

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

25 May 1988

EXAMINER HEARING

IN THE MATTER OF:

Application of Yates Petroleum Corp- CASE
oration for an unorthodox well loc- 9384
ation, Chaves County, New Mexico.

BEFORE: Michael E. Stogner, Examiner

TRANSCRIPT OF HEARING

A P P E A R A N C E S

For the Division: Charles E. Roybal
Attorney at Law
Legal Counsel to the Division
State Land Office Bldg.
Santa Fe, New Mexico 87501

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

I N D E X

HAROLD GARCIA

Direct Examination by Mr. Roybal

3

E X H I B I T S

Division Exhibit A, Gas Allowable Hearing

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1
2
3 MR. STOGNER: Call next Case
4 9384.

5 MR. ROYBAL: Application of
6 Yates Petroleum Corporation for an orthodox well location,
7 Chaves County, New Mexico.

8 MR. DICKERSON: Mr. Examiner,
9 I'm Chad Dickerson of Artesia, New Mexico, on behalf of the
10 applicant.

11 I have one witness to be sworn.

12 MR. STOGNER: Are there any
13 other appearances in this matter?

14 Will the witness please stand
15 and be sworn.

16
17 (Witness sworn.)

18
19 LESLIE BENTZ,
20 being called as a witness and being duly sworn upon her
21 oath, testified as follows, to-wit:

22
23 DIRECT EXAMINATION

24 BY MR. DICKERSON:

25 Q Mr. Bentz, will you please state your
name, your occupation, and by whom you're employed, please?

1 A My name is Leslie Bentz. I'm employed by
2 -- as a petroleum geologist by Yates Petroleum Corporation
3 of Artesia, New Mexico.

4 Q Ms. Bentz, you have appeared before this
5 Division on numerous occasions in the recent past and your
6 credentials are a matter of record, are they not?

7 A Yes, they are.

8 Q And are you familiar with the geological
9 basis for the application filed in Case 9384?

10 A Yes, I am.

11 MR. DICKERSON: Mr. Examiner, I
12 tender Ms. Bentz as an expert petroleum geologist.

13 MR. STOGNER: Ms. Bentz is so
14 qualified.

15 Q Ms. Bentz, will you summarize the purpose
16 of Yates Petroleum Corporation's application in Case 9384
17 for us?

18 A We respectfully request approval for the
19 unorthodox location of the proposed Witz "VN" State No. 3,
20 to be drilled 1980 feet from the south line and 660 feet
21 from the east line of Section 26, Township 9 South, Range 26
22 East. The south half of the section would be dedicated to
23 the well.

24 Q And the necessity for your requested un-
25 orthodox location is based on geological considerations, is

1 it not?

2 A Yes, it is.

3 Q Will you identify for us and point out
4 the pertinent features of what we've submitted as Yates Ex-
5 hibit Number One?

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

10 The proration unit is outlined in red.

11 Q And your well location is noted by the
12 red dot.

13 A Yes, it is.

14 Q So you are encroaching only upon yourself
15 and Enron Oil & Gas, are you not?

16 A That is correct.

17 Q Okay. Identify for us, Ms. Bentz, Exhi-
18 bit Number Two and tell us what you show on that map.

19 A Exhibit No. 2 is a map depicting the sub-
20 surface structure on top of the PrePenn unconformity. The
21 contour interval is 50 feet; datum points are noted by cir-
22 cles and the the appropriate datum is listed by the well.

23 Well spots colored in red indicate Ordo
24 vician producers.

25 The red outline and the green outline

1 marks the termination of the Mississippian formation and the
2 Ordovician formation, respectively.

3 The structure shows a horst block which
4 is completely fault bounded. Throw on the bounding faults
5 varies from over 200 feet to less than 100 feet. Erosion on
6 the uplifted horst block has resulted in areas where the
7 Mississippian and Ordovician formation has been completely
8 stripped away, leaving Pennsylvanian lying unconformably on
9 the PreCambrian. The PrePennsylvanian section on the re-
10 mainder of the horst block consists of Ordovician on PreCam-
11 brian.

12 A normal sequence of Pennsylvanian res-
13 ting unconformably on Mississippian occurs on the down-
14 thrown areas of the bounding faults.

15 Gas production from the uplifted fault
16 block results from porosity development along the unconfor-
17 mity surface which is Karst topography development in the
18 Ordovician which is truncated against the PreCambrian.

19 The overlying Pennsylvanian provides the
20 source. The bounding faults serve as a trapping mechanism
21 as they place the tight Mississippian formation in juxtapo-
22 sition with the porous Ordovician dolomite.

23 It is the intention of the proposed unor-
24 thodox location to penetrate a remnant section of the Ordo-
25 vician in a structurally high position between the granite

1 knob and the bounding faults which are downthrown to the
2 west and the south.

3 Dipmeter data obtained from the Yates
4 Petroleum Corporation Witz "VN" State No. 2, which is drill-
5 ed in -- on the north 320 at the same section, indicates a
6 structurally advantageous location to the south/
7 southeast

8 MR. DICKERSON: Mr. Examiner,
9 for your information that well that she referred to was al-
10 so the subject of an unorthodox location and that was Case
11 9329.

12 Q Ms. Bentz, were Exhibits One and Two pre-
13 pared by you or under your direction and supervision?

14 A Yes, they were.

15 Q Can you summarize for us very briefly the
16 geological basis for your requested unorthodox location?

17 A The unorthodox location is the best al-
18 lowable location in the south half of Section 26 which would
19 enable the borehole to encounter the structure at an advan-
20 tageous position. It is anticipated that structurally high
21 penetration of the Ordovician formation would enhance ear-
22 lier and greater recovery of gas reserves.

23 The well will be drilled through to the
24 PreCambrian to ensure that the complete section is tested.

25 Q Ms. Bentz, will you identify what we've

1 submitted to Mr. Stogner as Exhibits Three and Three-A and
2 tell him what those are?

3 A It's an Affidavit of Mailing pursuant to
4 Rule 1207, which requires notification to be given to offset
5 operators. Copies of the certified notification are at-
6 tached, as well as the return receipts.

7 Q Ms. Bentz, in your opinion will the ap-
8 proval of this application be in the interest of conserva-
9 tion, the prevention of waste, and the protection of correl-
10 ative rights?

11 A Yes, it will.

12 MR. DICKERSON: Mr. Stogner, I
13 move admission of Yates Exhibits One, Two, Three and Three-
14 A, and I have no further questions of Ms. Bentz.

15 MR. STOGNER: Exhibits One,
16 Two, Three and Three-A will be admitted into evidence at
17 this time.

18

19 CROSS EXAMINATION

20

21 BY MR. STOGNER:

22 Q Ms. Bentz, for clarification, over in
23 Section 25, the Nortex Lease?

24 A Yes.

25 Q You have it penciled down in the lower

1 left-hand corner "Enron". Is that an Enron lease presently
2 or --

3 A Yes, it is. Nortex was purchased by En-
4 ron.

5 Q And how about the northern half?

6 A The northern half belongs to Yates Petro-
7 leum with the exception of the lease that's marked Nortex,
8 which now -- well, it belonged to Enron but we earned that
9 by drilling the well in that proration unit.

10 Q Okay.

11 MR. DICKERSON: The south half,
12 Mr. Stogner, for clarification, is actually owned 70 percent
13 Yates Petroleum Corporation and 30 Percent Enron.

14 Q In Exhibit Number Two, this is your
15 structure map, you show several geophysical lines. I assume
16 this geophysical information was also used to draw out the
17 fault blocks, is that correct?

18 A Yes, it was.

19 Q Now, in Section 26 there is that well up
20 in the northwest quarter.

21 A Yes, sir.

22 Q Does that -- is that an Abo producer or
23 could you tell me a little bit more about that well?

24 A It is completed in the Abo formation and
25 did not go any deeper.

1 Q And the same with the well right north of
2 there about a quarter of a mile, looks like the Dallas Ranch
3 No. 1?

4 A That well was completed as an Abo well
5 but did penetrate the Ordovician and had a Mississippian
6 section laying on top of the Ordovician and the Ordovician
7 was tested wet in the drill stem test.

8 Q Did it ever produce from any of the lower
9 zones?

10 A No, only the Abo.

11 Q Only the Abo.

12 MR. STOGNER: I have no further
13 questions of Ms. Bentz at this time.

14 Are there any other questions
15 of this witness?

16 MR. DICKERSON: No.

17 MR. STOGNER: If not, she may
18 be excused.

19 Are there any -- is there
20 anything further in Case Number 9384 at this time?

21 MR. DICKERSON: Nothing.

22 MR. STOGNER: If not, this case
23 will be taken under advisement.

24

25 (Hearing concluded.)

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. 9384,
heard by me on 25 May 1988.
Michael J. Hughes, Examiner
Oil Conservation Division