

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. 12,831  
)  
APPLICATION OF YATES PETROLEUM )  
CORPORATION FOR APPROVAL OF A UNIT )  
AGREEMENT, LEA COUNTY, NEW MEXICO )  
\_\_\_\_\_ )

ORIGINAL

REPORTER'S TRANSCRIPT OF PROCEEDINGS

EXAMINER HEARING

BEFORE: DAVID R. CATANACH, Hearing Examiner

March 7th, 2002

Santa Fe, New Mexico

02 MAR 21 AM 10:40  
OIL CONSERVATION DIV

This matter came on for hearing before the New Mexico Oil Conservation Division, DAVID R. CATANACH, Hearing Examiner, on Thursday, March 7th, 2002, at the New Mexico Energy, Minerals and Natural Resources Department, 1220 South Saint Francis Drive, Room 102, Santa Fe, New Mexico, Steven T. Brenner, Certified Court Reporter No. 7 for the State of New Mexico.

\* \* \*

STEVEN T. BRENNER, CCR  
(505) 989-9317

I N D E X

March 7th, 2002  
Examiner Hearing  
CASE NO. 12,831

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<u>JOHN AMIET</u> (Geologist)	
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\* \* \*

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## A P P E A R A N C E S

## FOR THE DIVISION:

DAVID K. BROOKS  
Attorney at Law  
Energy, Minerals and Natural Resources Department  
Assistant General Counsel  
1220 South St. Francis Drive  
Santa Fe, New Mexico 87505

## FOR THE APPLICANT:

HOLLAND & HART, L.L.P., and CAMPBELL & CARR  
110 N. Guadalupe, Suite 1  
P.O. Box 2208  
Santa Fe, New Mexico 87504-2208  
By: WILLIAM F. CARR

\* \* \*

STEVEN T. BRENNER, CCR  
(505) 989-9317

1           WHEREUPON, the following proceedings were had at  
2   11:32 a.m.:

3           EXAMINER CATANACH: Okay, at this time we'll call  
4   Case 12,831, the Application of Yates Petroleum Corporation  
5   for approval of a unit agreement, Lea County, New Mexico.

6           Call for appearances.

7           MR. CARR: May it please the Examiner, my name is  
8   William F. Carr with the Santa Fe office of Holland and  
9   Hart, L.L.P. We represent Yates Petroleum Corporation in  
10   this matter, and I have one witness.

11          EXAMINER CATANACH: Any additional appearances?

12          Will the witness please stand to be sworn in?

13          (Thereupon, the witness was sworn.)

14          MR. CARR: Mr. Examiner, at this time we call  
15   John Amiet.

16                       JOHN AMIET,  
17   the witness herein, after having been first duly sworn upon  
18   his oath, was examined and testified as follows:

19                       DIRECT EXAMINATION

20   BY MR. CARR:

21       Q.    Would you state your name for the record, please?

22       A.    My name is John Amiet, A-m-i-e-t.

23       Q.    Where do you reside?

24       A.    Artesia, New Mexico.

25       Q.    By whom are you employed?

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1           A.    Yates Petroleum.

2           Q.    And what is your position with Yates?

3           A.    I'm a geologist with Yates.

4           Q.    Have you previously testified before the Oil  
5 Conservation Division?

6           A.    Yes, I have.

7           Q.    At the time of that testimony, were your  
8 credentials as an expert witness in petroleum geology  
9 accepted and made a matter of record?

10          A.    Yes, they were.

11          Q.    Are you familiar with the proposed New Grass  
12 State Exploratory Unit?

13          A.    Yes, I am.

14          Q.    Are you familiar with the status of the lands in  
15 the proposed unit area?

16          A.    Yes, I am.

17          Q.    Have you made a geological study of the area  
18 which is the subject of this unit application?

19          A.    Yes, I have.

20          Q.    Are you prepared to share the results of that  
21 work with Mr. Catanach?

22          A.    Yes.

23               MR. CARR:  Are Mr. Amiet's qualifications  
24 acceptable?

25               EXAMINER CATANACH:  They are.

1           Q.    (By Mr. Carr)  Would you initially state for the  
2 Examiner what it is that Yates Petroleum Corporation seeks  
3 with this Application?

4           A.    Yates is seeking approval of the New Grass State  
5 Exploratory Unit agreement.  This is a voluntary  
6 exploratory unit that contains approximately 3200 acres of  
7 State of New Mexico lands, located in Lea County, New  
8 Mexico.

9           Q.    Have you prepared exhibits for presentation here  
10 today?

11          A.    Yes, I have.

12          Q.    Let's go to what's been marked for identification  
13 as Yates Exhibit Number 1.  I would ask you to identify  
14 that and review it for Mr. Catanach.

15          A.    This is the unit agreement.  This is based on the  
16 state form for an exploratory unit.

17          Q.    And is Exhibit Number 2 a copy of a plat of the  
18 unit area?

19          A.    That's correct.

20          Q.    Is this the same as Exhibit A to the unit  
21 agreement?

22          A.    That's correct.

23          Q.    How many State of New Mexico leases do we have in  
24 the unit area?

25          A.    There are 11 State of New Mexico leases located

1 in seven different sections.

2 Q. What is Exhibit Number 3?

3 A. This is the ownership breakdown. It shows the  
4 ownership of each lease in the unit area. Yates has a  
5 majority interest in all of these leases. These working  
6 interests are common, the acreage has been pooled between  
7 Yates and David Petroleum. Yates has a total -- all the  
8 Yates parties have a total of 62-percent interest, and all  
9 David Petroleum parties have a total of 38-percent  
10 interest.

11 Q. Has 100 percent of the acreage been committed to  
12 the unit plan?

13 A. Yes, it has.

14 Q. What is the status of the approval of the  
15 Commissioner of Public Lands for the New Grass Unit?

16 A. I met with Mr. Martinez and four members of his  
17 staff on Monday afternoon. We talked for about an hour and  
18 a half. At that time he indicated that he thought he  
19 didn't see any problems with this approval.

20 I called him yesterday morning and again he said  
21 he didn't see any problems at this time, and he expected to  
22 have word by Friday. That would be tomorrow.

23 MR. CARR: Mr. Catanach, when we receive the  
24 letter from the Commissioner of Public Lands we will submit  
25 a copy to the Division for inclusion in the record of this

1 case.

2 Q. (By Mr. Carr) Mr. Amiet, does Yates Petroleum  
3 Corporation desire to be designated operator of this unit?

4 A. Yes, we do.

5 Q. What is Exhibit Number 5?

6 A. That's the AFE. It sets out the dryhole costs  
7 and completed well costs, a dryhole cost of \$995,750 and a  
8 total completed well cost of \$1,487,550.

9 Q. This will be the initial well on the unit?

10 A. That's correct.

11 Q. And when do you plan to spud this well?

12 A. On or before April 1st. We have two leases on  
13 the west side of the unit that expire at that time, so we  
14 need to drill before April 1st.

15 Q. Does the unit agreement provide for the periodic  
16 filing of plans of development?

17 A. Yes, it does.

18 Q. And will these plans be filed with the Oil  
19 Conservation Division as well as the New Mexico State Land  
20 Office?

21 A. Yes, they will.

22 Q. And how often are these plans to be filed?

23 A. The initial plan is six months after completion  
24 of the first well. Subsequent plans are twelve months  
25 thereafter.



1           Q.    What formations are unitized in the New Grass  
2 Exploratory Unit?

3           A.    All formations.

4           Q.    Where is this test well going to be drilled?

5           A.    It will be 660 feet from the north and east lines  
6 of Section 22. That's Township 15 South, Range 34 East,  
7 New Mexico.

8           Q.    And how deep will you drill?

9           A.    We're going to drill to a TD of 13,900 feet.  
10 That would be the lower Mississippian lime.

11          Q.    And the principal objective or the primary  
12 objective in this well is what formation?

13          A.    The Morrow.

14          Q.    Is this within an established pool, or will it be  
15 a wildcat?

16          A.    This will be a wildcat well. It's more than two  
17 miles away from the nearest Morrow producer.

18          Q.    Are there any secondary objectives in the well?

19          A.    There's an Atoka and upper Mississippian,  
20 possibly Wolfcamp.

21          Q.    Mr. Amiet, let's go to what has been marked as  
22 Yates Petroleum Corporation Exhibit Number 6. Would you  
23 identify that and review it for Mr. Catanach?

24          A.    This is a structure map on top of the Morrow.  
25 The unit outline is shown in yellow. This map is showing

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(505) 989-9317

1 all wells that have been drilled, regardless of TD.

2           You'll notice the four purple spots over the  
3 wells. Those are four Morrow producers. I might mention  
4 that of those four producers only one is economic. That's  
5 the well down in the southeast corner of the map in Section  
6 25. The other three wells have either cum'd about half a  
7 BCF or will -- we expect them to cum about half a BCF. In  
8 order to be an economic well, you probably need at least  
9 1.5 BCF.

10           Q. Okay, what are the blue areas shaded on the map?

11           A. The blue areas are indicating the structural  
12 highs. The blue lines are showing some of the incised  
13 channels which, as you go downdip, develop into kind of a  
14 fan system. Well locations were determined from  
15 integrating both the seismic data and the well control.

16           I might also mention that the Morrow penetrations  
17 are shown with open purple circles. If you look in Section  
18 24, in kind of the southeast corner of the map, there's two  
19 wells, Yates Petroleum Arreguy wells. Those are both dry  
20 holes that have the open circles. So open circles just  
21 indicate penetration through the Morrow.

22           Q. What is Yates Exhibit 7?

23           A. That's a Morrow isopach map. It shows the sand  
24 thickness. It's indicating a general east-west trend.  
25 Again, the Morrow producers are shown with purple. Now,

1 this map extends about three-quarters of a mile farther to  
2 the east, so there are two more producers shown on this  
3 map. The one in Section 19, the Yates Pardner, is an  
4 excellent well. The other one up to the north was an  
5 uneconomic well. It made about 100 million cubic feet of  
6 gas. It's still producing.

7 Q. Is Yates Exhibit 8 a written summary of your  
8 geological presentation?

9 A. Yes, it is.

10 Q. Refer to this summary and explain to the Examiner  
11 why Yates is proposing to attempt to develop this area  
12 under the proposed unit plan.

13 A. These are expensive wells to drill, they cost  
14 about \$1.5 million each. We feel that formation of the  
15 unit will result in a more reasonable development of these  
16 reserves. The pool can be more effectively developed under  
17 a unit plan. We're stepping out about two miles to the  
18 west of any economic production.

19 Also, I might mention that there are no Morrow  
20 penetrations in the unit outline. So this is going to be a  
21 rank wildcat well that we're going to be drilling.

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

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1 A. Yes.

2 Q. Were Yates Exhibits 1 through 8 prepared by or  
3 compiled under your direction and supervision?

4 A. Yes, they were.

5 Q. Can you testify to the accuracy of these  
6 exhibits?

7 A. Yes, I do.

8 MR. CARR: Mr. Catanach, at this time we move the  
9 admission into evidence of Yates Exhibits 1 through 8.

10 EXAMINER CATANACH: Exhibits 1 through 8 will be  
11 admitted as evidence.

12 EXAMINATION

13 BY EXAMINER CATANACH:

14 Q. You didn't have any well control to the west of,  
15 say, Section 26 where that's the last Morrow penetration  
16 you have in this area?

17 A. That's correct.

18 Q. So your geologic data west of that point is based  
19 on just the well control to the east there?

20 A. No, we actually have a 3-D seismic that goes up  
21 about to the southern edge of, I'll say, Section 15 and 16.  
22 So we do have some seismic, 3-D seismic control in this  
23 area. It doesn't go -- Well, I'll correct it. It doesn't  
24 go all the way to 16 and 21. It kind of covers the north  
25 half of section 22, so that's how we picked the location.

1 But if the Section 22 wildcat well comes in, we will  
2 probably shoot more 3-D out to the west.

3 Q. You've shown that well -- the proposed location  
4 is going to encounter what you've shown is a little over 30  
5 feet of net pay in that Morrow?

6 A. That's correct.

7 Q. And you've got a well in Section 13 that you say  
8 is uneconomic, with about the same amount of pay?

9 A. That's correct. We just drilled that Chevy well.  
10 Actually, the two Yates wells that I talked about, the  
11 Arreguy wells, and the Chevy well were all drilled last  
12 year. Just being in the channel doesn't guarantee that you  
13 get a good well. We try to drill in the lows. Sometimes  
14 we hit the clay plug, sometimes we hit good sand.

15 There's a lot of sand in that well, in the Chevy  
16 well. It had neutron density crossover, but it just didn't  
17 have the porosity. Instead of having 8- to 10-percent  
18 porosity, a lot of that sand was down at 5- or 6-percent  
19 porosity.

20 So again we're optimistic that hopefully that's  
21 an anomalous well, and if we hit that much sand normally  
22 you get a good well.

23 Q. Your proposed location is going to be upstructure  
24 from the Chevy well?

25 A. No, it's going to be downstructure --

1 Q. Downstructure, okay.

2 A. -- it's going to be deeper. There's actually a  
3 structural high just to the east, if you look at the  
4 structure map. Just to the east of that well, there's a  
5 high in Section 14. We think there's sands coming off this  
6 structural high, coming into this low, and so we're  
7 drilling right adjacent or close to that high.

8 Q. What's the potential in the Mississippian in this  
9 area?

10 A. We've had several excellent Mississippian wells.  
11 One of them IP'd -- it's quite a ways to the north -- about  
12 2 million a day. And so far, that well has made several  
13 hundred million cubic feet of gas. There's an Austin field  
14 that's exclusively Mississippian production, upper  
15 Mississippian. Some of those wells can range up to 2, 3  
16 BCF of gas. So the Mississippian is definitely a target.

17 Q. All right. At this point, you don't know where a  
18 subsequent well may be drilled within the unit?

19 A. If that well comes in, we actually have an  
20 approved location in Section 24, the Yates Bart. But  
21 because of the Chevy we're holding off on that well. The  
22 Chevy is an uneconomic well, and the two Arreguy wells are  
23 uneconomic wells, so we're just holding off on that  
24 location at this time. We've drilled three uneconomic  
25 wells on both sides of that north half of Section 24. But

1 that might be a well we'd come back.

2 We also might go to the west, although we'd  
3 probably shoot some seismic first. We think some of these  
4 channels eventually are going to fan out and develop into  
5 more of a fan system that might be more laterally  
6 continuous. Right now, trying to hit these narrow channels  
7 that are maybe 400 or 500 feet wide is a lot of risk, and  
8 if we can get to a fan to where the sands are spreading out  
9 and you get a more continuous sand development, it would be  
10 a lot easier to hit a good well.

11 So we could either go to the east or to the west.

12 EXAMINER CATANACH: I have no further questions.

13 MR. CARR: Mr. Catanach, that concludes our  
14 presentation in this case.

15 EXAMINER CATANACH: Do you have anything?

16 MR. BROOKS: No.

17 EXAMINER CATANACH: There being nothing further,  
18 Case 12,831 will be taken under advisement.

19 (Thereupon, these proceedings were concluded at  
20 11:45 a.m.)

21 \* \* \*

22 I do hereby certify that the foregoing is  
23 a complete record of the proceedings in  
the Examiner hearing of Case No. 12831  
heard by me on March 7 2002.

24 David R. Catanach Examiner  
25 Oil Conservation Division

STEVEN T. BRENNER, CCR  
(505) 989-9317

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 March 14th, 2002.




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STEVEN T. BRENNER  
 CCR No. 7

My commission expires: October 14, 2002

STEVEN T. BRENNER, CCR  
 (505) 989-9317