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STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION

EXAMINER HEARING

IN THE MATTER OF:

Application of Yates Petroleum Case 9794
Corporation for a unit agreement,
Lea County, New Mexico.

TRANSCRIPT OF PROCEEDINGS

BEFORE: VICTOR T. LYON, EXAMINER

STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO
November 1, 1989

CUMBRE COURT REPORTING
(505) 984-2244

ORIGINAL

A P P E A R A N C E S

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1 HEARING EXAMINER: We'll call Case 9794.
2 Application of Yates Petroleum Corporation for a unit
3 agreement, Lea County, New Mexico.

4 Call for appearances in this case.

5 MR. VANDIVER: Mr. Examiner, my name is
6 David Vandiver with the firm of Fisk & Vandiver. Fisk
7 & Vandiver enters an appearance for Yates Petroleum
8 Corporation in the application of Yates Petroleum
9 Corporation, and I have two witnesses to be sworn.

10 (Witnesses sworn.)

11 HEARING EXAMINER: You may proceed.

12 DIRECT EXAMINATION

13 BY MR. VANDIVER:

14 Q. State your name and occupation and by whom
15 you're employed, please.

16 A. My name is Cy Cowen. I'm a landman for
17 Yates Petroleum Corporation in Artesia, New Mexico.

18 Q. Mr. Cowen, are you familiar with the title
19 to the land within the proposed Remuda State Unit?

20 A. Yes, I am.

21 Q. Have you testified previously before the
22 New Mexico Oil Conservation Division and had your
23 qualifications as a petroleum landman accepted, and
24 are your qualifications a matter of record?

25 A. Yes, they are.

1 MR. VANDIVER: Mr. Examiner, I tender
2 Mr. Cowen as a petroleum landman.

3 HEARING EXAMINER: Mr. Cowen is considered
4 qualified.

5 Q. (BY MR. VANDIVER) Mr. Cowen, briefly
6 summarize the purpose of Yates Petroleum's application
7 in Case No. 9794.

8 A. Yates Petroleum's purpose is to achieve
9 approval of the Remuda State Unit in Township 10
10 South, 33 East, in Lea County, New Mexico, so we can
11 effectively develop and explore the area.

12 Q. Mr. Cowen, refer to what we have submitted
13 as Applicant's Exhibit No. 1 and orient the Examiner,
14 please, sir, with respect to the location of proposed
15 unit.

16 A. Exhibit 1 is an outline of the proposed
17 Remuda State Unit in Township 10 South, 33 East,
18 Lea County, New Mexico. The Unit outline is in
19 yellow. The proposed initial well is the red dot in
20 Section 8, which the location will be 1980 from the
21 South line, 660 feet from the East line, and we're
22 proposing to drill a 9500 foot test to the Penn.

23 This unit is comprised of 2962.62 acres of
24 state lands and the unit is 100 percent state lands.

25 Q. Now, if you would identify what we have

1 submitted as Exhibit 2, which is the Unit Agreement,
2 and describe what that is, please, sir.

3 A. Exhibit 2 is the Unit Agreement for the
4 Remuda State Unit. It is on the standard State of
5 New Mexico form. On page 2 it describes the unit area
6 as Township 10 South, 33 East.

7 In Section 5, the Southwest 1/4, the West
8 1/2 of the Southeast 1/4.

9 Section 7, Lots 1, 2, 3, 4, the East 1/2,
10 and the East 1/2 of the West 1/2, comprising all of
11 Section 7.

12 Section 8, it's the North 1/2
13 Section 8. It's the South 1/2, also.

14 Section 9 is all.

15 Section 16 all.

16 And Section 17 is the Northeast 1/4. And
17 this is comprised of 2962.62 acres of land in
18 Lea County, New Mexico.

19 Q. What formations are to be unitized under
20 the Unit Agreement?

21 A. Any and all formations from the surface to
22 the Penn will be unitized under this agreement.

23 Q. Is there any limitation on the formations
24 to be unitized under the terms of this agreement?

25 A. No, sir.

1 Q. Who is designated as operator under the
2 terms of the Unit Agreement?

3 A. Unit Operators designate is Yates Petroleum
4 Corporation of Artesia, New Mexico.

5 Q. And as required, the Unit Agreement
6 allocates production from any well drilled on a
7 committed tract within the unit area to each of the
8 separately owned tracts on a surface acreage basis,
9 does it not?

10 A. That's correct.

11 Q. Refer to Exhibit A of the Unit Agreement
12 and tell the Examiner what information is contained in
13 that exhibit.

14 A. Exhibit A is a plat showing the proposed
15 outline of the Remuda State Unit. It tells the record
16 titleholder, lease number for the lease in the unit
17 and also the expiration dates.

18 And I would like to add that there are two
19 leases, one lease in Section 9 and one lease in
20 Section 16 that will expire January 1st, 1990.
21 Therefore, we ask for speedy approval of this unit.

22 Q. That is the earliest date of any leases to
23 be committed to the unit -- that's the earliest
24 expiration date?

25 A. Yes, sir.

1 Q. Now, if you would refer to Exhibit B to the
2 Unit Agreement and review for the Examiner the
3 information contained in that exhibit.

4 A. Exhibit B to the Unit Agreement is a list
5 of the lands in the proposed unit, starting out with
6 the tract number, the description of the lease in that
7 particular tract, the number of acres, the serial
8 number and the expiration date of the lease, basic
9 royalty owner and the percentage of royalty, lessee of
10 record, overriding royalty owner percentage, and the
11 working interest owner and their percentage in that
12 lease.

13 Q. What's the status of the joinder of the
14 working interest owners to this proposed unit?

15 A. We anticipate by the time the unit is
16 approved we will have 100 percent joinder of the
17 working interest owners.

18 Q. Have all the working interest owners
19 committed to joining this unit?

20 A. Yes, they are.

21 Q. Identify Exhibit 3 and describe what it is,
22 please, sir.

23 A. Exhibit 3 is A.A.P.L. Form 610, dated 1977.
24 Model Form Operating Agreement for the Remuda State
25 Unit. The Operating Agreement is dated October 1st

1 1989, designating Yates Petroleum Corporation as the
2 operator of the unit in Lea County, New Mexico.

3 Q. And this unit Operating Agreement has been
4 submitted to all the working interest owners for their
5 approval?

6 A. Yes, it has.

7 Q. Refer to Exhibit A of the unit Operating
8 Agreement and review the manner in which the cost of
9 the initial test well will be paid.

10 A. Exhibit A to the unit Operating Agreement
11 describes the percentage of interests of the parties
12 in the well and how they will be paid for. This well
13 will be paid for by Yates Petroleum Corporation, Yates
14 Drilling Company, Abo Petroleum Corporation, and Myco
15 Industries, Incorporated.

16 Q. And all other customary contractual terms
17 of a joint Operating Agreement are contained in this
18 instrument and have been submitted for approval in
19 joinder by all the other working interest owners?

20 A. Yes, they have.

21 Q. Now, if you would identify what we have
22 submitted as Applicant's Exhibit 4 and describe what
23 that is, please, sir.

24 A. Exhibit 4 is a letter dated October 27,
25 1989, from Fisk & Vandiver to the Commissioner of

1 Public Lands, Attention Ms. Susan Howarth.

2 And in this letter is Yates Petroleum
3 Corporation's application for preliminary approval of
4 the Remuda State Unit in Lea County, New Mexico, and
5 along with this letter were enclosed two copies of a
6 draft of the Unit Agreement with Exhibits A and B and
7 a draft of the Unit Operating Agreement and Geological
8 Explanation with the maps.

9 Q. And you haven't had any response to this
10 letter requesting preliminary approval, since it was
11 so recently sent, have you?

12 A. No, I haven't.

13 Q. And one of the requirements for the
14 Commissioner of Public Lands to approve the Unit
15 Agreement is that an order first be entered by the
16 New Mexico Oil Conservation Division approving the
17 proposed unit?

18 A. That is correct.

19 Q. And it will be necessary for Yates to have
20 final approval by the Commissioner of Public Lands and
21 to have commenced operations for drilling the initial
22 test well prior to January 1, 1990?

23 A. That's correct.

24 Q. Mr. Cowen, were Exhibits 1, 2, 3 and 4
25 prepared by or under your direction and supervision?

1 A. Yes, they have.

2 MR. VANDIVER: Mr. Examiner, I move
3 admission of Applicant's Exhibits 1 through 4, and I
4 have no further questions of this witness.

5 HEARING EXAMINER: Is there objection?

6 Exhibits 1 through 4 will be admitted into
7 the record.

8 I don't believe I have any questions for
9 this witness. You may be excused.

10 THE WITNESS: Thank you.

11 HEARING EXAMINER: Proceed Mr. Vandiver.

12 DIRECT EXAMINATION

13 BY MR. VANDIVER:

14 Q. Mr. Fly, state your name, your occupation,
15 and by whom you're employed, please, sir.

16 A. My name is Sterling H. Fly, III. I am a
17 petroleum geologist at Yates.

18 HEARING EXAMINER: What was your last name,
19 please?

20 THE WITNESS: Fly. F-L-Y.

21 HEARING EXAMINER: Thank you.

22 Q. (BY MR. VANDIVER) Mr. Fly, you've
23 previously testified before the New Mexico Oil
24 Conservation Division as a petroleum geologist, had
25 your qualifications as a geologist accepted, and they

1 are a matter of record, are they not?

2 A. Yes.

3 Q. Have you made a study of the available
4 geological data regarding the proposed Remuda State
5 Unit for the purposes of your testimony, and are you
6 familiar with the geological basis for the proposed
7 unit?

8 A. Yes.

9 MR. VANDIVER: Mr. Examiner, I tender
10 Mr. Fly as an expert petroleum geologist.

11 HEARING EXAMINER: Mr. Fly is so qualified.

12 Q. (BY MR. VANDIVER) Mr. Fly, summarize for
13 the Examiner the geological factors which dictate the
14 formation of the proposed exploratory unit.

15 A. We have mapped out multiple stratigraphic
16 porosity zones which coincide with the presence of the
17 structural nose through the proposed unit, and we
18 believe we will encounter stratigraphic entrapment.

19 Q. What is Yates Petroleum Corporation's
20 principal objective in forming this unit and drilling
21 the initial exploratory well?

22 A. The principal objective are the series of
23 Bough limestones, upper Penn age and the Abo dolomite;
24 lower Abo dolomite is also another objective.

25 Q. What's the location of the initial

1 exploratory well and the land to be dedicated to that
2 well?

3 A. The initial test well would be in Section 8
4 of Township 10 South, Range 33 East, located 1980 feet
5 from North Line, 660 from the East or the Southeast
6 1/4 of the Northeast.

7 Q. All right. Mr. Fly, identify what we have
8 submitted as Applicant's Exhibit 5, which is the
9 cross-section, and review the information contained in
10 that exhibit, please.

11 A. Exhibit 5 is a West-East Stratigraphic
12 Cross-section, which covers of the lower Abo dolomite
13 Wolfcamp formation and into the upper Penn, focusing
14 on the Bough formation -- Bough members, rather.

15 I would point out on the little
16 cross-section location map that the edge of the Bough
17 production, as defined by the Veda and ^{sube}NB pools off to ^L
18 the east, ending, say, in Section 3, 10, 15, and so
19 forth, to the south, is defined by loss of porosity in
20 an up-^{dip}depth direction in the Bough C. The Veda pool ^L
21 is represented on the cross-section by the last well
22 log on the right side of the cross-section.

23 One thing the cross-section indicates is
24 that there is additional porosity in the Bough C,
25 up-depth from the Veda porosity pinch out. Also the ^L

1 Bough A, B, and C appear to have favorable porosity
2 for hydrocarbon accumulation also.

3 Other than that, I'd point out on the
4 cross-section what's labeled as the the Primary Abo
5 Porosity Interval, up near the top of the
6 cross-section. This interval is the persistent
7 interval where porosity is encountered in Abo
8 producing wells in the region.

9 Q. Anything further with regard to that
10 exhibit?

11 A. No, that's it.

12 Q. All right. Now, Mr. Fly, identify for the
13 Examiner Exhibit 6 and review the information
14 contained in that exhibit, please.

15 A. Exhibit 6 is a structure map taken on the
16 top of the Bough C member. The primary thing to point
17 out on this exhibit is the presence of structural nose
18 which trends to the southeast, extending through the
19 proposed Unit outline. Favorable structural position,
20 as indicated on the map, would enhance the
21 stratigraphic producibility within the Bough and Abo
22 intervals where porosity is encountered.

23 Q. Anything further with regard to that
24 exhibit?

25 A. No.

1 Q. Refer to Applicant's Exhibit 7. Identify
2 that and describe the information contained in that
3 exhibit.

4 A. Exhibit 7 is a Veda porosity map for the L
5 Bough C interval. I'd point out that on the right
6 side of the map where the contours are is the edge of
7 the Veda NB Pools, and you will note that porosity L
8 does, indeed, pinch out in an up-^{deep}depth or a westward, L
9 essentially, westward direction.

10 Wells to the south of the proposed unit in
11 Section 20, particularly, and also in Sections 24 and
12 19, encountered porosity which we feel will extend
13 through the Unit in, essentially, a north-south
14 direction, or parallel to the Veda map porosity. R

15 Q. Now, if you would identify Exhibit 8 and
16 describe the information contained therein.

17 A. Exhibit 8 is just like Exhibit 7 except the
18 mapping horizon is the Bough A, again a net feet of
19 porosity map on Abo A, and patterns mapped are very
20 similar to what was seen in the Bough C. So, again, I
21 feel that porosity -- favorable porosity will be
22 encountered in a north-south orientation through the
23 unit with, again, the control points being those wells
24 to the south, which did penetrate.

25 Q. Now, refer to Exhibit 9. Identify it and

1 describe it for the Examiner, please.

2 A. Exhibit 9 is net feet of porosity map on
3 the Abo, which is it same as of the primary Abo
4 interval indicated on the cross-section of Exhibit 6,
5 I believe it was -- 5.

6 In the Abo porosity was developed upon
7 shoals, which were present on the sea floor at the
8 time of deposition. These shoals developed on
9 structural highs which were analogous to the modern
10 structural highs. Elongation of porosity trends
11 primarily occurs in a direction perpendicular to the
12 paleo shore line, which was essentially northwest to
13 southeast.

14 Q. Anything else with regard to that exhibit?

15 A. No.

16 Q. Mr. Fly, based on your review of this data
17 what conclusions have you drawn from your study of
18 this area?

19 A. Well, we expect to encounter one or more
20 porosity zones within the Bough A, B, C, and D
21 intervals and also the Abo porosity interval. So we
22 anticipate a stratigraphic entrapment of oil in one or
23 more of those zones. And the presence of a structural
24 nose going through the unit would enhance
25 producibility of the stratigraphic accumulations.

1 Q. In your opinion, Mr. Fly, will approval of
2 this exploratory unit be in the interest of
3 conservation of oil and gas, the prevention of waste
4 and the protection of correlative rights?

5 A. Yes.

6 Q. Were Exhibits 5, 6, 7, 8, and 9 prepared by
7 you or under your direction or supervision?

8 A. They were.

9 MR. VANDIVER: Mr. Examiner, I would move
10 for the admission of Exhibits 5 through 9, and I have
11 no further questions of this exhibit.

12 HEARING EXAMINER: Is there an objection?

13 Exhibits 5 through 9 will be admitted.

14 EXAMINATION

15 BY HEARING EXAMINER:

16 Q. Mr. Fly, what is the status of the well in
17 the Northeast 1/4 of the Northeast 1/4 of Section 17?

18 A. That was an old San Andreas well that made,
19 maybe, 5,000 barrels of oil. Plugged and abandoned.

20 Q. So it does not provide data for the markers
21 that you've shown?

22 A. No, sir. The depth of it is approximately
23 4500 feet.

24 HEARING EXAMINER: Anybody else have any
25 questions? I have no further questions.

1 The witness maybe excused.

2 MR. VANDIVER: Mr. Examiner, that concludes
3 my preparation in this case.

4 HEARING EXAMINER: Thank you. We'll take
5 this case under advisement.

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I do hereby certify that the foregoing is
a correct and true copy of the proceedings in
the examination hearing of Case No. 9794,
heard by me on November 1, 1989;
Victor J. Lyon, Examiner
Oil Conservation Division


1 CERTIFICATE OF REPORTER

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

5
6 I, Diana Abeyta, 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
18 WITNESS MY HAND AND SEAL January 3, 1990.

19
20
21 
22 DIANA ABEYTA
CSR No. 267

23 My commission expires: May 7, 1993
24
25