## STATE OF NEW MEXICO ENERGY AND MINERALS DEPARTMENT OIL CONSERVATION DIVISION STATE LAND OFFICE BUILDING SANTA FE, NEW MEXICO

17 July 1985

EXAMINER HEARING

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IN THE MATTER OF:

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Application of Yates Petroleum Coration for an unorthodox gas well 3651 location, Eddy County, New Mexico.

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BEFORE: Michael E. Stogner, Examiner

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TRANSCRIPT OF HEARING

APPEARANCES

Jeff Taylor

Legal Counsel to the Division Oil Conservation Division State Land Office Bldg. Santa Fe. New Mexico 87501

For the Applicant:

Division:

For the Oil Conservation

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1 2 MR. STOGNER: Call next Case 3 8651. MR. TAYLOR: The application of Yates Petroleum Corporation for an unorthodox gas well loca-5 6 tion, Eddy County, New Mexico. 7 MR. DICKERSON: Mr. Examiner, 8 I'm Chad Dickerson of Artesia, New Mexico, and I have one 9 witness. 10 MR. STOGNER: Are there any 11 other appearances in this matter? 12 Will the witness please stand 13 and be sworn? 14 15 (Witness sworn,) 16 17 RAY BECK, 18 being called as a witness and being duly sworn upon his 19 oath, testified as follows, to-wit: 20 21

## DIRECT EXAMINATION

22 BY MR. DICKERSON:

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Q Will you state your name, your occupation, and by whom you're employed, please?

Ray Beck, geologist, Yates Petroleum Cor-

poration, Artesia, New Mexico.

Q Mr. Beck, you have previously testified as a geologist before the Oil Conservation Division and your credentials are a matter of record, are they not?

A Yes, they are.

MR. DICKERSON: Is this witness

7 | qualified, Mr. Examiner?

MR. STOGNER: He is so qualified.

Q Mr. Beck, will you summarize the purpose of Yates' application in Case 8651?

A In Case 8651 Yates Petroleum Corporation respectfully requests approval of the unorthodox gas well location of its proposed Amoco "QT" Federal #2, to be drilled 660 feet from the south and east lines of Section 29, Township 19 South, Range 24 East, Eddy County, New Mexico.

The south half of Section 29 would be dedicated to the well.

The necessity for this nonstandard location is based on geological conditions pertaining to a carbonate zone in the Wolfcampian, but the well will be drilled through the base of the Lower Canyon carbonate bank to a depth of 7750 feet.

Q Mr. Beck, will you refer to what we've marked and submitted as Exhibit Number One and tell us what

is shown on that exhibit?

A Exhibit Number One is a land plat showing the proposed location and its relationshp to the surrounding acreage situation.

Yellow denotes acreage in which Yates has full or partial interest in operating rights.

The proration unit is outlined in red.

Q Refer, please, Mr. Beck, to Exhibit Number Two and tell us what it is.

Exhibit Number Two is a combined structure and porosity map. The 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 to the mile to the east/southeast.

The dashed lines are contoured on feet of effective log porosity and permeability present in a Wolf-campian 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 1500 MCF of gas per day in March, 1981, and is currently producing 716 MCF per day.

Yates Petroleum's recently drilled Agave
"AAJ" No. 1 in the northeast/northeast of Section 32 had 6
feet of effective porosity and permeability in the CC Tank

zone and was completed for 750 MCF of gas per day.

In May, 1984, Yates' reservoir engineer made a pressure study of the CC Tank zone reservoir. The results of the study were that approximately 0.9 BCF of gas has been produced, that 1.8 BCF of gas remains to be produced, and that the CC Tank zone reservoir underlies about 1200 surface acres.

Considering the present well control and the reservoir study, it is believed that the CC Tank reservoir extends into the southeastern portion of Section 29 and that a well drilled at the proposed location would encounter over 10 feet of effective porosity and permeability and make a gas producer whose quality would lie between that of the Agove "AAJ" and the CC Tank No. 1.

Q Mr. Beck, will you refer to Exhibit Number Three and tell us what you've 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 as it is present in the Yates CC Tank No. 1.

In summary, the proposed location is geologically the best allowable location in the south half of Section 29, should recover the greatest amount of hydrocar-

bon product from the proration unit, and thereby prevent 1 waste and protect correlative rights. Mr. Beck, will you refer to Exhibit Number Four and tell us what that is? 5 Exhibit Number Four is a packet of let-6 sent by Yates Land Department to offsetting operators 7 requesting waivers, asking for no objection to this drilling 8 of this unorthodox location, and we received two acceptances or waivers from Conoco and Chevron, or Gulf. 10 And you had no response from Mitchell 11 Energy or Amoco Production Company? 12 Α No response from those. 13 Beck, were Exhibits One through Four Mr. 0 14 either prepared by you or compiled under your direction 15 supervision? 16 A They were. 17 MR. DICKERSON: Mr. Examiner. 18 at this time I move admission of Applicant's Exhibits 19 through Four. 20 MR. STOGNER: Exhibits One 21 through Four will be admitted into evidence. 22 MR. DICKERSON: I have no fur-23 ther questions of the witness, Mr. Examiner. 24

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MR. STOGNER: Does anybody else

## Q 1 CROSS EXAMINATION BY MR. STOGNER: 2 3 0 Mr. Beck, what's your primary zone of interest? 5 The primary zone of interest is the 6 you could look on this cross section there, if you would, 7 you can see the Yates CC Tank zone is a carbonate horizon in 8 the Wolf -- overall Wolfcampian section. This well has been -- zone has been pene-10 trated first in the Yates CC Tank Well No. 1 in Section 28 11 and we got an unorthodox location approved and drilled in 12 Section -- northwest northwest of Section 32. 13 So we're kind of in between those 14 wells in Section 29. 15 MR. STOGNER: I have no further 16 questions of Mr. Beck. 17 Are there any other questions 18 for this witness? 19 If not, he may be excused. 20 Mr. Dickerson, do you have any-21 thing further in Case 8651 this morning? 22 MR. DICKERSON: No, Mr. Stog-

25 have anything further in this case?

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ner, I don't.

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CERTIFICATE

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

Jacres W. Boyd Cor

I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case No. 865/. heard by me on 17 hun.

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Oil Conservation Division