

STATE OF NEW MEXICO
 ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
 OIL CONSERVATION DIVISION

IN THE MATTER OF THE HEARING)
 CALLED BY THE OIL CONSERVATION)
 DIVISION FOR THE PURPOSE OF)
 CONSIDERING:) CASE NO. 10668

APPLICATION OF YATES PETROLEUM
 CORPORATION

REPORTER'S TRANSCRIPT OF PROCEEDINGS

EXAMINER HEARING

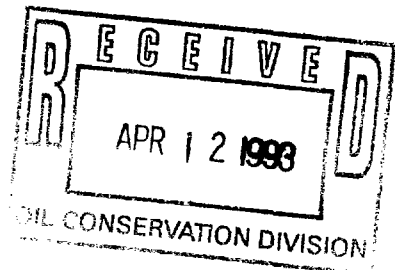
BEFORE: Michael E. Stogner, Hearing Examiner

March 18, 1993

Santa Fe, New Mexico

This matter came on for hearing before the
 Oil Conservation Division on March 18, 1993, at the
 Oil Conservation Division Conference Room, State Land
 Office Building, 310 Old Santa Fe Trail, Santa Fe, New
 Mexico, before Deborah O'Bine, RPR, Certified Court
 Reporter No. 63, for the State of New Mexico.

ORIGINAL



CUMBRE COURT REPORTING
 P.O. BOX 9262
 SANTA FE, NEW MEXICO 87504-9262
 (505) 984-2244

A P P E A R A N C E S

FOR THE DIVISION:

ROBERT G. STOVALL, ESQ.

General Counsel

Oil Conservation Commission

State Land Office Building

310 Old Santa Fe Trail

Santa Fe, New Mexico 87501

CUMBRE COURT REPORTING

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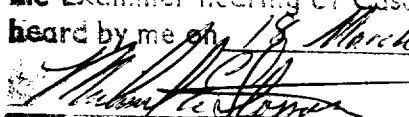
(505) 984-2244

1 EXAMINER STOGNER: Let's call next case,
2 No. 10668.

3 MR. STOVALL: Application of Yates
4 Petroleum Corporation for compulsory pooling, Eddy
5 County, New Mexico.

6 EXAMINER STOGNER: This case was heard at
7 the February 18, 1993, hearing, previous to the
8 notification. Due to notification, this case is
9 readvertised for today's hearing.

10 Is there anything further or additional
11 testimony at this time? If not, this case will also
12 be taken under advisement.

13
14
15
16
17
18 I do hereby certify that the foregoing is
19 a complete record of the proceedings of
the Examiner hearing of Case No. 10668,
20 heard by me on 18 March 1993
21  , Examiner
Oil Conservation Division

1 NEW MEXICO OIL CONSERVATION DIVISION

2 STATE LAND OFFICE BUILDING

3 STATE OF NEW MEXICO

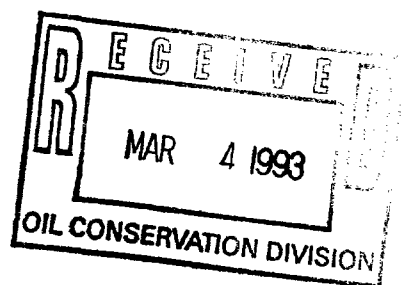
4 CASE NO. 10668

5
6 IN THE MATTER OF:7
8 The Application of Yates Petroleum
9 Corporation for Compulsory Pooling,
10 Eddy County, New Mexico.

11 BEFORE:

12 MICHAEL E. STOGNER
13 Hearing Examiner
14 State Land Office Building
February 18, 1993

15 REPORTED BY:

16 CARLA DIANE RODRIGUEZ
17 Certified Court Reporter
18 for the State of New Mexico
19
20
21
22
23
24
25**ORIGINAL**

A P P E A R A N C E S

FOR THE NEW MEXICO OIL CONSERVATION DIVISION:

ROBERT G. STOVALL, ESQ.

General Counsel

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FOR THE APPLICANT:

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Santa Fe, New Mexico 87504-2208

BY: WILLIAM F. CARR, ESQ.

FOR CONOCO, INC.:

KELLAHIN & KELLAHIN

Post Office Box 2265

Santa Fe, New Mexico 87504-2265

BY: W. THOMAS KELLAHIN, ESQ.

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1 EXAMINER STOGNER: I'll call case
2 10668.

3 MR. STOVALL: Application of Yates
4 Petroleum Company for compulsory pooling, Eddy
5 County, New Mexico.

6 EXAMINER STOGNER: Call for
7 appearances.

8 MR. CARR: May it please the Examiner,
9 my name is William F. Carr with the Santa Fe law
10 firm Campbell, Carr, Berge & Sheridan. I
11 represent Yates Petroleum Corporation in this
12 case, and I have three witnesses.

13 EXAMINER STOGNER: Are there any other
14 appearances?

15 MR. KELLAHIN: I'm Tom Kellahin of the
16 Santa Fe law firm of Kellahin and Kellahin,
17 appearing on behalf of Conoco, Inc.

18 EXAMINER STOGNER: Do you have any
19 witnesses, Mr. Kellahin?

20 MR. KELLAHIN: No, Mr. Examiner.

21 EXAMINER STOGNER: Any other
22 appearances?

23 Will the witnesses please stand to be
24 sworn.

25 [And the witnesses were duly sworn.]

1 EXAMINER STOGNER: Mr. Carr.

2 MR. CARR: At this time, Mr. Stogner,
3 we call Janet Richardson.

4 JANET RICHARDSON

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

7 EXAMINATION

8 BY MR. CARR:

9 Q. Would you state your full name for the
10 record, please.

11 A. Janet Richardson.

12 Q. And where do you reside?

13 A. In Artesia, New Mexico.

14 Q. By whom are you employed and in what
15 capacity?

16 A. Yates Petroleum Corporation as a
17 landman.

18 Q. Have you previously testified before
19 this Division?

20 A. Yes, I have.

21 Q. At the time of that prior testimony,
22 were your credentials as a petroleum landman
23 accepted and made a matter of record?

24 A. Yes.

25 Q. Are you familiar with the application

1 filed in this case on behalf of Yates Petroleum
2 Corporation?

3 A. Yes, I am.

4 Q. Are you familiar with the status of the
5 lands in the acreage which Yates is proposing to
6 pool?

7 A. Yes.

8 MR. CARR: Are the witness'
9 qualifications acceptable?

10 EXAMINER STOGNER: Are there any
11 objections?

12 MR. KELLAHIN: No objection.

13 EXAMINER STOGNER: Ms. Richardson is so
14 qualified.

15 Q. Would you briefly state what Yates
16 seeks with this application?

17 A. We would like an order pooling all
18 mineral interests from the surface to the base of
19 the Canyon formation, under the northeast quarter
20 of Section 29, Township 19 South, Range 25 East,
21 forming a standard 160-acre spacing unit for all
22 the formations or pools developed on 160 acres.

23 This includes but isn't limited to the
24 North Dagger Draw-Upper Pennsylvanian Pool.

25 Q. And you propose to drill a well at a

1 standard location?

2 A. Yes, we do.

3 Q. Have you prepared certain exhibits for
4 presentation here today?

5 A. Yes, I have.

6 Q. Would you identify what has been marked
7 as Yates Petroleum Corporation Exhibit No. 1 and
8 then review this for Mr. Stogner?

9 A. Exhibit No. 1 is a plat showing the
10 area around the proration unit for drilling this
11 well. The proration unit is outlined in red at
12 the northeast corner of Section 29. The location
13 for the well is spotted on the map.

14 We've also colored in the Yates acreage
15 around the proration unit. The outlined acreage
16 is where we have a partial interest, and the
17 solid acreage is where we have the entire working
18 interest.

19 Q. The primary objective in the well, you
20 said, was the Upper Pennsylvanian Pool?

21 A. Yes.

22 Q. Let's go now to what has been marked as
23 Yates Exhibit No. 2. Could you identify that,
24 please?

25 A. Yes. This is an interest worksheet,

1 showing the working interest owners within the
2 northeast quarter of Section 29.

3 We have contacted all of the working
4 interest owners and several have already decided
5 that they will join. All the Yates companies
6 have joined, Spiral, the Lodewicks have joined.
7 We've contacted Conoco. Right now we've sent
8 them the operating agreement, the AFE, and they
9 say, "Subject to a mutually acceptable operating
10 agreement, they verbally join."

11 Coquina and American National have
12 joined, and Ernie Bello, Mrs. Frances Bunn. And
13 Frederick Van Vranken have all joined. We have
14 some farmouts from Kerr-McGee, Charles Cline
15 Moore, the Space Building Corporation and the
16 Agnes Cluthe Oliver Trust.

17 Q. If we go to the Conoco interest, you
18 have a verbal agreement with Conoco to join in
19 the well?

20 A. Yes.

21 Q. Documents have not been signed?

22 A. Right.

23 Q. You did not give them notice, did you,
24 of the compulsory pooling application?

25 A. No.

1 Q. Therefore, if that agreement should,
2 for some reason, fail, they wouldn't be subject
3 to the order that would be entered in this case?

4 A. Yes.

5 Q. I would like to go to the Estate of
6 William Nixon at the bottom. Can you review for
7 Mr. Stogner the status of your negotiations with
8 the William Nixon interest?

9 A. Yes. We had sent an oil and gas lease,
10 and in a telephone call with them last year, and
11 we were under the assumption that we were going
12 to have that leased and to date we do not have
13 that. At the time that we sent out the notices,
14 we thought we were still going to get the lease,
15 but we don't have that yet.

16 Q. Notice was not given to the Estate of
17 William Nixon?

18 A. No.

19 Q. It has since been given, is that
20 correct?

21 A. Yes.

22 Q. The 20 days has not run?

23 A. No, it has not.

24 MR. CARR: For that reason, Mr.
25 Stogner, at the conclusion of this case we're

1 going to ask that it be continued until the March
2 18 hearing so that the notice period will run as
3 to the interests of the Estate of William Nixon.

4 Should we receive the lease back in the
5 interim, we will immediately advise the Division.

6 Q. Now, Ms. Richardson, what percentage of
7 the interest under the proposed spacing unit has
8 voluntarily been committed to this well?

9 A. 94 percent.

10 Q. Let's go now to Exhibit No. 3. Would
11 you identify this and briefly review it for the
12 Examiner?

13 A. Exhibit No. 3 is our Authority for
14 Expenditure for drilling this well. Dry hole
15 costs are \$270,325, and completed costs are
16 \$581,925.

17 Q. Are these costs in line with the Yates
18 charges for other Dagger Draw wells in the area?

19 A. Yes, they are.

20 Q. Could you briefly review the efforts
21 made by Yates Petroleum Corporation to obtain
22 voluntary joinder of all interest owners in this
23 proposal?

24 A. Back in March of 1992, we first
25 proposed this well and we sent all the working

1 interest owners a proposal letter and an AFE, and
2 we requested they either join or farm out or
3 lease. We have been negotiating with them ever
4 since.

5 On January 12th, we repropose the well
6 and again sent the AFE and an operating agreement
7 for signature.

8 Q. You advised all interest owners who had
9 not joined at that time that you were proposing
10 to commence the well in March of 1993?

11 A. Yes.

12 Q. Would you identify Yates Exhibit No. 4?

13 A. Exhibit No. 4 is the proposal letter
14 along with the addressee list attached that we
15 sent out to all the working interest owners.

16 Q. Is Exhibit No. 5 an affidavit
17 confirming that notice of this hearing has been
18 provided in accordance with OCD rules, to those
19 interest owners identified in Exhibit A to that
20 affidavit?

21 A. Yes, it is.

22 Q. Are copies of the letters and return
23 receipts attached to that affidavit?

24 A. Yes, they are.

25 Q. Have you made an estimate of the

1 overhead and administrative costs to be assessed
2 against the nonparticipating owners while
3 drilling the well and also while producing it, if
4 it is successful?

5 A. Yes, we have.

6 Q. What are those figures?

7 A. They're \$5,400 a month for drilling
8 well rate, and \$540 a month for producing well
9 rate.

10 Q. Are these figures that have been
11 utilized by Yates in the drilling of other Dagger
12 Draw wells in the area?

13 A. Yes, we find they're standard for our
14 Dagger Draw wells. We've drilled more than a
15 hundred wells in the Dagger Draw area. These
16 rates were also approved recently by the
17 Commission in Order No. R-9838 in a similar suit
18 with Santa Fe.

19 Q. Do you recommend that these figures be
20 incorporated into any order which results from
21 this hearing?

22 A. Yes.

23 Q. Does Yates Petroleum Corporation desire
24 to be designated operator of the proposed well?

25 A. Yes.

1 Q. Were Exhibits 1 through 5 either
2 prepared by you or compiled under your direction
3 and supervision?

4 A. Yes, they were.

5 MR. CARR: At this time, Mr. Stogner,
6 we move the admission of Yates Petroleum
7 Corporation Exhibits 1 through 5.

8 EXAMINER STOGNER: Exhibits 1 through 5
9 will be admitted into evidence at this time.

10 MR. CARR: That concludes my direct
11 examination of Ms. Richardson.

12 EXAMINER STOGNER: Thank you, Mr.
13 Carr.

14 Mr. Kellahin, any questions?

15 MR. KELLAHIN: No questions, Mr.
16 Examiner.

17 EXAMINER STOGNER: Do you have a
18 question, Mr. Stovall?

19 EXAMINATION

20 BY MR. STOVALL:

21 Q. You answered with reference to Conoco
22 being subject to this order. Your answer to Mr.
23 Carr's question was yes, and I think that created
24 possibly an ambiguity.

25 Am I understanding correctly that if

1 the agreement with Conoco falls through, you're
2 assuming they're not pooled by this order?

3 A. Yes.

4 MR. STOVALL: That's what I thought you
5 said "yes" to, but the way the question was
6 worded, it was a little unclear.

7 That's all I've got.

8 EXAMINATION

9 BY EXAMINER STOGNER:

10 Q. The reason for the continuance to March
11 18th is just for the notification to Mr. Nixon?

12 A. Yes.

13 Q. All the others were duly notified?

14 A. Duly notified, yes.

15 Q. I assume all the people that you're
16 seeking to force pool today, they have actually
17 been found and you have communicated by
18 correspondence?

19 A. Yes, we have.

20 Q. And there's nobody on here that is
21 missing or undeliverable?

22 A. No.

23 Q. Looks like they're scattered between
24 Hawaii and New York.

25 MR. STOVALL: You made personal efforts

1 to contact some of those people face to face?

2 MR. CARR: Only those in Hawaii.

3 Q. You referred to Order No. R-9838 for
4 Santa Fe Operating that had similar overhead
5 charges. To your best recollection, was that a
6 gas well? Oil well?

7 A. It was a gas well.

8 Q. To what depth?

9 A. Approximately 8300 feet.

10 EXAMINER STOGNER: I'll take
11 administrative notice of that order. Any other
12 questions of this witness? Ms. Richardson may be
13 excused.

14 Mr. Carr?

15 MR. CARR: At this time we call D'Nese
16 Fly.

17 D'NESE FLY

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

20 EXAMINATION

21 BY MR. CARR:

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

24 A. My name is D'Nese Fly.

25 Q. Spell your first name, please.

1 A. D, apostrophe, N E S E.

2 Q. Where do you reside?

3 A. In 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 and I'm a geologist with them.

8 Q. Have you previously testified before
9 this Division?

10 A. Yes, I have.

11 Q. At the time of that prior testimony,
12 were your credentials as a petroleum geologist
13 accepted and made a matter of record?

14 A. Yes.

15 Q. Are you familiar with the application
16 filed in this case on behalf of Yates Petroleum
17 Corporation?

18 A. Yes, I am.

19 Q. Have you conducted a geological survey
20 of the area which is involved in this case?

21 A. Yes, I have.

22 MR. CARR: Are the witness'
23 qualifications acceptable?

24 EXAMINER STOGNER: Are there any
25 objections?

1 MR. KELLAHIN: None.

2 EXAMINER STOGNER: Ms. Fly is so
3 qualified.

4 Q. Have you prepared certain exhibits for
5 presentation here today?

6 A. Yes.

7 Q. Could you identify what has been marked
8 as Yates Petroleum Corporation Exhibit No. 6 and
9 review this exhibit for Mr. Stogner?

10 A. Yes. This is a structure map done
11 based on the top of the Canyon Upper Penn
12 dolomite. It is located in the northeast portion
13 of the Dagger Draw field--actually, the
14 southeastern portion of the North Dagger Draw
15 field.

16 In this, the wells that are highlighted
17 in green are producing at this time from what
18 Yates considers the Canyon dolomite, and the
19 proposed location is marked in yellow there in
20 Unit B of Section 29.

21 The wells highlighted in red are Morrow
22 production from the Cemetery Morrow field. Also
23 located on here is a cross-section, which will be
24 the next exhibit, running from Section 20, Unit G
25 of Section 20, down through Section 29, ending in

1 Section 32, Unit F.

2 In this map you can see that the
3 dolomite is striking towards the northeast and
4 dipping to the south in this area. The proposed
5 location is falling low to the well that is due
6 north of it. It is also falling, structurally, a
7 little bit lower than the well that is at the top
8 of the cross-section, which would be the Ross 10
9 in Unit G.

10 This is just kind of a location map to
11 explain my next exhibit. It will be explained
12 further in the cross-section.

13 Q. All right. Let's go to that
14 cross-section, and if you could identify that for
15 the Examiner and then--

16 A. And I apologize, this cross-section is
17 large and kind of bulky to work with. I put a
18 reference map down here in the bottom left corner
19 showing what portion of the Dagger Draw field we
20 are located in.

21 You can see in the northern part of
22 Dagger Draw it tends to start moving towards the
23 northeast, plunging in that same direction and
24 dipping towards the south/southeast. I've blown
25 up the area with the location of the

1 cross-section itself.

2 To get up into the cross-section, the
3 north being on the left, you can see the entire
4 limestone section that the dolomite has developed
5 in. The limestone bank, I guess, is the way we
6 refer to it at Yates.

7 Through diagenesis, the dolomitization
8 took place in this limestone bank. If we look at
9 the Ross 10 over on the left side of the
10 cross-section, you can see we have a limestone
11 stringer at the top, or what we call a limestone
12 cap. Then we get into dolomite and we develop a
13 50-foot stringer of limestone within the
14 dolomite, and then back into the main body of the
15 dolomite.

16 There's also a line on here as
17 reference to the oil-water contact, and it is not
18 a straight line which we have previously covered
19 in a hearing covering Dagger Draw numerous times,
20 the hydrodynamics of the water table. It's not
21 textbook flat water-oil-gas in this field, so it
22 does have a variance in it here.

23 What we saw in the Ross 10 while
24 drilling it was, we ran a test in the dolomite
25 out from under the limestone stringer and

1 recovered oil and water; 600 feet of oil and 3500
2 feet of formation water. And we tested lower and
3 recovered all water. Also, our mud logs in that
4 area showed that the gas had died off at this
5 point, which is indicative of what happens when
6 we get into "the big water."

7 When we went back and did the
8 perforation on this well, we opened the bottom
9 part and the upper zone above the limestone
10 stringer and saw that they both gave a large
11 amount of water in their production. We always
12 see water in the Dagger Draw production. There's
13 no well out here that does not produce water.

14 But this, as we get encroached to the
15 eastern side of North Dagger Draw, even our
16 hydrocarbon column appears to become more wet
17 than the normal wells seen in Dagger Draw.

18 As we moved on south of the Ross 10
19 down to the Patriot 2, we came in structurally
20 higher, and the water column had moved up in this
21 well. Yet, as you can see on the cross-section,
22 this small dotted line towards the top
23 of--running from the top of the Ross 10 over
24 through the Patriot 2, there is a column there
25 that has gotten above a wet hydrocarbon column.

1 Does that make sense? Hydrocarbon and water
2 column. We got into a structurally higher zone
3 where we encountered just more oil production and
4 lower water production.

5 As I project this on south through our
6 proposed location and down to the Albert in
7 Section 32, our proposed location is going to
8 come in structurally lower. I'm being optimistic
9 here hoping we don't encounter any limestone
10 stringers, and I'm anticipating possibly a
11 hundred feet of dolomite above the big water.
12 Yet it appears to be similar to the Ross 10. It
13 will be down in the wetter portion of our
14 hydrocarbon column.

15 I carried this on further south to show
16 that the dolomite becomes all water as it dips
17 down into the big water table.

18 Q. Now, in going forward with Yates' plans
19 to drill this well, what you're trying to do is
20 get structurally as high as you can, correct?

21 A. Yes.

22 Q. You're trying to be above the oil-water
23 content?

24 A. Yes.

25 Q. You're hoping to avoid limestone

1 stringers in the well?

2 A. Yes.

3 Q. And you're still at the extreme eastern
4 edge of the field where you are confronted with
5 unusually high water cut?

6 A. Right.

7 Q. Are all of these elements that you must
8 factor into a determination concerning the risk
9 involved in drilling the well?

10 A. Yes, they are.

11 Q. Are you prepared to make a
12 recommendation to the Examiner as to the risk
13 penalty that should be assessed against any
14 interest that isn't voluntarily committed to the
15 well?

16 A. Yes.

17 Q. And what is that penalty?

18 A. Yates is seeking the maximum allowed by
19 the OCD.

20 Q. Do you believe there's a chance at the
21 proposed location you could drill a well that, in
22 fact, would not be a commercial success?

23 A. That possibility is always there when
24 dealing with this carbonate reservoir.

25 Q. In your opinion, will approval of this

1 application and the imposition of a 200 percent
2 risk penalty on the nonparticipating interest
3 owners, be in the best interest of conservation,
4 the prevention of waste and the protection of
5 correlative rights?

6 A. Yes.

7 Q. Were Exhibits 6 and 7 prepared by you?

8 A. Yes, they were.

9 MR. CARR: At this time, Mr. Stogner,
10 we would move the admission of Yates Petroleum
11 Corporation Exhibits 6 and 7.

12 EXAMINER STOGNER: Exhibits 6 and 7
13 will be admitted into evidence.

14 MR. CARR: That completes my direct
15 examination of Ms. Fly.

16 EXAMINER STOGNER: Thank you, Mr.
17 Carr. Mr. Kellahin, your witness.

18 MR. KELLAHIN: No questions, Mr.
19 Examiner.

20 EXAMINATION

21 BY EXAMINER STOGNER:

22 Q. Going to the cross-section, Exhibit No.
23 7, I want to make sure that I'm clear what you're
24 telling me on that dotted line that shows up in
25 the Patriot #2.

1 Below that, you find that to be more
2 oil productive and above it is an oil-water
3 column? Is that what I'm hearing? Or what does
4 that dashed line represent again?

5 A. These are our two farthest east wells.
6 First, drilling the Ross 10, our hydrocarbon
7 column that we got above what we call the big
8 water zone, appeared to have a lot higher water
9 cut to it than other Dagger Draw wells. So, we
10 thought this would be common in this eastern
11 portion of the field.

12 As we came farther south and drilled
13 the Patriot 2, it came in structurally higher.
14 We opened the zone that appeared to be
15 structurally high to the Ross 10 to see if we
16 could get out of this water zone a little bit,
17 and it does appear that we can. If we encounter
18 wells that are structurally higher than the Ross
19 10 in this north/south line here, we can make a
20 good well out of them.

21 Q. But you're not expecting this gas cut
22 column, that dashed line, you don't extend it
23 over to your proposed location? I guess you
24 don't feel that it goes--

25 A. I'm expecting that we will even come in

1 lower than the Ross 10 itself, so we will be down
2 in the hydrocarbon water zone.

3 Q. In looking at the top of the big water
4 in that Patriot #2, is this due to coning or is
5 it a natural phenomenon that the water-oil
6 contact is somewhat undulating out there?

7 A. It's a natural phenomenon, as far as
8 I'm concerned. It has to do with the effect of
9 the capillary pressures within the reservoir.
10 They vary throughout it. You have zones where
11 you have oil and water sitting above zones with
12 possibly a higher oil cut. It's not a textbook
13 field, as far as your water-oil-gas contacts.
14 We're still learning every day how it's working.

15 Q. Ms. Fly, are you aware of any other
16 force poolings that have occurred in this area in
17 this particular formation or pool?

18 A. Yes. In this same section, we force
19 pooled a Mr. Voight a year or two ago.

20 Q. Being on 160-acre spacing, was that--

21 A. That would have been in the northwest
22 160. Unit D, I think, is the Voight #1.

23 Q. I see two wells drilled in there. Is
24 that representative of what actual production in
25 that proration pool is from these two wells?

1 A. In that spacing?

2 Q. Yes.

3 A. Yes, in that 160. That would be the
4 Voight 1 and the Voight 2.

5 Q. Do you know if that carried a 200
6 percent penalty?

7 A. I'm not sure what our ruling on that
8 was. I can look that up. We asked for a 200
9 percent. I'm not sure what the ruling came down
10 as.

11 EXAMINER STOGNER: We have the record
12 here, and I'll make administrative notice of that
13 order that covers the northwest of 29.

14 EXAMINATION

15 BY MR. STOVALL:

16 Q. That was the order in which we had to
17 come back and do an interpretation as to how Mr.
18 Voight would be treated on the second well, is it
19 not?

20 MR. CARR: That is correct, and he
21 joined in the second well.

22 Q. Given that this area is developed on
23 much greater density than 160 acres, do you
24 anticipate additional wells to be drilled in this
25 160-acre tract?

1 A. It depends on what we encounter here.
2 We're kind of stepping out eastward and southward
3 in this direction.

4 As you can see in the southern portion
5 of my first exhibit, we're within a mile of being
6 out of the reservoir itself. The Albert well
7 only had 50 feet of the dolomite and the well
8 offsetting it by a 40 had zero. So we're also,
9 as we move southward, which would be Unit G,
10 which would be a unit south of this proposed
11 location, we're getting even closer to the
12 boundaries of the dolomite itself.

13 On each well, we learn something new.
14 When we drilled the Voight a year or two ago,
15 there was not any production out that far east
16 yet. And, since then, we have slowly progressed
17 on; except I think possibly the Ross 1, and it
18 was originally drilled as a Morrow well. I'm not
19 sure if it had been recompleted in the Canyon at
20 that time. It was kind of frontier then and we
21 have slowly stepped out to this proposed
22 location.

23 Q. I guess my question would be, given our
24 experience with the Voight well, should we
25 address how to treat subsequent wells on a

1 spacing unit within the order, rather than have
2 to come back and kind of figure out how to do it
3 later on?

4 Would you request, or possibly--I
5 assume Dr. Boneau is going to testify, would you
6 rather defer that question to him?

7 A. I'll let Dave--excuse me, our
8 engineering witness.

9 MR. STOVALL: And he's nodding his head
10 "yes," too. You can't see that.

11 EXAMINER STOGNER: With that, I have no
12 other questions.

13 MR. CARR: I just have one.

14 FURTHER EXAMINATION

15 BY MR. CARR:

16 Q. Ms. Fly, how does the proposed location
17 compare, geologically, to the Voight wells in the
18 northwest quarter of Section 29?

19 A. We'll be downdip, and I think we'll
20 possibly have a thinner section of dolomite.

21 Q. Would you consider this, just from a
22 geologic perspective, to be comparable to those
23 wells, in terms of risk, or greater?

24 A. Greater in risk. As we step out
25 eastward, we're dipping more into the water

1 itself.

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

3 EXAMINER STOGNER: Thank you. Any
4 other questions of Ms. Fly? She may be excused.

5 Mr. Carr?

6 MR. CARR: At this time we'll call Dr.
7 Boneau.

8 **DAVID FRANCIS BONEAU, Ph.D.**

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

11 EXAMINATION

12 BY MR. CARR:

13 Q. Will you state your full name and place
14 of residence?

15 A. My name is David Francis Boneau, and I
16 live in Artesia, New Mexico.

17 Q. By whom are you employed?

18 A. I'm employed by Yates Petroleum
19 Corporation.

20 Q. And in what capacity?

21 A. My job is called reservoir engineering
22 supervisor.

23 Q. Dr. Boneau, you've previously testified
24 before this Division?

25 A. That's correct.

1 Q. At the time of that testimony, were
2 your credentials as a petroleum engineer accepted
3 and made a matter of record?

4 A. Yes, sir.

5 Q. Are you familiar with the application
6 filed in this case?

7 A. Yes.

8 Q. Are you familiar with the portion of
9 the Dagger Draw-Upper Penn field that is involved
10 in this application?

11 A. Yes, sir.

12 MR. CARR: Are the witness'
13 qualifications acceptable?

14 EXAMINER STOGNER: Are there any
15 objections?

16 MR. KELLAHIN: None.

17 EXAMINER STOGNER: Dr. Boneau is so
18 qualified. Mr. Carr?

19 Q. Dr. Boneau, could you refer to what has
20 been marked as Yates Exhibit No. 8, and first
21 identify that for Mr. Stogner and then identify
22 what is indicated on the plat?

23 A. Yes, I can do that. The force of my
24 testimony is in support of a 200 percent
25 nonconsent penalty. Exhibit 8 is a group of, I

1 think it is, five pieces of paper, to explain why
2 we think this is a relatively risky well.

3 The first page of Exhibit 8 is a map
4 that's actually copied from, I think, a corner of
5 the cross-section. It shows the whole Dagger
6 Draw field and then tries to blow up the portion
7 on the eastern part where this location exists.

8 The whole field is shown here, and it
9 exists between the wiggly lines which are the
10 boundaries of the dolomite. The field contains a
11 gas cap to the west, and you should note that
12 there are relatively few wells drilled out in the
13 gas cap. The main fairway of the field is mostly
14 developed. You'll see there's a few locations
15 left, but the main fairway is mostly developed.

16 The current drilling is centered on
17 exploring the edges. There's some drilling down
18 by my red dot in the south, trying to find the
19 south boundaries of the field, and there's some
20 drilling like the well we've proposed here on the
21 northeast end, up by my yellow circle.

22 To be sure we understand, the Indian
23 basin, the big gas field, lies to the south of
24 this, and it's high. Dagger Draw dips from the
25 south to the northeast, and by the time the field

1 ends, wherever it ends over there in the
2 northeast, it ends because we dip down into the
3 water, and the dolomite extends as a water
4 aquifer 20 miles or so to the east, past the
5 Pecos River, actually.

6 So, structurally, we're going from
7 relatively high in the south and west to low in
8 the east, and the problem here is, when do we
9 move so far east that we get so much water that
10 you can't make an economic well? That's the
11 situation.

12 So the risk--well, I'm going to talk
13 about two kinds of risk, at least in my head. We
14 have a dolomite reservoir that's erratic enough
15 that you can get surprisingly poor wells right
16 next to sensational wells. Then, when you get on
17 the edge of the field, my second argument is that
18 that risk is magnified when you get to the edge
19 of the reservoir and you're fighting the water.
20 That's the situation we have here.

21 So I'm going to talk about some wells
22 near the red dot, some wells near the blue dot,
23 some wells near the green dot, and some wells
24 near the yellow dot, and those are the other four
25 pages of the exhibit.

1 Q. Are you ready to go now to the pages
2 that address each of these areas?

3 A. I think so.

4 Q. Why don't we start with the red dot at
5 the bottom. That's the Staghorn #2.

6 A. The next page I think it says at the
7 top, "Red Area. Staghorn #2." Example of a poor
8 well at the south edge of the field. The exhibit
9 shows the Staghorn #2 in Unit N of Section 25,
10 20/24, and shows the wells that are adjacent to
11 it. The wells that are adjacent are the Staghorn
12 #1 and the Dahlia #1, and there's a Marathon
13 location in Section 36 that is being drilled, but
14 I do not know the results of that.

15 On each of these I've made a little
16 table at the bottom that shows some of the
17 numbers, and here it shows what I mean by a poor
18 well. The last line at the bottom of the page,
19 Staghorn #2, has cumulated 3,000 barrels of oil.
20 During its life its averaged 55 barrels of oil a
21 day. It isn't all that terrible, but it's not
22 good by Dagger Draw standards. It's currently
23 producing 50 oil and 61 water.

24 The adjacent wells, the other two
25 wells, the Dahlia and the Staghorn 1, in their

1 relatively short lives have cum'd about 50,000
2 barrels of oil. The numbers are there. The
3 Dahlia has made an average of 229 barrels of oil
4 a day, and the Staghorn #1 has made an average of
5 321 barrels a day. Very good wells.

6 One location to the east the reservoir
7 is mostly gone, and you get a 50-barrel-a-day
8 well, which probably--which is very close to
9 economic. It may not be economic. Normally you
10 need about 80- to 100,000 barrels of oil to have
11 an economic well there. So, this is one example
12 at the southern end where we stepped out to the
13 east and we got a stinker. That's pretty much
14 the story.

15 Q. Let's go now to the blue area. I think
16 the pages are out of order.

17 A. The blue area may be out of order but
18 there's a page that says "Blue Area, Conoco AGK
19 #10," and this is in the middle of what's called
20 South Dagger Draw-Upper Penn pool.

21 The Conoco #10 has wells on every
22 offset to it except the west, and those wells are
23 shown there. And at the bottom there's numbers
24 about each of the wells.

25 The Conoco #10 well is kind of similar

1 to the Staghorn. It's made 8,000 barrels of oil,
2 it's averaged 55 barrels a day and it's making 44
3 barrels of oil and 98 barrels of water. It's not
4 making much fluid.

5 The surrounding wells are all over
6 100-barrel-a-day wells, some 200-barrel-a-day
7 wells. They've all cum'd at least 60,000 barrels
8 and they're all going to cum at least 100,000,
9 probably 150,000 barrels of oil. Again, it's a
10 stinker in amongst good wells. And this is not
11 at the edge of the field, this is right in the
12 middle of the fairway.

13 Probably the best example is the next
14 one. It's called the green area, and this is at
15 the--at pretty much the central or southern end
16 of North Dagger Draw-Upper Penn.

17 The well we're calling your attention
18 to is the Clifford #2, and this is right in the
19 middle of the fairway of the best part of the
20 field. The Clifford #2 has cum'd 5,000 barrels
21 of oil. It's averaged 12 barrels a day. It's
22 now making four barrels of oil and 38 barrels of
23 water.

24 The north offset is a Roden #6 well.
25 It's averaged 283 barrels a day and has made over

1 200,000 barrels of oil. The south offset has
2 averaged 311 barrels a day and has made over
3 300,000 barrels of oil. And, kind of as an
4 aside, that south well, that Clifford #1 was a
5 force pooling with a 200 percent penalty. I was
6 here to testify on it.

7 And then the southeast offset to the
8 Clifford #2 is a Conoco well. It's a sensational
9 well; averaged 387 barrels a day and has made
10 over 300,000 barrels of oil. So here's just a
11 plain uneconomic well right in the heart of the
12 fairway of the field.

13 Q. Let's go now to the yellow area and
14 again I would ask you to review this
15 information.

16 A. Okay. The yellow area is essentially
17 Section 20 of 19/25. They asked you to look at
18 Ross #7 and Ross #10, but the story probably
19 better said here is that there's nine wells in
20 this section and there's two good ones and seven
21 poor ones. So, we're so far to the east where
22 water is really becoming a problem; but let's
23 look at some of the numbers.

24 The Ross 10 and the Patriot 2 are the
25 most easterly wells in the field and they're the

1 ones that we're worried about. The Ross 10 has
2 made 7,000 barrels of oil and it's making 33 oil
3 and 1,876 barrels of water. It's making
4 whatever, 98 percent water, and we simply can't
5 handle that much water for that little oil.

6 My problem in getting you to believe
7 the risk penalty is the Patriot #2, which is the
8 closest well to the Binger location. The Patriot
9 #2 has produced only for about a month,
10 approximately 30 days, but it's averaged over 400
11 barrels a day and is making 287 barrels of oil
12 per day.

13 My point in talking about these wells
14 is, I hope we get another Patriot 2 but the odds
15 are against it, is the message. So the Ross 10
16 has a very high oil cut. The Ross 7, is making
17 48 barrels of oil and 908 barrels of water, so a
18 20-to-1 ratio. And that's probably not
19 economic. That is not economic.

20 The Ross #1 there is not really good at
21 35 oil and 307 water, a 10-to-1 ratio.

22 Rather than rambling on, the Ross 4 is
23 a good well, the Patriot 2 is a good well. The
24 other wells in this area have 10 times as much
25 water at least as oil, and my point is that those

1 odds tell me that we have a very good chance of
2 getting a lot of water at this eastern Binger
3 location, and that seriously puts in doubt the
4 economics of the well.

5 If it comes in real high, it may be a
6 very good oil well, but the odds out here are
7 that it will make lots of water and the economics
8 are in doubt.

9 Q. And what would you recommend be the
10 risk penalty to be assessed against the interest
11 owners who do not participate in this well?

12 A. My recommendation is that the risk
13 penalty be the maximum 200 percent.

14 Q. Can you make a recommendation to the
15 Examiner as to how the question of the subsequent
16 development of this 160-acre tract might be
17 handled? And I'm speaking here in terms of
18 joinder of interest owners who are now being
19 pooled, that if there are additional wells would
20 need to be somehow brought into subsequent
21 development on this 160?

22 A. My answer to that is, I know that the
23 state did something in the case of Voight. I
24 wish they would do a similar thing in this one.
25 I do not remember exactly the wording of that.

1 The more problems they can solve for us, the
2 happier we'll be.

3 MR. STOVALL: Let me jump into that. I
4 think I remember. I believe that the provision
5 interpretation we came up with was that in that
6 case Mr. Voight, the force-pooled party, be given
7 the opportunity to join the second well and that
8 each well be treated individually for accounting
9 purposes. If they go nonconsent on the first
10 well, then production from the first well is
11 applied to the penalty. Excuse me. No, the
12 proration unit is the accounting entity. But
13 they can pay the costs of the second well, but
14 all production from the proration unit goes to
15 pay off the first well first, before they receive
16 revenue from the proration unit.

17 Does that sound like what you think
18 you're endorsing here, Dr. Boneau?

19 THE WITNESS: That sounds like what I
20 think I'm endorsing. We want these people to
21 join. That's the whole purposes. We want to
22 drill the well. We want the people to join. We
23 would be happy to give them the opportunity to
24 join.

25 MR. STOVALL: I think the key to it is,

1 they get the chance to join and the proration
2 unit is the accounting unit for determining
3 payout of any nonconsenting interests, and not an
4 on an individual well basis.

5 THE WITNESS: Yes, and I'm sure our
6 accounting people have a method of handling that
7 for the Voight, and they can apply it to the
8 Binger just as well.

9 Q. (BY MR. CARR) Dr. Boneau, was Exhibit
10 8 prepared by you?

11 A. Yes, sir, that's correct.

12 MR. CARR: At this time, Mr. Stogner,
13 we would move the admission of Yates Petroleum
14 Corporation Exhibit No. 8.

15 EXAMINER STOGNER: Are there any
16 objections?

17 MR. KELLAHIN: None.

18 EXAMINER STOGNER: Exhibit No. 8 will
19 be admitted into evidence.

20 MR. CARR: That concludes my direct
21 examination of Dr. Boneau.

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

24 Mr. Kellahin, any questions?

25 MR. KELLAHIN: No questions.

1 EXAMINER STOGNER: Other than Mr.
2 Stovall, are there any other questions of this
3 witness? I have none of Dr. Boneau at this
4 time. He may be excused.

5 MR. CARR: We have nothing further in
6 this case, Mr. Stogner.

7 EXAMINER STOGNER: Mr. Carr, would you
8 please provide us a rough draft of this
9 compulsory pooling?

10 MR. STOVALL: Specifically looking for
11 the language in the subsequent well operations.

12 MR. CARR: We would be happy, Mr.
13 Stogner, to provide a draft of the order. We
14 would request that the case remain open and be
15 continued to March 18, to permit the appropriate
16 time period to run for the notice to the William
17 Nixon Estate.

18 EXAMINER STOGNER: And so it shall.
19 And you can get your rough draft in by that
20 time.

21 MR. CARR: Yes.

22 EXAMINER STOGNER: Anything further in
23 this matter? This case will be continued to the
24 Examiner's Hearing scheduled for March 18, 1993.

25 (And the proceedings concluded.)
I do hereby certify that the foregoing is
a complete record of the proceedings in
the Examiner hearing of Case No. 10668
heard by me on 18 February 1993.

Michael E. Stogner Examiner
RODRIGUEZ REPORTING
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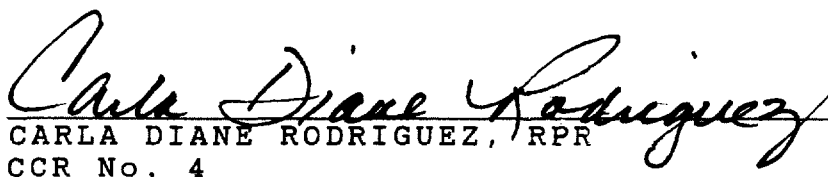
CERTIFICATE OF REPORTER

STATE OF NEW MEXICO)
) ss.
COUNTY OF SANTA FE)

I, Carla Diane Rodriguez, Certified Court Reporter and Notary Public, HEREBY CERTIFY that the foregoing transcript of proceedings before the Oil Conservation Division was reported by me; that I caused my notes to be transcribed under my personal supervision; and that the foregoing is a true and accurate record of the proceedings.

I FURTHER CERTIFY that I am not a relative or employee of any of the parties or attorneys involved in this matter and that I have no personal interest in the final disposition of this matter.

WITNESS MY HAND AND SEAL March 1, 1993.


CARLA DIANE RODRIGUEZ, RPR
CCR No. 4