

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

16 March 1988

EXAMINER HEARING

IN THE MATTER OF:

Application of Yates Petroleum Corporation for an unorthodox gas well location, Chaves County, New Mexico. CASE 9329

BEFORE: David R. Catanach, Examiner

TRANSCRIPT OF HEARING

A P P E A R A N C E S

For the Commission: No attorney appearing.

For the Applicant: Chad Dickerson
Attorney at Law
DICKERSON, FISK & VANDIVER
Seventh & Mahone/Suite E
Artesia, New Mexico 88210

I N D E X

LESLIE BENTZ

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MR. CATANACH: Call 9329. The application of Yates Petroleum Corporation for an unorthodox gas well location, Chaves County, New Mexico.

Are there appearances in this case?

MR. DICKERSON: Mr. Examiner, I'm Chad Dickerson of Artesia, New Mexico, on behalf of Yates Petroleum Corporation and I have one witness who was sworn in the previous case.

MR. CATANACH: Let the record show that Ms. Bentz was previously sworn in.

LESLIE BENTZ,
being called as a witness and having been previously sworn,
testified as follows, to-wit:

DIRECT EXAMINATION

BY MR. DICKERSON:

Q Ms. Bentz, will you summarize the purpose of Yates' application in 9329?

A Yates Petroleum Corporation respectfully requests approval for the unorthodox location of its proposed Witz "VN" State No. 2 to be drilled 660 feet from the north and 660 feet from the east line of Section 26, Town-

1 ship 9 South, Range 26 East, Chaves County, New Mexico. The
2 north of Section 26 would be dedicated to well.

3 The necessity for this unorthodox loca-
4 tion is based upon geological conditions.

5 Q Okay. Refer to what we've submitted as
6 Exhibit Number One and tell the Examiner about the land plat
7 you've identified there.

8 A Exhibit Number One is a land plat showing
9 the proposed location and its relationship to the surround-
10 ing acreage in which Yates has full or partial operating
11 rights.

12 The proration unit is outlined in red.

13 Q Okay. Refer to Exhibit Number Two and
14 tell us what you show on that map.

15 A Exhibit Number Two is a map depicting the
16 subsurface structure on top of the PrePenn unconformity.
17 The contour interval is 50 feet. Datum points are noted by
18 circles and the appropriate datum is listed.

19 Well spots colored in red indicate Ordo-
20 vician producers. The red outline and the green outline
21 marks the termination of the Mississippian formation and the
22 Ordovician, respectfully.

23 The structure shows a horst block which
24 is completely fault bounded. Throw on the bounding faults
25 varies from 200 feet to a slight displacement of less than

1 100 feet. Erosion on the uplifted area has resulted in
2 areas where Mississippian and Ordovician sediments have been
3 completely stripped away leaving Pennsylvanian sediments
4 lying unconformably on the Precambrian.

5 The PrePennsylvanian section on the re-
6 mainder of the horst block consists of Ordovician resting on
7 Precambrian.

8 A normal system of Pennsylvanian resting
9 inconformably on Mississippian occurs on the downthrown side
10 of the bounding faults.

11 Gas production from the uplifted fault
12 block results from the porosity development along the uncon-
13 formity surface (Karst topography) of the Ordovician, which
14 is truncated against the Precambrian.

15 The overlying Pennsylvanian provides the
16 source. The bounding faults serve as a trapping mechanism
17 that place the tight Mississippian limestone in juxtaposition
18 with the porous Ordovician dolomite.

19 It is the intention of the proposed unor-
20 thodox location to penetrate a remnant section of the Ordo-
21 vician in a structurally high position between the granite
22 knob and the bounding fault which is downthrown to the west.

23 Q Ms. Bentz, identify Exhibit Number Three
24 and describe for Mr. Catanach what that is.

25 A Exhibit Number Three, cross section A-A',

1 shows the pertinent well tops and intervals picked by corre-
2 lation. The mapped subcrop patterns and fault locations are
3 further documented.

4 The first well, located west of the pro-
5 posed location on the downthrown block, shows the Pennsyl-
6 vanian resting on the Mississippian.

7 The Ordovician tested water in this bore-
8 hole.

9 The proposed location is shown to be in
10 an upthrown position but should encounter a porous Ordovi-
11 cian section in a structurally advantageous position.

12 The center well, the Ibis "XU" State No.
13 2, penetrated the high granite knob; however, it should
14 produce from the arkose section as well as the Wolfcamp
15 formation.

16 The final well, the Dragonfly State Unit
17 No. 1, is producing from the Ordovician. It has been con-
18 nected to a pipeline within the last month and is producing
19 at a rate of 600 MCF gas per day.

20 Q Can you summarize your conclusions that
21 you've drawn from this information?

22 A The proposed unorthodox location is the
23 best allowable location in Section -- in the north half of
24 Section 26 which would enable the borehole to encounter the
25 structure at its highest point possible and still encounter

1 a productive Ordovician section.

2 It is anticipated that structurally high
3 penetration of the Ordovician formation would enhance ear-
4 lier and greater recovery of gas reserves.

5 The well will be drilled through to the
6 Precambrian to ensure that the complete section is tested.

7 Q Ms. Bentz, were Exhibits One, Two and
8 Three prepared by you or under your direction and supervi-
9 sion?

10 A Yes, they were.

11 Q And in your opinion will the approval 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 will.

16 Q Identify for us, Ms. Bentz, Exhibit Num-
17 ber Four.

18 Mr. Catanach, I apologize. I have my ex-
19 hibits mismarked. The ones submitted to you as Three, Four
20 and Five, should be Four, Five and Six.

21 A Exhibit Number Four is an affidavit of
22 mailing.

23 Q Exhibit Number Four is a waiver, is it
24 not, of --

25 A Oh.

1 Q -- MYCO Industries, Abo Petroleum Cor-
2 poration and Yates Drilling Company of the -- of any objec-
3 tion to the proposed unorthodox location?

4 A Yes, it is.

5 Q Okay. Now identify what we've submitted
6 as Exhibit Number Five.

7 A Okay, Exhibit Number Five is an affidavit
8 of mailing.

9 Q Of the original application filed in this
10 case.

11 A Yes.

12 MR. DICKERSON: Mr. Examiner,
13 your file will reflect that the applicant originally filed
14 an application seeking an east half spacing unit. It was
15 subsequently amended to request a south half spacing unit
16 and Exhibit Number Five is the affidavit of mailing of the
17 original application to the offsetting interest owners with
18 return receipts requested.

19 Q Ms. Bentz, identify Exhibit Number Six.

20 A That's the affidavit of mailing for --

21 Q The amended application --

22 A Right.

23 MR. DICKERSON: To the same
24 parties, with the affidavits -- certificates of receipt
25 attached, Mr. Examiner.

1 I move admission of Yates Exhi-
2 bits One through Six.

3 MR. CATANACH: Exhibits One
4 through Six will be admitted as evidence.

5

6 CROSS EXAMINATION

7 BY MR. CATANACH:

8 Q Ms. Bentz, the Marathon well that you de-
9 scribed on Exhibit Three, that's not producing in the Ordo-
10 vician?

11 A No, it's not.

12 Q Is it tested? Was it tested?

13 A Yes it was tested. It tested water on
14 drill stem test. In fact, I believe there's two drill stem
15 tests.

16 It is currently being recompleted as an
17 Abo producer.

18 Q So what you're saying is you have to en-
19 counter the Ordovician structurally high as to -- so you
20 get a good producer?

21 A Yes, that's true, but if you get too high
22 on the structure you don't have any Ordovician section.
23 It's Pennsylvanian on Precambrian.

24 Q Who operates the two wells in Section 19?

25 A Joe Kelly, Elk Oil.

1 Q Are they pretty good wells?

2 A The Meredith State has already made over
3 2 BCF.

4 Q How about the other one? Do you know
5 anything about that?

6 A It made about a BCF and a half.

7 Q And your new producing -- the Dragonfly
8 State No. 1, it's already completed, right?

9 A Yes. It's been on the pipeline for prob-
10 ably about 20 days.

11 MR. CATANACH: That's all I
12 have of the witness.

13 Are there any other questions
14 of the witness?

15 She may be excused.

16 Is there anything further in
17 Case 9329?

18 MR. DICKERSON: No, Mr.
19 Catanach.

20 MR. CATANACH: It will be taken
21 under advisement.

22

23 (Hearing concluded.)

24

25

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 (Commission) 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.

Sally W. Boyd CSR

I do hereby certify that the foregoing is
a complete record of the proceedings in
the Examiner hearing of Case No. 9329,
heard by me on March 16, 19 88.
David R. Cabanul, Examiner
Oil Conservation Division