

NEW MEXICO OIL CONSERVATION DIVISION

EXAMINER HEARING

SANTA FE, NEW MEXICO

Hearing Date JUNE 14, 2001 Time 8:15 A.M.

NAME	REPRESENTING	LOCATION
Bill Pierce	Penwell Energy	Midland, Tx.
John Humphrey	Yates Pet	Alamogordo, NM
NAG: SoAs	RM&S Enterprises	Hobbs, NM
Paul Bliss	Games "A" No. 201	" "
Brad Bliss	Techsys Resources	Houston, TX.
David Percy	Raptor Resources	Midland TX
Bill Keathly	"	"
John Lannere	"	"
William J. Gray	Holland + Hart LLP	Santa Fe
Michael Feldewert	" "	" "
Bill Baker	American Oil	MIDLAND TX
Dave Bulley	GRUBBS PARTNER	Santa Fe
Susan Hull	PERMIAN	SF
ROBERT MARSHALL	PERMIAN RESOURCES	MIDLAND, TX
WILL PORTER	" "	" "
MIKE STEWART	" "	" "

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, EDDY COUNTY, NEW MEXICO )

CASE NO. 12,676

**ORIGINAL**

REPORTER'S TRANSCRIPT OF PROCEEDINGS

EXAMINER HEARING

BEFORE: DAVID R. CATANACH, Hearing Examiner

June 14th, 2001

Santa Fe, New Mexico

This matter came on for hearing before the New Mexico Oil Conservation Division, DAVID R. CATANACH, Hearing Examiner, on Thursday, June 14th, 2001, 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.

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COURT REPORTER

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## I N D E X

June 14th, 2001  
 Examiner Hearing  
 CASE NO. 12,676

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<u>JOHN F. HUMPHREY</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 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

## ALSO PRESENT:

RICHARD EZEANYIM  
Chief Engineer  
New Mexico Oil Conservation Division  
1220 South Saint Francis Drive  
Santa Fe, NM 87501

\* \* \*

1           WHEREUPON, the following proceedings were had at  
2           8:15 a.m.:

3           EXAMINER CATANACH: Call the hearing to order  
4           this morning for Docket Number 20-01. I'm going to call  
5           the continuances and dismissals at this time.

6           (Off the record)

7           EXAMINER CATANACH: At this time I'll call first  
8           case, 12,676, which is the Application of Yates Petroleum  
9           Corporation for approval of a unit agreement, Eddy County,  
10          New Mexico.

11          Call for appearances in this case.

12          MR. CARR: May it please the Examiner, my name is  
13          William F. Carr with the Santa Fe office of Holland and  
14          Hart, L.L.P. We represent Yates Petroleum Corporation, and  
15          I have one witness.

16          EXAMINER CATANACH: Call for additional  
17          appearances. Okay, will the witness in this case please  
18          stand to be sworn in?

19          (Thereupon, the witness was sworn.)

20                         JOHN F. HUMPHREY,  
21          the witness herein, after having been first duly sworn upon  
22          his oath, was examined and testified as follows:

23                                 DIRECT EXAMINATION

24          BY MR. CARR:

25                  Q. Will you state your name for the record, please?

1 A. John Humphrey.

2 Q. Mr. Humphrey, where do you reside?

3 A. Artesia, New Mexico.

4 Q. By whom are you employed?

5 A. Yates Petroleum.

6 Q. And what is your position with Yates Petroleum?

7 A. I'm a senior geologist with Yates Petroleum.

8 Q. Have you previously testified before the New  
9 Mexico Oil Conservation Division?

10 A. Yes, I have.

11 Q. At the time of that testimony, were your  
12 credentials as an expert in petroleum geology accepted and  
13 made a matter of record?

14 A. Yes, they were.

15 Q. Are you familiar with the proposed Luke Federal  
16 State Unit?

17 A. Yes.

18 Q. Are you familiar with the status of the lands in  
19 the unit area?

20 A. Yes.

21 Q. Have you made a geological study of the area  
22 which is the subject of this Application?

23 A. Yes.

24 Q. And are you prepared to share the results of that  
25 work with the Examiner?

1 A. Yes.

2 MR. CARR: Are the witness's qualifications  
3 acceptable?

4 EXAMINER CATANACH: Mr. Humphrey is so qualified.

5 Q. (By Mr. Carr) Would you initially summarize for  
6 Mr. Catanach what it is that Yates Petroleum Corporation  
7 seeks with this Application?

8 A. Yates Petroleum seeks approval of the Luke  
9 Federal State Exploratory Unit, a voluntary exploratory  
10 unit containing approximately 2560 acres of United States  
11 of America and State of New Mexico lands located in Eddy  
12 County, New Mexico.

13 Q. Have you prepared exhibits for presentation here  
14 today?

15 A. Yes, I have.

16 Q. Let's go to what has been marked for  
17 identification as Yates Exhibit Number 1, and I'd ask you  
18 to identify that and review it for Mr. Catanach.

19 A. Yates Exhibit 1 is a state/federal form for an  
20 exploratory unit.

21 Q. And it has all attachments as required by the  
22 State of New Mexico Land Office Rules and Regulations?

23 A. Yes, it does.

24 Q. Let's go to what has been marked Exhibit Number  
25 2. Exhibit 2 is a plat. Is this the same plat that is

1 attached to the unit agreement?

2 A. Yes, it is.

3 Q. Would you review this, please?

4 A. This contains the unit outline as proposed, it  
5 contains three federal leases which are Sections 3, 9 and  
6 10, and one state lease, Section 2.

7 Q. Would you identify and review Exhibit 3?

8 A. Exhibit 3 is an ownership breakdown of the  
9 various leases within the unit, and everything within the  
10 unit is all Yates Petroleum.

11 Q. Tract Number 1, the lessee of record is shown as  
12 John P. Strang.

13 A. Uh-huh.

14 Q. Has Yates acquired that interest?

15 A. Yes, we have.

16 Q. Mr. Strang is just the lessee of record?

17 A. Yes.

18 Q. And 100 percent of the acreage in the unit area  
19 is committed to the unit agreement, is it not?

20 A. That is correct.

21 Q. Has the Commissioner of Public Lands given his  
22 preliminary approval to the proposed unit agreement?

23 A. Yes, he has, and Exhibit 4 is the approval letter  
24 from the Commissioner of Public Lands.

25 Q. Has the proposed unit been reviewed with the

1 Bureau of Land Management?

2 A. Yes, it has.

3 Q. And what is Exhibit Number 5?

4 A. Exhibit 5 is a letter from the BLM designating  
5 the unit area as an area logically suited for development  
6 under a unit plan.

7 Q. Does Yates Petroleum Corporation desire to be  
8 designated operator of this unit?

9 A. Yes.

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

12 A. Yes, it does.

13 Q. And will these plans be filed with the Oil  
14 Conservation Division as well as the State Land Office and  
15 the BLM?

16 A. Yes.

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

18 A. The initial plan will be filed six months after  
19 completion of the initial unit well, and subsequent plans  
20 will be filed 12 months thereafter.

21 Q. Mr. Humphrey, what horizons are being unitized in  
22 the Luke Federal State Exploratory Unit?

23 A. All, all horizons.

24 Q. And what is the primary objective?

25 A. The upper Penn carbonate is the primary objective

1 in the unit, and it's a wildcat.

2 Q. Are there secondary objectives?

3 A. The Morrow and Atoka formation are secondary  
4 objectives.

5 Q. Would you refer to what has been marked as Yates  
6 Exhibit Number 6, identify this and review it for the  
7 Examiner?

8 A. Okay, Exhibit 6 is a structure map of the upper  
9 Penn carbonate over the Luke boundary area. In addition to  
10 the structure of the upper Penn carbonate, it also shows  
11 the predicted outline of the upper Penn dolomite reservoir  
12 boundary. We believe that reservoir-quality rock in the  
13 upper Penn is generally dolomite in this particular area.  
14 The upper Penn is tight, except where dolomitization has  
15 enhanced porosity and permeability.

16 In Section 2, the Maralo Indian Basin Unit well  
17 encountered 68 feet of porous dolomite and was not tested.  
18 We feel as you move upstructure that the upper Penn  
19 dolomite will thicken upon what we believe is a paleo high,  
20 and the proposed unit boundary encompasses the area where  
21 reservoir-quality rock, we believe, will be found.

22 The north-south-bounding fault to the west, on  
23 the west side of the proposed unit, is the seal to the west  
24 and laterally. Basically the seal is where dolomite grades  
25 into limestone and turns tight.

1 Q. What is the status of Section 4?

2 A. Section 4 is nonleased, and it is part of a deal  
3 with the BLM and the State. It's currently federal  
4 acreage, and it's going to be swapped to the state at some  
5 point in the future. It's not available for lease -- for  
6 putting up for bid right now.

7 Q. On this exhibit is a trace for a cross-section?

8 A. That is correct.

9 Q. Are you ready to go to that cross-section?

10 A. Yes.

11 Q. Could you refer, then, to Yates Exhibit Number 7  
12 and review the information on that exhibit?

13 A. Exhibit 7 is a cross-section across the proposed  
14 unit, A-A', as seen on the previous exhibit. Basically all  
15 the cross-section is showing is, it illustrates a trapping  
16 mechanism, we believe, that will exist under the proposed  
17 exploratory unit boundary. Again, note the west-bounding  
18 fault on the west side of the proposed unit, and note that  
19 the dolomite pinches out as you go off the structure on to  
20 the sides.

21 Q. Is Exhibit Number 8 a summary of your geological  
22 presentation?

23 A. Yes, it is.

24 Q. What does your geological study of this area tell  
25 you about this formation?



1 Q. About how far, would you say?

2 A. I would say it's probably -- I'd say about eight  
3 miles.

4 Q. So it's not a continuation of that field?

5 A. No, it isn't. Basically, it's closer to Indian  
6 Basin, actually, than Dagger Draw, and you have a major  
7 fault that bounds the western part of the Indian Basin Gas  
8 Pool. And then you go over to this township, and we're  
9 approximately, again, about six to eight miles from that  
10 pool.

11 Q. Do you anticipate this to be oil- or gas-  
12 productive?

13 A. Generally in this area we see mainly gas, more  
14 than oil.

15 Q. Okay, the well you mentioned in Section 2, the  
16 Indian Basin Unit Number 2, is it?

17 A. Uh-huh.

18 Q. It was drilled to that depth, but it wasn't  
19 tested in that interval?

20 A. That's correct. It produced from the Abo and  
21 Morrow.

22 Q. And you examined the logs in that well?

23 A. Yes, sir.

24 Q. Is that well potentially productive in this  
25 interval?

1           A.    Yes, sir, I believe it is.  And that particular  
2 well is on the cross-section.  We believe the -- It's the  
3 middle well on the cross-section, Exhibit 7.

4           Q.    Uh-huh.

5           A.    It has upwards of 8- to 10-percent porosity, max,  
6 towards the top of it, and it was not tested, it was not  
7 drill stem tested or production tested.  And we believe it  
8 will get thicker as you go up the structure.

9           Q.    Who operates that well?

10          A.    It's been plugged.

11          Q.    Oh, it's been plugged.

12          A.    Yeah.

13          Q.    Okay.  Have there been any other wells within the  
14 unit that have been drilled to this depth?

15          A.    Yes, the -- if you notice on the cross-section,  
16 the southeast part of Section 10, the Stinking Draw Number  
17 1 drilled by Yates, and that was a dry hole.  And that did  
18 not encounter dolomite in the upper Penn interval and the  
19 Morrow.  It was nonproductive.

20          Q.    Your process of defining the boundaries of this  
21 unit, did you mostly use well control, or did you use  
22 anything else, Mr. Humphrey?

23          A.    Well control.

24          Q.    And you were able to identify that fault to the  
25 west by well control?

1           A.    Yes, uh-huh.  You can notice toward -- especially  
2 between -- if you notice Section 16 and 17, you have  
3 approximately 350 feet of structural difference in less  
4 than a mile, and that's basically what's defined the fault.

5           Q.    Where is the initial well going to be?

6           A.    I believe it will probably be in Section 3.

7           Q.    But you haven't decided that yet, or --

8           A.    Yes.

9           Q.    Okay.

10          A.    It's still -- both wells are being -- the wells  
11 in Section -- the locations in Section 3 and 9 are both  
12 being permitted.

13          Q.    Okay, I see.  Okay.

14                   Now, the interval that you've got shaded in  
15 purple, are you trying to depict that that's going to be  
16 the approximate limits of the reservoir?

17          A.    That's correct.

18          Q.    And what defines that, porosity?

19          A.    Yeah, one defines it as dolomite.  Typically  
20 where you have dolomitization you have porosity within the  
21 upper Penn, and that's defined the outline there.

22                   EXAMINER CATANACH:  Mr. Carr, can I get you to  
23 send me the final approvals from the State Land Office and  
24 the Bureau of Land Management?

25                   MR. CARR:  Yes, sir, they will be issued after an

1 order in this case, the order here is a condition.

2 EXAMINER CATANACH: Okay. Are there any further  
3 questions of this witness?

4 EXAMINATION

5 BY MR. BROOKS:

6 Q. Which lands here are federal and which are state?

7 A. What's that?

8 Q. Which lands are federal and which are state?

9 A. The leases?

10 Q. Yeah.

11 A. Again, Sections 3, 9 and 10 are federal, and  
12 Section 2 is state.

13 MR. BROOKS: Okay, thank you.

14 MR. CARR: That concludes our presentation.

15 EXAMINER CATANACH: Okay, there being nothing  
16 further in this case, Case 12,676 will be taken under  
17 advisement.

18 (Thereupon, these proceedings were concluded at  
19 8:25 a.m.)

20 \* \* \*

21  
22 I hereby certify that the foregoing is a complete and correct transcript of the hearing held by me at  
23 the location bearing the number 12676 - 2001  
24 David R. Catnach  
25 Conservation Officer

