

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

6
7 10 April 1985

8 COMMISSION HEARING

9 IN THE MATTER OF:

10 Application of Yates Petroleum Corpora- CASE
11 tion for amendment of Order No. R-7770, 8553
12 Lea County, New Mexico.

13 BEFORE: Gilbert P. Quintana, Examiner

14 TRANSCRIPT OF HEARING

15 A P P E A R A N C E S

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18 For the Oil Conservation Division: Jeff Taylor
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22 For the Applicant: Chad Dickerson
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I N D E X

RODNEY THOMPSON

Direct Examination by Mr. Dickerson 6

E X H I B I T S

Yates Exhibit One, Plat 8
Yates Exhibit Two, Cross Section 9
Yates Exhibit Three, Structure Map 10
Yates Exhibit Four, Production Map 11
Yates Exhibit Five, Structure Map 11

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3 MR. QUINTANA: We'll call next
4 Case 8553.

5 MR. TAYLOR: Application of
6 Yates Petroleum Corporation for amendment of Order Number R-
7 7770, Lea County, New Mexico.

8 MR. DICKERSON: Mr. Examiner,
9 I'm Chad Dickerson of Artesia, New Mexico, on behalf of the
10 applicant and we have one witness to be sworn.

11 MR. QUINTANA: Are there other
12 appearances in Case 8553?

13 If not, sir, would you please
14 remain standing and you will be sworn in at this time.

15 (Witness sworn.)

16 MR. DICKERSON: Mr. Examiner,
17 as a preliminary matter I might summarize the background of
18 this case.

19 In Case 8372, by Order No. R-
20 7770, Harvey E. Yates Company was appointed operator and
21 certain unleased mineral interests in the north half, Sec-
22 tion 24, Township 14 South, Range 35 East, Lea County, New
23 Mexico, were subjected to compulsory pooling.

24 The evidence in that case was
25 limited to the applicant's proposed gas spacing unit in the
Austin-Mississippian formation and the order entered pooled

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2 all interest from the top of the Wolfcamp through the base
3 of the Mississippian formation to form a standard 320-acre
4 gas well spacing unit.

5 At the present time Yates Pet-
6 roleum Corporation requests that it be substituted in place
7 of Harvey E. Yates Company as operator of the initial test
8 well, which is currently drilling at an approximate depth
9 now of 12,000, toward a total depth of about 13,300 feet.

10 In addition to the substitution
11 of Yates Petroleum Corporation as operator, the applicant
12 now believes that there are possibilities of oil production
13 being established by the drilling well, which would be on
14 standard 40-acre spacing.

15 By this amended application the
16 applicant has requested that any possible oil zones on 40-
17 acre spacing be subjected to compulsory pooling, as well.
18 For this purpose we would ask that the amended order not be
19 limited in depth, that it cover from the surface to the base
20 of any oil production, which is encountered in this.

21 In addition, the parties to be
22 pooled, as the record will reflect, in Case 8372, are the
23 same parties throughout the north half of Section 24.

24 Those parties are unleased min-
25 eral owners with approximately 12-1/2 percent of the known
interest in the north half of Section 24, and they have not
been able, the applicant and Harvey E. Yates Company, its
predecessor, has not been able to locate any of these par-

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2 ties although extensive correspondence and attempts to con-
3 tact the parties was made, as reflected by the record in
4 Case 8372.

5 Since the identity and the in-
6 terest of these parties is uniform throughout the north half
7 of the section, and in the event that the applicant does
8 successfully establish oil production, the applicant further
9 requests that in order to avoid the necessity of seven addi-
10 tional hearings on the exact same facts, that the Division
11 enter the amended order authorizing the applicant under a
12 Division-approved continuous drilling program, which our
13 witness will recommend, to continuously develop the entire
14 north half of Section 24 within some set period of time, and
15 during that period of time to keep the Division informed of
16 the status of that development program, and upon abandonment
17 or cessation of that development program to so advise the
18 Division so that the current status of the order will be re-
19 flected by your records.

20 MR. QUINTANA: Mr. Dickerson,
21 that was Order No. R-what?

22 MR. DICKERSON: 7770.

23 MR. QUINTANA: And you also
24 want to reflect a change from Harvey E. Yates to Yates Pet-
25 roleum?

MR. DICKERSON: Yes, sir.

And I might at this time point
out, Mr. Examiner, that the advertisement in this case was

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2 limited from the top of the Wolfcamp to the base of the Mis-
3 sissippian and that spoke only of the standard gas spacing
4 and proration unit, and it may not be clear as to the oil
5 units which the applicant is requesting to be pooled, but
6 the order is requested to include all possible zones, even
7 though they may be above the top of the Wolfcamp, and if in
8 your opinion, a readvertisement in this case is necessary in
9 order to properly reflect that fact, it may be clear from
10 the advertisement as written, but if not, we point it out
11 and ask that the Division readvertise this case.

12 MR. QUINTANA: Thank you, Mr.
13 Dickerson.

14 You may proceed.

15 RODNEY THOMPSON,

16 being called as a witness and being duly sworn upon his
17 oath, testified as follows, to-wit:

18 DIRECT EXAMINATION

19 BY MR. DICKERSON:

20 Q Mr. Thompson, will you state your name,
21 your occupation, and by whom you're employed?

22 A My name is Rodney Thompson. I am an
23 exploration geologist for Harvey E. Yates Company, and I'm
24 appearing on behalf of Yates Petroleum Corporation.

25 Q Mr. Thompson, have you previously
testified before this Division and are your credentials a

1
2 matter of record.

3 A Yes, I have, and yes, they are.

4 Q And are you familiar with the application
5 filed in Case 8553?

6 A Yes, I am.

7 MR. DICKERSON: Is the witness
8 qualified, Mr. Examiner?

9 MR. QUINTANA: He's considered
10 qualified.

11 Q Mr. Thompson, would you briefly summarize
12 the purpose of Yates' application in Case 8553?

13 A Yes. This is the application of Yates
14 Petroleum Corporation for the amendment of Order No. R-7770,
15 Lea County, New Mexico.

16 The applicant seeks the amendment of Di-
17 vision Order No. R-7770, which authorized compulsory pooling
18 underlying the north half of Section 24 of Township 14
19 South, Range 35 East, to change the operator from Harvey E.
20 Yates Company to Yates Petroleum Corporation and to pool all
21 formations from the surface to the base of the Mississippian
22 formation and to form a standard gas spacing and proration
23 unit, or, should oil be encountered, eight standard spacing
24 and proration units, and to be developed under a Division
25 order approved for continuous development program.

26 Q Mr. Thompson, what is the purpose of your
27 testimony?

28 A The purpose of my testimony is first to

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2 discuss the geological factors regarding possible oil pro-
3 ducing zones expected to be encountered in the north half of
4 Section 24, and secondly, I'll recommend to the Examiner a
5 proposed continuous development program to be conducted un-
6 der all or part of the north half of Section 24 as to any
7 oil production established.

8 As stated by Mr. Dickerson, the situation
9 is identical throughout the north half of Section 24 as far
10 as the identities of the parties sought to be force pooled
11 are concerned, which was originally stated in R-7770, and
12 the operator wishes to have the opportunity to develop the
13 entire acreage on 40-acre spacing proration units in the
14 event of oil production without the necessity of eight
15 separate hearings.

16 Q Mr. Thompson, please refer to what we
17 have marked Exhibit Number One and tell the Examiner what
18 that shows.

19 A Mr. Examiner, Exhibit Number One is a
20 land plat showing the working interest unit that we have
21 formed involving a section and a half in Lea County, and our
22 proposed location, which is now presently drilling, 1980
23 form the north and east line of Section 24.

24 Q And your well location is indicated by
25 the arrow, is it not?

A Yes, it is.

Q Refer the Examiner to what you have
marked as Exhibit Number Two and tell him what you show on

1 that document.

2 A Mr. Examiner, Exhibit Number Two is a
3 structural cross section which shows our four possible po-
4 tential pay zones in the area.

5 I'd like to refer you to the plat on the
6 base of the cross section showing our presently, currently
7 drilling well in the northeast quarter of Section 24.

8 The cross section is west to east and in-
9 volves two wells that have recently or in the past been pro-
10 duced out of the -- out of two of these four zones that are
11 potential pay zones.

12 This, the datum here is hung a structural
13 datum and our four zones of interest are the McDonald pay
14 zone, which has produced in the Cherry Brothers well in Sec-
15 tion 19 of 14 South, Range 36 East.

16 This well has been plugged and abandoned
17 after producing 63,000 barrels of oil out of the McDonald
18 pay zone. It's the only well in the immediate area that has
19 been produced out of this zone.

20 There's a field called the McDonald Penn
21 that has produced out of two wells about five miles north-
22 east of our -- our currently -- our current drilling well in
23 Section 24.

24 The next zone of interest is a dolomite
25 zone which is labeled top of dolomite on the cross section.
That interval has produced in -- in one Richardson well that
is present off of the plat, four miles northeast of our pro-

1 posed location.
2

3 The other two zones are within the basal
4 Cisco pay zone that have had shows of oil or gas in the
5 immediate area, and are also potential pays.

6 One well has recently been completed in
7 this basal Cisco zone, the Adobe State 16-1, which is in
8 Section 16, the last well on the cross section, in the
9 southeast quarter of the southeast quarter.

10 This well has recently been recompleted
11 by Adobe Oil and Gas for 53 barrels of oil and 58 barrels of
12 water.

13 Q Do you have anything further as concerns
14 Exhibit Number Two, Mr. Thompson?

15 A No, sir.

16 Q Okay, refer the Examiner to your map
17 labeled Exhibit Number Three, and describe what you have
18 shown on Exhibit Number Three.

19 A Exhibit Number Three is a structure map
20 that's contoured on the top of the McDonald pay zone that
21 was shown on the -- as the first potential pay in the Wolf-
22 camp zone on the cross section.

23 We feel that this zone has good potential
24 in the area, being the Cherry Brothers well in Section 19 of
25 14 South, 36 East, was completed in this zone. We feel like
we'll be in a good structural position in the north half of
Section 24 to encounter possible pay in that zone.

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2 Again, the Cherry Brothers well, I might
3 go into Exhibit Number Four at the same time, here, which
4 shows the production, the ultimate cumulative production in
5 Section 19 of this Cherry Brothers well, which is 63,100
6 barrels of oil and 32,000,000 cubic feet of gas. That is
7 listed on the -- on the production, cumulative production
8 map of Exhibit Number Four, the only well in the immediate
9 area that has produced out of what we call the Permo-Penn,
10 which combines the Wolfcamp and the Upper Pennsylvanian.

11 Q Refer to Exhibit Number Five, Mr. Thompson,
12 and tell us what that shows.

13 A Mr. Examiner, Exhibit Number Five is a --
14 also a structure map contoured on the top of the basal Cisco
15 zone labeled on the cross section, Exhibit Number Two.

16 This zone has been recently completed in
17 the Adobe No. 1 State 16 in Section 16 of 14 South, 36 East.

18 We feel that this zone in the north half
19 of Section 24 has potential to produce oil and would also
20 like to include that in our discussion.

21 There is also a facies change here on
22 this map which runs northeast/southwest. The facies change
23 is from a limestone and shale facies in the Upper Pennsyl-
24 vanian and which changes to the northwest into a clean dolo-
25 mite facies with low permeability.

26 We feel a structural and stratigraphic
27 combination type trap is present in the -- in a portion of
28 the north half of Section 24.

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2 Q Mr. Thompson, were Exhibits One through
3 Five prepared by you or under your direction and supervi-
4 sion?

5 A Yes, they were prepared by me.

6 MR. DICKERSON: Mr. Examiner,
7 applicant moves admission of its Exhibits One through Five
8 at this time.

9 MR. QUINTANA: Exhibits One
10 through Five will be entered as evidence.

11 Q Mr. Thompson, do any oil producing zones
12 exist above the top of the Wolfcamp which the operator re-
13 quests to be subjecting to pooling in this case, as well?

14 A In the immediate area, I mean within like
15 ten miles, so far there's been no completions in the Permian
16 or -- or any interval from the surface to Wolfcamp, but we
17 do propose that -- that we include surface to base of the
18 Mississippian in this hearing in case in the future some
19 possible zone would -- would come into play.

20 Q Mr. Thompson, in the order entered in the
21 original case, Order R-7770, a 200 percent risk penalty was
22 imposed upon the Austin-Mississippian formation, which was
23 subjected to pooling for a 320-acre gas spacing and prora-
24 tion unit.

25 Will you discuss the factors which bear
on the risk to be imposed if any oil producing zone is en-
countered in the north half of Section 24?

A Mr. Examiner, I would request that we

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2 propose a 200 percent maximum penalty and a risk factor in
3 the case, the same as we did in our Order R-7770.

4 I feel like the risk factor involved in
5 the Permo-Penn is even much greater than what it was in our
6 Mississippian-Austin zone, we call it, in our earlier hear-
7 ing.

8 The Mississippian-Austin again was our
9 major objective for the prospect.

10 Q In your opinion, as far as the risk for
11 the oil producing zones is concerned, and related to the re-
12 lative risk, as compared to that in the Austin-Mississippian
13 gas zone, in your opinion would the -- any proposed wells
14 have been drilled based on present information in the ab-
15 sence of that possible gas zone, which has been the subject
16 in the previous case?

17 A I can only speak for Harvey Yates Company
18 and Yates Petroleum Corporation in this -- in this question,
19 Mr. Dickerson, but I feel like our company would not have
20 drilled a well on itself through the Permo-Pennsylvanian
21 with the type of production that has been gathered as his-
22 torical data in the area. We -- we would drill to the Aus-
23 tin-Mississippian as our primary objective, and without that
24 type of prospect, I don't feel we would, with the risk fac-
25 tor involved, we would drill a well on its own.

23 Q Would it be --

24 A To the Permo-Penn.

25 MR. QUINTANA: Bear with me

1 just a moment.
2

3 (Thereupon a short recess was taken.)
4

5 MR. QUINTANA: You may proceed.

6 Q To summarize your testimony with respect
7 to the risk in the oil zones, Mr. Thompson, would it be fair
8 to say that the oil zones are looked upon, possibly, as sal-
9 vage zones and the Mississippian-Austin is the principle ob-
10 jective in the well?

11 A That would be correct, yes.

12 Q What is the present status of the well
13 currently drilling?

14 A Mr. Examiner, our currently drilling well
15 is called the Woodward ABD No. 1 under Yates Petroleum Cor-
16 poration as operator, and we're presently at a total depth
17 11,850 feet, precisely.

18 We've drilled through the Wolfcamp and
19 Upper Pennsylvanian and are presently in the Strawn forma-
20 tion and so far in the well we really had some slim encour-
21 agement on -- as far as a producing well in the Wolfcamp and
22 Pennsylvanian; however, we have had some encouragement that
23 the north half of Section 24 has a possibility of potential
24 production.

25 For example, our first drilling break
with a show in the samples and a slight gas increase, came
in the Wolfcamp McDonald pay zone. Now, we did not test the

1 zone. We felt that the type of drilling break we had and
2 the show we had was a little on the nonpermeable side to run
3 a DST.

4 Now we need to further evaluated the zone
5 with electric logs to help us decide on coming back to that
6 zone for future completion, but right now, just from the in-
7 formation we have, it looks like it would be a marginal type
8 well, if anything.

9 Our first drill stem test came at 11,229
10 feet to 11,308 in the basal Cisco zone and we did recover
11 1,381 feet of gas-cut distillate, 659 feet of sulphur water,
12 155 feet of sulphur water-cut drilling fluid. Total fluid
13 recovery was 2,195 feet; however, our pressure indication
14 showed that on this zone there was a 239 pound pressure
15 drop, so right now it looks like it's probably a limited re-
servoir.

16 We may find some better production in
17 that zone in the north half of Section 24, but in this cur-
18 rently drilling well, it looks rather grim.

19 And so far that's the only two zones that
20 we've had an indication of show and possible potential in.

21 Q Mr. Thompson, what type of continuous
22 development program does the operator request the Division
23 to approve for development of oil production on the north
half of Section 24?

24 A Yates Petroleum requests a 120 -- 120
25 days from the completion of the first well completed in one

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2 of these oil, possible oil zones, to the commencement of the
3 next well, the entire program to be accomplished within
4 three years.

5 Q So that if the program were not accom-
6 plished or had not taken place within three years from the
7 entry of the order, that the order would terminate by its
8 own terms.

9 A Yes. The operator should be required, I
10 recommend, to notify the OCD of such operations so that the
11 status of the order to be entered in this case can be moni-
12 tored by the OCD at all times.

13 MR. DICKERSON: Mr. Examiner,
14 if I did not request it, I would ask that you take adminis-
15 trative notice of the evidence in the earlier Case 8372 be-
16 cause the other factors which are necessary for your pur-
17 poses are fully contained, we think, in the evidence.

18 MR. QUINTANA: I'll take admin-
19 istrative notice of the previous evidence entered in Case
20 8372.

21 Q Mr. Thompson, in your opinion would the
22 granting of this application be in the interest of conserva-
23 tion, the prevention of waste, and the protection of corre-
24 lative rights?

25 A Yes, it would.

MR. DICKERSON: I have no fur-
ther questions of this witness, Mr. Examiner.

MR. QUINTANA: I would request

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2 that you would submit to me a written schedule of the drill-
3 ling program that you plan to invoke upon this 320 acres,
4 that you plan to drill up, and in this paper that you're
5 going to submit to me I would like to have the approximate
6 depths you plan to drill, completion techniques, and the
7 date, of course, that you plan for drilling, the whole sche-
8 dule for drilling.

8 MR. DICKERSON: The time sche-
9 dule will not be a problem, Mr. Examiner, but this is all to
10 occur in the future and the details as to the depths to be
11 drilled, and so forth, are based on factors which are not
12 known at the present time.

13 MR. QUINTANA: Estimates would
14 be fine. Estimates would be fine, so we'd have something
15 that we -- the thing I'm concerned about is, as we had
16 talked previously, should some of these people that you're
17 pooling that you haven't been able to find, for some reason
18 pop up out of nowhere in the next three years, and you were
19 drilling up 40-acre spacing proration units to hold another
20 40-acre proration unit without a well on it, I would like to
21 have something that I could show them and what approximate
22 depths that they could expect, and I would have something in
23 writing to show these people, and, like I said, it can just
24 be estimates. We realize that could be changed but I would
25 emphasize the major thing we're -- I'm concerned about now
is the timetable, but I ask these other things be thrown in
just as estimates.

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2 It doesn't have -- you don't have to go
3 into great detail in this; just put that.

4 MR. DICKERSON: Okay.

5 MR. QUINTANA: Whatever you
6 like.

7 It's possible that we may have
8 to readvertise this case to reflect a pooling from the sur-
9 face all the way down to the base of the Mississippian and
10 the current advertisement did not reflect that, so we will
11 have to readvertise this case.

12 Is there anything, any other
13 questions of the witness?

14 MR. DICKERSON: No, Mr. Exami-
15 ner.

16 MR. QUINTANA: Is there any-
17 thing further in Case 8553?

18 If not, the Case 8553 will be
19 taken under advisement.

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(Hearing concluded.)

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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 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. 8553 heard by me on APRIL 10 1985.

Gilbert P. Quintana Examiner
Oil Conservation Division