

STATE OF NEW MEXICO

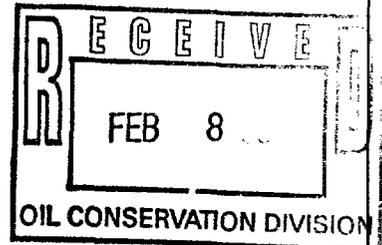
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

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 A UNIT AGREEMENT,)
 LEA COUNTY, NEW MEXICO)

CASE NO. 11,444

ORIGINAL



REPORTER'S TRANSCRIPT OF PROCEEDINGS

EXAMINER HEARING

BEFORE: DAVID R. CATANACH, Hearing Examiner

January 25th, 1996

Santa Fe, New Mexico

This matter came on for hearing before the New Mexico Oil Conservation Division, DAVID R. CATANACH, Hearing Examiner, on Thursday, January 25th, 1996, 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

January 25th, 1996
 Examiner Hearing
 CASE NO. 11,444

	PAGE
APPEARANCES	3
APPLICANT'S WITNESSES:	
<u>ROBERT BULLOCK</u> (Landman)	
Direct Examination by Mr. Owen	5
Examination by Examiner Catanach	11
<u>JOHN McRAE</u> (Geologist)	
Direct Examination by Mr. Owen	12
Examination by Examiner Catanach	19
REPORTER'S CERTIFICATE	23

* * *

E X H I B I T S

Applicant's	Identified	Admitted
Exhibit 1	7	11
Exhibit 2	13	19
Exhibit 3	14	19
Exhibit 4	16	19
Exhibit 5	17	19

* * *

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, P.A.
Suite 1 - 110 N. Guadalupe
P.O. Box 2208
Santa Fe, New Mexico 87504-2208
By: PAUL R. OWEN

* * *

1 WHEREUPON, the following proceedings were had at
2 11:45 a.m.:

3 EXAMINER CATANACH: At this time we'll call Case
4 11,444.

5 MR. CARROLL: Application of Yates Petroleum
6 Corporation for a unit agreement, Lea County, New Mexico.

7 EXAMINER CATANACH: Are there appearances in this
8 case?

9 MR. OWEN: Yes, Mr. Examiner, Paul R. Owen with
10 the Santa Fe law firm of Campbell, Carr and Berge for the
11 Applicant.

12 EXAMINER CATANACH: Any additional appearances?
13 Okay, do you have any witnesses in this case, Mr.
14 Owen?

15 MR. OWEN: Yes, Mr. Examiner, we have two
16 witnesses.

17 As a preliminary matter, I would like to call to
18 the Examiner's attention the fact that the acreage
19 contained in the Application, and consequently the ad in
20 this case, contains approximately 80 acres more than is
21 actually included in the proposed unit.

22 The witness, Mr. Robert Bullock, will go into the
23 precise reason for the additional acreage. However, I
24 believe that you spoke with Mr. Carr yesterday, Mr.
25 Examiner, and this will not be a problem with the

1 Application or require readvertisement in this case.

2 EXAMINER CATANACH: Okay, it's my understanding
3 that the 2178.68 -- the actual unit size is 80 acres less
4 than that?

5 MR. OWEN: Correct.

6 EXAMINER CATANACH: Okay. Yeah, that would be
7 fine. I don't think that there's a need to readvertise
8 this case. We can just proceed from there.

9 MR. OWEN: Okay, Mr. Examiner, I call Mr. Robert
10 Bullock.

11 EXAMINER CATANACH: Will the witnesses please
12 stand to be sworn in?

13 (Thereupon, the witnesses were sworn.)

14 ROBERT BULLOCK,
15 the witness herein, after having been first duly sworn upon
16 his oath, was examined and testified as follows:

17 DIRECT EXAMINATION

18 BY MR. OWEN:

19 Q. Please state your name and place of residence for
20 the record.

21 A. My name is Robert Bullock, and I live in Hope,
22 New Mexico.

23 Q. And who do you work for?

24 A. I work for Yates Petroleum Corporation.

25 Q. In what capacity?

1 A. As a petroleum landman.

2 Q. Have you previously testified before the Division
3 and had your credentials made a matter of record as a
4 landman?

5 A. Yes.

6 Q. Are you familiar with the Application filed in
7 this case?

8 A. Yes, I am.

9 Q. Are you familiar with the proposed Morton
10 Exploratory Unit?

11 A. Yes, sir.

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

14 EXAMINER CATANACH: They are.

15 Q. (By Mr. Owen) Mr. Bullock, would you please
16 briefly state what Yates Petroleum Corporation seeks with
17 this Application?

18 A. We seek approval of the Morton Exploratory Unit
19 agreement. This is a voluntary exploratory unit containing
20 approximately 2090 acres of state and fee lands. It's
21 located in Lea County, New Mexico.

22 Q. Mr. Bullock, I note that the Application in this
23 case states that the unit area comprises approximately 2178
24 acres. Is there a reason for the discrepancy between the
25 Application and your testimony?

1 A. The original application included an additional
2 80 acres. That 80 has subsequently fallen out and we
3 readvertised. And through, I guess, an error, it never did
4 get advertised correctly.

5 Q. What 80 acres is not included in the --

6 A. It was the north half of the northeast quarter of
7 Section 6, Township 15 South, Range 35 East.

8 Q. Have you prepared certain exhibits for
9 introduction in this case?

10 A. Yes, sir.

11 Q. Okay, let's go to your first exhibit, "State/Fee
12 Exploratory Unit". Would you please identify and explain
13 what it is and what it shows?

14 A. This is the form that we'll be using for state
15 and fee lands only. It incorporates the language that is
16 appropriate for this type of unit.

17 Q. Have there been any amendments?

18 A. No amendments included.

19 Q. Let's look at Exhibit A to the unit agreement.
20 What is Exhibit A?

21 A. Exhibit A is the plat that outlines our proposed
22 unit. It also includes our tract numbers that we
23 identified in Exhibit B. It differentiates between state
24 lands and fee lands, and it includes the total amount of
25 acreage that we have in the unit.

1 Q. What's the status of the acreage?

2 A. The acreage is primarily state lands, with the
3 exception of one tract, a 160-acre tract in the southwest
4 quarter of Section 33, which are fee lands.

5 Q. How many leases are contained in it?

6 A. Exhibit B to the unit agreement is a schedule of
7 ownership. We do it on a tract basis, describing the
8 lands, and we have -- one, two, three, four, five, six --
9 seven state tracts, of which one is unleased presently, and
10 one fee tract, which I've already referenced.

11 The acres of state lands, recapping at the
12 bottom, we have 84.7164 percent of these lands are leased
13 under state oil and gas leases. The unleased state tract
14 is approximately 7.64 percent. And the -- I've also
15 differentiated on the fee lands lease versus the unleased
16 fee lands.

17 Q. There is no federal land involved in this --

18 A. No federal land involved in this.

19 Q. -- unit, is there?

20 What percentage acreage has been committed to
21 this unit?

22 A. Presently 84.7164 percent of the lands are
23 effectively committed to the unit.

24 Q. What's the status of the remaining tracts?

25 A. The remaining tracts are the unleased state

1 lands, which we hope to buy at the next state land sale.
2 And then we have the fee lands partially leased, and we're
3 trying to lease the balance of those fee lands at the
4 present time.

5 Q. So part of them had -- part of the remaining
6 tracts are unleased state lands and part are partially
7 leased fee lands?

8 A. That's correct.

9 Q. Can you identify the other owners, including
10 those who elected not to participate, fee?

11 A. We have -- All of the owners of the Yates
12 companies, the four Yates companies -- being Yates
13 Petroleum Corporation, Yates Drilling Company, Abo
14 Petroleum Corporation and MYCO Industries, Inc. -- there
15 are no additional working interest owners, aside from the
16 Yates companies, in this unit.

17 Q. Have you applied to the Commissioner of Public
18 Lands for preliminary approval to the proposed unit
19 agreement?

20 A. Yes, we have.

21 Q. What's the status of that application?

22 A. They're reviewing it right now, and Pete Martinez
23 seems to think it will be all right. That's -- We don't
24 have any type of written preliminary approval at this point
25 in time.

1 Q. Is the Application substantially similar to the
2 case that will be called in a few minutes, 11,445?

3 A. Yes, sir.

4 Q. Have you received approval in that, preliminary
5 approval in that case?

6 A. Yes, we have.

7 Q. Does Yates desire to be designated unit operator?

8 A. Yates Petroleum Corporation wants to be the unit
9 operator.

10 Q. Does this agreement provide for the periodic
11 filing of plans of development?

12 A. Yes.

13 Q. Will these be filed with the OCD as well as other
14 agencies?

15 A. Yes, sir.

16 Q. How often are these plans to be filed?

17 A. I believe the initial plan must be filed within
18 six months of the completion of the first well. Subsequent
19 plans are on a yearly basis, every twelve months.

20 Q. Will Yates also call a geological witness?

21 A. Yes, sir.

22 Q. Was Exhibit 1 and its sub-exhibits prepared by
23 you or compiled --

24 A. Yes.

25 Q. -- under your direction?

1 A. Yes, sir.

2 MR. OWEN: Mr. Examiner, I offer Exhibit 1.

3 EXAMINER CATANACH: Exhibit 1 will be admitted as
4 evidence.

5 MR. OWEN: That concludes my examination of Mr.
6 Bullock.

7 EXAMINATION

8 BY EXAMINER CATANACH:

9 Q. Mr. Bullock, is the unit agreement as to all
10 formations?

11 A. Yes, sir.

12 Q. Okay. It's your understanding that particular
13 unleased state lease will be up for bid shortly?

14 A. It will be. It is on the February sale.

15 Q. Okay. And the unleased fee lease, you're
16 attempting to lease at this point?

17 A. Yes.

18 Q. Do you anticipate success in that effort?

19 A. Probably not. We'll probably not get it all
20 leased up. Probably it will be -- that tract will not be
21 recognized as being a committed tract.

22 Q. When did you expect an answer from the State Land
23 Office?

24 A. I think within a couple weeks.

25 EXAMINER CATANACH: Okay, I don't have anything

1 further.

2 MR. OWEN: That concludes my examination of this
3 witness.

4 I call Mr. John McRae.

5 JOHN McRAE,

6 the witness herein, after having been first duly sworn upon
7 his oath, was examined and testified as follows:

8 DIRECT EXAMINATION

9 BY MR. OWEN:

10 Q. Mr. McRae, would you please state your name and
11 place of residence for the record?

12 A. My name is John McRae, and I live in Artesia, New
13 Mexico.

14 Q. And who do you work for?

15 A. Yates Petroleum Corporation.

16 Q. In what capacity?

17 A. As an exploration geologist.

18 Q. Have you previously testified before the Division
19 or one of its Examiners and had your credentials as a
20 geologist accepted and made a matter of record?

21 A. Yes, I have.

22 Q. Are you familiar with the Application filed in
23 this case?

24 A. Yes, I am.

25 Q. Have you made a geological study of the area

1 surrounding the proposed Morton Exploratory Unit?

2 A. Yes, sir.

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

5 EXAMINER CATANACH: They are.

6 Q. (By Mr. Owen) What formations are being unitized
7 in the Morton Exploratory Unit?

8 A. We have requested that all formations be
9 unitized.

10 Q. And what is the primary objective?

11 A. The primary objective is the Strawn formation.

12 Q. Is this location for the Strawn formation in this
13 unit subject to a pooling order?

14 A. I have checked with the OCD in Hobbs, and the
15 portion that we have looked at in Section 32 and Section 5
16 are not in pools and will be considered a wildcat.

17 Q. Are there secondary objectives?

18 A. Yes, the Wolfcamp, the Cisco and the Canyon
19 formations.

20 Q. Let's go to what's been marked as Yates Exhibit
21 Number 2. Can you review it for the Examiner?

22 A. Yes, this exhibit is simply a base map of the
23 area surrounding the Morton unit. I have a legend on the
24 lower portion of the map. This -- I'd like to note that
25 this map includes all wells.

1 I have color-coded all of the producing wells,
2 with blue being Permo-Penn; brown, Strawn; green, Morrow;
3 purple, Mississippian.

4 I have also indicated the location of several 2-D
5 seismic lines that Yates has purchased, that was
6 incorporated in my geological presentation, and I've also
7 noted several wells that have been plugged.

8 You'll notice in the Morton unit, which is
9 designated as a red outline on the map, that there are two
10 Permo-Penn wells that have produced, and they have been
11 plugged. I did not note each plugged producer outside of
12 the unit boundary.

13 Also on this map is a location of the Papalotes
14 Unit, which we will be discussing later.

15 Q. Is that outlined in blue?

16 A. Yes, it is.

17 Q. Are the seismic lines indicated on the map 2-D
18 seismic lines?

19 A. Yes, they are.

20 Q. All right. Let's go to Yates Exhibit Number 3.
21 Can you please review that for the Examiner?

22 A. This is the exact same base map, with the
23 exception that I have stripped off the wells that are
24 11,000 feet and shallower, so this map presents only wells
25 that have penetrated a depth of 11,000 -- actually 11,001

1 and greater.

2 I also have a legend on the lower portion of the
3 map. It shows the Wolfcamp and Strawn producers, also the
4 plugged producers with the plugged symbol. And I have
5 noted on this map that this contains wells of 11,000 feet
6 or greater.

7 And this map also shows the 2-D seismic lines. I
8 have used subsurface well control and dip directions from
9 the 2-D seismic lines to generate a structure map, which
10 this exhibit is. It's a structure map on top of the
11 Strawn.

12 As you can see, the dip is generally to the north
13 in this portion of the Basin, and there are several
14 interpreted closures. The main -- I have noted the key
15 well, that is located in Section 3 of 15-35. It is noted
16 there on the map with the key well symbol. It is a plugged
17 Strawn producer. This particular well produced 1600
18 barrels of oil, 869 MCF of gas, and 1092 barrels of water
19 from the Strawn formation.

20 Because this particular well produced a small
21 amount of oil and almost an equal amount of water, I
22 interpret this to be on a small closure.

23 The Morton unit itself, we have interpreted a
24 closure at Strawn level. And I'd like to point out that to
25 the south of this map, about four miles south of the Morton

1 unit itself, is the Lovington West-Strawn field.

2 The structure map on the top of the Strawn at
3 that location shows a closure at Strawn level, and that
4 closure is controlled in part by an algal mound buildup in
5 the Strawn horizon.

6 That algal mound environment is present in this
7 key well that produced the small amount of oil and water.
8 And it's my interpretation that at the Morton Unit location
9 there is a Strawn algal mound buildup of significant size
10 that has influenced the location of this structural
11 closure.

12 I've also shown on this map the possible oil-
13 water contact.

14 Q. Is that indicated at the exterior of the Morton
15 Unit?

16 A. Yes, and it's colored green and labeled also with
17 a label.

18 Q. All right, let's go to what's been marked as
19 Yates Exhibit Number 4, type log of the key well.

20 A. This is a type log of the key well, located in
21 Section 3, as I mentioned before. I have noted on here the
22 mapped horizon for the Exhibit 3. I've also noted the top
23 of the Strawn formation and the top of the Atoka formation.

24 This well was drilled by Gecko. It was the
25 Crescent "3" Number 1 well. It was drilled and completed in

1 May of 1993. I've noted on the log the perforations. This
2 well produced 1602 barrels of oil, 869 MCF of gas, 1092
3 barrels of water, and it was plugged in 4 of 1994.

4 I would like to point out on this log that this
5 is a gamma ray on the left-hand side with caliper. On the
6 right-hand side there's the neutron density log.

7 The interval from 11,904 feet to the top of the
8 Atoka, which is at 11,980 feet, is the micritic carbonate
9 shelf that is present in this portion of the Basin. The
10 algal mound buildups always occur above this micritic
11 shelf, and that goes from 11,904 up to the top of the
12 Strawn. This is where the growth develops in the Strawn,
13 and this is exactly what has occurred at Lovington West to
14 the south where this -- several of the wells of Lovington
15 South have over 100 feet of algal mound buildup, and that's
16 what has influenced that structural closure.

17 We anticipate that at the Morton Unit we will
18 have a significantly thicker algal mound development than
19 the Gecko well did. I believe the small amount of
20 production from the Gecko well is that it's a very small
21 mound, as I've noted by my structural closure there in
22 Section 3.

23 Q. All right, let's go to Yates Exhibit Number 5.
24 Would you please review that for the Examiner?

25 A. This is a geological explanation of the proposed

1 Morton unit, and it essentially discusses what I've stated.

2 Q. Have you determined where the initial test well
3 will be located in the Morton unit?

4 A. We are still leasing in Section 35 -- I'm sorry,
5 33, as Mr. Bullock has mentioned earlier, and with the
6 state lease being open in the northwest of 32, and we have
7 decided we will either drill in the southeast of 32 or in
8 the northeast of Section 5, one of those two locations.
9 That will be determined after our acreage is -- leasing is
10 complete.

11 Q. Do those locations -- Are they the best chance
12 for a quality reservoir?

13 A. Yes, they are.

14 Q. Is this an area that can be best produced under a
15 unit plan?

16 A. Yes, it is.

17 Q. How soon do you plan to drill the initial test
18 well?

19 A. We will drill after we receive the order from OCD
20 and prior to 4-1-96.

21 Q. In your opinion, will approval of this
22 Application be in the best interest of conservation, the
23 prevention of waste and the protection of correlative
24 rights?

25 A. Yes, it will.

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

3 A. Yes.

4 MR. OWEN: Mr. Examiner I offer Exhibits 2
5 through 5 into evidence.

6 EXAMINER CATANACH: Exhibits 2 through 5 will be
7 admitted as evidence.

8 MR. OWEN: Mr. Examiner, that completes my
9 examination of this witness.

10 EXAMINATION

11 BY EXAMINER CATANACH:

12 Q. Mr. McRae, to map this Strawn structure, you
13 utilized the 2-D seismic data that's shown on the map?

14 A. That's correct, in addition to the well control.

15 Q. Which is very little. The well in Section -- Is
16 that Section 3? Is that the only well you utilized?

17 A. There are two wells that have penetrated the
18 Strawn. I might mention that the NDE symbol is a well that
19 did -- is 11,000 feet or greater and did not penetrate the
20 Strawn horizon.

21 This is an area where the Strawn is very -- Well,
22 there's just very little exploration for the Strawn.

23 The Lovington West field to the south, Charles
24 Gillespie's company has told me that they anticipate that
25 that field could produce as much as 7 million barrels of

1 oil.

2 So there are significant reserves in the Strawn
3 formation in this area of the Basin that are yet to be
4 discovered. And we have some significant blocks of
5 acreage, and based on my interpretation and work in this
6 area, we feel that we have a very high probability of
7 finding Strawn production here in the Morton unit. That's
8 why I have used and put on here the location of the 2-D
9 lines.

10 Q. Typically, the Strawn algal mound buildups are
11 substantially smaller than what you have mapped in the
12 Morton unit; is that correct?

13 A. Over in the Humble City area, 16-37, 17-37, they
14 tend to be much smaller.

15 This Lovington West field is an exception. I
16 don't know the exact limits of that field in square miles
17 or acres. There are two new locations on the north side.
18 It's very possible that field's limits have not been
19 defined yet.

20 But it is -- It covers the major portions of
21 three or four sections. I think that this part of the
22 Basin may have potential for larger mounds that could
23 conceivably cover areas as large as what we have
24 interpreted here at the Morton Unit.

25 Q. How did you determine the possible oil-water

1 contact position?

2 A. I used the Gecko well as -- I should have put an
3 oil-water contact on that. I believe that this well is on
4 a very small mound and has an oil-water contact in the
5 wellbore, based on the small amount of production. I've
6 used essentially the same contour location, same oil-water
7 contact, as in that Gecko well.

8 Q. Okay, but in your structure, do you think you're
9 going to encounter a larger pay section?

10 A. Yes, sir.

11 Q. Was there a geologic reason that the 80-acre
12 tract was left out of the unit, or is that some other
13 reason?

14 A. Originally -- Well, there's not a geological
15 reason it was left out. You can see my --

16 Q. Part of that tract appears to be below the oil-
17 water contact?

18 A. Well, you can see my contour. I originally
19 thought that that tract was prospective. In fact, I still
20 think it's prospective.

21 Huber owns that tract, and they had committed
22 that to another party as a farmout.

23 As my map shows, I feel it's on the edge. It may
24 not be a location that we would want to drill.

25 EXAMINER CATANACH: Okay, I have nothing further.

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

MR. OWEN: That concludes our presentation in this case.

EXAMINER CATANACH: Okay, there being nothing further in this case, Case 11,444 will be taken under advisement.

(Thereupon, these proceedings were concluded at 12:10 p.m.)

* * *

I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case No. 11444, heard by me on August 25 1996.
David R. Catanach, Examiner
Oil Conservation Division

CERTIFICATE OF REPORTER

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

I, Steven T. Brenner, 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 transcribed my notes; 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 January 31st, 1996.



STEVEN T. BRENNER
 CCR No. 7

My commission expires: October 14, 1998