are geologically
8 comparable?

9 A. That's my opinion.

10 Q. Were Exhibits 1 through 7 prepared by
11 you or compiled under your direction.

12 A. Yes, they were.

13 MR. CARR: At this time, Mr. Stogner, I
14 would move Yates' Exhibits 1 through 7.

15 EXAMINER STOGNER: Any objection?

16 MR. BRUCE: No, sir.

17 EXAMINER STOGNER: Exhibits 1 through 7
18 will be admitted into evidence at this time.

19 MR. CARR: That concludes my direct of
20 Mr. May.

21 EXAMINER STOGNER: Thank you, Mr.
22 Carr.

23 I had put that in to make sure it was Mr. Bru
24 Mr. Bruce?

25 EXAMINATION

1 BY MR. BRUCE:

2 Q. I just want to reconfirm a few things,
3 Mr. May. I don't think we need to stretch out
4 the cross-section you have, but do you agree with
5 Mr. Davis that at Yates proposed reentry, there
6 is limestone on top of the dolomite?

7 A. Yes, there is. But the first DST was
8 definitely in the dolomite and they definitely
9 did recover oil and water comparable to the
10 Dagger Draw DSTs.

11 Q. You did say that you would anticipate a
12 completion at either the Santa Fe or the Yates
13 location in the Upper Penn to be more of a Dagger
14 Draw type well than an Indian Basin gas well?

15 A. That's what I anticipate. I feel like
16 that when we drill into the Canyon, we're not
17 going to a gas well here. It's either going to
18 be oil, water or both. Probably oil and water,
19 or water.

20 Q. Is your structure map on the top of the
21 Canyon, is that on the top of the dolomite?

22 A. That's on top of the carbonate, so it's
23 a little bit different from Mr. Davis'.

24 Q. Do I interpret it correctly to show
25 that Santa Fe's location would gain some

1 structure over Yates' proposed reentry?

2 A. Yes, it would, as far as the dolomite
3 goes.

4 Q. The Anadarko well in the northwest
5 quarter of Section 27, do you know its footage
6 location?

7 A. I believe it is--well, that should be
8 on the cross-section. I have it 2310 from the
9 north line and 1980 from the west line of Section
10 27.

11 Q. In the Pan Am Pardue well, did you use
12 samples, or did you use a sample log to determine
13 the top of the dolomite?

14 A. I used the combination of the sonic log
15 and a sample log, a commercial sample log, which
16 I think is probably similar to what Mr. Davis
17 said.

18 Q. Did the sample log show any limestone
19 below the point where you put it on your
20 cross-section?

21 A. Yes, it did. The sample log showed
22 lime going down to 8,000 feet and, as I described
23 earlier, my opinion is that the dolomite could
24 have possibly come higher because of the cleaner
25 section on the gamma ray.

1 The thing you have to take into
2 account, and this is just my opinion, sometimes
3 samples are not good samples or are incorrect.
4 It's just my opinion.

5 Q. Can you definitely separate the
6 limestone from the dolomite by gamma ray?

7 A. No, not definitely, not by any means.
8 That sonic log is very vague.

9 Q. Now regarding the Morrow water
10 saturation, did you do the calculations on that?

11 A. Yes, I did.

12 Q. Do you agree with the values Mr. Davis
13 gave?

14 A. Those are probably in the ballpark,
15 yes. I may have gotten some a little bit higher,
16 but they were not out of the ballpark by any
17 means, no.

18 Q. Do you think that a four percent
19 difference, I think Mr. Davis had 45 percent and
20 41 percent, do you think that four percent
21 difference suggests one is wet and one is dry?

22 A. That's very hard to say. I don't think
23 that's a definite line that you can pick in
24 between there. Usually we consider in the
25 Morrow, I was getting around 50, or low 50s or

1 high 40s, and that's a little on the wet side, as
2 far as my opinion is.

3 Q. When you discussed the same wells in
4 Section 22 and 27 that Mr. Davis did, did you
5 think the well in Section 22, the Ralph Lowe, was
6 that a bypass producer in the Morrow, in your
7 opinion?

8 A. Yes, that should have been a Morrow
9 completion, in my opinion.

10 Q. What about the wells in Section 27?

11 A. The Pardue? The Anadarko well?

12 Q. Yes.

13 A. I think that sand is wet, and so I
14 don't think I could consider it a Morrow
15 completion.

16 Q. Would that indicate that it might be
17 best to move as far away from that well as
18 possible?

19 A. You want to move away from it as long
20 as you get structurally high enough to where you
21 think you're out of the water, and I think both
22 the Santa Fe and the Yates' locations will do
23 that.

24 MR. BRUCE: Nothing further, Mr.
25 Examiner.

1 EXAMINER STOGNER: Mr. Carr, any
2 redirect?

3 MR. CARR: No redirect.

4 EXAMINATION

5 BY EXAMINER STOGNER:

6 Q. I'm looking at Exhibit No. 6, Mr. May,
7 you show the three well locations and I'm showing
8 the fourth one. Who did you talk to or where did
9 you learn about these Santa Fe locations from?

10 A. This is all verbal communication with
11 Mr. Davis, the Santa Fe geologist.

12 Q. Over what kind of time frame are we
13 talking about?

14 A. We talked one day of the week of
15 October 26th through the 30th, and he told me
16 about the first and second location and told me
17 the second location was going to be their
18 location at that time.

19 A few days later, I can't remember
20 whether it was two or three, he called me back
21 and said that he had remapped and moved it to the
22 third location.

23 Q. We're talking late October, early
24 November?

25 A. Yes.

1 Q. Now, I want to make sure I have my time
2 frames straight here. You said your first
3 communication with Mr. Davis was October 26th.
4 Was that the first time you talked to him about
5 any prospect out here?

6 A. I had talked to him earlier about
7 trying to get the logs from the Right Hand Canyon
8 well. But as far as prospects, I don't believe
9 we discussed any prospects.

10 Q. But October 26th was the first date
11 that you talked to him on it?

12 A. The week of the 26th was the first time
13 I recall that we talked about a prospect.

14 Q. And that was a week after the APD was
15 submitted to the BLM by Yates?

16 A. I think it was the week of, wasn't it?

17 MR. BULLOCK: 10/29 is when it was
18 submitted.

19 EXAMINER STOGNER: I thought you said
20 the 22nd, Mr. Bullock.

21 MR. BULLOCK: Let me check.

22 EXAMINER STOGNER: Since I'm going to
23 need a copy of that, that shows the receipt date
24 at the BLM. I would certainly appreciate that,
25 and that might be in our files here.

1 MR. CARR: But we will provide a copy
2 of the APD, in any event.

3 EXAMINER STOGNER: So, Mr. Bullock, am
4 I correct, is it the 22nd or the 29th?

5 MR. BULLOCK: We submitted it the
6 29th. I don't have the date received. I'm not
7 sure of the date they received it. It's dated
8 10/29. I won't say that's the date they received
9 that.

10 MR. CARR: We'll confirm that, Mr.
11 Stogner.

12 EXAMINER STOGNER: I have no other
13 questions of Mr. May at this time.

14 MR. CARR: We have no further questions
15 of Mr. May.

16 EXAMINER STOGNER: Mr. Carr?

17 MR. CARR: At this time we would call
18 Dr. Boneau.

19 DR. DAVID FRANCIS BONEAU

20 Having been first duly sworn upon his oath, was
21 examined and testified as follows:

22 EXAMINATION

23 BY MR. CARR:

24 Q. Could you state your name for the
25 record?

1 A. David Francis Boneau.

2 Q. Where do you reside?

3 A. Artesia, New Mexico.

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

6 A. I'm employed by Yates Petroleum
7 Corporation as a reservoir engineering
8 supervisor.

9 Q. Dr. Boneau, have you previously
10 testified before the Division?

11 A. Yes, sir.

12 Q. At the time of that testimony, were
13 your credentials as a petroleum engineer accepted
14 and made a matter of record?

15 A. Yes, sir.

16 Q. Are you familiar with each of the
17 applications filed in these consolidated cases?

18 A. Yes, sir.

19 Q. And are you familiar with the area that
20 is involved in these cases?

21 A. Yes, that's correct.

22 MR. CARR: Are Dr. Boneau's
23 qualifications acceptable?

24 EXAMINER STOGNER: Are there any
25 objections?

1 MR. BRUCE: No, sir.

2 EXAMINER STOGNER: Dr. Boneau is so
3 qualified.

4 Q. Have you prepared certain exhibits for
5 presentation here today?

6 A. Yes, that's correct.

7 Q. Would you refer to what has been marked
8 as Yates Exhibit No. 8, identify that first and
9 then review this exhibit for Mr. Stogner?

10 A. Yates Exhibit No. 8 is supposed to
11 point out two things. One is a quick review of
12 the theory on which this exploration is based in
13 the Canyon dolomite formation, and the other idea
14 is to support that it's a risky proposition with
15 a 200 percent penalty being appropriate.

16 What Exhibit 8 is, is a map of the
17 Indian Basin Upper Penn field. The total
18 productive limits are the black area plus the
19 yellow area. The yellow area is the part of a
20 field that has watered out over the last 25
21 years, as approximately 1.5 Tcf of gas has been
22 produced from this field. Water has encroached
23 from the east and watered out all the areas that
24 are shown in yellow.

25 The theory we're talking about here is

1 that there is an oil leg downdip of this gas, and
2 that oil leg would be just to the east of the red
3 line in Sections 22, 27, 34 and adjacent areas
4 that have been discussed here.

5 The pink dot shows--well the pink dot
6 probably covers both proposed locations, but it
7 shows where we're talking about drilling here.
8 So there is a theory that there is oil off to the
9 east in some extensive area, hopefully, so that
10 the exact location of this test is somewhat
11 immaterial to whether there's an oil leg there or
12 not.

13 I'm the sceptic at Yates on this whole
14 project, and I guess I have a friendly wager with
15 John Yates as to whether there's anything there.
16 But the concern in the risk factor is that there
17 may have been oil off to the east, but in these
18 25 years of production, water has moved in the
19 oil. What there was of it could have easily
20 moved updip and be trapped in a previously
21 gas-saturated reservoir and just not be
22 commercial.

23 There's sensational risk of that, and
24 it's my opinion that that's what we're going to
25 find. I would love to be proved wrong, but there

1 is that great risk.

2 Q. You would concur, would you not with
3 Santa Fe, that this is a high-risk venture?

4 A. That's exactly what we're saying.

5 Q. That a 200 hundred percent penalty
6 should be assessed against any interest owner who
7 doesn't voluntarily participate in the venture?

8 A. We agree with Santa Fe on that, yes,
9 sir.

10 Q. There are no oil wells producing from
11 this theorized oil trap at this time?

12 A. That's correct, yes.

13 Q. Let's move to Yates Exhibit No. 9.
14 Could you identify that, please?

15 A. Yes, sir. Yates Exhibit No. 9 shows
16 kind of a score card of Yates' activities in the
17 area of reentries within the last six or eight
18 months.

19 Exhibit 9 lists six wells that Yates
20 has reentered since last spring. It also shows
21 the locations and the target reservoirs, et
22 cetera. These are not all in the immediate area
23 that we're talking about, but they're all in
24 Southeast New Mexico, in Eddy and Lea Counties.

25 The purpose is to show something about

1 AFE costs, and something about our experience and
2 success at completing these reentries. So we're
3 talking about six wells here.

4 To the right-hand side I show our AFE
5 costs in the third last column from the right,
6 and for the six wells that totals \$2.218
7 million.

8 The second column from the right shows
9 the actual costs we have incurred in completing
10 these six reentries, and that's \$2.166 million.

11 The final column shows what it would
12 cost to drill a new well in each of these
13 situations, and that's about \$4.2 million.

14 So the message is that, on average, we
15 have come in equal to our AFEs on these
16 reentries. And, on average, we've saved about 50
17 percent over the cost of drilling a new well.

18 You look at individual comparisons
19 here, and some of the actual costs have been 25
20 percent higher than AFEs, some of them have been
21 40 percent under the AFEs, but we have completed
22 these reentries and we have completed them on
23 average at the AFE level that we're projecting.

24 We should note that these are not easy
25 reentries. These six here, five of them had

1 cutoff casing stubs in the hole that we had to
2 get back over and patch in casing and re-cement
3 the well. The only one that didn't have that
4 situation was the Hickory, item #4 there.

5 We'll see in a minute that the reentry
6 we're talking about is relatively straightforward
7 compared to at least five of the six reentries
8 that we have successfully completed in recent
9 times.

10 Q. Let's go now, Dr. Boneau, to Exhibit
11 No. 10, and you can explain and review that.

12 A. Exhibit No. 10 is a wellbore sketch for
13 the Pardue Fed. Gas Com #1, showing the present
14 situation of the well we attempt to reenter.
15 There's surface casing at 280 feet cemented to
16 the surface, and there's 8-5/8" casing at 2780
17 feet. There's a hole in the ground at 8038 feet
18 with some cement plugs in it.

19 This is a relatively straightforward
20 reentry. You drill out the plugs, drill deeper,
21 run production casing, cement it, and try to
22 complete the well. We're clearly going to get to
23 the 8000 foot level.

24 Santa Fe has brought up the possibility
25 that we'll lose circulation and somehow not be

1 able to get any deeper. If that were to happen,
2 and I think it's unlikely, but if that were to
3 happen, we will be able to test the dolomite
4 which is, in my mind, the main objective of this
5 is testing this oil theory in the dolomite. I
6 think we'll get to the Morrow. But if we don't
7 get to the Morrow, we'll surely complete this
8 reentry and we'll get a test of the dolomite and
9 it will be cheap.

10 Q. Dr. Boneau, if you did that, if you
11 were unable to get to the Morrow, the option of
12 drilling a Morrow well would still remain, is
13 that not correct?

14 A. Yes, that's correct, and it might even
15 be a relatively orthodox location.

16 Q. In view of the risk that's associated
17 with this venture, do you believe it is prudent
18 to drill a new well when a reentry is available?

19 A. I think it is prudent to test this oil
20 theory as cheaply as possible. If it proves that
21 there's oil there, then real dolomite wells, real
22 Canyon wells can be drilled on closer spacing and
23 produce lots of oil.

24 Q. Are you expecting a 640-acre gas well
25 unit in the Canyon to result from this operation?

1 A. No. The Canyon well is not going to
2 produce gas. It's going to produce nothing, or
3 water or oil.

4 Q. Now, Dr. Boneau, you heard Mr. Roberts'
5 testimony today concerning the AFE costs that
6 have been charged or at least presented by Yates?

7 A. I heard that.

8 Q. Can you explain why some of these costs
9 may have been so high?

10 A. I made a tabulation of the AFE and
11 actual costs for the Dagger Draw wells that Yates
12 operates where Santa Fe participates. My
13 conclusion from that is similar to what Mr.
14 Roberts said. My numbers are that the total AFE
15 costs were like \$12 million and we actually spent
16 \$16 million on those AFEs.

17 I went back and looked individually at
18 quite a number of those wells. In my mind, there
19 are three million reasons for the cost overruns,
20 mostly not related to Yates drilling the well
21 right.

22 The main reason the AFEs run over is
23 that we leave the AFEs open beyond the period of
24 time that the writer of the AFE had in mind. And
25 what happens is that we complete the well--Dagger

1 Draw well we're talking about--we produce it for
2 a month or two, we find out we need a bigger
3 pump, a smaller pump, we go in and restimulate
4 it, most often successfully, and those charges
5 that occur a couple of months down the line are
6 lumped into the original drilling AFE.

7 These pump changes and these
8 retrieval costs are about \$100,000, and they
9 weren't considered by the writer of the AFE.

10 Q. Dr. Boneau, if someone is required to
11 prepay based on an AFE, the lower figure would be
12 the figure utilized, is that right?

13 A. Yes, that's correct.

14 Q. And you're billing actual costs on
15 these, is that right?

16 A. That's correct.

17 Q. What would be another reason that the
18 AFE costs may be high?

19 A. Another thing that we've done that we
20 think is wise but fouls up the AFEs, is that
21 we're cementing those Dagger Draw wells to the
22 surface on the production casing and we're doing
23 that to protect against corrosive waters in the
24 Abo and the Yeso.

25 The AFE contains \$8,000 for a cement

1 job, and in order to use DV tools and three-stage
2 cement jobs to cover that, we're spending
3 \$30,000. Again, the AFE was not written with
4 that in mind; but subsequent to writing the AFEs,
5 we decided that was a good idea and that was
6 done.

7 The other item that drives up the AFE,
8 and this is relatively related to what Santa Fe
9 is talking about, is that in some of the wells at
10 Dagger Draw we lose circulation above the
11 dolomite, from about 4000 feet to 5400 feet, and
12 it requires extra water, mud, and day-work
13 charges to overcome these loss circulation
14 problems.

15 We're always successful in overcoming
16 them, but to be honest with you there are not
17 contingency charges in the AFEs for that
18 happening in most cases. And recently, I think
19 we've got some of these changes in the AFEs, so
20 the AFEs are a little higher and we're doing a
21 better job of hitting them. Those are the kind
22 of things that have happened to explain the facts
23 that Santa Fe brought up.

24 Q. Are you aware of any complaints from
25 Santa Fe about these costs?

1 A. No, I'm not aware of those.

2 Q. Is Yates willing to discuss those with
3 them if those problems are brought to them?

4 A. Most certainly. We're trying to save
5 money. We're spending a lot of money out there
6 of our own. We're trying to save money, surely.

7 Q. Now, if we look at the proposed Santa
8 Fe location, you indicated we weren't looking for
9 a 640-acre gas well. If, by some quirk, we got
10 that, would a well at the proposed location drain
11 that acreage, Section 27, at the Santa Fe
12 proposed location?

13 A. No. A well that's barely in Section 27
14 is not going to drain all of Section 27.

15 Q. How does this location stack up as an
16 effective location to drain the Morrow in Section
17 27?

18 A. Well, it's not going to drain 320 acres
19 of Section 27 of the Morrow, it's going to drain
20 Santa Fe's other acreage.

21 Q. Do you have an opinion as to the most
22 efficient way to go about testing this oil
23 theory?

24 A. My opinion is to test it as cheaply as
25 possible because it's a theory, which means that

1 it's in need of test and may be wrong.

2 Q. We had testimony from Mr. Roberts and
3 he stated reasons he felt that Santa Fe may be a
4 better choice as an operator here. Could you
5 summarize what, in your opinion, would be the
6 arguments for Yates operating this property?

7 A. I'll attempt to do that, yes. We think
8 that the reentry approach that Yates is
9 suggesting is the prudent way to go. Our
10 location is less than orthodox. Yates has
11 experience with reentries. The reentry cost is
12 going to be lower. Yates has experience with
13 Morrow gas wells in Southeast New Mexico. We
14 operate about 125 of them. Yates has experience
15 with Canyon dolomite wells, we operate about 120
16 such wells at Dagger Draw. The reentry costs are
17 going to be lower than drilling a new well, no
18 matter how you cut it.

19 This is a risky project. The Canyon
20 theory is unproven and needs to be tested. The
21 reentry is a straightforward reentry. We're
22 going to get to the Canyon. We can overcome loss
23 circulation if, by some sense, that happens. We
24 have experience with loss circulation.

25 The Yates way will test it prudently

1 and cheaply. The Morrow, in my opinion is--well,
2 the place to test the Morrow in Section 27 is
3 almost outside Section 27. It's somewhere in the
4 interior of Section 27.

5 I think, for the reasons I've tried to
6 state, that the Yates approached to testing the
7 Canyon is a prudent, cheap thing to do, and
8 that's what we should do in this case.

9 Q. In your opinion, will approval of
10 Yates' application and the drilling of a well as
11 Yates proposes, be in the best interests of
12 conservation, the prevention of waste and the
13 protection of correlative rights?

14 A. Yes, sir.

15 Q. Were Exhibits 8, 9 and 10 prepared by
16 you or compiled at your direction?

17 A. Yes, sir.

18 MR. CARR: At this time, Mr. Stogner,
19 we move the admission of Yates Petroleum
20 Corporation's Exhibits 8, 9 and 10.

21 EXAMINER STOGNER: Any objection?

22 MR. BRUCE: No, sir.

23 EXAMINER STOGNER: Exhibits 8, 9 and 10
24 will be admitted into evidence.

25 MR. CARR: That concludes my

1 examination of Dr. Boneau.

2 EXAMINER STOGNER: Thank you, Mr. Carr.
3 Mr. Bruce?

4 EXAMINATION

5 BY MR. BRUCE:

6 Q. Dr. Boneau, regarding this drainage
7 issue, Santa Fe has already said it doesn't
8 object to a well at its location and really it's
9 the one affected, isn't it, to say that because
10 of the unorthodox Santa Fe location, it's not the
11 best location to drain all of Section 27?

12 A. The unorthodox locations are not the
13 best place to drain all of Section 27. The fact
14 that some of the drainage will probably come from
15 34 should probably be considered immaterial since
16 that is Santa Fe's acreage.

17 Q. Looking at your Exhibit 9, the six
18 wells you listed, are any of those Dagger Draw
19 wells?

20 A. No, those are not Dagger Draw wells.
21 Those are Delaware wells and those are Saunders
22 Permo-Penn wells.

23 Q. They're not in the Dagger Draw field?

24 A. They're not in the Dagger Draw field.

25 Q. There have been a couple of reentries

1 in the Dagger Draw, have there not?

2 A. We know there's been the Sara #1 put up
3 by Santa Fe.

4 Q. The Larue XX?

5 A. You would call that a reentry, yes.
6 There were a couple of old Conoco wells that we
7 reactivated; whether you call those reentries or
8 just reopenings.

9 Q. And those were over budget? Over the
10 AFE? Actual versus AFE?

11 A. The Sara #1 well was over AFE, and when
12 that was brought up this morning I looked at the
13 details on that, and the reentry was over AFE.

14 Q. You gave some reasons why the actual
15 costs were above AFE. Is whoever prepares the
16 AFE going to start taking these extra costs into
17 account, like cementing to surface, et cetera?

18 A. Yes. I talked to him in recent weeks,
19 and some of those changes had been made in late
20 summer, early fall. I'm under the impression
21 that we have changed the AFEs so that they're
22 more--

23 Q. Very recently?

24 A. I think the cementing to surface was
25 changing some that were effective in the August

1 kind of time frame.

2 Q. Now, regarding your proposed reentry,
3 back 20, 30 years ago, was it, maybe not a
4 practice, but was it common when people were
5 plugging wells, to throw junk into the well?

6 A. Well, I wasn't there throwing junk 25
7 years ago, but we have experience with reentries
8 and there are a fraction of the reentries where
9 you hit something that really shouldn't be in the
10 hole; maybe one out of five, or something on that
11 order.

12 Q. And we don't know what's in the Pan Am
13 Pardue hole?

14 A. No. Those kind of actions are usually
15 not recorded on the official record.

16 Q. What would Yates do if it lost
17 circulation in the Cisco Canyon during the
18 reentry, but prior to drilling to the Morrow?

19 A. I'll attempt to answer that
20 adequately. If we lose circulation in a minor
21 way, we would attempt to fix it and continue. If
22 we lost it in a major way we would stop where we
23 were, which will be at least partially through
24 the dolomite, set casing, and test the Canyon
25 dolomite.

1 Q. Would you be able to continue on down
2 to the Morrow?

3 A. It would not be a Morrow test at all.
4 We would not get to the Morrow. We would admit
5 that we would not get to the Morrow.

6 Q. Mr. Carr questioned you that you could
7 still drill a new Morrow well, of course, even if
8 that happened?

9 A. Yes.

10 Q. Do you have an estimate, off-the-cuff
11 estimate of the cost of a new Morrow well in this
12 section?

13 A. It's going to be in the \$700,000,
14 \$750,000 range.

15 Q. So there is a potential if you lost
16 circulation in a major way, as you said in the
17 Cisco Canyon, you would spend an estimated
18 \$435,000 in the reentry, and then, if you wanted
19 to drill a Morrow, \$750,000, so to get the same
20 results Santa Fe is seeking, you would be
21 spending a million-two, or thereabouts?

22 A. Well, we probably would not spend all
23 that \$435,000 if we couldn't get past it, but we
24 would spend \$750,000 plus \$300,000 or some such
25 thing, yes.

1 MR. BRUCE: That's all I have, Mr.
2 Examiner.

3 EXAMINER STOGNER: Thank you, Mr.
4 Bruce. Mr. Carr, any redirect?

5 MR. CARR: No redirect.

6 EXAMINER STOGNER: I have no questions
7 of Dr. Boneau at this time.

8 Any other witnesses?

9 MR. CARR: That concludes our
10 presentation.

11 MR. BRUCE: Mr. Examiner, I don't have
12 any other witnesses. However, on Mr. May's
13 Exhibit 6, there are some proposed Santa Fe
14 locations. We don't agree with those. I don't
15 know if it's really worth the Examiner's time to
16 go into those, but our version of events as to
17 what Santa Fe proposed is a little different.

18 EXAMINER CATANACH: Oh, I would like to
19 hear it.

20 MR. BRUCE: Mr. Davis could, in just a
21 minute, because he speaks very fast.

22 EXAMINER STOGNER: Thank you, Dr.
23 Boneau, you may be excused. Mr. Davis?

24 GENE DAVIS

25 Having been previously duly sworn upon his oath,

1 was recalled to the stand, and was examined and
2 testified further as follows:

3 FURTHER EXAMINATION

4 BY MR. BRUCE:

5 Q. Mr. Davis, just very briefly, could you
6 specify what Santa Fe's initial location was and
7 then how it got down to the current location, and
8 also there was a 1980, 660 location mentioned by
9 Mr. May. How did that get in?

10 A. When I visited with Mr. May for the
11 first time on the phone in, I guess it would be,
12 late October, we talked about drilling a well in
13 Section 27 and I told him what our location would
14 be. I don't have the exact footage, but it would
15 be within a couple hundred feet and on the same
16 pad as the proposed reentry by Yates of the Pan
17 Am Pardue Fed well.

18 Q. So that was number one?

19 A. That was number one. We may have,
20 during the course of the conversation, discussed
21 a location or possible location that would be
22 orthodox at 1980 from the south and 660 from the
23 west for a stand-up or for that location, but
24 that was never a proposed location, and I was
25 never told by the BLM that I could not drill that

1 location.

2 By looking at a topo sheet, it's fairly
3 obvious that you could not drill there because
4 the topography wouldn't allow it.

5 I did call Mr. May back later in that
6 week, or sometime thereafter to make sure the
7 exact date, and told him I was going to change
8 the location to a location that would be 500 feet
9 or so from the south line and 660 from the west,
10 and I told him that was because of some of the
11 geological information I had gotten from the
12 remapping.

13 Q. From the sample log?

14 A. Correct. I think I visited with him or
15 left a message for him because I wasn't able to
16 get ahold of him because he was out of the office
17 on wellsite duty, that we were changing the
18 location to 204 feet from the south line because
19 of topographic reasons.

20 MR. BRUCE: Thank you.

21 EXAMINER STOGNER: Mr. Carr?

22 FURTHER EXAMINATION

23 BY MR. CARR:

24 Q. Mr. Davis, I understand your testimony
25 to be that you don't agree with the locations as

1 presented on Yates Exhibit 6, correct?

2 A. That's correct.

3 Q. I further understand your testimony to
4 be that you have proposed three locations in the
5 southwest quarter of this section instead of
6 four?

7 A. That's correct.

8 MR. CARR: Okay, thank you.

9 EXAMINER STOGNER: Anything else, Mr.
10 Bruce?

11 MR. BRUCE: Nothing else, Mr.
12 Examiner.

13 EXAMINER STOGNER: Closing statements?

14 MR. CARR: Yes, sir, Mr. Stogner. Mr.
15 Stogner, we're both before you, obviously,
16 seeking an order pooling the same lands, and
17 there are a lot of things that are not in
18 dispute.

19 There's no dispute this is a high-risk
20 venture. There's really no dispute as to what
21 the ownership questions are or that there's been
22 an effort to obtain voluntary joinder and that
23 effort has failed, so we come before you asking
24 for a pooling order. And the questions are
25 relatively simple. The questions you have to

1 decide are which of these proposals make sense
2 and who should operate the well.

3 We've done a lot of posturing and we've
4 talked about a lot of things that probably aren't
5 really going to be determinative of much of
6 anything. We're not talking about a 640-acre
7 unit, and we have a 50/50 ownership split if we
8 were. We really know we're not. We're talking
9 about a Morrow well or a Cisco Canyon oil well,
10 and that would be a much smaller spacing than
11 anything we've actually discussed, although
12 that's actually been the issue before you here
13 today.

14 We both proposed a unit if we're in the
15 Morrow that will maximize our ownership
16 position. All of those things are background,
17 but I think when you are through listening to all
18 of this, there are some thing that are very
19 clear.

20 One, the comparable locations being
21 proposed in both the Morrow and in the Canyon,
22 and then the question becomes, does Santa Fe's
23 proposal really make sense? As Dr. Boneau says,
24 they want to test Section 27. Actually, what
25 they would like to do is test Section 27 by

1 getting virtually off the section itself.
2 They've tucked it way down, 204 feet off the
3 south line way in the corner, and everybody knows
4 that isn't going to be an effective drainage
5 pattern.

6 If they're going to drain they'll
7 drain, yes, from them, a lot from their own
8 acreage in Section 34, but while they're doing
9 that they're also going to be draining the
10 southwest of Section 27. And if you look at
11 that, three-quarters of that is ours.

12 What we're proposing is a best
13 location. The photographs presented by Mr.
14 Roberts suggested that there were not a lot of
15 locations due to topographic reasons, but we're
16 about as standard as you can get to drill a well,
17 to achieve our objectives, and to test this
18 formation.

19 We also, I think, because we have a
20 high risk, have a matter before you that you
21 should consider whether or not it is prudent to
22 start throwing a lot of unnecessary cost in an
23 effort to test what I think is truly nothing more
24 than a theory. And yet, to try and avoid that,
25 we have Santa Fe standing here and suggesting

1 there's going to be loss circulation and all
2 sorts of problems, we need to drill a hole
3 because, well, maybe we would have to put a liner
4 in the well.

5 And the bottom line is, when you look
6 at our reentry, we've already penetrated the zone
7 that they have loss circulation in. Those
8 problems, we submit to you, are really red
9 herrings.

10 We talked about operations. I think
11 there are several things that just cannot be
12 disputed. If you're developing 27, Yates does
13 have a better location. We're at least more
14 central to the acreage they're trying to test.

15 Look at experience. I'm not suggesting
16 Mr. Roberts said that their well in 34 was the
17 only well that Santa Fe operated in Southeast New
18 Mexico, but I suggest anyplace you look, Yates
19 stands heads and shoulders above Santa Fe in
20 terms of experience. We're ahead of them in
21 Morrow completions, in Canyon completions, in
22 reentries.

23 They may not like the costs, although
24 they're telling us that today, not before, about
25 Dagger Draw wells. They sure sign up, because

1 the results we've gotten have been extremely
2 good. We can reduce the costs on what is a very
3 high-risk venture, and we will be more efficient.
4 And when you're looking at conservation and
5 proper use and development of the resource, we
6 think that's a factor you should consider.

7 We also think when you look at this,
8 you can see that if there is a problem with our
9 reentry, we can go back and test the Cisco
10 Canyon. We've been there. At least that zone
11 was tested before we acquired the well. There
12 are oil shows, and we will be able to get a test
13 in that zone.

14 We haven't lost anything. It's not
15 like we're proposing two wells. Mr. Bruce would
16 like you to think that. We have, at least, a
17 fall-back position and that is, in the worst case
18 scenario, we will be able to test the Canyon
19 zone.

20 You are supposed to decide this case
21 based on considerations of waste and the
22 protection of correlative rights. When we look
23 at waste, we submit to you that Santa Fe is
24 undertaking a wasteful effort to sort of pretend
25 they're testing Section 27. Mr. Davis says he

1 needs a Canyon test. Under our program, we can
2 give you that. There is so little control out
3 here, you can't tell us that their location, and
4 they can't tell you, that the location that
5 they're proposing is any better for this purpose
6 than what Yates is standing before you proposing
7 today.

8 With risk, as to the risk of getting
9 that test, there's really very little with
10 Yates. And so the waste issue, we think, falls
11 on our side.

12 As to the correlative rights question,
13 all you're supposed to do is give us an
14 opportunity to produce, without waste, our fair
15 share of the resources, and so both of us are
16 here today taking advantage of that opportunity,
17 and I submit to you that that is not a
18 significant issue in this case.

19 The bottom line, when all factors are
20 considered, experience, better location, more
21 efficient operations, the case really comes down
22 on the side of Yates Petroleum Corporation. And
23 after you've decided that and after we've drilled
24 the well or reentered the well and taken it to
25 the Morrow, the option is still present for Santa

1 Fe to go forward and drill what Mr. Davis
2 characterized as a good prospect, and drill a
3 well in the north half of this section, which
4 would be virtually entirely their acreage, and go
5 ahead and test the Morrow and the Canyon on their
6 own land.

7 EXAMINER STOGNER: Thank you, Mr. Carr,
8 Mr. Bruce?

9 MR. BRUCE: Mr. Examiner, it's pretty
10 clear that the parties have negotiated for
11 months. Santa Fe was intent on drilling a well
12 in this area; the problem was, they could never
13 get Yates to commit to anything.

14 As a result, Santa Fe went ahead on its
15 own and drilled the Right Hand Canyon well,
16 benefitting both parties. Yates rode Santa Fe
17 down on the Right Hand Canyon well, and now they
18 want to take what we view as unfair advantage by
19 forming a south-half unit and, in essence,
20 excluding Santa Fe from a second well in this
21 prospect. We don't think that's right.

22 As far as the geology goes, I think
23 regardless of whose sets of exhibits you use,
24 Santa Fe's location is better for the Morrow
25 based on the results of the Right Hand Canyon

1 well. Perhaps more importantly, Santa Fe's
2 location is better to test the Cisco Canyon
3 because there's more reservoir and it's at a
4 higher location structurally. Neither party
5 knows for sure what the Cisco Canyon reservoir is
6 like in this area, so it's better to be safe and
7 use Santa Fe's superior location.

8 In response to Mr. Carr, the Morrow is
9 not a theory in this area. Santa Fe is going to
10 complete a well in the Morrow. It's there, and
11 it's a waste of money and a waste of time not to
12 drill down to the Morrow. Santa Fe's location,
13 furthermore, if it's drilled and is successful in
14 the Morrow, as they anticipate, will set up a
15 second Morrow well in the east half of Section
16 27.

17 Obviously, despite Dr. Boneau's
18 questions, the Cisco Canyon is very important for
19 both parties. That may be a theory, but with
20 Santa Fe's location you get both the Cisco Canyon
21 and the Morrow; whereas, with Yates' location,
22 it's more likely you're just going to test the
23 Cisco Canyon and perhaps not even the whole
24 section of the Cisco Canyon.

25 Because of that, it's imperative to

1 drill a new well in Section 27, rather than doing
2 the reentry, as proposed by Yates.

3 Furthermore, as we've demonstrated, the
4 actual difference in cost between the Santa Fe
5 proposal and the Yates proposal will be very
6 small, especially considering that you will get
7 the Morrow for sure in the Santa Fe well.

8 These factors are accentuated, as I
9 said, by the better geology at the Santa Fe
10 location.

11 You can go round and round on the
12 operatorship issue. Santa Fe has dozens and
13 dozens and dozens of wells in Southeast New
14 Mexico. Perhaps not as many as Yates, but a
15 lot. We've gone through this before. I don't
16 know if you were at the hearing, Mr. Examiner,
17 but in the Hanley Petroleum matter, there's
18 testimony in the file about how many wells Santa
19 Fe has drilled and operated in Eddy and Lea
20 Counties.

21 Santa Fe, as we've stated, is the
22 majority working interest owner in the area. It
23 operates the offset. We believe it's an equally
24 qualified operator to Yates in this area.

25 Once again, the comment about the

1 Dagger Draw, they keep on saying well, despite
2 what Yates did, Santa Fe joined in the Dagger
3 Draw. I think any working interest owner in that
4 area would be foolish not to join in those Dagger
5 Draw wells than to go nonconsent, considering the
6 prolific field that Dagger Draw is. Obviously
7 they're going to recover their well costs.

8 Because of these factors, we think that
9 Santa Fe's proposed location and having Santa Fe
10 as operator is the superior application, and we
11 urge you to grant Santa Fe's application and deny
12 Yates' application.

13 EXAMINER STOGNER: Thank you, Mr.
14 Bruce.

15 I'm pondering over the unorthodox
16 location. It was requested in the Santa Fe case,
17 500 foot from the south line. This is more than
18 half, and lots more unorthodox, and our policy is
19 to readvertise. Do you concur, Mr. Bruce?

20 MR. BRUCE: Yes.

21 EXAMINER STOGNER: Mr. Carr?

22 MR. CARR: Yes, sir.

23 EXAMINER STOGNER: You're aware, Mr.
24 Carr, since both these applications cover the
25 same area, such readvertisement will also affect

1 your case inasmuch as one order will be issued?

2 MR. CARR: Mr. Stogner, I understand
3 that, but I think that you're really stepping
4 outside the rules if you don't.

5 EXAMINER STOGNER: With that, the
6 earliest I can get it on would be the 21st of
7 January hearing for a readvertisement. That's an
8 additional week than we would normally have
9 because of the holidays.

10 With that, since we do have a little
11 bit of time, I would like a rough draft from both
12 of the parties.

13 MR. CARR: And, as you know, Mr.
14 Stogner, the rough draft and the memo writing
15 that Mr. Bruce and I have been engaged in, has
16 been about to kill us lately. If it is all right
17 with you, may we file that in mid-January?

18 EXAMINER STOGNER: You've got until the
19 21st.

20 MR. CARR: That's fine.

21 MR. BRUCE: That's fine.

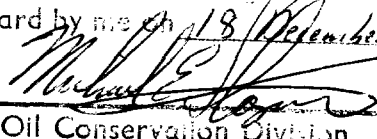
22 EXAMINER STOGNER: There again, the
23 earliest you can get it. I'm not aware of the
24 memorandums that you're talking about, but I'm
25 sure that's a different story.

1 If there's nothing further in either
2 one of these cases at this time, then the record
3 will remain open on both cases. It will not be
4 necessary to readvertise your particular order,
5 but it will be left open pending the rough draft
6 orders.

7 MR. BRUCE: Thank you.

8 MR. CARR: Thank you.

9 (And the proceedings concluded.)

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19 I do hereby certify that the foregoing is
20 a complete record of the proceedings in
21 the Examiner hearing of cases 10628 and 10629
22 heard by me on 18 December 1992
23  Examiner
24 Oil Conservation Division
25

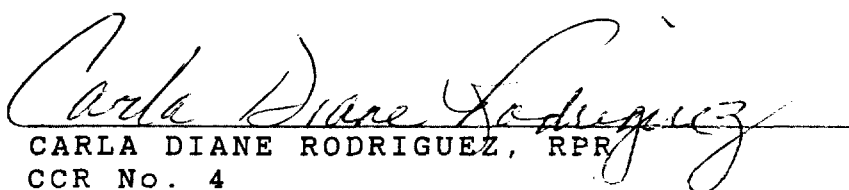
1 CERTIFICATE OF REPORTER

2
3 STATE OF NEW MEXICO)
4 COUNTY OF SANTA FE) ss.

5
6 I, Carla Diane Rodriguez, Certified
7 Court Reporter and Notary Public, HEREBY CERTIFY
8 that the foregoing transcript of proceedings
9 before the Oil Conservation Division was reported
10 by me; that I caused my notes to be transcribed
11 under my personal supervision; and that the
12 foregoing is a true and accurate record of the
13 proceedings.

14 I FURTHER CERTIFY that I am not a
15 relative or employee of any of the parties or
16 attorneys involved in this matter and that I have
17 no personal interest in the final disposition of
18 this matter.

19 WITNESS MY HAND AND SEAL January 18,
20 1993.

21
22
23 
24 CARLA DIANE RODRIGUEZ, RPR
25 CCR No. 4