

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. 11,653  
)  
APPLICATION OF YATES PETROLEUM )  
CORPORATION FOR A UNIT AGREEMENT, )  
LEA COUNTY, NEW MEXICO ) ORIGINAL  
)

REPORTER'S TRANSCRIPT OF PROCEEDINGS

EXAMINER HEARING

BEFORE: DAVID R. CATANACH, Hearing Examiner

November 21st, 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, November 21st, 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.

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 Examiner Hearing  
 CASE NO. 11,653

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\* \* \*

## 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           8:42 a.m.:

3           EXAMINER CATANACH: And at this time I'll call  
4           Case 11,653.

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. 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 two witnesses.

14          The witnesses are the same witnesses who have  
15          just testified in the preceding case, and I would request  
16          that Ms. Mauritsen's credentials as a landman be accepted  
17          and made a matter of record and that Mr. McRae's  
18          credentials as a geologist be likewise accepted, and that  
19          the record reflect that both remain under oath.

20          EXAMINER CATANACH: Are there any additional  
21          appearances in this case?

22          Okay, the record shall reflect that both  
23          witnesses have been previously sworn in and qualified in  
24          their respective fields.

25          You may proceed.

1 MR. CARR: Having done the Trick Unit, we're now  
2 ready to do the Treat Unit.

3 EXAMINER CATANACH: Good.

4 MR. CARR: And we call Ms. Mauritsen.

5 MECCA MAURITSEN,

6 the witness herein, having been previously duly sworn upon  
7 her oath, was examined and testified as follows:

8 DIRECT EXAMINATION

9 BY MR. CARR:

10 Q. Ms. Mauritsen, who picked the names for these  
11 units?

12 A. I did.

13 Q. Are you familiar with the Application filed in  
14 this case?

15 A. Yes, I am.

16 Q. And are you familiar with the status of the lands  
17 in the proposed Treat State Unit?

18 A. Yes, I am.

19 MR. CARR: Are the witness's -- They have been  
20 accepted.

21 Q. (By Mr. Carr) Can you briefly state what Yates  
22 seeks with this Application?

23 A. We're seeking approval of our Treat State Unit  
24 agreement for an area comprising 1920 acres of state lands  
25 in Township 21 South, 35 East.

1 Q. Let's go to what has been marked for  
2 identification as Exhibit Number 1. Could you identify  
3 that for Mr. Catanach?

4 A. Yes, it's our proposed unit agreement. It's on  
5 the state/fee exploratory unit form.

6 Q. Let's go to the plat behind the Exhibit A tab.  
7 Can you review that for the Examiner?

8 A. It shows the outline of our proposed unit. It's  
9 three full sections. It's 100 percent state lands.

10 Q. And then the document behind the B tab, what is  
11 that?

12 A. Okay, that's the outline of all the leases, the  
13 working interest ownership, the royalty ownership, and the  
14 status of the leases and expiration dates.

15 Q. What percentage of the acreage in this unit has  
16 been voluntarily committed to the unit plan?

17 A. At this time we have 75 percent.

18 Q. And at this time, who has not yet committed?

19 A. MYD, Inc., Tenneco Gas Production, Crescent  
20 Porter Hale Foundation, and then the Millard Deck, et al.,  
21 group, Tract 7.

22 Q. Are you still negotiating with any of those  
23 interest owners to bring them into the unit?

24 A. Yes, MYD, Inc., has indicated they're just  
25 waiting for final management approval to join the units.

1 Tracts 6 and 7 are HBP, and I'm not sure that we'll get  
2 them to join.

3 Q. Does 75-percent commitment give you effective  
4 control of unit operations?

5 A. Yes.

6 Q. Has this been reviewed by the Commissioner of  
7 Public Lands and his staff?

8 A. Yes, it has.

9 Q. And have they given you a verbal approval of this  
10 unit plan?

11 A. Yes, they have.

12 Q. When do you anticipate written confirmation?

13 A. This afternoon.

14 Q. And will you provide copies of the Commissioner's  
15 approval letter to the Division?

16 A. Yes, we will.

17 Q. Yates seeks to be designated operator of this  
18 unit?

19 A. Yes.

20 Q. This unit agreement provides for periodic filing  
21 of plans of development?

22 A. Yes, it does.

23 Q. And will these be filed at the Oil Conservation  
24 Division at the same time they're filed with the State Land  
25 Office?

1 A. Yes, they will be.

2 Q. And how often are they to be filed?

3 A. After the first commercial well we have six  
4 months to file our first, and it's 12 months thereafter.

5 Q. Will Yates also call a geological witness to  
6 review that portion of this Application?

7 A. Yes, we will.

8 Q. Was Exhibit Number 1 either prepared by or  
9 compiled by you?

10 A. Yes, it was.

11 MR. CARR: At this time, Mr. Catanach, we would  
12 move the admission of Yates Petroleum Corporation Exhibit  
13 Number 1.

14 EXAMINER CATANACH: Exhibit Number 1 will be  
15 admitted as evidence.

16 MR. CARR: And that concludes my direct  
17 examination of Ms. Mauritsen.

18 EXAMINATION

19 BY EXAMINER CATANACH:

20 Q. The interest owners who are not committed, are  
21 they in a specific area in the unit?

22 A. Well, Tract 5, 6 and 7, which is -- Tract 5 is  
23 the north half of Section 26; 6 and 7 are the east half of  
24 the southwest and south half of the northeast of 27. We do  
25 anticipate Tract 5 having at least half joinder and

1 possibly 100-percent joinder.

2 EXAMINER CATANACH: I have nothing further of the  
3 witness.

4 MR. CARR: At this time we call Mr. McRae.

5 JOHN R. McRAE,

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

8 DIRECT EXAMINATION

9 BY MR. CARR:

10 Q. Mr. McRae, are you familiar with the Application  
11 filed in this case on behalf of Yates Petroleum  
12 Corporation?

13 A. Yes.

14 Q. And have you made a geological study of the area  
15 surrounding the proposed Treat State Unit?

16 A. I have.

17 Q. What formations are being unitized in this,  
18 pursuant to this unit agreement?

19 A. All horizons.

20 Q. And what is the primary objective in the unit?

21 A. It's the Wolfcamp formation.

22 Q. Any particular Wolfcamp pool?

23 A. No.

24 Q. Are there secondary objectives?

25 A. Delaware sands, Bone Springs sands, Strawn, Atoka

1 and Morrow.

2 Q. Let's go to Exhibit Number 2, your structure map.  
3 Would you review the information on this exhibit for Mr.  
4 Catanach?

5 A. It is a structure map on top of the Wolfcamp.  
6 Again, the wells that are not circled are less than 6000  
7 feet. The wells that are circled are greater than 6000  
8 feet.

9 It is not noted on the legend, but in the title  
10 block it has wells greater than 6000 feet noted, and that  
11 applies to the circled wells.

12 This structure map shows dip from the east to the  
13 west, it shows the unit outline. It also shows the cross-  
14 section and the key well.

15 Q. And this was prepared from well-control  
16 information; is that right?

17 A. That's correct.

18 Q. It also shows the location of the key well?

19 A. Right.

20 Q. Let's go to Exhibit Number 3. Would you identify  
21 and review this?

22 A. Exhibit Number 3 is an isopach of the Wolfcamp  
23 interval. It's from the top of the Wolfcamp to the top of  
24 the Strawn. It also shows the approximate Central Basin  
25 Platform shelf edge.

1           This isopach shows a pronounced thick at the  
2 Treat State Unit location, with the key well being 700  
3 feet, Wolfcamp section. As you go to the west and the  
4 east, the Wolfcamp thins significantly. We've interpreted  
5 a Wolfcamp debris flow at the location of the Trick State  
6 Unit.

7           Q.    Okay, let's go now to your cross-section, Exhibit  
8 Number 4.

9           A.    Exhibit Number 4 is a stratigraphic cross-  
10 section, A-A'. It's hung on top of the Wolfcamp.

11           On the left-hand side of the cross-section it  
12 shows the isopach interval from the top of the Wolfcamp,  
13 essentially the base of the third Bone Spring sand, to the  
14 top of the Strawn interval. This shows very clearly that  
15 Well Number 2 is thin, Number 2 is thicker [sic], Number 3  
16 is thicker yet, and it shows the location of our proposed  
17 location and our interpreted location of the Wolfcamp  
18 debris flow.

19           The key well also notes the two cored intervals,  
20 on the left-hand side of the depth column, and the  
21 perforated interval where production tests were conducted.  
22 This well recovered in the core debris, and I'll go into  
23 more in detail on that in the next exhibit. Production  
24 tests recovered small amounts of oil and water.

25           And as you go to the east, you start to climb up

1 on the Central Basin Platform shelf edge, which is the  
2 control and the source of the east edge of the debris.

3 Q. Let's go to Exhibit Number 5, the log on the key  
4 well. Would you review that?

5 A. Yes. Exhibit Number 5 is a detail of the key  
6 well. It is a gamma ray on the left-hand side and a  
7 neutron density on the right-hand side of this log. It  
8 also shows the cored intervals, again, on the left-hand  
9 side of the depth track, and it shows the location of the  
10 production tests.

11 I've color-coded -- I'm sorry, I've colored  
12 greater than 4 percent, and if you would correct your  
13 exhibit, the draftsman put 14 percent by accident, and it  
14 should be 4-percent porosity.

15 I'd also like to draw your attention to the  
16 description. I've underlined the two cored intervals, and  
17 I'd like to draw your attention to the second core, and  
18 I've underlined the part of interest, 23 feet of limestone,  
19 breccia, pebbly to boulder, very fossiliferous,  
20 carbonaceous and argillaceous with fair porosity.

21 And then the next section, 19 feet of lime, light  
22 tan to light brown, very fine grain, crystalline, very  
23 fossiliferous, vugs to cavernous porosity, fractures with  
24 bleeding gas and oil, low perm.

25 And this is our basis for the debris flow. There

1 are some very significant wells in Lea County out of this  
2 type of trap, and it's my interpretation that this well is  
3 on the immediate west edge of a significant debris flow.

4 Q. Is Exhibit Number 6 a summary of your geologic  
5 presentation?

6 A. Yes, it is.

7 Q. And where will the initial test well actually be  
8 located in this unit?

9 A. It will be in the northeast corner of Section 34.

10 Q. Can you just briefly summarize your geological  
11 conclusions?

12 A. The geological study of this area shows that this  
13 area is very favorable for Wolfcamp debris flows, and we  
14 feel that the Treat State Unit will test this particular  
15 prospect.

16 Q. Mr. McRae, does this Application also need to be  
17 expedited to the extent possible?

18 A. Yes, it does. We propose to spud the first well  
19 prior to 12-1-96.

20 Q. In your opinion, will approval of this  
21 Application and the development of this acreage under a  
22 unit plan 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 6 prepared by you?

2 A. Yes.

3 MR. CARR: Mr. Catanach, at this time we would  
4 move the admission into evidence of Yates Petroleum  
5 Corporation Exhibits 2 through 6.

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

8 MR. CARR: And that concludes my direct  
9 examination of Mr. McRae.

10 EXAMINATION

11 BY EXAMINER CATANACH:

12 Q. Mr. McRae, that initial well is going to be  
13 drilled just to the Wolfcamp?

14 A. Yes, sir. I have actually recommended we go  
15 deeper, and management approval is still pending on going  
16 deeper. At this point we're only proposing Wolfcamp tests.

17 Q. What's the closest Wolfcamp production to this  
18 unit?

19 A. On the previous exhibit -- I'm sorry, the  
20 previous case, Section -- it would be Section -- I believe  
21 Section 7. Let me check that real quick. Essentially  
22 southwest of this unit about two miles.

23 Q. Okay. You say that these debris-flow deposits  
24 are fairly common in Lea County?

25 A. Yes, they are. They're productive in -- Quite a

1 few wells are productive from this type of trap in Township  
2 20 South, Range 35 East.

3 Q. Are they fairly small in extent?

4 A. Generally.

5 That well that you asked about, there's Wolfcamp  
6 production in Section 5, Section 6 and Section 7 of 22  
7 South, 35 East, immediately southwest of this proposed  
8 unit.

9 Q. Mr. McRae, how did you generally define the  
10 boundaries for this debris flow?

11 A. The boundaries are determined by several things:  
12 First, the thickest part of the Wolfcamp section. Second,  
13 the key well is interpreted to be on the far west edge,  
14 because Sections 2 and -- I'm sorry, Wells Number 1 and 2  
15 do not have this interval present.

16 There is also, on the published maps, a  
17 structural low at Strawn level in Section 25, and that even  
18 persists up through the Yates-Seven Rivers section. This  
19 appears to be a pass through the reef or the reef complex,  
20 along the Central Basin Platform, and it appears to be the  
21 point source where the debris came from. And I've  
22 interpreted a -- just a big pile of carbonate debris right  
23 in front of that structural low, or -- structural low on  
24 both the Strawn and the Yates horizons, with the key well  
25 in the downdip edge.

1 Q. What did you use on the north and the northwest?

2 A. The isopach thinning, appears to be -- Well  
3 Number 1 has 360 feet of Wolfcamp. Well Number 2, which is  
4 straight south, has 520 feet. There appears to be a  
5 thinning in the Wolfcamp through Sections 22 and 23, and --  
6 just interpreted that the debris will be concentrated in  
7 26, 27 and 34.

8 EXAMINER CATANACH: I have nothing further of the  
9 witness.

10 MR. CARR: That concludes our presentation in  
11 this case.

12 EXAMINER CATANACH: All right, there being  
13 nothing further in this case, Case 11,653 will be taken  
14 under advisement.

15 (Thereupon, these proceedings were concluded at  
16 8:58 a.m.)

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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.

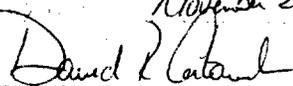
I FURTHER CERTIFY that I am not a relative or employee of any of the parties or attorneys involved in this matter and that I have no personal interest in the final disposition of this matter.

WITNESS MY HAND AND SEAL ~~November 27th~~, 1996.



STEVEN T. BRENNER  
CCR No. 7

My commission expires: October 14, 1998

I do hereby certify that the foregoing is a true and accurate record of the proceedings before me on November 21 1996.  
  
Oil Conservation Division