

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

6
7 26 April 1989

8 EXAMINER HEARING

9 IN THE MATTER OF:

10 Application of Yates Petroleum Corp- CASE
11 oration for a unit agreement, Eddy 9655
12 County, New Mexico.

13 BEFORE: David R. Catanach, Examiner
14

15
16 TRANSCRIPT OF HEARING

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

19 For the Division: Robert G. Stovall
20 Attorney at Law
21 Legal Counsel to the Division
22 State Land Office Building
Santa Fe, New Mexico

23 For Yates Petroleum Chad Dickerson
24 Corporation: Attorney at Law
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1 MR. CATANACH: At this time
2 we'll call Case 9655, the application of Yates Petroleum
3 Corporation for a unit agreement, Eddy County, New Mexico.

4 MR. DICKERSON; Chad Dicker-
5 son, Artesia, New Mexico, appearing on behalf of Yates
6 Petroleum Corporation and I have the same two witnesses who
7 have previously been sworn and qualified.

8 MR. CATANACH: You may pro-
9 ceed.

10
11 KATHY COLBERT,
12 being recalled as a witness having been previously sworn
13 and remaining under oath, testified as follows, to-wit:

14
15 DIRECT EXAMINATION

16 BY MR. DICKERSON:

17 Q Ms. Colbert, will you summarize for us
18 the purpose of Yates' application in Case 9655?

19 A In Case 9655 Yates Petroleum Corporation
20 desires to obtain approval of the East Apple State Unit
21 containing 5,919.52 acres located in Eddy County, in order
22 to effectively explore and develop the area.

23 Q All right, will you identify the plat
24 submitted as Exhibit Number One and review that for Mr.
25 Catanach?

1 A Exhibit Number One is a plat outlining
2 the unit, which is located in Townships 25 and 26 South,
3 Range 28 East. The unit is comprised of 97.3 percent State
4 leases and 2.7 percent fee lands.

5 The initial test well, an 8000 foot Bone
6 Spring, is located 1980 from the north and east lines of
7 Section 5, Township 6 South, Range 28 East.

8 Q And that is anticipated as an oil well?

9 A That's correct.

10 Q Statewide 40-acre spacing in effect?

11 A Yes, sir.

12 Q So the spacing unit for your proposed
13 well would be the southwest quarter of the northeast quar-
14 ter of Section 5?

15 A That's correct.

16 Q All right. Identify your unit agreement
17 submitted as Exhibit Number Two and review that for us,
18 please.

19 A Exhibit Two is the proposed unit agree-
20 ment which is on the standard form containing the state
21 lands. The agreement designates Yates Petroleum Corpora-
22 tion as operator.

23 Q And paragraph 11, as required, allocates
24 production to each separately owned tract within the unit
25 area regardless of where the well physically is located?

1 A That's correct.

2 Q Okay, review for us Exhibit B to that
3 unit agreement with respect to the separately owned tracts
4 within the unit area.

5 A Exhibit B to the unit agreement sets out
6 the 17 tracts showing each lease number or name, descrip-
7 tion, expiration date, burdens on the lease, and it also
8 reflects the lessee of record and the working interest
9 owners under each lease.

10 Q And it appears that with the exception
11 of Tract 7 owned by Marshall & Winston that Yates Petroleum
12 Corporation, et al, owns 100 percent -- or no, I notice
13 Tract 12 also has some other entities under it.

14 A That's correct. There are two tracts
15 that are not owned by Yates.

16 Q All right. What's the current status of
17 joinder of this unit by all working interest owners?

18 A At the present time we have 98.5 per-
19 cent joinder. The only one that we lack is an actual
20 signed ratification from the Yates Energy Corporation, who
21 owns approximately 27 percent of Tract 12. We have con-
22 tacted them, been in contact with them and foresee no
23 problem with this unit being 100 percent committed.

24 Q All right, review the joint operating
25 agreement submitted as Exhibit Number Three for us.

1 A Exhibit Three is the proposed unit oper-
2 ating agreement on the standard AAPL Form 610, 1977. It
3 does cover expenditures, liabilities of the participating
4 parties.

5 Q Turn to Exhibit A attached to that oper-
6 ating agreement and tell the Examiner how the initial test
7 well will be paid for and owned by the parties.

8 A Exhibit A to the unit operating agree-
9 ment sets out all the parties within the unit, the acreage
10 they are committing to the unit and their percentage.

11 The initial test well will be paid for
12 by these parties in their respective percentages.

13 Q And those are in proportion to their net
14 acres owned within the unit area, is that right?

15 A That is correct.

16 Q All right. Tell us about Exhibit Number
17 Four.

18 A Exhibit Four is a packet of letters
19 where we did request preliminary approval from the Commis-
20 sioner of Public Lands and (unclear) copies of transmittals
21 to the Commissioner.

22 Q And what is your understanding with
23 regards to the status of that proposed preliminary appro-
24 val?

25 A Again, it is my understanding that the

1 State Land Office has no problem with this unit and as far
2 as I know, preliminary approval will be forthcoming.

3 Q All right, review Exhibit Number Five
4 for Mr. Catanach.

5 A Exhibit Number Five are copies of all
6 correspondence to the parties within the unit where we did
7 invite them to join.

8 MR. DICKERSON: Mr. Catanach,
9 I move admission of Yates Exhibits One through Five and I
10 have no further questions of Ms. Bentz.

11 MR. CATANACH: We will --

12 MR. DICKERSON: I mean Ms.
13 Colbert.

14 MR. CATANACH; Exhibits One
15 through Five will be admitted as evidence.

16 I have no questions of the
17 witness.

18 Any further questions?

19 MR. STOCKTON: No, questions,
20 Mr. Examiner, but we would like to state at this time but
21 we would like to state that the Commissioner has verbally
22 given preliminary approval on this unit.

23 MR. CATANACH: Thank you, Mr.
24 Stockton. The witness may be excused.

25

1 LESLIE BENTZ,

2 being recalled as a witness previously sworn and remaining
3 under oath, testified as follows, to-wit:
4

5 DIRECT EXAMINATION

6 BY MR. DICKERSON:

7 Q Ms. Bentz, who prepared the geological
8 exhibits upon which you will testify today?

9 A The geological exhibits were prepared by
10 Ray Beck, Chief Geologist for Yates Petroleum Corporation.

11 Q And why is it that Mr. Beck could not be
12 here to testify regarding his exhibits?

13 A He was unable to be here. He had a
14 prior commitment out of town.

15 Q Have you familiarized yourself with the
16 geological data reflected in these exhibits and familiar-
17 ized yourself with that data so that you can express your
18 opinion upon what these exhibits show?

19 A Yes, with my experience in putting to-
20 gether other state units. I've worked very closely with Mr.
21 Beck on this unit.

22 Q Orient us, Ms. Bentz, with respect to
23 the geographical location of this proposed East Apple State
24 Unit area.

25 A Okay. If you can refer to geological

1 Exhibit Number Six, it is an index map showing the loca-
2 tion of the East Apple State Unit, which is about 25 miles
3 south/southeast of Carlsbad. The East Apple State Unit is
4 located in the Northern Delaware Basin. It is an area
5 where oil and gas production have been obtained from the
6 Delaware Mountain Group, the Bone Spring, and to a lesser
7 extent, Strawn and Morrow formations.

8 Q All right, identify Exhibit Number Seven
9 for us and review that instrument.

10 A Exhibit Number [Two] is a combined
11 structure and sand isolith map. The dotted lines are
12 structural contours on top of the Bone Spring formation.
13 The contour interval is 100 feet.

14 Within the unit the Bone Spring struc-
15 tural contours show regional monoclinal dip of 100 feet per
16 mile to the east.

17 The solid contours are isolith contours
18 showing the various thickness of total clean sand of the
19 primary objective, which is the First Bone Spring Sand
20 interval in this area.

21 The clean sand is defined as sand with
22 less than 50 gamma ray API units.

23 The contour interval is 20 feet. The
24 circled wells are First Bone Spring Sand penetrations. The
25 producing horizons are color coded according to the legend,

1 e.g. the yellow denotes production from the First Bone
2 Spring Sand.

3 The isolith map shows a southwesterly
4 trending sand thick of approximately 80 to over 100 feet of
5 clean sand within the unit outline and the test well should
6 encounter in excess of 100 feet of clean sand.

7 The key data well is the Gulf Eddy State
8 "FD" No. 1, which is located in Section 28, Township 25,
9 Range 28 East. This well is shown on the cross section.

10 The key well had a clean sand count of 87 feet in the First
11 Bone Spring Sand, which was much more than any other well
12 in the area.

13 The Gulf Eddy "FD" was a Devonian test
14 drilled and plugged in 1965. The First Bone Spring Sand
15 was neither drill stem tested nor perforated, even though
16 production pipe was run in the well; however, much of the
17 sand has porosities ranging from 14 to 17 percent and water
18 saturations from 30 to 36 percent.

19 The First Bone Spring Sand was perfor-
20 ated and produced small, uneconomic amounts of oil and gas
21 along with water in three other wells in this area.

22 The HCW Dorstate in Section 27 of 25
23 South, 28 East, produced a total of 538 barrels of oil,
24 1800 MCF of gas, and 796 barrels of water in the First Bone
25 Spring Sand, and higher Bone Spring perforations.

1 The Marline Hay "A" Federal in Section
2 13 of 26 South, 27 East, produced 1320 barrels of oil, 3200
3 MCF of gas and 4900 barrels of water from the first Bone
4 Spring Sand and the Second Bone Spring Sand.

5 The Abo Hay "C" Federal, also in Section
6 13 produced 638 barrels of oil and 1025 barrels of water in
7 the First Bone Spring Sand.

8 Although the three wells were unecono-
9 mic, they do constitute oil and gas shows from thinner and
10 more argillaceous sands on either side of the sand thick
11 within the proposed unit outline.

12 Another reason for early abandonment of
13 these wells was the high production of water. Yates Pet-
14 roleum does have a new water disposal well, the Yates
15 Flower "AGA" No. 1, located in Section 3 of Township 26
16 South, 28 East, and we expect that we can dispose of 5000
17 barrels of water per day and we think that with much cheap-
18 er disposal of produced water in the area that that will
19 allow more extraction of the oil and gas in the area.

20 Q Ms. Bentz, identify your cross section
21 submitted as Exhibit Number Eight and review that for us,
22 please.

23 A Exhibit Number Seven -- Eight, excuse
24 me, stratigraphic cross section is located from the
25 southwest to northeast. It is hung on top of the First

1 Bone Spring Sand.

2 The cross section shows the correlation
3 of the First Bone Spring Sand in the area.

4 The yellow coloring in the gamma ray
5 column shows how the clean sands were counted for the pre-
6 vious exhibit.

7 The red coloring on the neutron density
8 log shows gas effect and red coloring on the sonic log of
9 the Gulf Eddy "FD" State Well shows the porosity in excess
10 of 10 percent.

11 Q Based on your review of this data, Ms.
12 Bentz, can you summarize for us your conclusions regarding
13 the proposed test of the Bone Spring in this area?

14 A Yes. The proposed unit is justified by
15 a thick of 80 to over 100 feet of clean First Bone Spring
16 Sands, which would constitute reservoirs, and by all the
17 oil and gas shows from the First Bone Spring Sands on
18 either side of the unit, up dip and down dip to the unit,
19 which would indicate the reservoirs contain oil and gas.

20 In addition, disposal of water will
21 allow greater amount of oil and gas to be extracted econ-
22 omically in this area, and further scattered production
23 from the Delaware Mountain Group nearby would indicate
24 possible production of oil and gas from that interval
25 within the unit, also.

1 Q Ms. Bentz, in your opinion will the ap-
2 proval of this application be in the interest of conser-
3 vation, the prevention of waste and the protection of cor-
4 relative rights?

5 A Yes, it will.

6 MR. DICKERSON: Mr. Catanach,
7 move admission of Yates' Exhibits Six, Seven and Eight and
8 this concludes our case in this matter.

9 MR. CATANACH: Exhibits Six,
10 Seven and Eight will be admitted as evidence.

11

12 CROSS EXAMINATION

13 BY MR. CATANACH:

14 Q Ms. Bentz, what's the closest commer-
15 cial producing Bone Springs, Bone Spring well in this area,
16 do you know?

17 A I can't tell you exactly, but it would
18 probably be at least 20 miles, or quite a ways from it.

19 MR. CATANACH: Any other ques-
20 tions of this witness?

21 MR. STOCKTON: Yes, sir.

22

23 QUESTIONS BY MR. STOCKTON:

24 Q Ms. Bentz, that salt water disposal
25 well, which formation is that?

1 A It's going to be in the Bell Canyon, I
2 believe. It's going to be in the Delaware Group, Delaware
3 Sandstone Group.

4 Q In this area do you anticipate having to
5 dispose of water under pressure into that formation?

6 A I am not familiar with the salt water
7 disposal well. I assume that it has been approved.

8 MR. DICKERSON: The OCD, in
9 approving that well, will have regulated to some extent and
10 monitored any injection pressure required, Mr. Stockton.

11 MR. STOCKTON: No further
12 questions.

13 MR. CATANACH: The witness may
14 be excused.

15 Is there anything further in
16 this case?

17 MR. DICKERSON: No, sir.

18 MR. CATANACH: This case will
19 be taken under advisement.

20

21 (Hearing concluded.)

22

23

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. 9055,
heard by me on April 26 1989.
David R. Catamula, Examiner
Oil Conservation Division