

1 STATE OF NEW MEXICO  
2 ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT  
3 OIL CONSERVATION DIVISION  
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7 EXAMINER HEARING  
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9 IN THE MATTER OF:  
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11 Application of Yates Petroleum Case 9770  
12 Corporation for an unorthodox  
13 gas well location, Eddy County,  
14 New Mexico  
15  
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17 TRANSCRIPT OF PROCEEDINGS  
18

19 BEFORE: MICHAEL E. STOGNER, EXAMINER  
20

21 STATE LAND OFFICE BUILDING

22 SANTA FE, NEW MEXICO

23 October 4, 1989  
24

25 **ORIGINAL**

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

FOR THE DIVISION:

ROBERT G. STOVALL  
Attorney at Law  
Legal Counsel to the Divison  
State Land Office Building  
Santa Fe, New Mexico

FOR THE APPLICANT:

FISK & VANDIVER  
Attorneys at Law  
Seventh & Mahone/Suite E  
Artesia, New Mexico 88210  
BY: DAVID R. VANDIVER, ESQ.

## I N D E X

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Appearances

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Witnesses:

RAY BECK

Direct Examination by Mr. Vandiver

4

Certificate of Reporter

11

## E X H I B I T S

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Applicant's Exhibit 2  
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Applicant's Exhibit 5

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1 HEARING EXAMINER: We will call case No.  
2 9770.

3 MR. STOVALL: Application of Yates  
4 Petroleum Corporation for an unorthodox gas well  
5 location, Eddy County, New Mexico.

6 HEARING EXAMINER: At this time I'll call  
7 for appearances.

8 MR. VANDIVER: Mr. Examiner, I'm David R.  
9 Vandiver of the firm of Fisk & Vandiver, Artesia, New  
10 Mexico, and I'm appearing on behalf of the Applicant.  
11 I have one witness to be sworn.

12 HEARING EXAMINER: Are there any other  
13 appearances in this case?

14 In that case, will the witness please stand  
15 and be sworn?

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

19 DIRECT EXAMINATION

20 BY MR. VANDIVER:

21 Q. Mr. Beck, state your name, your occupation,  
22 and by whom you are employed.

23 A. My name is Ray Beck. I'm employed by Yates  
24 Petroleum Corporation in Artesia, New Mexico, as a  
25 petroleum geologist.

1 Q. Mr. Beck, you have previously testified on  
2 numerous occasions before the Oil Conservation  
3 Division and had your qualifications as a petroleum  
4 geologist accepted, and your qualifications are a  
5 matter of record, are they not?

6 A. That's true.

7 Q. Mr. Beck, have you made a study of the  
8 available geological data in the area surrounding  
9 Yates Petroleum Corporation's application in Case No.  
10 9770, and are you familiar with the application?

11 A. Yes, I am.

12 MR. VANDIVER: Mr. Examiner, I tender Mr.  
13 Beck as an expert petroleum geologist.

14 HEARING EXAMINER: Mr. Beck is so  
15 qualified.

16 Q. (BY MR. VANDIVER) Mr. Beck, what is the  
17 purpose of Yates Petroleum Corporation's application  
18 in Case No. 9770?

19 A. In Case 9770, Yates Petroleum requests  
20 approval of an unorthodox gas well location for its  
21 Saguaro "AGS" Federal Com Well No. 1 to be drilled  
22 1980 feet from the south line and 660 feet from the  
23 west line of Section 11, Township 20 South, Range 24  
24 East, Eddy County. The south half of Section 11 will  
25 be dedicated to the well.

1           The necessity for this nonstandard location  
2 is based upon geologic conditions prevailing in the  
3 primary objective Morrow Classics formation.

4           Q.     Mr. Beck, if I could refer you to  
5 Applicant's Exhibit No. 1 and ask you to describe what  
6 that is, please.

7           A.     Exhibit No. 1 is a land plat. The proposed  
8 location is a red spot. The south half proration unit  
9 is outlined in red. Solid yellow color denotes a 100  
10 percent Yates lease, and yellow-outlined tracts means  
11 Yates has a partial interest in the lease. Purple  
12 color denotes a Yates mineral interest.

13          Q.     If I could refer you to Applicant's Exhibit  
14 No. 2 and ask you to describe what information is  
15 contained on that exhibit.

16          A.     Exhibit No. 2 is a combined isopach and  
17 structural map. The dotted contours show regional  
18 southeast dip of about 200 feet-per-mile on the top of  
19 the Morrow Classics interval. The solid contours are  
20 isopach contours showing the varying thickness of the  
21 Morrow Classics interval in the area of interest. The  
22 contour interval is 20 feet.

23                 Experience in northern Eddy County has  
24 shown that wells located within or along the flanks of  
25 Morrow Classics thicks have a much better chance of

1 encountering more and thicker Morrow channel sand  
2 bodies which, if not water bearing, are capable of  
3 producing better-than-average economic volumes of  
4 gas.

5           A good example is the recently drilled  
6 Yates Conoco well in the north half of Section 11 of  
7 20 South, 24 East, which encountered 131 feet of  
8 Morrow Classics on the east flank of the thick,  
9 running from northeast to southwest in Section 10.  
10 This well was completed naturally and is currently  
11 producing 4.3 million cubic feet a day into the  
12 pipeline from a 26-foot Morrow channel sandstone.

13           According to the present interpretation of  
14 the data, a well drilled at the proposed unorthodox  
15 location should encounter about 160 feet in the Morrow  
16 Classics, or 29 feet more than the excellent Yates  
17 Conoco well in the north half. It should be on the  
18 same east flank of the Morrow Classics thick, and  
19 should encounter one or more good reservoir sands  
20 about 25 feet up dip of the Yates Conoco well.

21           Q.     Mr. Beck, if I could refer you to what's  
22 been marked for identification as Applicant's Exhibit  
23 No. 3 and ask you to describe what information is  
24 contained in that exhibit.

25           A.     Exhibit No. 3 is an isolith map with

1 10-foot contours, showing a varying thickness of the  
2 total clean Morrow sand in this area. By comparing  
3 this map with the previous map, one can see that  
4 greater amounts of Morrow sand are found where the  
5 Morrow Classics interval is thicker.

6 According to Exhibit 3, this isolith map,  
7 one may observe that any standard location will  
8 encounter significantly less sand than the proposed  
9 nonstandard location.

10 The proposed unorthodox location should  
11 encounter approximately 30 feet of Morrow sand, which  
12 is about the same amount of sand as was found in the  
13 Yates Conoco well in the north half of Section 11, and  
14 which appears to be an excellent Morrow gas well.

15 Also, please note the trace of  
16 cross-section A-A Prime, the next exhibit.

17 Q. All right, then, if I could refer you to  
18 Applicant's Exhibit No. 4, the cross-section, and ask  
19 you to identify that and describe what information is  
20 contained therein.

21 A. Exhibit No. 4 is cross-section A-A Prime.  
22 It is a stratigraphic cross-section hung on the Morrow  
23 Classics and trends more or less perpendicularly to  
24 the Morrow Classics thick shown on Exhibit No. 2.

25 The cross-section shows the pertinent



1 correlations and the interval mapped on Exhibit No.  
2 2. The cross-section also shows the manner in which  
3 the sand was encountered for the isolith map of  
4 Exhibit No. 3 by the yellow coloring on the left side  
5 of each open hole well log.

6 The cross-section illustrates that the  
7 proposed location should encounter Morrow sand on the  
8 east flank of the Morrow Classics thick.

9 Q. Anything else with regard to Exhibit 4?

10 A. Nothing with regard to Exhibit 4.

11 MR. VANDIVER: Mr. Examiner, Applicant's  
12 Exhibit No. 5 is an affidavit of a mailing prepared by  
13 my office, reflecting notice in accordance with Rule  
14 1207 to the parties entitled to receive notice in this  
15 case.

16 Q. Mr. Beck, were Exhibits 1 through 4  
17 prepared by you or under your direction and control?

18 A. Yes, they were.

19 Q. In your opinion, is the proposed location  
20 the best allowable location for a Morrow well on the  
21 south half of Section 11?

22 A. Yes, it is true, we believe it is  
23 geologically the best location of the south half of  
24 Section 11.

25 Q. In your opinion, will the granting of Yates

1 Petroleum Corporation's application in this case be in  
2 the interest of conservation of oil and gas, and  
3 prevention of waste, and protection of correlative  
4 rights?

5 A. Yes, it will.

6 MR. VANDIVER: Mr. Examiner, we would move  
7 admission of Applicant's Exhibits 1 through 5 at this  
8 time.

9 HEARING EXAMINER: Applicant's Exhibits 1  
10 through 5 will be admitted into evidence at this time.

11 MR. VANDIVER: I have no further questions  
12 of the witness.

13 HEARING EXAMINER: I have no other  
14 questions of this witness either.

15 Are there any other questions of this  
16 witness?

17 Mr. Beck, you may be excused.

18 Does anybody else have anything further in  
19 the case of 9770?

20 This case will be taken under advisement.

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## 1 CERTIFICATE OF REPORTER

2  
3 STATE OF NEW MEXICO )  
4 ) ss.  
5 COUNTY OF SANTA FE )

6 I, Deborah O'Bine, Certified Shorthand  
7 Reporter and Notary Public, HEREBY CERTIFY that the  
8 foregoing transcript of proceedings before the Oil  
9 Conservation Division was reported by me; that I  
10 caused my notes to be transcribed under my personal  
11 supervision; and that the foregoing is a true and  
12 accurate record of the proceedings.

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

17 WITNESS MY HAND AND SEAL November 1, 1989.

18   
19 DEBORAH O'BINE  
20 CSR No. 127

21 My commission expires: August 10, 1990

22 I do hereby certify that the foregoing is  
23 a complete record of the proceedings in  
24 the Examiner hearing of Case No. 9770,  
25 heard by me on 4 October 19 89.

, Examiner  
Oil Conservation Division