

STATE OF NEW MEXICO  
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT  
OIL CONSERVATION DIVISION

IN THE MATTER OF: )  
 )  
APPLICATION OF YATES PETROLEUM )  
CORPORATION FOR A UNIT AGREEMENT, ) CASE NO. 10134  
LEA COUNTY, NEW MEXICO. )  
\_\_\_\_\_ )

REPORTER'S TRANSCRIPT OF PROCEEDINGS

EXAMINER HEARING

BEFORE: JIM MORROW, Hearing Examiner

November 28, 1990  
10:00 a.m.  
Santa Fe, New Mexico

This matter came on for hearing before the Oil Conservation Division on November 28, 1990, at 10:00 a.m. at Oil Conservation Division Conference Room, State Land Office Building, 310 Old Santa Fe Trail, Santa Fe, New Mexico, before Deborah LaVine, RPR, Certified Shorthand Reporter No. 252 and Notary Public, in and for the County of Santa Fe, State of New Mexico.

FOR: OIL CONSERVATION  
DIVISION

BY: DEBORAH LAVINE, RPR  
Certified Shorthand Reporter  
CSR No. 252

HUNNICUTT REPORTING  
DEBORAH LAVINE, CSR, RPR

## I N D E X

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## APPLICANT'S WITNESSES:

ROB BULLOCK

Direct Examination by Mr. Vandiver  
 Examination by Mr. Morrow

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STERLING FLY

Direct Examination by Mr. Vandiver  
 Examination by Mr. Morrow

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## APPLICANT'S EXHIBITS:

MRKD

ADMTD

1. Map
2. Unit Agreement
3. Operating Agreement
4. Letter, 11/28/90
5. Statement
6. Map
7. Map
8. Map
9. Map
10. Map

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

BEFORE: JIM MORROW: Hearing Examiner

FOR THE DIVISION: ROBERT G. STOVALL, ESQ.  
General Counsel  
Oil Conservation Commission  
State Land Office Building  
310 Old Santa Fe Trail  
Santa Fe, New Mexico 87501

FOR THE APPLICANT: FISK & VANDIVER  
Attorneys at Law  
BY: David R. Vandiver, ESQ.  
Seventh & MaHone  
Suite E  
Artesia, New Mexico 88210

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1 EXAMINER MORROW: Case 10134.

2 MR. STOVALL: Application of Yates Petroleum Corporation  
3 for a unit agreement, Lea County, New Mexico.

4 EXAMINER MORROW: Call for appearances.

5 MR. VANDIVER: Mr. Examiner, my name the David Vandiver  
6 of the Artesia law firm of Fisk & Vandiver appearing on behalf  
7 of the applicant, Yates Petroleum Corporation. I have two  
8 witnesses to be sworn.

9 EXAMINER MORROW: Would the witnesses please stand and be  
10 sworn.

11 (THEREUPON, a discussion was held off the record.)

12 MR. VANDIVER: Mr. Examiner, I have a preliminary matter  
13 to address before I proceed with the testimony in this case.  
14 The application was originally filed October 9th, I believe,  
15 that's right, requesting approval of the subject unit  
16 agreement as to lands in the Sections 2, 3 and 11 of Township  
17 16 South, Range 33 East. And then because of the applicant's  
18 failure to get support, I filed an amended application  
19 requesting approval of the unit only as to lands in Section 2.

20 The advertisement was never changed. I think the  
21 case has been continued two or three times, and the  
22 advertisement has always stated that Yates seeks approval of  
23 the Red Hat State Unit agreement as to all or portions of  
24 Sections 2, 3 and 11 of Township 16 South, Range 33 East. And  
25 as will be more fully revealed in the testimony, Yates is

1 seeking approval of the unit as to all the lands that we  
2 originally sought approval for and I'm asking that you  
3 disregard the amended application that I filed requesting  
4 approval only as to Section 2.

5 EXAMINER MORROW: So the advertisement then is correct --

6 MR. VANDIVER: Yes, sir.

7 EXAMINER MORROW: -- as you'd like to have it read today?  
8 Is that all right, Bob?

9 MR. STOVALL: Yeah, I don't see any problem with that.

10 MR. VANDIVER: May I proceed?

11 EXAMINER MORROW: Yes, sir.

12 ROB BULLOCK

13 the witness herein, having been first duly sworn by the Notary  
14 Public, was examined and testified as follows:

15 DIRECT EXAMINATION

16 BY MR. VANDIVER:

17 Q. Mr. Bullock, please state your name, by whom you're  
18 employed and in what capacity.

19 A. My name is Robert Bullock. I'm employed by Yates  
20 Petroleum Corporation as a landman.

21 Q. And have you previously testified before the New  
22 Mexico Oil Conservation Division in your capacity as a landman  
23 and had your qualifications accepted and made a matter of  
24 record?

25 A. Yes, I have.

1 Q. Are you familiar with the title to the land within  
2 the proposed Red Hat State Unit area?

3 A. Yes, I am.

4 Q. And have you prepared certain exhibits to be used  
5 in conjunction with your testimony today?

6 A. Yes.

7 MR. VANDIVER: Mr. Examiner, I'll tender Mr. Bullock as  
8 an expert in petroleum land matters.

9 EXAMINER MORROW: We're accepting him as qualified.

10 Q. (By Mr. Vandiver:) Mr. Bullock, if you could,  
11 summarize the purpose of Yates' application in this case  
12 10134.

13 A. Yates would like to form a Red Hat exploratory unit  
14 to effectively and efficiently explore for hydrocarbons within  
15 this unit boundary.

16 (Applicant's Exhibit No. 1 was  
17 marked for identification.)

18 Q. If I could ask you to refer to Applicant's Exhibit  
19 1 in this case and orient the examiner with respect to the  
20 location of the proposed unit.

21 A. The proposed unit is in Township 16 South, Range 33  
22 East. It includes all of Section 2, the north two-thirds of  
23 Section 3, and the north half of section 11 within Lea County,  
24 New Mexico.

25 Q. And the lands to be included are outlined on the

1 plat which is marked as Exhibit 1?

2 A. That's correct.

3 Q. And also the location of the initial test well is  
4 marked as a red dot in that plat?

5 A. That's correct.

6 Q. Mr. Bullock, who owns all the minerals within the  
7 proposed unit?

8 A. The State of New Mexico.

9 (Applicant's Exhibit No. 2 was  
10 marked for identification.)

11 Q. Now if I could ask you to refer to the Applicant's  
12 Exhibit 2 and identify that and describe what it is.

13 A. That is a unit agreement for the development and  
14 operation of the Red Hat State Unit. It includes a unit  
15 agreement, Exhibit A, which includes the outline of the unit  
16 agreement, Exhibit B, which describes the leases involved and  
17 the working interest parties to the agreement.

18 Q. What formations are unitized under the terms of  
19 this unit agreement, if you can refer to paragraph two?

20 A. All oil, gas, natural gas land associated with  
21 fluid hydrocarbons in any and all formations would be unitized  
22 lands or subject to this agreement.

23 Q. And who's designated as operator under the unit  
24 agreement?

25 A. Yates Petroleum corporation.

1 Q. And as required by state law and regulation, the  
2 unit agreement allocates production from any well drilled on a  
3 committed tract within a unit area to each of the separately  
4 owned tracts on a surface acreage basis; is that not correct?

5 A. That's correct.

6 Q. Now if you could refer to Exhibits A and B and  
7 describe the type of information that is contained in those  
8 two exhibits. You don't have to describe all the information  
9 but just the type of information.

10 A. Exhibit A shows the record title owner to the  
11 leases, describes the state serial number designated to the  
12 lease and the expiration date of the lease, and it sets out  
13 each tract. Exhibit B describes each land -- each lease, that  
14 is, the number of acres in each lease, the serial number  
15 designated and the expiration date, the royalty and ownership,  
16 the lessee of record, overriding realty owners and working  
17 interest owners involved in each lease.

18 Q. Mr. Bullock, as reflected on Exhibits A and B, what  
19 is the earliest exploration date of any of the leases to be  
20 committed to the proposed unit?

21 A. That would be January 1 of 1991.

22 Q. And that is unit tract 3?

23 A. That's correct.

24 Q. And you're seeking to have the oil conservation  
25 division enter an order approving this unit agreement prior to



1 January 1, 1991?

2 A. That's correct.

3 Q. What is the status of joinder of the lessees and  
4 working interest owners to the unit agreement?

5 A. We have 100 percent joinder to this unit as of this  
6 date.

7 Q. And that's verbal commitments? You don't have any  
8 anything executed at this point?

9 A. We have several executed letters and a couple of  
10 verbal.

11 (Applicant's Exhibit No. 3 was  
12 marked for identification.)

13 Q. Now if you could identify the Applicant's Exhibit 3  
14 in this case and describe what that is, please, sir.

15 A. That is the operating agreement for the Red Hat  
16 State Unit, and it sets out Yates Petroleum as operator,  
17 defines the contract area designated. And it covers all the  
18 operations that would be subject to this unit, Red Hat State  
19 Unit.

20 Q. I might ask you and point out that under Article 6  
21 on page 4, it describes the initial test well as being located  
22 1980 feet from the west line and 3300 feet from the south line  
23 of Section 2, and that location had been changed, has it not?

24 A. That's correct. The location has been amended to  
25 1980 from the east line and 3300 from the south of Section 2.

1 Q. And that will be revised prior to the parties'  
2 execution and prior to submitting the agreement to the  
3 commissioner of public lands for final approval?

4 A. That's right.

5 EXAMINER MORROW: 1980 from the east and what else?

6 THE WITNESS: 3300 from the south line.

7 MR. VANDIVER: That will be the initial test well.

8 Q. (By Mr. Vandiver:) Now if you could refer to  
9 Exhibit A of the unit operating agreement which should set out  
10 the percentage interests of the working interest owners. And  
11 I'd ask you -- it states here it's being negotiated. What's  
12 the status of those negotiations?

13 A. We're in the final stages of all the parties buying  
14 and selling and trading acreage. And we understand that  
15 yesterday, we think the parties have come to an agreement.  
16 But it was too late to get it set out in this exhibit. We  
17 anticipate all the parties being in agreement on the interest  
18 before we submit the final draft to the commissioner of public  
19 lands and to the commission.

20 Q. And this unit operating agreement contains all  
21 other customary contractual terms of a joint operating  
22 agreement and has been submitted to the working interest  
23 owners for approval?

24 A. Yes, it has.

25 (Applicant's Exhibit No. 4 was

1 marked for identification.)

2 Q. Now if you would identify the Applicant's Exhibit 4  
3 in this case and describe what that is, please, sir.

4 A. This is what we hand delivered to the commissioner  
5 of public lands on the Red Hat State Unit along with the unit  
6 operating agreement and the geological explanation and  
7 tendered it to them for their approval for the Red Hat State  
8 Unit.

9 Q. And that letter reflects that you're seeking  
10 preliminary approval at this point?

11 A. That's correct.

12 Q. And the proposed unit was only just submitted to  
13 the state land office today?

14 A. That is correct.

15 Q. So you have no idea as to whether they have any  
16 requirements?

17 A. Not at this time.

18 Q. And one of the requirements of the commissioner of  
19 public lands for approval of a unit agreement is that an order  
20 first be entered by the oil conservation division approving  
21 the unit; is that correct?

22 A. That's correct.

23 Q. And it's necessary that Yates have final approval  
24 by the commission of public lands and the oil conservation  
25 division prior to commencing operations to drill the initial

1 test well?

2 A. That is correct.

3 Q. And as previously stated, that will hopefully occur  
4 before January 1, 1991?

5 A. Hopefully, yes, it will.

6 Q. Mr. Bullock, were Exhibits 1 through 4 prepared by  
7 you or under your direction and supervision?

8 A. Yes, they were.

9 MR. VANDIVER: Mr. Examiner, I would at this time move  
10 admission of Applicant's Exhibits 1 through 4, and that  
11 concludes my direct examination of this witness.

12 EXAMINER MORROW: We'll admit those exhibits 1 through 4.  
13 (Applicant's Exhibits Nos. 1 through 4  
14 were admitted into evidence.)

15 EXAMINATION

16 BY EXAMINER MORROW:

17 Q. I need to be cleared up on the status of the  
18 agreement of the working interest owners. It wasn't clear to  
19 me. Are they all -- you said you had 100 percent joinder, I  
20 believe. Does that mean they're all --

21 A. Yes, sir, they've all committed. Collins & Ware  
22 and Santa Fe Energy wanted a larger percentage of the unit,  
23 and they acquired that through a trade with Matador and Plains  
24 Radio. And it took a while to get all that done, and we  
25 understand that yesterday, they did come to an agreement.

1 Everybody has their interests like they wanted at this time.

2 Q. And it's your opinion that all of them either have  
3 or will agree with the unit agreement and the unit operating  
4 agreement?

5 A. That's correct.

6 Q. Does that include the -- I guess it would. But  
7 I'll ask you anyhow. Does it include the proposed charges for  
8 drilling wells and producing wells? Has that been discussed  
9 with the working interest owners?

10 A. Our AFE has not been submitted to them at this  
11 time.

12 Q. Looking quickly at this, it's set out one -- I  
13 believe it's set out one costs \$540 per as a producing well  
14 rate and \$5,400 as the drilling well rate?

15 A. Yes, sir.

16 Q. Would that apply at all depths, or is this just for  
17 the initial well?

18 A. For the initial well.

19 Q. And that would assume completion at the deeper  
20 interval?

21 A. That's correct, yes.

22 EXAMINER MORROW: That's all the questions I have of this  
23 witness.

24 MR. VANDIVER: I have no further questions.

25

1                               STERLING FLY

2       the witness herein, having been first duly sworn by the Notary  
3       Public, was examined and testified as follows:

4               MR. VANDIVER:   May I proceed?

5               EXAMINER MORROW:   Yes, you may.

6                               DIRECT EXAMINATION

7       BY MR. VANDIVER:

8               Q.       Mr. Fly, please state your name, by whom you're  
9       employed and in what capacity.

10              A.       I'm Sterling Fly, III. I'm a petroleum geologist  
11       with Yates Petroleum in Artesia, New Mexico.

12              Q.       And you have previously testified before the New  
13       Mexico Oil Conservation Division as a petroleum geologist, had  
14       your qualifications as a geologist accepted and made a matter  
15       of record; is that correct?

16              A.       Yes.

17              Q.       Have you made a study of the available geological  
18       data regarding the proposed Red Hat State Unit for the  
19       purposes of your testimony today?

20              A.       Yes, I have.

21              Q.       And are you familiar with the geological basis for  
22       the proposed unit?

23              A.       Yes.

24              Q.       And have you prepared certain exhibits to  
25       illustrate your testimony today?

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                              DEBORAH LAVINE, CSR, RPR

1 A. Yes, I have several exhibits.

2 MR. VANDIVER: Mr. Examiner, I would tender Mr. Fly as an  
3 expert petroleum geologist.

4 EXAMINER MORROW: Yes, we accept his qualifications.  
5 Will you spell your last name for me, please.

6 THE WITNESS: F-l-y.

7 EXAMINER MORROW: Yes, go on. Continue.

8 Q. (By Mr. Vandiver:) Mr. Fly, in your opinion, is the  
9 unit area for the proposed Red Hat State Unit logically  
10 subject to unit development?

11 A. Yes.

12 (Applicant's Exhibit No. 5 was  
13 marked for identification.)

14 Q. If I could refer you to Yates Exhibit 5 and ask you  
15 to describe what that is, just what it is.

16 A. Exhibit 5 is a geological explanation justifying  
17 the formation of the Red Hat State Unit.

18 Q. And that's a summary of your testimony today?

19 A. Yes, it's essentially the same as what I'll be  
20 saying.

21 Q. What is the principal objective, Yates' principal  
22 formation Yates is seeking to test in the formation of this  
23 unit and the drilling of the initial test well?

24 A. The primary objective, actually twin primary  
25 objectives, are the lower Atokan sandstone and then a series

1 of lower Morrow sandstones.

2 Q. And as previously has been stated, the location of  
3 the initial test well is 1980 feet from the east line and 3300  
4 feet from the south line of Section 2?

5 A. That's correct.

6 Q. Sections 2 and 3 are irregular sized sections, are  
7 they not?

8 A. Yes, they are.

9 (Applicant's Exhibit No. 6 was  
10 marked for identification.)

11 Q. Identify Exhibit 6, which is the cross-section, and  
12 review the information that's contained in that exhibit for  
13 the examiner.

14 A. Exhibit 6, cross-section AA Prime, is a  
15 stratigraphic cross-section trending from northwest to  
16 southeast. The first well to the left or northwest end of the  
17 cross-section is a Gulf well up in the northwest corner of  
18 Section 3. And the last well on the far right is down in  
19 Section 13. Three of the wells -- I'm sorry. Two of the  
20 wells, the two to the far left, are wells that are within the  
21 unit boundary.

22 As I said, this is a stratigraphic cross-section.  
23 The stratigraphic datum is a thin line marker within the Atoka  
24 shale member, Atoka shale unit. The highlight zones or the  
25 primary objectives are shown. They're colored on the



1 cross-section, the first one, being this in yellow, identified  
2 as the Rojo sandstone, sits on the top about 100 feet above  
3 the Morrow line top. And then the other -- well, I've also  
4 colored in in orange and green two Morrow sandstones. More  
5 than likely, there are going to be other sandstones down  
6 there, but these are highlighted as typical of the Morrow  
7 sandstones. I just point out with respect to the Rojos or the  
8 Atokan sandstones, the continuity of electric log character,  
9 especially on the right end of the cross-section or the  
10 southern end, and the obvious correlation between that  
11 sandstone and then that which is present in the Humble well,  
12 the second from the left. Also correlation is demonstrated  
13 down there in the lower Morrow sandstones.

14 Q. And your proposed location is depicted --

15 A. Correct.

16 Q. -- in the cross-section?

17 A. Between the Humble and the Amoco wells.

18 Q. Anything further with regard to that exhibit?

19 A. No, I don't believe so. The primary purpose of the  
20 exhibit is just to show the lower Pennsylvanian stratigraphy  
21 here, ending with the top of the Mississippian formations.

22 Q. Now if I could --

23 A. I would point out that I will be referring back to  
24 this as I talk about some of the maps, so it would be easier  
25 if you keep it out.

1 (Applicant's Exhibit No. 7 was  
2 marked for identification.)

3 Q. Now would you identify Yates Exhibit 7.

4 A. Exhibit 7 is a subsurface structure map. The datum  
5 point is the top of the Morrow formation as indicated on the  
6 cross-section. This map indicates that we have a fairly well  
7 defined structural high center essentially in the middle of  
8 Section 2.

9 Q. Of course, the proposed location is shown on that  
10 exhibit as well?

11 A. Correct.

12 Q. Anything further with regard to Exhibit 7?

13 A. Well, the structure in Section 2 has a bearing on  
14 the Atokan prospects. But as we get down into the Morrow, the  
15 sands there are less structure dependent, so I just wanted to  
16 point that out.

17 (Applicant's Exhibit No. 8 was  
18 marked for identification.)

19 Q. Now identify Yates Exhibit 8 and describe the  
20 information contained in that exhibit, please.

21 A. Okay. Exhibit 8 is an ice pack map, gross ice pack  
22 of what's identified as the Rojo sandstone and the Atoka.  
23 Again referring back to the cross-section, you'll notice that  
24 on the gamma ray of this Rojo sandstone, it has the character  
25 of a real clean, blocky sand, no gradation upward or downward

1 in there. The character of the sandstone suggests that this  
2 sand was deposited in a braided stream deposition environment,  
3 braided streams flowing off to the east and southeast.

4 So with that in mind, the Exhibit 8, the isopach  
5 map, demonstrates the character of the sand in a map view, in  
6 other words, a migrating type of sand moving off to the east.  
7 It's not a widespread sand as the -- oh, the well there in  
8 Section 1 doesn't have a value for it, but that's a zero. And  
9 some of the wells to the north have very low sand. So it's a  
10 fairly well defined sand channel, and the cross-section  
11 clearly demonstrates the correlatability between the wells in  
12 section 11 and 12 and the well in Section 3.

13 Q. When you say the wells in section 11 and 12, you  
14 mean --

15 A. Well, the wells --

16 Q. You mean the one in the northwest quarter of  
17 Section 12?

18 A. Yes. Well, there's three wells in section 12, and  
19 they all show the sand. I believe two of those were on the  
20 cross-section.

21 Q. Right.

22 A. Right. No, I'm sorry. Just one of them was on the  
23 cross-section. The one that says 40 west there in the west  
24 half. And also the well there in section 11.

25 Q. Anything further with regard to Exhibit A?

1           A.     Oh, I'd just like to point out that the Atoka will  
2     be enhanced by the occurrence of the structure in the middle  
3     of Section 2. These wells down in section 11 and 12  
4     penetrated very nice looking sands. And some of them were  
5     tested. The one in section 11 wasn't. But it calculated wet.  
6     They're wet because they're too low structurally, but we have  
7     a well defined structure there in 2. So as far as the Atoka  
8     is concerned, the presence of the sand and the favorable  
9     structural position should give us probably, you know, two or  
10    three locations in the Atoka, primarily in Section 2.

11           Q.     In Section 2?

12           A.     Yes. And possibly extending down into 11.

13           Q.     Okay.

14           A.     Now I'll also point out right quick the Humble  
15    well, the second one on the cross-section there in Section 3,  
16    shows a 22 on the isopach map. That well tested gas and no  
17    water, so there's probably a location for Atoka in Section 3.

18           Q.     In the east half or the west half?

19           A.     In the east half, possibly on the west half. The  
20    structure is poorly defined over there.

21                               (Applicant's Exhibits Nos. 9 and 10  
22                               were marked for identification.)

23           Q.     Now if you would, identify Yates Exhibit 9 and  
24    describe the information depicted on that exhibit.

25           A.     Okay. I'll talk about Exhibits 9 and 10 both

1 because they're essentially the same thing. What they are is  
2 isoporosity maps for these lower Morrow sandstones. Exhibit 9  
3 is identified -- well, let's see. Okay, Exhibit 10 is  
4 identified as the lower Morrow Sombrero sandstone. And that  
5 is shown in orange on the cross-section. And Exhibit 9 is  
6 shown in green on the cross-section, identified as a basal  
7 Morrow sandstone.

8           These are isoporosity maps, have a porosity cutoff  
9 of nine percent. So the values shown in here, for instance,  
10 down there in Section 13, the well identify with the green  
11 color has five feet of nine percent porosity. Geologically,  
12 these maps demonstrate that in the Morrow, these thin  
13 sandstones were deposited by channels flowing to the southeast  
14 and fairly thin. They're fairly thin in a vertical sense and  
15 not particularly wide. But the two wells there shown in green  
16 on both of these maps were productive in these lower Morrow  
17 sand. And referring back to the structure map, there's no  
18 apparent favorable structure there, so it's fairly apparent  
19 that the accumulations of gas in Sections 12 and 13 are of a  
20 stratigraphic nature.

21           Q.     And as you move into Section 3, the west half lacks  
22 control?

23           A.     Except for the one Gulf well there. They did  
24 run -- okay. It's not one of the map units, one of the units  
25 I mapped, but they did a drill stem test in the Gulf well

1 there in Section 3. And on a DST at 13,161 to 184, a gas  
2 surface at 828,000 cubic feet of gas per day, so that's just  
3 another one of the sands which are to be encountered through  
4 this area.

5 Q. Other than the Atoka and the Morrow, are there any  
6 prospective zones you might seek to test in drilling the  
7 initial test well and joint test well?

8 MR. STOVALL: Excuse me.

9 A. I'd anticipate drill stem tests in the Wolfcamp and  
10 canyon formations. And, oh, the Strawn is a possible test,  
11 Queen, several other zones. But I would say at least two  
12 outside of the lower Penn here.

13 Q. Anything further you wish to point out with regards  
14 to Exhibits 9 and 10?

15 A. No. I just want to emphasize that the  
16 accumulations here are not structurally dependent.

17 Q. Mr. Fly, based upon your review of this data, what  
18 conclusions have you drawn from your study of the proposed  
19 unit area?

20 A. Well, I've concluded that we have an excellent  
21 chance, on the initial locations, that we have an excellent  
22 chance of an Atoka gas accumulation and a good chance at the  
23 Morrow throughout the entire unit. And also, providing a  
24 success on the first well, a possible three, four additional  
25 locations to be drilled throughout the unit.

1 Q. In your opinion, Mr. Fly, will approval of this  
2 exploratory unit be in the interest of conservation of oil and  
3 gas, the prevention of waste and the protection of correlative  
4 rights?

5 A. Yes.

6 Q. Were Exhibits 5 through 10 prepared by you or under  
7 your direction and supervision?

8 A. Yes, they were.

9 MR. VANDIVER: Mr. Examiner, I would move the admission  
10 of Yates Exhibits 5 through 10, and that concludes my direct  
11 examination of this witness.

12 EXAMINER MORROW: We'll accept the exhibits into  
13 evidence.

14 (Applicant's Exhibits Nos. 5 through 10  
15 were admitted into evidence.

16 EXAMINATION

17 BY EXAMINER MORROW:

18 Q. Mr. Fly, the wells in Section 3, you mentioned a  
19 Gulf well and I believe a Humble well.

20 A. Yes, sir.

21 Q. Apparently from the cross-section that Humble well  
22 produced for a while; is that correct or not?

23 A. It produced about 5,000 barrels of oil in the  
24 canyon, definitely subeconomic.

25 Q. And the canyon is -- that's Pennsylvanian there?

1 A. Yes, sir. It's about 11,2 or 3, I believe.

2 Q. The Gulf well, did they set pipe on it?

3 A. No, it was dry hole all the way.

4 Q. Are there any producing wells in the proposed unit  
5 area? I assume there are not.

6 A. No, there are no current producers. And the only  
7 former producer is that poor Canyon.

8 Q. Have you made estimates of the recovery you expect  
9 from an initial well?

10 A. I can just guess based on what the surrounding  
11 wells do. And in this area -- well, the two Morrow producers  
12 in Sections 12 and 13 made -- one of them made 1.6 billion.  
13 The other one made 2 billion. And the Atoka would probably be  
14 analogous to that. There are some wells that have really big  
15 production off to the south, but --

16 Q. So one and a half to three bcf total?

17 A. Yes, sir.

18 Q. Are the two wells to the south on the right-hand  
19 side of your cross-section, are those two wells currently  
20 producing?

21 A. I believe that they're -- I believe one of them is  
22 producing. The other one may be plugged. And I'm not sure  
23 which one is which right offhand, but they are essentially at  
24 the end of their life. They're not going to make a lot more  
25 even if one of them is still producing.



1 EXAMINER MORROW: Any questions?

2 MR. STOVALL: No questions.

3 EXAMINER MORROW: We have no further questions.

4 MR. VANDIVER: Mr. Examiner, that concludes my  
5 presentation in this case. And just to emphasize and say one  
6 more time that one of the leases in the proposed unit expires  
7 January 1, and we hope to get an order in sufficient time to  
8 allow us to build a location and commence drilling prior to  
9 January 1, if possible.

10 MR. STOVALL: Mr. Vandiver, it appears that the initial  
11 test well is on that lease.

12 MR. VANDIVER: I believe that's right. So, you know, if  
13 we don't get it approved, it's not going to be the end of the  
14 world, but --

15 MR. STOVALL: It'll be a whole lot nicer to drill under a  
16 unit order?

17 MR. VANDIVER: Yes, sure.

18 EXAMINER MORROW: Anything further, Mr. Vandiver?

19 MR. VANDIVER: No, sir. That's it.

20 EXAMINER MORROW: Case 10134 will be taken under  
21 advisement. Take a five-minute break.

22 (The foregoing hearing was adjourned at the approximate  
23 hour of 10:35 a.m.)

24

25

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

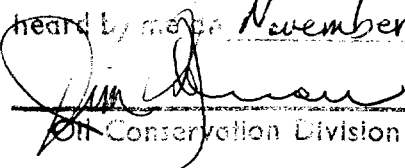
3  
 4 REPORTER'S CERTIFICATE

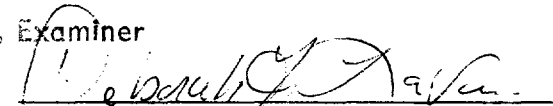
5  
 6 I, DEBORAH LAVINE, RPR, a Certified Shorthand  
 7 Reporter and Notary Public, DO HEREBY CERTIFY that I  
 8 stenographically reported these proceedings before the Oil  
 9 Conservation Division; and that the foregoing is a true,  
 10 complete and accurate transcript of the proceedings of said  
 11 hearing as appears from my stenographic notes so taken and  
 12 transcribed under my personal supervision.

13 I FURTHER CERTIFY that I am not related to nor  
 14 employed by any of the parties hereto and have no interest in  
 15 the outcome hereof.

16 DATED at Santa Fe, New Mexico, this 21st of  
 17 December, 1990.

18 I do hereby certify that the foregoing is  
 19 a complete record of the proceedings in  
 the Examination of Testimony No. 10,134,  
 heard by me on November 28, 1990.

20  Examiner  
 Oil Conservation Division

21   
 22 DEBORAH LAVINE, RPR  
 23 Certified Shorthand Reporter  
 24 CSR No. 252, Notary Public

25 My Commission Expires:  
 August 6th, 1993

HUNNICUTT REPORTING  
 DEBORAH LAVINE, CSR, RPR