

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:)
APPLICATION OF YATES PETROLEUM)
CORPORATION FOR DOWNHOLE COMMINGLING,)
LEA COUNTY, NEW MEXICO)

CASE NO. 11,781

ORIGINAL

REPORTER'S TRANSCRIPT OF PROCEEDINGS

EXAMINER HEARING

BEFORE: DAVID R. CATANACH, Hearing Examiner

May 15th, 1997

Santa Fe, New Mexico

This matter came on for hearing before the New Mexico Oil Conservation Division, DAVID R. CATANACH, Hearing Examiner, on Thursday, May 15th, 1997, at the New Mexico Energy, Minerals and Natural Resources Department, Porter Hall, 2040 South Pacheco, Santa Fe, New Mexico, Steven T. Brenner, Certified Court Reporter No. 7 for the State of New Mexico.

* * *

I N D E X

May 15th, 1997
 Examiner Hearing
 CASE NO. 11,781

	PAGE
APPEARANCES	3
APPLICANT'S WITNESS:	
<u>DAVID F. BONEAU</u> (Engineer)	
Direct Examination by Mr. Carr	4
Examination by Examiner Catanach	14
REPORTER'S CERTIFICATE	20

* * *

E X H I B I T S

Applicant's	Identified	Admitted
Exhibit 1	6	13
Exhibit 2	7	13
Exhibit 3	8	13
Exhibit 4	12	13
Exhibit 5	11	13
Exhibit 6	9	13
Exhibit 7	9, 10	13

* * *

A P P E A R A N C E S

FOR THE DIVISION:

RAND L. CARROLL
Attorney at Law
Legal Counsel to the Division
2040 South Pacheco
Santa Fe, New Mexico 87505

FOR THE APPLICANT:

CAMPBELL, CARR, BERGE and SHERIDAN, P.A.
Suite 1 - 110 N. Guadalupe
P.O. Box 2208
Santa Fe, New Mexico 87504-2208
By: WILLIAM F. CARR

* * *

1 WHEREUPON, the following proceedings were had at
2 9:28 a.m.:

3 EXAMINER CATANACH: At this time we'll call Case
4 11,781.

5 MR. CARROLL: Application of Yates Petroleum
6 Corporation for downhole commingling, Lea County, New
7 Mexico.

8 EXAMINER CATANACH: Call for appearances.

9 MR. CARR: May it please the Examiner, my name is
10 William F. Carr with the Santa Fe law firm Campbell, Carr,
11 Berge and Sheridan.

12 We represent Yates Petroleum Corporation in this
13 matter, and I have one witness.

14 EXAMINER CATANACH: Any additional appearances?
15 Would you please swear in the witness, Mr.
16 Carroll?

17 (Thereupon, the witness was sworn.)

18 DAVID F. BONEAU,
19 the witness herein, after having been first duly sworn upon
20 his oath, was examined and testified as follows:

21 DIRECT EXAMINATION

22 BY MR. CARR:

23 Q. Could you state your name for the record, please?

24 A. My name is David Francis Boneau.

25 Q. Where do you reside?

1 A. I live in Artesia, New Mexico.

2 Q. By whom are you employed?

3 A. I'm employed there by Yates Petroleum
4 Corporation.

5 Q. And what is your position with Yates?

6 A. I'm a reservoir engineer with Yates Petroleum.

7 Q. Have your credentials as an expert witness in
8 reservoir engineering previously been accepted by this
9 Division?

10 A. Yes, they have.

11 Q. Are you familiar with the Application filed in
12 this case on behalf of Yates?

13 A. I am familiar with that, yes sir.

14 Q. And are you familiar with the Pawnee "AWP" [sic]
15 State Well Number 1?

16 A. Yes, sir.

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

19 EXAMINER CATANACH: Yes, they are.

20 Q. (By Mr. Carr) Dr. Boneau, would you briefly
21 state what Yates seeks with this Application?

22 A. Yes, Yates is seeking approval to downhole
23 commingle production from the Queen, the Grayburg and the
24 San Andres formation in the subject well, which is the
25 Pawnee "APW" State Number 1 in Unit A of Section 20, 18

1 South, 35 East, Lea County, New Mexico.

2 Q. Dr. Boneau, is Exhibit Number 1 a copy of the
3 Application that was filed in this case seeking approval
4 for downhole commingling with an attached plat?

5 A. Yes, we applied for administrative approval of
6 this downhole commingling, and Exhibit 1 is that
7 application.

8 Q. It shows the bottomhole pressures by zone that
9 have been obtained in the well?

10 A. Yes, it shows -- Item Number 5 shows pressures
11 from 1350 to 2050 for the three zones.

12 Q. And we have a situation here where the lower zone
13 -- the lowest pressure, or the lower-pressured zone is less
14 than 50 -- not less than 50 percent of the upper zone; is
15 that right?

16 A. That's correct, yes, sir.

17 Q. And you would not expect crossflows if the
18 commingling is approved?

19 A. Do not expect crossflow here.

20 Q. Current production rate is also set forth on this
21 exhibit, is it not?

22 A. Yes, it is.

23 Q. It shows in essence that the production is coming
24 primarily from the Queen sand?

25 A. Production is coming primarily from the San

1 Andres, with a little contribution from the Queen and
2 essentially nothing from the Grayburg.

3 Q. The oil gravity is also indicated on this
4 exhibit.

5 Do you anticipate any compatibility problems if,
6 in fact, the commingling is approved?

7 A. No, there should be no commingling problems, no
8 incompatibility problems with the Queen, Grayburg and San
9 Andres.

10 Q. The second page of this exhibit shows, in fact,
11 the location of the proposed -- the well in which you
12 propose to commingle; is that correct?

13 A. There's an arrow pointing to it up in the upper
14 right-hand corner of Section 20.

15 Q. And what is the spacing for this pool?

16 A. The well is spaced on 40 acres.

17 Q. Are the offset operators the same for each of the
18 zones that you propose to commingle?

19 A. Yes, they are.

20 Q. Have the offset operators been notified of this
21 Application?

22 A. They have been notified, yes, sir.

23 Q. Is Exhibit Number 2 a copy of an affidavit
24 identifying those interest owners and confirming that
25 notice has, in fact, been provided by certified mail?

1 A. That is what Exhibit 2 is. They're those four
2 offset people, and they've been notified. I think they
3 were notified when we submitted the Application for
4 administrative approval.

5 Q. This matter has -- was originally filed for
6 administrative approval; is that correct?

7 A. Yes, sir.

8 Q. When did that occur?

9 A. The Application is dated 3-4-97, March 4th, 1997.

10 Q. And what response did you receive from the
11 Division?

12 A. Exhibit 3 is a letter containing Bill LeMay's
13 signature, dated April 10th, 1997.

14 The Examiner can read that or I can read it for
15 him, but it denies the Application, mostly on the basis
16 that it's a long held policy of the Division to not allow
17 downhole commingling in a case in which one of the proposed
18 intervals is not productive of oil or gas.

19 And it goes on to suggest that we squeeze the
20 offending interval or set the matter for hearing.

21 Q. Now, if you were to squeeze the offending
22 interval, you would be, in fact, going in and cementing the
23 Grayburg; is that right?

24 A. Yes, and of course it's the middle interval of
25 the three.

1 Q. What kind of costs would you be looking at if you
2 were to try and cement the Grayburg?

3 A. We'd be looking at minimum cost of like \$15,000,
4 plus the risk of really screwing everything up.

5 Q. Is this a marginal well?

6 A. It is definitely a marginal well as it is.

7 Q. If you were to recommend how \$15,000 would be
8 spent on this well, what would you recommend be done with
9 it?

10 A. In real honesty, if this is not approved we're
11 going to plug the well, I think, and go away.

12 Q. Okay. Could you refer -- I'd like to go out of
13 order. I'd like you to look at this time at what is marked
14 Yates Exhibit Number 6. Could you refer to that and
15 explain to Mr. Catanach what this is.

16 A. Exhibit Number 6. Yeah, essentially our
17 Application was turned down because the Grayburg doesn't
18 produce, and it's the Division's policy not to allow
19 commingling in such a case. And I'm here to try to give
20 the Commission -- the Examiner -- some reason to approve
21 our Application other than begging and saying we're poor
22 and all that stuff.

23 And so my plan was to bring to his attention
24 another long-held policy of the Division which supports our
25 position, and that is exhibited in Number 6 and Number 7.

1 So Exhibit 6 is a list of pools in southeast New
2 Mexico where the pool definition includes the Grayburg and
3 the San Andres, or the Grayburg and the Queen, or the
4 Grayburg and the Queen and the San Andres, so that, in my
5 words, the Grayburg is automatically commingled.

6 But the fact is that the pool includes two or
7 three of those intervals, and you're allowed to produce
8 from anywhere in them, with any perforations, anyplace.
9 And essentially that's the situation we have with this
10 Pawnee well.

11 And then the numbers are that there are 25 or so
12 of these pools containing 10,000 wells, and with cumulative
13 production of 1.6 billion barrels of oil and 2 TCF.

14 So what we're asking has been done, you know,
15 thousands of times before, and I'm hoping that that gives
16 the Examiner a reason to approve our Application.

17 Exhibit 7 is simply a continuation of this
18 argument. It's a map where the townships containing such
19 pools are colored in yellow, and they cover a large part of
20 Eddy and Lea County.

21 The red dot there shows where our well is, sort
22 of, in the area where the Queen, Grayburg and San Andres
23 have traditionally been commingled despite pool definition.

24 So we're not asking for something unusual; we're
25 asking for something that's been done thousands of times

1 before. That's my point.

2 Q. Dr. Boneau, let's go to Yates Exhibit Number 5.

3 A. Okay.

4 Q. What is that?

5 A. You said Number 5?

6 Q. Yes, sir.

7 A. I found that one. It's a chronology of the --
8 well, an abbreviated chronology, my Cliff Notes for the
9 history of the well.

10 Q. This is a relatively new well, is it not?

11 A. It was spudded in November of 1996.

12 Q. And this exhibit really provides the completion
13 history and shows the kinds of treating and testing and
14 efforts that have been made on the well to establish
15 commercial production; is that right?

16 A. That's correct. The target of the well was the
17 Delaware. So the well was drilled to 6850 feet as a
18 Delaware test, and it's way up in that northeast corner
19 because there's Delaware production to the northeast. It
20 did not produce from the Delaware.

21 We perforated the San Andres, and actually it
22 looked pretty good, and it frac'd to San Andres.

23 And item number 10 says that we pumped the San
24 Andres for 26 days and averaged 46 barrels of oil and 123
25 barrels of water, I think a reasonable producing rate.

1 The truth is, we should have stopped right there.

2 But we didn't, we went on and perforated the
3 Grayburg and it made nothing. And the Queen made a little,
4 made two barrels of oil a day and 36 barrels of water on a
5 15-day test.

6 We put the whole thing together in February of
7 this year, and it potentialed 25 oil and 58 from those
8 three zones, those three zones open.

9 We applied for this commingling and it's been
10 denied. The well has been sitting there for the most part,
11 just producing enough to hold the lease at the moment.

12 Q. What is Exhibit Number 4?

13 A. Exhibit Number 4 is a letter from the State Land
14 Office approving this commingling, subject to Oil
15 Conservation Division approval, and it's signed by Jami
16 Bailey.

17 Q. Does it set up a recommended allocation by zone
18 for production from the well if commingling is approved?

19 A. It sets that out, and it sets it out in type
20 that's almost big enough to read. So it says Queen 10
21 percent, San Andres 90 percent of the oil, and assign all
22 the gas to the San Andres.

23 Q. Dr. Boneau, if this Application is approved and
24 the zones are commingled, will hydrocarbons be recovered
25 that otherwise would just be left in the ground?

1 A. Yes, essentially the alternatives are that we're
2 allowed to do this, and the well will make probably 10,000
3 barrels of oil, or we're not allowed to do it and we'll
4 plug the well and no oil will be produced. Essentially
5 there's no other choice.

6 Q. I understand your testimony that these same zones
7 have, in fact, been commingled, and the numerous other
8 wells in the area; is that right?

9 A. Yes, that's correct.

10 Q. Over 10,000 times?

11 A. Very, very many times, yes.

12 Q. In your opinion, will approval of this
13 Application be in the best interest of conservation and the
14 prevention of waste?

15 A. Yes, sir.

16 Q. Were Exhibits 1 through 7 prepared by you or
17 compiled under your direction?

18 A. Yes, they were.

19 MR. CARR: At this time, Mr. Catanach, I would
20 move the admission into evidence of Yates Petroleum
21 Corporation Exhibits 1 through 7.

22 EXAMINER CATANACH: Exhibits 1 through 7 will be
23 admitted as evidence.

24 MR. CARR: That concludes my examination of Dr.
25 Boneau.

EXAMINATION

1
2 BY EXAMINER CATANACH:

3 Q. Mr. Boneau, this well is on the south end of the
4 Vacuum Pool; is that correct?

5 A. It's south of the Vacuum Pool, yes. On the map
6 that's in one of them, the first exhibit, you can see the
7 Vacuum Pool is all those wells at the north edge of the
8 map, at the top of the map. This is the Vacuum up in --
9 mostly in the townships to the north.

10 Q. So you're out of that good San Andres producing
11 fairway in the Vacuum at this location?

12 A. Yes, and the San Andres that we're producing is
13 better than San Andres that you get in other wells in the
14 near region. Maybe there's actually some San Andres there.
15 But it's definitely out of the main San Andres trend, very
16 much out of the main San Andres trend.

17 Q. This is the Queen Gas Pool, is that your
18 understanding, West Reeves-Queen Gas Pool?

19 A. There's a Queen gas pool, and there are two wells
20 in Section 20 that produce from the Queen. Look on the
21 same map; there are two wells that are called Collier Mesa
22 States 1 and 2. They produce from the Queen. I'm told
23 it's the Queen Gas Pool. I frankly haven't looked up all
24 the details of the pool, but those two wells produce from
25 the Queen.

1 There are some wells to the northeast that
2 produce from the Delaware. The Delaware was what Yates was
3 after by moving way up in that upper right-hand corner of
4 the section.

5 So there's kind of Queen production southeast of
6 the well and some Delaware production northeast of the
7 well. Otherwise, it's kind of a barren area between, you
8 know, south of the Vacuum Pool.

9 Q. Well, has this well been placed within that West
10 Reeves-Queen Gas Pool, do you know?

11 A. Our Application is that it's a commingling of a
12 West Reeves-Queen Gas Pool with wildcat Grayburg and
13 wildcat San Andres. If you're asking me what the exact
14 status of where -- what you people have done with that, I'm
15 not totally sure.

16 Q. Okay.

17 A. Our complet- -- Well, I think our completion
18 report with those words on it has been stamped approved; I
19 think that's what you're asking.

20 Q. Okay. As far as you know, there's not an
21 existing Grayburg or San Andres pool within this section or
22 within a mile of you guys?

23 A. No, I'm sure that there is not. Obviously
24 there's San Andres production nearby, relatively nearby,
25 and I think the nearest Grayburg production would be up in

1 that Vacuum Pool also.

2 Q. Okay. Have you -- Have you guys thought about
3 petitioning the District Office when they, in fact, create
4 a new Grayburg and San Andres Pool, to petition them to
5 create, in fact, a Grayburg San Andres combined pool? Is
6 that a possibility that you've discussed with the District
7 Office?

8 A. I am not aware of a discussion of that with the
9 District Office.

10 Q. Is that a possibility that could be accomplished?
11 I mean, there's -- like you submitted data on many pools
12 that the Division has already --

13 A. Theoretically it's possible that we get a
14 Grayburg San Andres pool defined here and then ask you to
15 commingle the Queen with it.

16 Q. But you don't know at this point if any action
17 has been taken by the Division to create a Grayburg or a
18 San Andres pool, separate pool?

19 A. That's correct, I do not know.

20 Q. Okay. But that would solve your problem if there
21 was, in fact, a Grayburg-San Andres Pool?

22 A. If the Grayburg could find a home, then we'd have
23 a standard situation and we could solve our problem, yes.

24 Q. Okay. You're estimating \$15,000 to squeeze the
25 Grayburg, and that, in fact, would render this well

1 uneconomic as far as Yates is concerned?

2 A. That's my testimony, and maybe the numbers don't
3 exactly support that. This well has been a disappointment,
4 it's been a -- It's not been what we wanted. The San
5 Andres has, you know, started out at 60 or 70 barrels a day
6 and now down to 25. It's not going to make a whole lot of
7 oil.

8 I'm just telling you, I think that if we can't
9 produce it like it is, the only money we have left in our,
10 quotes, budget, is of the order of \$10,000 or \$20,000, and
11 we'd use that to plug it rather than to try and essentially
12 waste that money. We think we'd be wasting the money
13 trying to squeeze the Grayburg. That just doesn't make any
14 sense at all. That's really the point, rather than trying
15 to convince you it's uneconomic.

16 But spending money to -- Anyway, that's my point.
17 Spending money to squeeze the Grayburg is just a total
18 waste of money. And we admit we've wasted money
19 perforating the Grayburg. You know, that's not going to --
20 That's not the point; this is where we are.

21 Q. Yeah. Let me ask you this. Under different
22 circumstances, for instance if you had some better
23 producing rates from the San Andres, would you typically
24 squeeze a zone like the Grayburg, if the well was a better
25 well?

1 A. Well, I hear two questions there, or I hear
2 several questions there. If we had a great San Andres zone
3 -- if we had a great San Andres zone there, we would have
4 stopped for one thing, and not opened anything else.

5 But if we had a great San Andres zone and we
6 opened the Grayburg and it was this, you would require us
7 to squeeze the Grayburg, and the economics would be there
8 to justify that, and we would -- I mean, we'd still say
9 that money is wasted, but we've got to follow the rules,
10 and we would do it, we would squeeze the Grayburg in that
11 situation --

12 Q. Okay.

13 A. -- if that's the question.

14 Q. So I mean, this one's kind of out of the ordinary
15 in the fact that it's not a very good producing well?

16 A. Yeah, we got a -- maybe decent zone, a poor zone,
17 and just a zero zone. We got -- All three of which add up
18 to not very much.

19 Q. You're estimating that's approximately 10,000
20 barrels going to be recovered. Is that from both zones?

21 A. I think if you -- Yeah, if you let us pump the
22 well as we requested, we're going to get -- I think we're
23 going to get 10,000 barrels. I mean, we're not going to
24 get 200,000 barrels or something. We're going to get about
25 10,000 barrels.

1 Q. Do you have an estimate on maybe what the
2 producing life is?

3 A. Two or three years, two or three years.

4 Q. Typically, when you went in and plugged the well,
5 you would then squeeze the formations or set bridge plugs
6 or some other thing to isolate the zones?

7 A. We would have to isolate the zones, I think, with
8 bridge plugs.

9 EXAMINER CATANACH: I have nothing further of
10 this witness, Mr. Carr.

11 MR. CARR: Mr. Catanach, that concludes our
12 presentation of this case.

13 EXAMINER CATANACH: Okay, there being nothing
14 further in this case, Case 11,781 will be taken under
15 advisement.

16 (Thereupon, these proceedings were concluded at
17 9:50 a.m.)

18 * * *

19
20
21 I do hereby certify that the foregoing is
22 a complete record of the proceedings in
the Examiner hearing of Case No. 11781,
heard by me on May 15 1987.

23 David J. Catanach, Examiner
24 Oil Conservation Division
25

