

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 APPROVAL OF A UNIT )  
AGREEMENT, CHAVES COUNTY, NEW MEXICO )

CASE NO. 13,053

**ORIGINAL**

REPORTER'S TRANSCRIPT OF PROCEEDINGS

EXAMINER HEARING

BEFORE: MICHAEL E. STOGNER, Hearing Examiner

**RECEIVED**

April 24th, 2003

MAY 8 2003

Santa Fe, New Mexico

Oil Conservation Division

This matter came on for hearing before the New Mexico Oil Conservation Division, MICHAEL E. STOGNER, Hearing Examiner, on Thursday, April 24th, 2003, 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.

\* \* \*

## I N D E X

April 24th, 2003  
 Examiner Hearing  
 CASE NO. 13,053

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<u>TIM MILLER</u> (Geologist)	
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\* \* \*

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

## FOR THE DIVISION:

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Assistant General Counsel  
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## FOR THE APPLICANT:

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

\* \* \*

1           WHEREUPON, the following proceedings were had at  
2   8:58 a.m.:

3           EXAMINER STOGNER: At this time I will call Case  
4   Number 13,053. This is the Application of Yates Petroleum  
5   Corporation for approval of a unit agreement, this time in  
6   Chaves County, New Mexico.

7           Call for appearances.

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

12           EXAMINER STOGNER: Any other appearances?  
13           Will the witness please stand to be sworn?  
14           (Thereupon, the witness was sworn.)

15                   TIM MILLER,  
16   the witness herein, after having been first duly sworn upon  
17   his oath, was examined and testified as follows:

18                   DIRECT EXAMINATION

19   BY MR. CARR:

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

21           A.    My name is Tim Miller.

22           Q.    Mr. Miller, where do you reside?

23           A.    I reside in Carlsbad, New Mexico.

24           Q.    By whom are you employed?

25           A.    Yates Petroleum Corporation.

1 Q. And what is your position with Yates?

2 A. I'm a geologist.

3 Q. Have you previously testified before this  
4 Division and had your credentials as an expert in petroleum  
5 geology accepted and made a matter of record?

6 A. Yes, they have.

7 Q. Are you familiar with the proposed Stare State  
8 Exploratory Unit?

9 A. Yes, I am.

10 Q. And how do you spell Stare?

11 A. S-t-a-r-e.

12 Q. Have you made a geological study of the area  
13 which is involved in this Application?

14 A. Yes, I have.

15 Q. Are you familiar with the status of the lands in  
16 the Stare State Exploratory Unit?

17 A. Yes, I am.

18 Q. Are you prepared to share the results of your  
19 work with Mr. Stogner?

20 A. Yes, I am.

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

23 EXAMINER STOGNER: Mr. Miller is so qualified.

24 Q. (By Mr. Carr) Initially, state what it is that  
25 seeks with this Application.

1           A.    Yates seeks the approval of the proposed Stare  
2   State Exploratory Unit, a voluntary exploratory unit  
3   containing approximately about 1600 acres of State lands,  
4   located in Chaves County, New Mexico.

5           Q.    And you've prepared exhibits for presentation  
6   here today?

7           A.    Yes, I have.

8           Q.    Let's go to what is marked Exhibit 1, and I'd ask  
9   you to identify that.

10          A.    This is the unit agreement for development of  
11   operations of the Stare State Exploratory Unit in Chaves  
12   County, New Mexico.

13          Q.    And this is based on the state/federal form unit  
14   agreement; is that right?

15          A.    Yes, it is.

16          Q.    Let's go to Exhibit 2.  Would you identify that?

17          A.    Exhibit 2 is a land plat taken off the land map  
18   of an outline of the Stare State Unit.  It encompasses in  
19   Township 9 South 27 East, all of Section 8, the south half  
20   of Section 9 and all of Section 16, and these are all State  
21   leases.

22          Q.    Would you go now to Exhibit 3 and review that?

23          A.    This is basically the Stare State Unit  
24   description of the different lands encompassed, the net  
25   acres and the lessor and royalty owners and the lessee of

1 record.

2 Q. This is a 100-percent state land?

3 A. Yes.

4 Q. 100-percent Yates and Yates companies in terms of  
5 working interest ownership?

6 A. Yes, it is.

7 Q. There are no overrides?

8 A. No.

9 Q. Is Yates looking at a lease expiration anytime  
10 soon?

11 A. Yes, the leases expire August 1st of 2003.

12 Q. Has the Commissioner of Public Lands given  
13 preliminary approval to the proposed unit?

14 A. Yes, he has.

15 Q. And is Yates Exhibit Number 4 a copy of the  
16 letter from the State Land Office giving this preliminary  
17 approval?

18 A. Yes, it is.

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

20 A. Yes, we do.

21 Q. And this agreement provides for the periodic  
22 filing of the plans of development, does it not?

23 A. Yes, it does.

24 Q. And when are these plans to be filed?

25 A. As soon as the unit is approved.

1 Q. And then do you file plans at six-month and then  
2 annual intervals thereafter?

3 A. Yes.

4 Q. What horizons are being unitized in the proposed  
5 Stare State Exploratory Unit?

6 A. All horizons are being proposed to be unitized.

7 Q. Could you explain where it is that the initial  
8 test well is going to be drilled? And you might just refer  
9 to Exhibit 5.

10 A. Exhibit 5 is a plat, and of course it's a gross  
11 isopach also of base of Pennsylvanian, top of Strawn. The  
12 initial test well will be in the northwest corner of  
13 Section 8 of 9 South, 27 East. It will be 660 from the  
14 north, 660 from the west.

15 Q. And that's the Stare State Unit Well Number 1,  
16 correct?

17 A. Yes, it is.

18 Q. And to what depth do you intend to drill?

19 A. Approximately drill to 6700 feet.

20 Q. What is the primary objective in this unit?

21 A. The primary objective for this unit is the Strawn  
22 sands, and this will be a wildcat well drilled into the  
23 basement, Granite Wash.

24 Q. Have there been any Strawn penetrations in the  
25 unit area to date?



1           A.    Not in the unit -- There is one down in the south  
2 half, the Elk Oil Company's Luce State Com Number 1.

3           Q.    And that is the only one?

4           A.    That is the only one.

5           Q.    Are there secondary objectives?

6           A.    Yes, there are some secondary objectives in the  
7 drilling of the Stare State Number 1. They would be Abo  
8 sands, Wolfcamp limes, Cisco limes and possibly some  
9 Siluro-Devonian dolomite and possibly the Granite Wash.

10          Q.    Let's now look at Exhibit Number 5, the gross  
11 isopach, and I'd ask you to review the information on this  
12 exhibit for Mr. Stogner.

13          A.    Okay, Exhibit Number 5, as I stated before, is a  
14 gross isopach from the base of the Pennsylvanian, otherwise  
15 base of Cisco, to the top of Strawn. And basically what  
16 this shows is a thick that basically runs from the  
17 southeast part of the map, if you look down to Section 16,  
18 or section to the north of Section 9, you have the contour  
19 lines 325 feet, 300 feet and trending to the west and the  
20 northwest through the north half of Section 8 into the  
21 south half of Section 6 and the north half of Section 7.

22                We feel that to encompass more than one Strawn  
23 sand out here, if you have a thicker package from the base  
24 of the Pennsylvanian to the top of Strawn, you just have a  
25 better chance of encompassing more than one Strawn sand.

1 It enables you to have a better sand-shale package. Like I  
2 stated before, have more than one sand, and hopefully have  
3 better targets in the Strawn interval.

4 Q. What is Exhibit 6?

5 A. Exhibit 6 is a structure map on top of the  
6 Wolfcamp. And if we look at the unit outline, especially  
7 in Section 8 where the Stare State Unit Number 1 is  
8 proposed, going along again, if you refer back to Exhibit  
9 5, you'll see the structure, you have a low coming up  
10 through the north half of Section 8, to the northwest  
11 corner of Section 8, up into Section 6. This low  
12 corresponds to the gross isopach thickness map in Exhibit 5  
13 where you would hopefully have thicker accumulations of the  
14 Strawn interval, and this Wolfcamp structure map, which is  
15 higher structurally and an age so that it corresponds with  
16 the gross isopach map in Exhibit 5.

17 Q. Let's go to Exhibit 7, the structure map on top  
18 of the Cisco.

19 A. Structure map on top of the Cisco is similar to  
20 the one beforehand on the Wolfcamp. This once again shows  
21 a low coming in this -- basically directly from the east in  
22 the north half of Section 8, trending to the west through  
23 the northwest quarter of Section 8, into the south half of  
24 Section 6 and the north half of 7, one again kind of  
25 restating the gross isopach map of Section 5 where we

1 figure we have development of thicker Strawn sections for  
2 the State Number 1.

3 Q. There's a trace for a cross-section A-A' on this  
4 exhibit, is there not?

5 A. Yes, there is.

6 Q. Let's go to that cross-section, stratigraphic  
7 cross-section, which has been marked for identification as  
8 Yates Exhibit 8.

9 A. Okay, as you can see on the cross-section,  
10 basically it is probably what I call a combination cross-  
11 section. It doesn't basically go strictly north, south,  
12 east, west.

13 Basically what I am trying to show, if we start  
14 down in the south of Section 16 where this starts on A,  
15 Yates Petroleum Corporation's East Wind State Number 1, it  
16 was a Yates Petroleum test that was drilled down into the  
17 Siluro-Devonian. And as you see on the map, it -- what  
18 this is depicting -- again, this is hung on the top --  
19 basically, this is hung on top of the Strawn to give you an  
20 idea from top of Strawn to the top of, in certain areas,  
21 the top of Siluro-Devonian or the top of the -- the  
22 thickness of the Strawn interval. As you can see here, it  
23 is relatively thin on the structure map on the top of  
24 Cisco, you're coming off of structure to the west.

25 If we move up to the second well, the Elk Oil

1 Company Luce State Number 1, which is 660 south, 2310 from  
2 the east, the yellow-colored interval once again is the  
3 Strawn. It is increasing in thickness. You are going down  
4 the flank of this Cisco structure. If you recall Exhibit  
5 5, you have a thicker section of Strawn.

6 If you look down towards the bottom of the Elk  
7 well in the Strawn section at about 6230, you will see a  
8 little crossover which is colored in red, neutron density,  
9 meaning some natural gas in these sandstones. Some of  
10 these sandstones in the Strawn, as you look in the Elk Oil  
11 Luce State, have some clean gamma rays, 6220, 6230.  
12 Sometimes the Strawn sands in the lower sections are hot or  
13 you have high gamma-ray readings.

14 If we move through the third well, which is the  
15 proposed Stare State Unit, we are hoping to encounter a  
16 thicker section of Strawn, which hopefully will enable us  
17 to have possibly more than one Strawn sand, two or three  
18 possibly.

19 The structure -- The Cisco structure map, which  
20 of course is the Exhibit 7, shows us in the center of this  
21 low, and we -- as is showed on the Exhibit 5, the gross  
22 isopach, we would have a -- hopefully -- we hope to  
23 encounter a thicker section of Strawn sands, once again,  
24 which will enable us to maybe make a productive well out of  
25 the Strawn.

1           Moving again to the next well, the Plains Radio  
2 Broadcasting Camel State Number 3, which is in the  
3 northeast quarter of Section 7, you slightly came  
4 upstructure. The Strawn thins some down towards the bottom  
5 in the Strawn section, you see 6210 to -20. They did  
6 perforate in the Strawn sand in that well. It accumulated  
7 only 4.5 million cubic feet of gas, and it only produced  
8 from March of 1988 to March of -- I mean February of 1988  
9 to March of 1989.

10           This -- Once again, the Strawn was thinning  
11 coming upstructure, meaning you didn't have a thicker  
12 section, and you just have a very thin productive sand.

13           The next well on the cross-section, the Plains  
14 Radio, which is in the northwest quarter of Section 7, the  
15 Plains Radio Camel Number 1, it has a slightly thicker  
16 interval of Strawn. You see a lower Strawn sand in this  
17 well, perforated. The red is the colored version of the  
18 crossover of the neutron density, meaning gas effect. It  
19 has so far accumulated 360 million cubic feet of gas. It  
20 has first produced from September of 1981, and this is data  
21 through October of 2002. This sort of starts to  
22 substantiate that if you have a -- the thicker section of  
23 Strawns, you might pick up better productive Strawn sands.

24           The next one on the cross-section is the Plains  
25 Radio Camel State Number 1 [sic]. This again has similar

1 thickness of Strawn, and this is the best Strawn sand out  
2 there, as you can see towards the bottom of the Strawn  
3 section in the yellow-colored interval. It is perf'd  
4 between 6220 down to -50. Very high porosity crossover.  
5 The well has produced 1.3 BCF of gas since October of 1986  
6 through -- I mean since August of 1986, through October of  
7 2002.

8 The next well, the Plains Radio Camel Number 4,  
9 which is in the northeast quarter of Section 2, similar  
10 thickness of Strawn. It has several sands in it. It is  
11 not as -- even though it has more sands than the Camel  
12 State Number 2, it doesn't have the better porosity as in  
13 the Camel State Number 2. It has produced 122 million  
14 cubic feet of gas since June of 1988 through October of  
15 2002.

16 Q. And that's in the northeast of Section 6,  
17 correct?

18 A. Yes.

19 Q. All right.

20 A. Northeast of Section 6.

21 Q. All right, let's move on to the wells in 5.

22 A. Okay, the wells in 5, coming back in the cross-  
23 section as you are going towards the east, the Carl A.  
24 Schellinger Glo State Number 1, you have -- This actually  
25 has a thinner section of Strawn. This is sort of an

1 exception. We have a Strawn sand down at the bottom of the  
2 interval, 62- -- basically around 6230 to -50.

3 Now, this is one of the Strawn sands that have a  
4 hard gamma-ray. You do not have good crossover, but  
5 sometimes these sands, because they are a combination of  
6 chert, subigneous rocks, limestone, dolomite, they're a  
7 little different than, say, the Camel Number 2, which was  
8 over in Section Number 6. This well so far has produced  
9 656 million cubic feet of gas out of that Strawn interval  
10 since December of 1987 through October, 2002.

11 The last two sections -- or the last two wells on  
12 the cross-section, it's the southeast quarter of Section 5,  
13 Carl Schellinger's Campbell Station Number 6, it has a  
14 thicker section of Strawn. This again was perforated  
15 basically from starting around 6311 down to 6337. It has  
16 accumulated around 264 million cubic of gas since April of  
17 1989 to October, 2002.

18 And the last one, which is the farthest east well  
19 on the cross-section, is the Carl Schellinger Campbell  
20 Station Number 4 in Section 4. Is perforated up in the  
21 middle part of the Strawn and from basically 66- -- or 6243  
22 down to 6327. It has produced 540 million cubic feet of  
23 gas since December of 1984 through October of 2002, and as  
24 you can see they still have another sand in there at around  
25 6400 that they have not gone down and perforated those to

1 add additional production to this well.

2 Basically what the cross-section, to summarize it  
3 is showing, that as you move from -- as you move from  
4 structurally higher and down structurally lower, the  
5 thicker sections of the Strawn would seem to say that you  
6 have the better chance of more productive Strawn sands, if  
7 you have a thicker section of gross footage in the Strawn  
8 of around 180 feet or better. We feel that's kind of a  
9 fair cutoff to maybe encounter productive Strawn sands.

10 Q. And in the Stare State Unit Well Number 1 it  
11 looks like you have a thickness of probably 250 feet or  
12 more; isn't that right?

13 A. Yes, yes, we feel that putting it in there --  
14 again, looking at the Exhibit 7 for top of structure of the  
15 Cisco, the low comes running in there from the east to the  
16 west. And again on Exhibit 5 the gross isopach map, as Mr.  
17 Carr says, we feel that we have around 250 feet of total  
18 Strawn section, which hopefully will enable us to have  
19 maybe two or three productive Strawn sands.

20 Q. The Siluro-Devonian is also potentially  
21 productive in this area, correct?

22 A. Yes, it is.

23 Q. Would you refer to Yates Exhibit Number 9 and  
24 review that?

25 A. Exhibit Number 9 is a structure map on top of the



1 Siluro-Devonian. Wells have penetrated this formation in  
2 the area. None has been basically that productive out of  
3 it. There has been some test in it.

4 Probably the one that has produced the most would  
5 be the Yates Petroleum East Wind State Number 1, which is  
6 the first well in the cross-section on the left-hand side.  
7 It is basically still producing out of the Siluro-Devonian  
8 and is not that good of a well. It has only made 36  
9 million cubic feet of gas since 1988 through November of  
10 2002.

11 There have been some other wells that have been  
12 tried. Plains Radio Camel State Number 2, which is the  
13 best Strawn well, they perf'd down in the Siluro-Devonian  
14 6412 to 6426, and they swabbed 10 barrels of saltwater per  
15 hour. There's been some other tests that has had some gas  
16 shows as shown in the cross-section. We feel that we would  
17 be maybe -- putting the Stare State in there, that there is  
18 a faint possibility we could have some production in the  
19 Siluro-Devonian, but we view that as a secondary objective.

20 Q. Is Exhibit 10 a written summary of your  
21 geological presentation?

22 A. Yes, it is.

23 Q. Referring to this and the exhibits you've  
24 presented, could you summarize for Mr. Stogner the reasons  
25 behind Yates' proposal to develop this area under a unit

1 plan?

2 A. Yates -- Once again, the summarized write-up is  
3 proposing to develop a unit plan. We have several leases  
4 that expire August 1st of 2003. We feel with the proposed  
5 well, the Stare State Number 1, which is in Section 8, 660  
6 from the north and 660 from the west, 6700 feet, that this  
7 will enable us to save these leases with this one well, and  
8 we are hoping to establish further Strawn production going  
9 to the southeast from where it is in the Camel State Number  
10 2, several other wells to the north and northwest in the  
11 area.

12 Q. If in fact you drill a successful well at the  
13 location of the Stare State Number 1, this could in fact  
14 result in additional Strawn development south and east of  
15 the current Strawn play?

16 A. Yes, it will.

17 Q. In your opinion, will approval of the Application  
18 and the development of this area under the proposed unit  
19 plan be in the best interest of conservation, the  
20 prevention of waste and the protection of correlative  
21 rights?

22 A. Yes, it will.

23 Q. Were Exhibits 1 through 10 either prepared by you  
24 or compiled at your direction?

25 A. Yes, they were.

1 Q. And have you reviewed them?

2 A. Yes, I have.

3 Q. Can you testify as to their accuracy?

4 A. Yes.

5 MR. CARR: At this time, Mr. Stogner, we'd move  
6 the admission into evidence of Yates Exhibits 1 through 10.

7 EXAMINER STOGNER: Exhibits 1 through 10 will be  
8 admitted into evidence at this time.

9 MR. CARR: That concludes my direct examination  
10 of Mr. Miller.

11 EXAMINATION

12 BY EXAMINER STOGNER:

13 Q. Mr. Miller, please indulge me here. On Exhibit  
14 Number 2 there are two units mentioned, at least, in your  
15 exhibits today. What can you tell me, or can you tell me  
16 anything, about that Campbell Station Unit first, up north?  
17 When it was formed, if it's still intact? Do you know  
18 anything about it?

19 A. I do not know that much about it. The wells,  
20 again, are producing out of some Strawn and some Abo sands.

21 Q. And the wells that are producing, you're still  
22 saying that Carl --

23 A. -- Schellinger.

24 Q. -- Schellinger is still the operator?

25 A. Yes.

1 Q. Now, the well in Section 17, which takes in that  
2 little corner just outside there to the north -- I'm sorry,  
3 to the south and west, the East Wind State Unit Well Number  
4 1 --

5 A. Yes.

6 Q. -- what is the East Wind Unit, State Unit?

7 A. Well, that was a unit that was proposed by Yates  
8 back in the 1980s. It is now contracted, and so basically  
9 the unit doesn't exist anymore.

10 Q. Do you know what acreage that took in before it  
11 was contracted?

12 A. Not without going back and looking at it. I know  
13 off the map down in Sections -- I think it would be 33 and  
14 34, there were the East Wind States 2 and 3 that were  
15 drilled. Total acreage, I couldn't tell you at this time  
16 what it encompassed.

17 Q. Do you know if any parts of Sections 8, that  
18 south half of 9 or 16 were included in that old Yates unit?

19 A. Well, I know the unit did not go up that far.

20 Q. Okay. Now, you've presented some evidence today  
21 showing that old Elk Oil Company well in Section, I believe  
22 8, but there were two other old wells within this unit  
23 agreement area, and that's the one up in the northeast  
24 northeast of 8 and the one over in the northwest -- I'm  
25 sorry -- yeah, the northwest northwest of 16. Now, they

1 seem to be shallow wells.

2 A. Yes.

3 Q. Can you elaborate a little bit more on --

4 A. Well, they were shallow wells, they were drilled  
5 down to the San Andres, and basically tested the San Andres  
6 and basically were nonproductive.

7 Q. Now, one was a Yates well; was that correct?

8 A. No, the one up in the --

9 Q. Oh, I'm sorry, neither one of them are Yates  
10 wells?

11 A. No, right.

12 Q. Do you know how old those wells are?

13 A. Those wells were drilled, if I remember right, in  
14 the 1960s.

15 EXAMINER STOGNER: In the 1960s. I don't believe  
16 I have any other questions of Mr. Miller.

17 MR. CARR: That concludes our presentation in  
18 this case.

19 EXAMINER STOGNER: If there's nothing further in  
20 Case 13,053, this case will be taken under advisement.

21 And I'll also note that the expiration date is  
22 August. I'll put a fast track on this one.

23 (Thereupon, these proceedings were concluded at  
24 9:25 a.m.)

25 \* \* \*

13053

24 April 2003

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

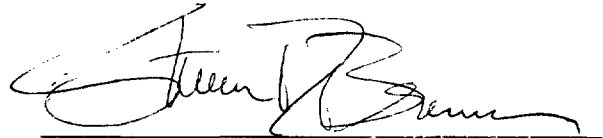
## CERTIFICATE OF REPORTER

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 April 26th, 2003.



STEVEN T. BRENNER  
CCR No. 7

My commission expires: October 16th, 2006