1	STATE OF NEW MEXICO
2	ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
3	OIL CONSERVATION DIVISION
4	CASE 10,708
5	
6	EXAMINER HEARING
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9	
10	IN THE MATTER OF:
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12	Application of Yates Petroleum Corporation for compulsory pooling, Eddy County, New Mexico
13	comparisory poorting, hady country, new Mexico
14	
15	TRANSCRIPT OF PROCEEDINGS
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18	BEFORE: DAVID R. CATANACH, EXAMINER MAY 7 1993
19	OIL CONSERVATION DIVISION
20	ORIGINAL
21	
22	
23	STATE LAND OFFICE BUILDING
24	SANTA FE, NEW MEXICO
25	April 8, 1993

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2	
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1	WHEREUPON, the following proceedings were had
2	at 4:20 p.m.:
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5	
6	EXAMINER CATANACH: At this time we'll call
7	Case 10,708.
8	MR. STOVALL: Application of Yates Petroleum
9	Corporation for compulsory pooling, Eddy County, New
10	Mexico.
11	EXAMINER CATANACH: Appearances in this case?
12	MR. CARR: May it please the Examiner, my
13	name is William F. Carr with the Santa Fe law firm of
14	Campbell, Carr, Berge and Sheridan.
15	I represent Yates Petroleum Corporation and I
16	have three witnesses.
17	MR. STOVALL: Mr. Carr, do you have other
18	witnesses for the other cases? Shall we swear all
19	witnesses at this time, as we did with
20	MR. CARR: I have two additional individuals
21	who could be sworn at this time.
22	EXAMINER CATANACH: Let's do that. We'll
23	swear all the Yates witnesses at this time and then not
24	have to do it in each case.
25	(Thereupon, the witnesses were sworn.)

1	JANET RICHARDSON,
2	the witness herein, after having been first duly sworn
3	upon her oath, was examined and testified as follows:
4	DIRECT EXAMINATION
5	BY MR. CARR:
6	Q. Will you state your name for the record,
7	please?
8	A. Janet Richardson.
9	Q. And where do you reside?
10	A. In Artesia, New Mexico.
11	Q. By whom are you employed, and in what
12	capacity?
13	A. I'm a landman for Yates Petroleum
14	Corporation.
15	Q. Have you previously testified before this
16	Division?
17	A. Yes, I have.
18	Q. At the time of that prior testimony, were
19	your credentials as a landman accepted and made a
20	matter of record?
21	A. Yes.
22	Q. Are you familiar with the Application filed
23	in this case on behalf of Yates Petroleum Corporation?
24	A. Yes.
25	Q. Are you familiar with the status of the lands

1	involved in this particular case?
2	A. Yes.
3	MR. CARR: Are the witness's qualifications
4	acceptable?
5	EXAMINER CATANACH: They are.
6	Q. (By Mr. Carr) Could you briefly state what
7	Yates seeks with this Application?
8	A. We seek an order to pool all mineral
9	interests from the surface to the base of the Canyon
10	formation in the southwest quarter of Section 21, 19
11	South, 25 East.
12	Q. And this is for your Hooper "AMP" Number 1
13	well?
14	A. Yes, and its location is a standard location.
15	It's 670 feet from the south line and 660 feet from the
16	west line of Section 21.
17	Q. Have you prepared certain exhibits for
18	presentation here today?
19	A. Yes, I have.
20	Q. Could you identify what has been marked as
21	Yates Exhibit Number 1 and review this for Mr.
22	Catanach?
23	A. Exhibit Number 1 shows our proration unit in
24	the southwest quarter of Section 21. It also shows the
25	well location in the southwest southwest.

The solid yellow in all nine sections, 1 including and surrounding the well, is Yates Petroleum 2 Corporation 100-percent acreage, and the outlined 3 acreage is where we have a partial interest. What is the primary objective in the proposed 5 Q. well? 6 We'd like to drill down and produce out of Α. the Canyon formation. Could you refer to what has been marked as 9 Q. Yates Exhibit 2 and review that for the Examiner? 10 Exhibit 2 is a list of all the owners within 11 Α. 12 the southwest quarter of Section 21. I have shown the 13 parties that have joined. We have 97.65164 percent who 14 have joined, and we have 2.34836 percent who are undecided. 15 And identify Number 3, please. 16 0. Exhibit Number 3 is our Authority for 17 18 Expenditure for drilling the well. The dryhole costs 19 are \$271,400, and the completed well costs are \$629,300. 20 And are these costs consistent with the costs 21 0. charged -- incurred by Yates for similar wells in this 22 area? 23 Yes, they are. 24 A.

Could you briefly summarize for Mr. Catanach

25

Q.

1 the efforts you have made to identify and obtain the voluntary participation of those owners identified on 2 Exhibit 2 who have not yet joined in this prospect? 3 Yes, we have sent a letter, a proposal letter 4 to each party stating where the well is and what we're 5 planning on doing. 6 7 Including with that letter were our AFE and 8 an operating agreement covering everything. 9 We sent that out certified and got the green cards back from everybody, just -- you know, we still 10 11 had the certain parties who did not respond. 12 And have you attempted to contact them since Q. that time? 13 14 Α. Yes, I have. And at this point in time can you say that 15 0. 16 you have made a good-faith effort to identify and obtain the voluntary participation of all interest 17 owners in this spacing unit? 18 19 Α. Yes. 20 Could you identify what has been marked Yates Q. 21 Exhibit Number 4? 22 Yes, Exhibit Number 4 is a copy of the Α. proposal letter, along with the addressee list attached 23 24 to it.

And would you identify Exhibit Number 5,

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0.

please? 1 Exhibit Number 5 is the affidavit of mailing Α. 2 of the Application to all the parties. 3 And all parties to whom the Application was 4 mailed by my office are identified --5 Α. Yes. 6 0. -- on Exhibit A? 7 8 Α. Yes. 0. And you provided us with the names on Exhibit 9 A? 10 11 Α. Yes. Have you made an estimate of the overhead and 12 13 administrative costs incurred while drilling this well and also while producing it, if in fact it is a 14 successful well? 15 Yes, they are \$5400 a month for a drilling 16 well rate and \$540 a month for a producing well rate. 17 Are these the figures that were approved by 18 Q. the Division in the pooling order that was entered in 19 20 Case 10,628, which we -- which was just reopened at this hearing? 21 22 A. Yes, I believe that was the most recent approval on it, and that was on a well in Section 27 of 23 21 South, 24 East. 24

Do you recommend that these figures be

25

Q.

1	incorporated into any order which results from today's
2	hearing?
3	A. Yes.
4	Q. Is it possible that Yates might elect to
5	drill an additional well on this pooled acreage?
6	A. Yes, it's possible.
7	Q. And how do you recommend that that be
8	handled, should that occur?
9	A. We would like to be able to submit an AFE and
10	offer the nonconsenting parties a chance to join on the
11	new well, given 30 days to respond.
12	Any nonconsent costs or penalties should be
13	recovered from all production on the proration unit.
14	Q. Now, is this procedure that you've just
15	described consistent with the procedure developed by
16	the Division for Order R-9618, in which the interest of
17	the Voight family was being pooled?
18	A. Yes, they are.
19	MR. CARR: And Mr. Catanach, we have also
20	pooled additional acreage or at least have presented a
21	case seeking the pooling of additional acreage in this
22	immediate area in the last well, three weeks ago.
23	And we were asked at that time to provide a
24	proposed order which contained these provisions.
25	The Order is virtually identical land is

1	in the same area, and the Order would be virtually
2	identical in these cases to what we propose, and I will
3	submit proposed orders that contain that language and
4	also a letter from the Division which described the
5	procedure they wanted us to follow.
6	Q. (By Mr. Carr) Does Yates Petroleum
7	Corporation seek to be designated operator of the well?
8	A. Yes.
9	Q. Were Exhibits 1 through 5 either prepared by
10	you or compiled at your direction?
11	A. Yes, they were.
12	MR. CARR: At this time, Mr. Catanach, we
13	move the admission of Yates Exhibits 1 through 5.
14	EXAMINER CATANACH: Exhibits 1 through 5 will
15	be admitted as evidence.
16	MR. CARR: And that concludes my direct
17	examination of Ms. Richardson.
18	EXAMINATION
19	BY MR. STOVALL:
20	Q. First question I've got, Ms. Richardson, is
21	Max Coll, the second list here, is that the State
22	Representative?
23	A. Yes, he is.
24	Q. That's good to know. The same one that
25	thinks we need to beat on oil companies, I think, isn't

it? 1 And he has elected to join the well? 2 A. Yes, he has. 3 EXAMINER CATANACH: It's on the record, Bob. 5 MR. STOVALL: Yes, it is now official, yes. (By Mr. Stovall) Could you detail more 6 Q. 7 specifically your communications, specifically -- I'm 8 not interested in the ones who have agreed to join, but with the undecided parties, and what all you've done 9 with them and --10 11 Again, most of these are the same people on Α. 12 our previous case that have not elected to join. 13 are parties -- or were parties in a Coquina Limited partnership which fell apart, and I believe what they 14 15 had done was, they were just -- they had just invested 16 their money in this partnership, and the partnership 17 fell apart. They are not oil and gas people; they're just 18 individuals out there who I think had invested their 19 20 money. They don't really understand how to be in the 21 oil and gas business. 22 I've called and talked to most of these people and, you know, I just -- I feel like they just 23 24 don't want to be bothered, you know. You know, we've

25

discussed --

1	Q. Well, that cuts both ways. I guess my
2	concern would be is, yes, I can understand that they
3	may not want to be bothered, but I would also be
4	concerned that they have sufficiently had explained
5	their options to them and
6	A. Yes, and
7	Q what they've the different things that
8	they could do.
9	A. We had offered to you know, for one thing,
10	for them to join and participate.
11	We've also offered for them to farm out their
12	interest so they would not have to put up any money up
13	front.
14	And in addition we've also offered to buy
15	them out.
16	So they've had several different
17	opportunities to do something, one way or the other.
18	Q. Now, you've got them listed Your column
19	heading is "undecided". Does that mean they simply
20	have not given you an answer, or some of them said
21	A. Yes, we have.
22	Q do whatever you can, or
23	A. They haven't given an answer at all.
24	Q. But you've had more than one communication
25	A. Yes.

1	Q more than just this February 19th letter?
2	A. Yes.
3	EXAMINATION
4	BY EXAMINER CATANACH:
5	Q. Is this the Dagger Draw pool?
6	A. Yes, it is.
7	Q. North or south, do you know?
8	A. No, I don't know.
9	MR. STOVALL: 160, it's got to be
10	THE WITNESS: It's north, isn't it?
11	MR. STOVALL: It's north, it's
12	THE WITNESS: I'm sorry, it's north.
13	MR. STOVALL: 160, isn't it?
14	THE WITNESS: Yes.
15	Q. (By Examiner Catanach) And the drilling
16	costs that you proposed are in line with other wells
17	that you've drilled in this area?
18	A. Yes, they are.
19	Q. And you've drilled a bunch in this area,
20	right?
21	A. Yes.
22	EXAMINER CATANACH: I have nothing further.
23	FURTHER EXAMINATION
24	BY MR. STOVALL:
25	Q. One other question, open up this.

1	Actually I mean, you're asking for
2	subsequent operations, but to this point I don't think
3	Yates has ever asked for escalation or adjustment of
4	overhead costs. Has that ever been a consideration?
5	I knew Dave would love it. That's why I
6	asked.
7	A. I don't know that we've ever discussed it.
8	MR. STOVALL: Okay. Well, I'll stop there at
9	this point.
10	EXAMINER CATANACH: You're going to write
11	this order, Bob.
12	(Off the record)
13	D'NESE FLY,
14	the witness herein, after having been first duly sworn
15	upon her oath, was examined and testified as follows:
16	DIRECT EXAMINATION
17	BY MR. CARR:
18	Q. Will you state your name for the record,
19	please?
20	A. My name is D'nese Fly.
21	Q. And how do you spell your first name?
22	A. D-'-n-e-s-e.
23	Q. And where do you Have you told me where
24	you reside?
25	A. Artesia, New Mexico.

1	Q. By whom are you employed?
2	A. Yates Petroleum.
3	Q. And in what capacity?
4	A. I'm employed there as a geologist.
5	Q. Have you previously testified before this
6	Division?
7	A. Yes.
8	Q. At the time of that testimony, were your
9	credentials as a geologist accepted and made a matter
10	of record?
11	A. Yes.
12	Q. Have you made a geological study of the area
13	that is involved in this case and also in the next case
14	involving the Amole well?
15	A. Yes, I have.
16	MR. CARR: Are the witness's qualifications
17	acceptable?
18	EXAMINER CATANACH: Yeah.
19	MR. STOVALL: And the spelling of her name
20	has been in the record too before, I think.
21	MR. CARR: I just want to be sure that every
22	court reporter gets this right.
23	THE WITNESS: That's the story of my life.
24	MR. STOVALL: Sometime you'll have to tell us
25	the story of your name

1	Q. (By Mr. Carr) Could you refer to what has
2	been marked as Yates Exhibit Number 6?
3	A. Yes, this is a rather creative map, and the
4	portion that I'm going to be dealing with is way up
5	here in the upper right-hand corner.
6	Q. The larger portion of the exhibit is just
7	your index map?
8	A. It's just my draftsman's creativity was
9	flowing that day.
10	Q. What is the upper right-hand portion of
11	Exhibit Number 6?
12	A. This is the structural configuration at the
13	top of the Canyon or Upper Penn dolomite seen in the
14	northern portion northeast portion of Dagger Draw
15	pool field, excuse me.
16	Q. Basically, what does this show?
17	A. Here I have the contour intervals in 50-foot
18	increments, and the green highlighted wells are Upper
19	Penn or Canyon oil wells. The red colored gas wells
20	are Morrow production or Atoka.
21	And here I would just like to show where my
22	next exhibit will be running, is the cross-section, A
23	to A', running east-west, and also showing here the
24	Hooper location as being downdip and to the east where

we encounter our water from our current producing wells

seen there in Section 20.

I have here bot

I have here both proposed locations that we're combining. The one I'm talking about right now is the Hooper.

And mostly this exhibit is just to show how our structure is dipping to the east, and as we move eastward in this field we encounter large amounts of water where the -- it's no longer economic to produce these oil wells.

- Q. And we're talking about the well in Section 21, correct?
  - A. Yes, in Unit M.
- Q. And in the next hearing we'll be talking about the well in Section 16?
- A. Yes, in Unit M also.
- Q. And is there anything concerning the well in Section 16 that in your opinion from a geologic point of view differs from the presentation you're making on the well in Section 21?
- A. No, they're virtually -- have the same risk factors, or risk, as far as I'm concerned. They're both moving eastward, and they're both downdip from our current production.
- Q. Now, on Exhibit Number 6 you have a trace for your cross-section, Exhibit 7?

1 Α. Yes. 2 Are you ready to move to that now? Q. 3 Α. Yes. 0. All right, let's go to Exhibit Number 7, and 5 I'd ask you to identify that and review it for Mr. Catanach. 6 7 (Off the record) THE WITNESS: This is my -- Exhibit 7 is my 8 9 structural cross-section of the carbonate bank which has gone through diagenesis, and we get our reservoir, 10 11 being the Dagger Draw dolomite. 12 What I'm showing here is how the bank dips as 13 we move eastward, where it eventually dips down as seen 14 over here in the Nearburg B and B Number 1, where the 15 production becomes noneconomic and virtually you almost 16 recover all water. They IP'd that well a month or so 17 ago for 22 barrels of oil and about 3000 barrels of It is presently temporarily abandoned, I think. 18

They're deciding what to do.

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The -- Where our proposed location here is expected to come in, I'm hoping to get possibly 30 feet of hydrocarbon column, which would be dolomite above where we encounter the Big Water. We could encounter maybe up to 60 feet if we're fortunate enough to have it dolomitized all the way up to the top of the

carbonate bank as seen in the Patriot 2.

This was a little bit anomalous to what we see, because if you move on westward to the Patriot 1 you can see how sometimes we develop these limestone stringers, so hopefully we will encounter at least 30 feet of clean dolomite in this Hooper well, and I think if we do, we can make an economic well.

It's risky as we move eastward. There's not a lot of control right here, and we're not sure how rapid our Dolomite falls off into the water.

- Q. (By Mr. Carr) Are you prepared to make a recommendation to the Examiner on the risk penalty that should be assessed against nonconsenting interest owners in this well?
  - A. Yes.

- Q. And what would that penalty be?
- A. I think it should be 200 percent.
- Q. Now, based on your geological review and the cross-section you've just presented, would the information you've presented from your Exhibit Number 7 equally apply to the Amole well as it does to the Hooper well?
  - A. Yes, it would.
- Q. Do you believe there's a chance that at either of the locations Yates could drill a well that

would not be a commercial success?

A. Yes.

- Q. Are you familiar with the Voight well which we discussed with Ms. Richardson a moment ago?
  - A. Yes, sir.
- Q. How does the risk involved in each of these cases compare with the risk associated initially with the drilling of the Voight well?
- A. Well, initially the Voight well was our furthest eastward stepout. Since then we have drilled in Section 20 to the north of the Voight well quite a bit, and we have moved farther eastward. And we have seen with every quarter -- or every 40 that we move eastward, we encounter more and more water.

Unless we can find a high, which I'm speaking about, such as in this Patriot 2 that we were very fortunate to get that -- It was dolomitized all the way to the top, and that is the only well we have seen eastward that has been like that. Virtually, they've all been smaller and smaller amount of dolomite above the big water as we move eastward, and this location is much riskier than the Patriot -- I mean than the Voight 1 location.

Q. In your opinion, would granting this
Application, pooling these lands and drilling of, in

1	this case, the Hooper well, be in the best interests of
2	conservation, the prevention of waste and the
3	protection of correlative rights?
4	A. Yes.
5	Q. Were Exhibits 6 and 7 prepared by you?
6	A. Yes.
7	MR. CARR: At this time we would move the
8	admission of Yates Exhibits 6 and 7.
9	EXAMINER CATANACH: Exhibits 6 and 7 will be
10	admitted as evidence.
11	MR. CARR: And that concludes my direct
12	examination of D'nese Fly.
13	EXAMINATION
14	BY MR. STOVALL:
15	Q. Which one's the Voight well? Voight Number
16	1?
17	A. Voight Number 1, it is not on my cross-
18	section. If you look
19	Q. No, I know it's on the
20	A. It is due south of the Patriot 1, it's right
21	there in Unit D of Section 29.
22	Q. Unit D of Section 29. Okay.
23	Is that water further east than you had
24	thought at the time you came in on Voight well?
25	A Voc

1	Q. And which is the one that's the case that
2	is I think you're still waiting an order on. Is
3	that
4	A. The Binger, which is there in Unit B.
5	Q. Is that the circle in 29?
6	A. Yes, I left that location so there is
7	reference to the Binger.
8	MR. STOVALL: Okay.
9	EXAMINATION
10	BY EXAMINER CATANACH:
11	Q. Ms. Fly, what's the status of the well in the
12	north half of Section 21?
13	A. 21 Just a second.
14	It is plugged. That is the Osage. I think
15	our engineering witness will speak in a little more
16	detail about that.
17	MR. STOVALL: It shows an injection symbol;
18	is that correct?
19	THE WITNESS: Yes, I think that is, isn't it,
20	Dave?
21	MR. STOVALL: We'll let Dave answer when
22	he
23	THE WITNESS: Okay. I think at this time
24	it's no longer being injected into.
25	It was IP'd for 16 barrels of oil and 26

1	barrels of water in 1982, and it cum'd 15 MBO and
2	552,000 barrels of water, so we know we're pretty much
3	in the water at that well.
4	And that B and B well to the east there
5	reaffirmed that reconfirmed that, excuse me.
6	MR. STOVALL: Which one?
7	THE WITNESS: The B and B well that Nearburg
8	just recomple or went up and perforated. It had
9	been a Morrow well.
10	Q. (By Examiner Catanach) Okay, how about the
11	well in Section in the north half of Section 16?
12	A. That Kincaid Number 1 is It IP'd in 1977
13	for 16 barrels of oil and 346 barrels of water, and
14	before it was plugged, it cum'd 601 barrels of oil and
15	60,000 barrels of water.
16	We're getting very high oil-water ratios as
17	we move eastward, and the engineering witness will go
18	into detail on that.
19	EXAMINER CATANACH: I have nothing further.
20	MR. CARR: At this time we call Dr. Boneau.
21	MR. STOVALL: Didn't we just get his
22	testimony?
23	DR. BONEAU: Yeah, I don't have any
24	MR. STOVALL: I think that's It looks like
25	this exhibit is taken care of. What's the next one?

1	DAVID F. BONEAU,
2	the witness herein, after having been first duly sworn
3	upon his oath, was examined and testified as follows:
4	DIRECT EXAMINATION
5	BY MR. CARR:
6	Q. State your name and place of residence,
7	please.
8	A. David Francis Boneau, and I live in Artesia,
9	New Mexico.
10	Q. By whom are you employed and in what
11	capacity?
12	A. I'm employed by Yates Petroleum Corporation
13	as a reservoir engineering supervisor.
14	Q. You've previously testified before this
15	Division?
16	A. Yes, sir.
17	Q. And your credentials as a petroleum engineer
18	have been accepted and made a matter of record?
19	A. Yes, sir.
20	Q. Are you familiar with the Application in this
21	case and also in the case concerning the pooling of
22	acreage for the Amole State well?
23	A. Yes, sir, I'm familiar with that.
24	MR. CARR: Are the witness's qualifications
25	acceptable?

EXAMINER CATANACH: They are.

- Q. (By Mr. Carr) Would you identify what has been marked as Yates Exhibit Number 8 and review that, please?
- A. Yes, Yates Exhibit Number 8 is two pieces of paper that attempt to address the question of risk for the proposed Hooper and the Amole wells.

The first page is in a map-type format, and the second page is in a tabular format, but they're similar kinds of information.

My attempt was to show production and wateroil ratios for wells on the northeast edge of the
Dagger Draw-Upper Penn Pool. All the wells that are
shown here are the Upper Penn wells. The wells that
are not Upper Penn wells are omitted from the picture.

If I can continue, there are three types of wells shown on the front page, on the map format.

There are black dots which represent current Canyon producers, and I put a number under each black dot which indicates its water-oil ratio for the month of February, 1993, and the details of those numbers are on the second sheet.

Secondly, there are black dots with diagonal lines through them, and those are abandoned Upper Penn producers. And I've tried to put numbers near those

that indicate their lifetime water-oil ratio and also 1 their cumulative oil and water production. 2 those numbers answer the questions that were asked Mrs. 3 Fly. 5 And then thirdly on the map I've included three open circles which indicate proposed Dagger Draw 6 locations. 7 In B of 29 is the Binger, which was the 8 9 subject of the pooling hearing last month. There's an open circle in M of Section 21, 10 which is the location of the Hooper "AMP" Number 1, 11 12 which is the subject of this hearing. And there's an open circle in Unit M of 13 Section 16, which is the location of the Amole "AMM" 14 Number 1, which is the subject of Case 10,709. 15 16 Okay, what are we trying to show with this 17 picture? The first thing, which I think the Examiner 18 has pretty much already noticed, is that there are no 19 commercial wells east of the Hopper and Amole 20 locations. 21 In order to be a commercial Dagger Draw well, 22 you need to produce 75 to 100,000 barrels of oil at 23 water-oil ratios of six to eight, is really as high as 24

you can go and get decent economics.

To the east of the locations considered here are some of the wells the Examiner brought out. The Kincaid well in Section 16, north half of 16, made a total of 600 barrels of oil in its life at a water-oil ratio of 100. Very much noncommercial.

2.2

Yates produced a well in Section 14. It's off to the east, and I included in the corner there some information about the Cotton MX Number 1, which is located in C of Section 14. It produced 6000 barrels of oil and 444,000 barrels of water for a water-oil ratio of 80. Yates pumped that well a very long time in the hope that the water-oil ratio would turn around, and it never did, and we finally abandoned it.

In Section 21 is the Osage well. That produced 15,000 barrels of oil and 552,000 barrels of water at a lifetime oil-water ratio of 37, and it was abandoned. That well was used by Yates as a salt water disposal well for quite a long time, and recently we've stopped using it except in emergencies as the field development moved close to that. Mr. Yates just thought it was not wise to be injecting so close to our producers, and we obliged by putting the water someplace else.

And then as Mrs. Fly said, Nearburg has recently tried a well in Section 22 which produced at a

water-oil ratio of about 100.

So there have been at least those four attempts at wells east of the proposed location, and they've all been far from commercial. So there's been high water-oil ratios and low oil recoveries to the east.

I've also showed -- If you look back to the west, you can see that the water-oil ratio increases as you move west. So on the very left-hand side of my map here, what I call column D, it goes down underneath Unit D of the Section 17, 20 and 29, the water-oil ratios are twos and threes and fives. The fieldwide water-oil ratio is about three.

At the current time Yates is producing about 13,000 barrels of oil a day and 39,000 barrels of water a day. So the water-oil ratios in that column D are pretty much in line with the field operation.

But as you move east from there, the wateroil ratios go up. That's my point.

If you look under what I call column C, the next row in from the left, the water-oil ratios vary from four to 20, and they're starting to rise.

If you go one more column to the east, there aren't very many wells there, but there's the Ross

Number 10, which has a huge water-oil ratio, hardly any

oil and thousands of barrels of water per day. 1 And Barbara Federal Number 7 produced at a 2 lifetime water-oil ratio of 10. 3 And then of course there's the Patriot 2, 5 which is the exception. It's producing at a water-oil ratio of about two, and actually the latest data this 6 week, it's up to about two and a half or three. 7 8 it's a good well and it's the exceptional well. 9 But what you see is that as you go from the west to the east, you start to fall off into the water, 10 11 and water-oil ratios go up. And we're proposing our 12 wells a half mile east of the Patriot 2, the Ross, and 13 there's definitely risks that you've gone one step too 14 far. And you would concur in the recommendation of 15 Q. 16 Mrs. Fly that a 200-percent penalty be imposed on any 17 interest owner who doesn't voluntarily join? 18 Α. Yes, I would concur in that. The water-oil ratios are rising as you head to the east. And any 19 20 further the east, those locations are clearly noncommercial wells. 21 Is there anything further you want to add to 22 0. your testimony? 23 No, sir. 24 Α. 25 Was Exhibit 8 prepared by you?

Q.

1	A. Yes, sir.
2	MR. CARR: At this time, Mr. Catanach, we
3	would move the admission of Yates Exhibit Number 8.
4	EXAMINER CATANACH: Exhibit Number 8 will be
5	admitted as evidence.
6	MR. CARR: And that concludes my examination
7	of Dr. Boneau.
8	EXAMINATION
9	BY EXAMINER CATANACH:
10	Q. Dr. Boneau, do you have an explanation for
11	the anomalous behavior of the Patriot 2?
12	A. Mrs. Fly told you the information that
13	explains the anomalous behavior of the Patriot 2, I
14	think, as best anyone can.
15	In that well, the dolomite extends 30 feet
16	higher than it does in any of the surrounding wells.
17	The well is open, it's perforated only in the top five
18	feet or so, so that it's skimming oil off the top of a
19	little bubble of oil sitting on top of this ocean of
20	Big Water.
21	So it's an anomalous bump that sticks up.
22	Obviously in the Hooper we're hoping that
23	bump extends over a big enough distance to hit the
24	Hooper. There's no chance that the Amole is in that
25	kind of a bump, I think. But that's the kind of

1	explanation the geology and the completion attempt
2	shows, and that's what's happening there.
3	EXAMINER CATANACH: Okay, I have nothing
4	further.
5	MR. CARR: We have nothing further in this
6	case, Mr. Catanach.
7	EXAMINER CATANACH: There being nothing
8	further, Case 10,708 will be taken under advisement.
9	(Thereupon, these proceedings were concluded
10	at 4:53 p.m.)
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1	CERTIFICATE OF REPORTER
2	
3	STATE OF NEW MEXICO )
4	) ss. COUNTY OF SANTA FE )
5	
6	I, Steven T. Brenner, Certified Court
7	Reporter and Notary Public, HEREBY CERTIFY that the
8	foregoing transcript of proceedings before the Oil
9	Conservation Division was reported by me; that I
10	transcribed my notes; and that the foregoing is a true
11	and accurate record of the proceedings.
12	I FURTHER CERTIFY that I am not a relative or
13	employee of any of the parties or attorneys involved in
14	this matter and that I have no personal interest in the
15	final disposition of this matter.
16	WITNESS MY HAND AND SEAL May 2, 1993.
17	Thun ( ) Receive 2
18	
19	STEVEN T. BRENNER CCR No. 7
20	Mr. gammiggian ayminasa Ostabar 14 1004
21	My commission expires: October 14, 1994
22	I do hereby certify that the foregoing is
23	the Examiner hearing of Case No. 1070,
24	heard by me on faut 1993.
25	Oll Conservation Division