

1 STATE OF NEW MEXICO  
2 ENERGY AND MINERALS DEPARTMENT  
3 OIL CONSERVATION DIVISION  
4 STATE LAND OFFICE BUILDING  
5 SANTA FE, NEW MEXICO

6 19 December 1984

7 EXAMINER HEARING

8 IN THE MATTER OF:

9 Application of Yates Petroleum Cor- CASE  
10 poration for an unorthodox gas well 8430  
11 location, Eddy County, New Mexico.

12  
13 BEFORE: Michael E. Stogner, Examiner

14  
15 TRANSCRIPT OF HEARING

16  
17 A P P E A R A N C E S

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19 For the Oil Conservation  
20 Division:

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22 For the Applicant: Chad Dickerson  
23 Attorney at Law  
24 LOSEE, CARSON & DICKERSON P.A.  
25 Artesia, New Mexico 88210

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I N D E X

RAY BECK

Direct Examination by Mr. Dickerson 3

E X H I B I T S

Yates Exhibit One, Plat 4  
Yates Exhibit Two, Map 5  
Yates Exhibit Three, Cross section 6

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2 MR. STOGNER: The hearing will  
3 come to order. I am Michael E. Stogner, appointed the Al-  
4 ternate Examiner in this case.

5 This case is being held in Room  
6 209 of the Oil Conservation Division's offices.

7 We will call now Case No. 8430,  
8 which is the application of Yates Petroleum Corporation for  
9 an unorthodox gas well location, Eddy County, New Mexico.

10 We'll call for appearances.

11 MR. DICKERSON: Mr. Examiner, I  
12 am Chad Dickerson of Artesia, New Mexico, on behalf of the  
13 applicant. We have one witness.

14 MR. STOGNER: Are there any  
15 other appearances? Being none, will the witness please  
16 stand to be sworn.

17 (Witness sworn.)

18 RAY BECK,  
19 being called as a witness, and being duly sworn upon his  
20 oath testified as follows, to-wit:

21 DIRECT EXAMINATION

22 BY MR. DICKERSON:

23 Q Mr. Beck, will you state your name, your  
24 occupation, and where you reside, please?

25 A Ray Beck; geologist, Yates Petroleum;

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Artesia.

Q Mr. Beck, you have previously testified before this Division or one of its Examiners and your credentials are a matter of record, are they not?

A Yes, they are.

MR. DICKERSON: Tender this witness as an expert geologist, Mr. Examiner.

MR. STOGNER: Mr. Beck is so qualified.

Q Mr. Beck, would you state the purpose of Yates' application in Case 8430?

A In Case 8430, Yates Petroleum respectfully requests approval of the unorthodox gas well location of its proposed No. 1 Agave "AAJ" State to be drilled 660 feet from the north and east lines of Section 32, Township 19 South, Range 24 East, Eddy County, New Mexico. The north half of Section 32 would be dedicated to the well.

And the necessity for this non-standard location is based on geologic conditions pertaining to a carbonate zone in the Wolfcampian, but the well will be drilled through the base of the Pennsylvanian.

Q Mr. Beck, will you refer to what we have marked as Exhibit Number One and tell the Examiner what that exhibit reflects?

A Exhibit Number One is a land plat showing the proposed location and its relationship to the surrounding acreage situation. Yellow denotes acreage in which

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Yates has full or partial interest in operating rights. The proration unit is outlined in red. Yates has obtained a farmout from Mitchell Energy to drill and earn in Section 32.

Q Will you now turn to what we have submitted as Exhibit Number Two and tell us what's shown on that document?

A Exhibit Number Two is a combined structure and porosity map. Solid lines are structural contours on top of the areally persistent Wolfcampian Rake Marker. Contour interval is 50 feet. Regional dip is about 100 feet per mile to the east southeast; however, there is structural nosing at the proposed location.

The dashed lines are contoured on feet of effective log porosity and permeability in a Wolfcampian carbonate horizon called the CC Tank zone. The Yates CC Tank No. 1, in Section 28, had 14 feet of effective porosity and permeability in the CC Tank zone. This zone was completed naturally for an original rate of 1500 MCF of gas per day in March, 1981, and is currently producing 810 MCF of gas per day. As indicated on the map, none of the offsetting wells have effective porosity or permeability or pay in the CC Tank zone.

In May, 1984, Yates reservoir engineer made a pressure test study of the CC Tank zone reservoir. The results of the study were that about 0.9 BCF had been produced; that about 1.8 BCF remains to be produced; and that the CC Tank

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zone reservoir underlies about 1200 surface acres.

Considering the present well control, the reservoir study, and the northeast-southwest trend of Permian porosity in this area, it is now believed that the CC Tank gas reservoir extends into the north half of Section 32, as shown on the map, and that a well drilled at the proposed location would encounter an optimum thickness of porosity and permeability in the CC Tank zone.

Q Mr. Beck, refer to what is marked Exhibit Number Three and tell the Examiner what you have shown on that exhibit.

A Exhibit Number Three is a stratigraphic west to east cross-section which is hung on the Wolfcampian Rake Marker. The cross-section shows the pertinent correlations and the CC Tank zone gas reservoir present in the Yates CC Tank No. 1.

Q Mr. Beck, indicate the wells for the Examiner as shown on your plat marked Exhibit Number One which are reflected on your cross-section.

A On Exhibit Number Two the cross-section runs between the well in Section 29, the well in--28, and the well in 27. It shows the CC Tank zone reservoir there. You can see the separation between the shallow and the deep ladder log which indicates permeability. And that is the zone that's producing. And it's not producing in any other wells thus far drilled. But because the reservoir study indicated it was almost two sections in area, we think it ex-

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2 tends down this way now, to the southwest.

3 Q And in your opinion, Mr. Beck, is the  
4 proposed location the optimum geologic location for the max-  
5 imum recovery of hydrocarbons in the north half of Section  
6 32?

7 A Yes, that's my testimony.

8 Q Were Exhibits One, Two, and Three pre-  
9 pared by you or under your direction and supervision?

10 A Yes, they were.

11 Q And in your opinion would the granting of  
12 this application be in the interest of conservation, the  
13 prevention of waste, and the protection of correlative  
14 rights?

15 A Yes, it would.

16 MR. DICKERSON: Mr. Examiner,  
17 at this time move the admission of applicant's Exhibits One,  
18 Two, and Three. And I have no further questions.

19 MR. STOGNER: Exhibits One,  
20 Two, and Three will be admitted into evidence.

21 I have no questions of Mr.  
22 Beck. Are there any other questions of this witness? If  
23 not, he may be excused.

24 Does anybody else have anything  
25 further in Case No. 8430? If not, this case will be taken  
under advisement.

(Hearing concluded.)

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C E R T I F I C A T E

I, SALLY W. BOYD, C.S.R., DO HEREBY CERTIFY that the foregoing Transcript of Hearing before the Oil Conservation Division was reported by tape recorder operated by R. Dan Boyd, under my direction and supervision; that the said transcript is a full, true, and correct record of the hearing, prepared under my direction and supervision to the best of my ability.

Sally W. Boyd CSR

I do hereby certify that the foregoing is a complete and correct transcript of the proceedings in the Examiner's hearing No. 8430 heard by me on 19 December 1984.

Michael E. Hogans, Examiner  
Oil Conservation Division

R. Dan Boyd

R. Dan Boyd