

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

IN THE MATTER OF THE HEARING CALLED BY)
THE OIL CONSERVATION DIVISION FOR THE)
PURPOSE OF CONSIDERING:) CASE NO. 12,373
)
APPLICATION OF YATES PETROLEUM)
CORPORATION FOR AN UNORTHODOX GAS)
WELL LOCATION, LEA COUNTY, NEW MEXICO) ORIGINAL
)

REPORTER'S TRANSCRIPT OF PROCEEDINGS

EXAMINER HEARING

BEFORE: MARK ASHLEY, Hearing Examiner

April 20th, 2000

Santa Fe, New Mexico

This matter came on for hearing before the New Mexico Oil Conservation Division, MARK ASHLEY, Hearing Examiner, on Thursday, April 20th, 2000, at the New Mexico Energy, Minerals and Natural Resources Department, Porter Hall, 2040 South Pacheco, Santa Fe, New Mexico, Steven T. Brenner, Certified Court Reporter No. 7 for the State of New Mexico.

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OIL CONSERVATION DIVISION

I N D E X

April 20th, 2000
 Examiner Hearing
 CASE NO. 12,373

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* * *

A P P E A R A N C E S

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FOR THE APPLICANT:

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 By: WILLIAM F. CARR

* * *

1 WHEREUPON, the following proceedings were had at
2 11:57 a.m.:

3 EXAMINER ASHLEY: At this time the Division calls
4 Case 12,373.

5 MS. HEBERT: Application of Yates Petroleum
6 Corporation for an unorthodox gas well location, Lea
7 County, New Mexico.

8 EXAMINER ASHLEY: Call for appearances.

9 MR. CARR: May it please the Examiner, my name is
10 William F. Carr with the Santa Fe law firm Campbell, Carr,
11 Berge and Sheridan.

12 We represent Yates Petroleum Corporation in this
13 matter, and I have two witnesses.

14 EXAMINER ASHLEY: Call for additional
15 appearances?

16 Will the witness please rise to be sworn?

17 (Thereupon, the witnesses were sworn.)

18 CHARLES MORAN,

19 the witness herein, after having been first duly sworn upon
20 his oath, was examined and testified as follows:

21 DIRECT EXAMINATION

22 BY MR. CARR:

23 Q. Would you state your name for the record, please?

24 A. My name is Charles Moran.

25 Q. Mr. Moran, where do you reside?

1 A. I reside in Artesia, New Mexico.

2 Q. And by whom were you employed?

3 A. Yates Petroleum Corporation.

4 Q. What is your position with Yates Petroleum
5 Corporation?

6 A. I'm a landman.

7 Q. Mr. Moran, have you previously testified before
8 this Division?

9 A. Yes, I have.

10 Q. At the time of that testimony, were your
11 credentials as an expert in petroleum land matters accepted
12 and made a matter of record?

13 A. Yes, they were.

14 Q. Are you familiar with the Application filed in
15 this case?

16 A. Yes, I am familiar with the Application in this
17 case.

18 Q. Are you familiar with the status of the lands in
19 the subject area?

20 A. I am familiar with the lands in the subject area.

21 MR. CARR: Mr. Ashley, we tender Mr. Moran as an
22 expert witness in petroleum land matters.

23 EXAMINER ASHLEY: Mr. Moran is so qualified.

24 Q. (By Mr. Carr) Would you briefly state what it is
25 that Yates seeks with this Application?

1 A. Yates Petroleum Corporation is seeking approval
2 to re-enter and drill our proposed Caprock "AVD" State
3 Number 1 well, which is at an unorthodox location because
4 of the spacing rules, or the setbacks required by the
5 general spacing rules.

6 Q. You propose to drill this well to what
7 formations?

8 A. We propose to drill this well down to the top of
9 the Mississippian formation, through the Morrow formation.

10 Q. And what is the footage location for this well?

11 A. The footage location is 660 from the north line
12 and 510 feet from the east line, making it 150 feet
13 unorthodox towards the east line.

14 Q. And what portion of Section 13 will be dedicated
15 to the well?

16 A. We intend to dedicate the east half of the
17 section of the unit, 320-acre spacing unit.

18 Q. What is the primary objective in the well?

19 A. The primary objective is the Morrow.

20 Q. And in what pool will this well be located, if
21 you complete in the Morrow?

22 A. Let me back up and state, that's the Atoka-
23 Morrow, and it will be the North Bagley-Permo-Penn-
24 Pennsylvanian Pool.

25 Q. Now, if you, in fact, drill the well down into

1 the top of the Mississippian, would it be in an established
2 Mississippian pool?

3 A. Yes, it will be in the undesignated East Caprock-
4 Mississippian Pool.

5 Q. Have special pool rules been adopted for either
6 of these pools?

7 A. No, they have not.

8 Q. They're governed by the statewide rules?

9 A. They're governed by Rule 104.C.(2)(a), which
10 provides for a 320-acre spacing, with wells located no
11 closer than 660 feet from the outer boundary of the quarter
12 sections upon which the well is to be drilled.

13 Q. Are there secondary objectives other than the
14 Atoka-Morrow, perhaps the Mississippian?

15 A. No other secondary objectives, other than the
16 Atoka-Morrow and the Mississippian.

17 Q. You've stated that you're here because the
18 existing wellbore is 150 feet too close to the east line?

19 A. Yes.

20 Q. What is the name of the well you're going to be
21 re-entering?

22 A. It is the Read and Stevens Number 1 State "F"
23 well.

24 Q. The purpose for using that wellbore, instead of
25 drilling a new well, is what?

1 A. The wellbore will allow us to economically go in
2 and test and see if we can find the Morrow formation and
3 possibly the Mississippian.

4 Q. And you will review the economic considerations
5 in a few moments?

6 A. Yes.

7 Q. Have you prepared exhibits for presentation here
8 today?

9 A. I have had three exhibits prepared.

10 Q. Mr. Moran, let's go to Yates Exhibit Number 1.
11 Briefly identify that and just explain what it shows.

12 A. Exhibit Number 1 is a plat of the lands in that
13 area with our subject lease highlighted in yellow, with the
14 red line surrounding -- designating the proposed spacing in
15 the east half of Section 13, Township 11 South, Range 32
16 East.

17 Q. This well is unorthodox toward the east, so what
18 tracts are affected by the unorthodox location.

19 A. The unorthodox location affects, immediately to
20 the east, Section 18, 11 South, 33 East, the north half or
21 a west-half spacing, depending on what the spacing would
22 be.

23 Q. What other acreage is affected?

24 A. And also it would affect Section 7, possibly, to
25 the north of Section 18, and there it would be a south-half

1 spacing unit or a west-half spacing unit in Section 7.

2 Q. In determining the parties to whom notice should
3 be given in Section 7 and Section 18, you have notified all
4 parties in the spacing units that you've identified, so
5 that whether they are developed on standup or laydown
6 units, all interest owners have been notified of the
7 Application?

8 A. We have notified the leasees of record as to
9 which that would be affected by the spacing units.

10 Q. Is Exhibit Number 2 an affidavit confirming that
11 notice of this Application has been provided to those
12 individuals in accordance with Oil Conservation Division
13 rules and regulations?

14 A. Yes, Affidavit Number 2 is an affidavit providing
15 notice to the leasees of record for this proposed
16 Application.

17 Q. Attached to that affidavit is a list identifying
18 the parties by tract that have received -- or to whom you
19 have provided notice, and behind that you have attached
20 copies of the return receipts confirming that the notice
21 has been provided by certified mail --

22 A. Correct.

23 Q. -- is that right?

24 A. That is correct.

25 Q. Are there unleased state tracts in either of the

1 sections affected by this Application?

2 A. Yes, there are unleased state lands in Section 7
3 that would be affected by this Application.

4 Q. And how are you handling the notice on these
5 tracts?

6 A. Through clerical error, the State Land Office was
7 not noticed. We have corrected that, contacted the State
8 Land Office, have received an oral waiver to the notice and
9 plan to have a written notice develop shortly.

10 Q. Is it possible we'll receive the waiver today?

11 A. I plan to go get the waiver this afternoon.

12 Q. And we will file that with the Oil Conservation
13 Division on receipt?

14 A. Yes, yes.

15 Q. Let's go now to what has been marked as Yates
16 Exhibit Number 3. First, identify what it is.

17 A. Exhibit 3 consists of three AFEs. The AFE on the
18 first page is the AFE we propose to drill the well under.
19 This is to re-enter the well at the unorthodox location and
20 drill to the top of the Mississippian formation. And the
21 total cost of that proposed operation is \$663,000.

22 The second AFE is an AFE to sidetrack out of the
23 existing wellbore to a legal location for the proposed
24 well. The cost of that well is -- proposed operations,
25 \$840,000, approximately \$180,000 more than re-entering at

1 the existing location.

2 And the third AFE is an AFE to drill a brand-new
3 well from top to bottom at a legal location, with its cost
4 being estimated to be \$887,500, which is almost \$200,000
5 more than it would be to re-enter the wellbores that exist
6 today.

7 Q. Compare the AFE for the re-entry with the AFE for
8 a directional well.

9 A. The directional -- The difference would be almost
10 \$180,000. It's about \$177,000 difference in total cost to
11 complete the well, the directional well being the more
12 expensive well, which would cause us potentially not to do
13 this -- undertake this operation.

14 Q. In fact, what we're trying to do is minimize the
15 cost of going at this particular location to test these
16 deeper horizons; is that not correct?

17 A. That is correct.

18 Q. And Yates will call a geological witness who will
19 be able to explain the nature of the risk involved?

20 A. Yes, we will.

21 Q. When you compare the AFE for the proposed
22 completion and a new well, what did you say the additional
23 cost would be?

24 A. It's approximately \$200,000, the difference
25 between \$663,000 and \$887,500.

1 Q. Those additional costs could, again, preclude the
2 well?

3 A. Yes, it's more expensive to drill the new well
4 than to even sidetrack. It's additional cost that would
5 cause us to potentially not go down and complete this and
6 may cause waste of the reserves.

7 Q. If no well is drilled to these formations in the
8 Atoka-Morrow and the Morrow is not tested, in fact,
9 reserves could be left in the ground?

10 A. Yes, they could.

11 Q. And waste would result?

12 A. Yes.

13 Q. What is the status of the lease at issue?

14 A. The lease at issue in Section 13 is set to expire
15 June 1st, and --

16 Q. Does Yates request that the order be expedited?

17 A. Yes, sir. Yes, we request expedition of the
18 order.

19 Q. Mr. Moran, were Exhibits 1 through 3 prepared by
20 you or compiled at your direction?

21 A. Exhibits 1, 2 and 3 were prepared at my
22 direction.

23 MR. CARR: Mr. Ashley, we would move the
24 admission into evidence of Yates Petroleum Corporation
25 Exhibits 1 through 3.

1 EXAMINER ASHLEY: Exhibits 1 through 3 will be
2 admitted as evidence.

3 MR. CARR: And that concludes my direct
4 examination of Mr. Moran.

5 EXAMINATION

6 BY EXAMINER ASHLEY:

7 Q. Mr. Moran, there aren't any plans to
8 directionally drill this well, are there?

9 A. No, the plan is to re-enter the existing wellbore
10 and deepen it down to the top of the Mississippian
11 formation, which would get us all the way through the
12 Atoka-Morrow.

13 The AFEs are just for representation purposes to
14 show the economic differences that will be caused by
15 nonapproval of an unorthodox location.

16 Q. Now, your lease includes the east half as well as
17 the northwest quarter --

18 A. Correct.

19 Q. -- of Section 13?

20 A. Correct.

21 Q. Did you say you -- You haven't received any
22 objections at all?

23 A. I have not received any objections that I'm aware
24 of, and I've obtained an oral waiver from the State Land
25 Office. They did not have a problem, because it's all

1 state royalty right in there.

2 EXAMINER ASHLEY: Okay, I have nothing further.
3 Thank you.

4 THE WITNESS: Thank you.

5 MR. CARR: At this time, Mr. Ashley, we call Tim
6 Miller.

7 TIM MILLER,

8 the witness herein, after having been first duly sworn upon
9 his oath, was examined and testified as follows:

10 DIRECT EXAMINATION

11 BY MR. CARR:

12 Q. Would you state your name for the record, please?

13 A. My name is Tim Miller.

14 Q. Mr. Miller, where do you reside?

15 A. Carlsbad, New Mexico.

16 Q. By whom are you employed?

17 A. Yates Petroleum Corporation.

18 Q. And what s your current position with Yates?

19 A. Petroleum geologist.

20 Q. Mr. Miller, have you previously testified before
21 this Division?

22 A. Yes, I have.

23 Q. At the time of that testimony, were your
24 credentials as an expert in petroleum geology accepted and
25 made a matter of record?

1 A. Yes, they were.

2 Q. Are you familiar with the Application filed in
3 this case on behalf of Yates?

4 A. Yes, I am.

5 Q. Have you made a geological study of the area
6 which is the subject of the Application?

7 A. Yes, I have.

8 Q. And are you prepared to share the results of your
9 work with the Division?

10 A. Yes, I am.

11 MR. CARR: Are the witness's qualifications
12 acceptable?

13 EXAMINER ASHLEY: They are.

14 Q. (By Mr. Carr) Mr. Miller, let's go to what has
15 been marked as your Exhibit Number 4, and I'd ask you to
16 first identify that and then review it for the Examiner.

17 A. Okay, Exhibit Number 4 is a gross isopach map
18 between the top of the Atoka formation down to the top of
19 the Mississippian. As you see on the plat, our proposed
20 location is there in the center of the plat on Section 13
21 in the northeast quarter. That is the one we would like to
22 re-enter and deepen, down to the top of the Mississippian.

23 What this map basically shows is the thick and
24 the thin of -- from the top of the Atoka down to the top of
25 the Mississippian.

1 On the left side or to the southwest of the
2 proposed location, you see a thin. That corresponds, which
3 I show in our next exhibit, to a structural high.

4 On the right side, over there where you have the
5 end of the cross-sections in Section 8, that's another
6 start of a thin. That's -- You're coming up on a
7 structural high.

8 What this says is that on the structural high
9 positions, geologically speaking, you have thinner Atoka-
10 to-Morrow gross thickness, and down in the lower areas you
11 have the thicker deposits from the Atoka, the Morrow sands
12 and shales.

13 Q. All right, let's go to your next exhibit.

14 A. Next exhibit, Exhibit 5, is a structure map on
15 top of the Mississippian, and this basically shows what
16 I've just alluded to in Exhibit 4 on the gross isopach map,
17 where the thick and thins are located.

18 Again on the left side of the map is, you have a
19 structural high down towards the south, and our proposed
20 location would be in the structural low. There is a fault
21 running basically from the northeast to the southwest.
22 This well is on the downthrown side of the fault, which
23 makes it lower structurally, which will hopefully enable us
24 to hit thicker sections, hopefully, of the Atoka-Morrow
25 sand deposition.

1 Then as you move towards the right, you're coming
2 back up on what basically is known as the Bagley structure,
3 a deep Devonian structure. And once again, our Atoka-
4 Morrow, as I alluded to in the first exhibit, or Exhibit 4,
5 is thinner on this -- on top of the section.

6 Q. Mr. Miller, if we took this well and we moved it
7 back to the west to a standard location, is that a possible
8 alternative?

9 A. No, it would not, because that would either put
10 us right on the fault or put us higher structurally, which
11 we would -- in our process of wildcatting for these Atoka-
12 Morrow sections, we feel that in the structural lows it
13 just better enables us to find, hopefully, more deposits of
14 Atoka-Morrow sands.

15 Q. And that would also apply concerning a standard
16 location to the south? As you move to the south, in fact,
17 you come out of the structural low and, in fact, could
18 drill a well at a location that wouldn't be able to
19 effectively drain the reservoir under this acreage; is that
20 correct?

21 A. That's correct. As you would move south, you
22 would be coming further updip and you would possibly be
23 losing more of your potential for encountering thicker
24 deposits of Atoka-Morrow sands.

25 Q. Mr. Miller, let's go to the cross-section, Yates

1 Exhibit Number 6, and I'd ask you to review that for Mr.
2 Ashley.

3 A. Okay, the cross-section is a stratigraphic cross-
4 section hung on top of the Atoka, and it basically shows
5 what the gross isopach map is, which is Exhibit 4, and it
6 starts A to A', which you go from the west to the east, or
7 otherwise on the cross-section from left to right, as we
8 can see, the first well, called the Lawton Oil Corporation
9 State Number 1 in Section 11 of 11 South, 32 East, has 458
10 feet of gross thickness from the top of the Atoka down to
11 the Mississippian.

12 As you go to the second well in the cross-
13 section, which is the Amerada Hess well, the Number 1
14 Crowley, you have a thinning, because basically you are
15 starting to come up a structure, so the Atoka-Morrow
16 section thins. As you can see, you have better sands. The
17 four intervals colored in yellow are sand intervals. As
18 you come up again on the Amerada Hess you're losing some of
19 those, you basically have one sand interval.

20 The third well in the cross-section, or the
21 center well, is again our proposed location to re-enter the
22 Read and Stevens well. I, by my gross isopach map, have
23 figured 515-plus feet from top of Atoka to the top of the
24 Mississippian interval, and hopefully we will have better
25 chances of encountering possibly more Atoka-Morrow sands.

1 As you move to the east you're again coming
2 upstructure, as in the Major Giebel Forst Champlin State
3 Number 1. You have two Atoka-Morrow sands and a gross
4 thickness of the interval of 398 feet.

5 Then as you end with our well, Yates Petroleum
6 Corporation Number 1 Quetzal, you're again -- you're
7 thinning, you have 343 feet of gross thickness. You have
8 two sands in both the MGF Champlin State, and Yates
9 Petroleum's Number 1 Quetzal, we feel that the re-entry of
10 the Read and Stevens is in the lowest part of the structure
11 and has our greatest chance of encountering several Atoka-
12 Morrow sands.

13 Q. Mr. Miller, is there risk associated with this
14 re-entry?

15 A. There is some, but we hope by drilling -- by
16 deepening this well, we will lessen some of the risk,
17 enhancing our position to encounter several sands, the
18 Atoka-Morrow.

19 Q. And there's always a risk associated with an
20 Atoka-Morrow?

21 A. Yes, it is.

22 Q. Being able to use this well makes it economically
23 desirable to go ahead and attempt to complete at this
24 location in those zones?

25 A. Yes, it does.

1 Q. In your opinion, will granting of this
2 Application and the drilling of the proposed well be in the
3 best interest of conservation and the prevention of waste
4 and the protection of correlative rights?

5 A. Yes, it will.

6 Q. Were Exhibits 4 through 6 either prepared by you
7 or compiled at your direction?

8 A. Yes, they were.

9 MR. CARR: May it please the Examiner, at this
10 time we would move the admission into evidence of Yates
11 Petroleum Corporation Exhibits 4 through 6.

12 EXAMINER ASHLEY: Exhibits 4 through 6 will be
13 admitted as evidence.

14 MR. CARR: That concludes my examination of this
15 witness.

16 EXAMINATION

17 BY EXAMINER ASHLEY:

18 Q. Mr. Miller, what's the closest Atoka-Morrow
19 Mississippian production to this well?

20 A. The closest is over there on our well, on the far
21 east, at the end of the cross-section, the Yates Petroleum
22 Quetzal well. We are producing out of that lowermost
23 Morrow sand that sits about 30 or 40 feet on top of the
24 Mississippian.

25 Q. And down in the southeast portion of -- excuse

1 me, southwest portion of Exhibit 4 , what have these wells
2 produced from in the past?

3 A. These are basically Devonian wells, Devonian oil
4 wells.

5 EXAMINER ASHLEY: Okay. I have nothing further,
6 thank you.

7 THE WITNESS: Thank you.

8 MR. CARR: May it please the Examiner, as we all
9 know, at the end of August, 1999, the Division amended Rule
10 104 and made it easier for operators to drill by expanding
11 the standard windows for development of spacing units in
12 this part of New Mexico.

13 Coming with that, the Division also has placed a
14 higher burden on an operator who comes before you seeking
15 an unorthodox location.

16 I would submit that in this case Yates has met
17 that obligation. As the evidence shows, this case involves
18 the re-entry of an older well. Not only do we need to use
19 the wellbore at this location for economic reasons, but we
20 also, I submit, have shown that there really is no
21 alternative acceptable standard location in the spacing
22 unit.

23 If we were to move to a standard location, we
24 would either be, if we moved to the west, on top of or on
25 the wrong side of a fault; if we moved to a standard

1 location to the south, we go into a shallower portion of
2 the reservoir where we wouldn't be able to encounter the
3 sand thicknesses necessary to have a shot at a successful
4 well.

5 Furthermore, I would emphasize that Yates isn't
6 planning to drill additional -- or doesn't contemplate
7 developing with this well shallower horizons. But even if
8 we did use this wellbore to complete uphole in a shallower
9 horizon, we would be at a standard location in those
10 shallower zones.

11 We submit that we have met the standards, even
12 the post-amendment Rule 104 standards, and we would request
13 that the order be entered and be expedited because of the
14 June 1, 2000, lease expiration.

15 That's all we have.

16 EXAMINER ASHLEY: Okay, thank you. There being
17 nothing further in this case, Case 12,373 will be taken
18 under advisement.

19 (Thereupon, these proceedings were concluded at
20 12:18 p.m.)

21 * * *

22

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CERTIFICATE OF REPORTER

STATE OF NEW MEXICO)
) ss.
 COUNTY OF SANTA FE)

I, Steven T. Brenner, Certified Court Reporter and Notary Public, HEREBY CERTIFY that the foregoing transcript of proceedings before the Oil Conservation Division was reported by me; that I transcribed my notes; and that the foregoing is a true and accurate record of the proceedings.

I FURTHER CERTIFY that I am not a relative or employee of any of the parties or attorneys involved in this matter and that I have no personal interest in the final disposition of this matter.

WITNESS MY HAND AND SEAL May 3rd, 2000.



STEVEN T. BRENNER
 CCR No. 7

My commission expires: October 14, 2002