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:

APPLICATION OF YATES PETROLEUM CORPORATION FOR AN UNORTHODOX GAS WELL LOCATION, EDDY COUNTY, NEW MEXICO ORIGINAL

REPORTER'S TRANSCRIPT OF PROCEEDINGS

EXAMINER HEARING

BEFORE: MICHAEL E. STOGNER Hearing Examiner

December 7th, 1995

DEC 9 1 1995

Santa Fe, New Mexico

Oil Conservation Division

This matter came on for hearing before the New Mexico Oil Conservation Division, MICHAEL E. STOGNER, Hearing Examiner, on Thursday, December 7th, 1995, 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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December 7th, 1995 Examiner Hearing CASE NO. 11,438

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APPEARANCES

FOR THE DIVISION:

RAND L. CARROLL Attorney at Law Legal Counsel to the Division 2040 South Pacheco Santa Fe, New Mexico 87505

FOR THE APPLICANT:

CAMPBELL, CARR & BERGE, P.A.
Suite 1 - 110 N. Guadalupe
P.O. Box 2208
Santa Fe, New Mexico 87504-2208
By: WILLIAM F. CARR

* * *

1	WHEREUPON, the following proceedings were had at
2	11:20 a.m.:
3	EXAMINER STOGNER: During the break it was
4	discussed we will go out of sequence and now call Case
5	Number 11,438 on the second page.
6	MR. CARROLL: Application of Yates Petroleum
7	Corporation for an unorthodox gas well location, Eddy
8	County, New Mexico.
9	EXAMINER STOGNER: Call for appearances.
10	MR. CARR: May it please the Examiner, my name is
11	William F. Carr with the Santa Fe law firm Campbell, Carr
12	and Berge.
13	We represent Yates Petroleum Corporation, and I
14	have two witnesses.
15	EXAMINER STOGNER: Any other appearances?
16	Will the witnesses please stand to be sworn?
17	(Thereupon, the witnesses were sworn.)
18	MECCA MAURITSEN,
19	the witness herein, after having been first duly sworn upon
20	her 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. It's Mecca Mauritsen.
25	Q. Where do you reside?

1	A. In Artesia, New Mexico.	
2	Q. By whom are you employed?	
3	A. Yates Petroleum Corporation.	
4	Q. And what is your current position with Yates	
5	Petroleum Corporation?	
6	A. I'm a landman.	
7	Q. Ms. Mauritsen, have you previously testified	
8	before this Division?	
9	A. Yes, I have.	
10	Q. At the time of that testimony, were your	
11	credentials as a petroleum landman accepted and made a	
12	matter of record?	
13	A. Yes, they were.	
14	Q. Are you familiar with the Application filed in	
15	this case on behalf of Yates?	
16	A. Yes, I am.	
17	Q. And are you familiar with the status of the lands	
18	in the subject area?	
19	A. Yes, I am.	
20	MR. CARR: Are the witness's qualifications	
21	acceptable?	
22	EXAMINER STOGNER: They are.	
23	Q. (By Mr. Carr) Ms. Mauritsen, would you briefly	
24	state what Yates Petroleum Corporation seeks with this	
25	Application?	

- A. We are seeking approval of an unorthodox location
 to drill our Opuntia Draw APK State Com Number 1 at a
 location of 1365 feet from the south, 660 feet from the
 west of Section 29 of 23 South, 25 East, to test the Morrow
 formation.
 - Q. And what are the spacing requirements for the Morrow in this area?
 - A. It's a 320-acre spacing unit.
 - Q. And the well-location requirements?
 - A. It's 1980 --
 - Q. -- 660?

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- A. -- and 660, right.
- Q. So in essence we're too close to the south line of the spacing unit; is that right?
 - A. Yes, sir, we are.
- Q. Let's go to what has been marked as Yates Exhibit
 Number 1. Would you identify that and review it for Mr.
 Stogner?
 - A. Yes, it's a lease plat of the area in question. The yellow shows the Yates acreage and the section that the well is at and the surrounding sections. The proposed spacing unit is outlined in red, and the proposed well is shown in red also. And the plat also shows the offsetting operators.
 - Q. Yates is proposing to dedicate a standard west-

half unit to the well?

A. Yes.

- Q. And all acreage in this spacing unit is owned 100-percent by Yates?
 - A. Yes, it is.
- Q. On what offsetting owners is the well actually encroaching?
 - A. Maralo and O'Brien, Goins and Simpson.
- Q. Could you briefly review what you understand to be the status of the ownership of the Maralo tract at this time?
- A. We received a call last week from Mark Wheeler at Maralo stating that they have sold their interest in that section to Penwell Energy, effective December 1st of 1995.

 Upon receiving that notice, we then sent notice to Penwell of this pending case.
- Q. But at the time notice was provided, all records indicated Maralo to be the owner of the tract; is that right?
- A. That's correct, and we've received nothing in writing yet that shows that change of ownership.
- Q. Mark Wheeler, who called you, was an employee of Maralo at that time; is that right?
 - A. Yes.
 - Q. And is he also, to your understanding, becoming

8 the landman now for Penwell? 1 Yes, that's my understanding. 2 Α. Let's go to what has been marked for 3 Q. identification as Yates Exhibit Number 2. Is this an 4 affidavit confirming that notice of this hearing has been 5 provided in accordance with OCD rules and regulations? 6 7 Yes, it is. Α. And notice was given not only to Maralo but also 8 Q. 9 to Penwell Energy on November 30; is that right? Yes, it was. 10 Α. Were Exhibits 1 and 2 either prepared by you or 11 Q. 12 compiled under your direction? 13 Α. Yes. MR. CARR: At this time, Mr. Stogner, we would 14 move the admission into evidence of Yates Petroleum 15 Corporation Exhibits 1 and 2. 16 17 EXAMINER STOGNER: Exhibits 1 and 2 will be admitted into evidence. 18 MR. CARR: And that concludes my direct 19 examination of Ms. Mauritsen. 20 EXAMINATION 21 BY EXAMINER STOGNER: 22 As far as that Maralo/Penwell, is that a 23 Q.

A. I think it's just actual sale of the property.

reorganization or a buy-out or a --

24

That's all we understand it to be.

- Q. But the person you talked with at Maralo is also going to go to work for Penwell?
 - A. That's our understanding, yes.
 - Q. But it's not a takeover or anything?
 - A. Not that we're aware of.
 - Q. A coincidental --
 - A. Well --

- Q. -- career change?
- A. -- Maralo is downsizing, and so a lot of the people are looking for other jobs. So I think that's just something that has come about.

EXAMINER STOGNER: Mr. Carr, do you have a legal opinion on the --

MR. CARR: Well, I'll tell you, Mr. Stogner, we believe we have complied with the notice requirements. We have provided notice to those who the records indicate are the owners of the tracts offsetting to the south.

Penwell -- Well, I don't know if you'd say Mr.

Wheeler was calling for Penwell or for Maralo. But

nonetheless, we have been contacted by them concerning this

transfer of interest in the property. I can confirm to you

and we have return receipts showing that both entities have

been advised of this, and there appears to be at this point

nothing in the public records.

So we believe we have complied with the notice 1 requirements, both -- we've complied with the rule and we 2 believe, in fact, we have given all those who could have an 3 interest actual notice of this hearing and have received no 4 5 objection. MR. CARR: With that, let me ask her a couple of 6 7 more questions. (By Examiner Stogner) Down in Section 31, that 8 Maralo property --9 10 Α. Yes. -- do you know if that well that's shown in the 11 Q. northern portion of Section 31 -- Is that a Morrow well? 1.2 I'd probably have to refer you to our geology 13 expert to discuss the wells, because I'm really not aware 14 of the status of that well. 15 I guess what I was asking about, did you contact 16 Maralo as the operator or the working interest owner or 17 leasee of record? 18 As the operator and lessee of record, because 19 there were no other owners of this section that I'm aware 20 21 of. And as far as this Penwell change, that's only 22 Q. You haven't received anything in writing --23 been verbal? Nothing in writing, only a telephone call. 24 Α.

-- or verified with any records or anything?

25

Q.

1	A. Right, that's correct. It was just done last
2	week, so
3	EXAMINER STOGNER: I concur with you, Mr. Carr.
4	No further necessity of continuing this matter for
5	notification purposes.
6	MR. CARR: Having talked with them, if they had
7	expressed concern we would have advised you of that. But
8	it was really in the nature just of advising us not only
9	that this property interest was changing, but also Mr.
10	Wheeler advised us that he was going with the properties
11	I think they have received adequate notice of the
12	hearing.
13	EXAMINER STOGNER: Good luck to Mr. Wheeler on
14	his career change.
15	I have no other questions of this witness.
16	MR. CARR: Nor do I, and at this time we would
17	call Mr. Brent May.
18	BRENT MAY,
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. For the record, would you state your name and
24	place of residence?
25	A. Brent May, Artesia, New Mexico.

By whom are you employed? 1 Q. Yates Petroleum Corporation. 2 Α. And your position with Yates? 3 Q. Geologist. 4 Α. Mr. May, you've previously testified before this 5 Q. Division, have you not? 6 7 Α. Yes, I have. At the time of that testimony, were your 8 credentials as a petroleum geologist accepted and made a 9 matter of record? 10 11 Yes, they were. Α. 12 Q. Are you familiar with the Application filed in this case? 13 14 Α. Yes, I am. And have you made a geological study of the area 15 Q. which is the subject of this Application? 16 17 Α. Yes, I have. MR. CARR: Are the witness's qualifications 18 19 acceptable? EXAMINER STOGNER: 20 They are. 21 Q. (By Mr. Carr) Mr. May, what is the primary 22 objective in the well? The Morrow formation. 23 Α. Are there secondary objectives? 24 0. 25 Secondary would be the Strawn, Atoka and possibly Α.

Delaware.

- Q. Could you just in a summary fashion state why Yates is proposing to drill at this unorthodox location?
 - A. Basically, it's based on the topography.
- Q. Let's go to Exhibit Number 3. Would you identify this and review it for the Examiner?
- A. This is taken from a 7-1/2-minute USGS topographic map. It shows the proposed location. It's been colored red. The proposed location is 1365 from the south line and 660 from the west. And also just to the north of that location shows the orange location and the orthodox location we had originally looked into trying to get.

Looking at that original location, it's right in the center of an arroyo. Because of that, we had to move it. Thus, we moved it to the south, to the proposed location, which is in a better topographic area than some of the surrounding area, and it also shows some geologic reasoning why we moved it to that specific area.

- Q. Let's go to the geological portion of the case, and I would direct your attention to Yates Exhibit Number 4. Would you identify that, please?
- A. This is a stratigraphic cross-section, A-A', through the area. It's a southwest-northeast. The cross-section trace is also shown on Exhibit Number 5.

The datum is top of the -- what I call the Morrow clastics. The lower Morrow top is also shown, and outlined in orange is what I loosely call the Moncrief sand, which is the target for the proposed location.

Starting on the left-hand side of the crosssection is the Amoco State "IZ" Number 1, in Section 31 of
23 South, 25 East. This was originally drilled back, I
believe, in the early 1980s. Amoco perforated one Morrow
sand and didn't have much luck at 10,313 and 10,328, and
then went up to the Moncrief sand and perforated it, IP'd
it for 725,000 cubic feet of gas a day. Currently it has
cum'd 1.7 BCF. This well is currently shut in.

Next on the cross-section, moving to the right, is the proposed location of Yates.

And then on the far right of the cross-section is the Moncrief Horseshoe State Number 1 in Section 29, of 23 South, 25 East. This Horseshoe State Number 1 is a key well, because Moncrief drilled down to the Morrow and ran several DSTs. The first DST was in the Moncrief sand. They recovered -- It flowed up to 4.5 million cubic feet of gas a day, but they did recover 2530 feet of water. They also DST'd two other Morrow zones, one being tight and one being wet also. They plugged the well then.

Q. All right, Mr. May, let's now go to the structure map, marked Yates Exhibit Number 5. Can you review that,

please?

A. This is a structure map with the top of the Moncrief sand as a datum. The wells that are circled are Morrow penetrations, and I'll point out in the legend there's a typo, "Morrow Penetraiton".

The wells that have been colored yellow have actually produced some gas out of this, quote, Moncrief sand, and I have the cumulative production in parentheses beside them.

This structure map is showing a basic west-to-east dip with the proposed location being updip of the Horseshoe State Number 1, which is the well that produced gas and water in the DST, and downdip of the Amoco State "IZ" Number 1, which produced 1.7 BCF out of the Moncrief sand.

We might note, too, that structurally the proposed location is pretty similar to the original location that we had picked, and because of structure we didn't want to move to the east, because we were getting closer to the downdip and wet well, so we moved to the south because of that. And the following exhibit will show why we didn't move to the north.

Q. All right, let's go to that exhibit, the isopach map -- I'm sorry, the sand porosity map, and I'd ask you to review that for Mr. Stogner.

A. This is a sand porosity map of the Moncrief sand itself. It's a density porosity with a ten-percent or greater. Again, the Morrow penetrations are circled.

This shows a -- This Moncrief sand is probably a beach-type deposit which runs parallel to the shoreline, and this thing is trending basically northeast-southwest, and it shows that at the proposed location we should have a sufficient thickness to produce gas in paying quantities.

If we had moved the original location to the north, we would be getting closer to the edge of the sand and increasing our risk of missing the reservoir.

- Q. Mr. May, in your opinion is the proposed unorthodox location the best available location in the west half of Section 29 for the production of Morrow reserves?
 - A. Yes, it is.
- Q. In your opinion, will approval of this

 Application enable Yates to produce reserves that otherwise
 will not be recovered?
 - A. Yes.

- Q. Will approval of the Application otherwise be in the best interest of conservation, the prevention of waste and the protection of correlative rights?
 - A. Yes, it will.
- Q. Were Exhibits 3 through 6 prepared by you or compiled at your direction?

Yes, they were. 1 Α. MR. CARR: At this time, Mr. Stogner, we would 2 move the admission into evidence of Yates Petroleum 3 Corporation Exhibits 3 through 6. 4 EXAMINER STOGNER: Exhibits 3 through 6 will be 5 admitted into evidence. 6 MR. CARR: And that concludes my direct 7 8 examination of Mr. May. 9 EXAMINATION BY EXAMINER STOGNER: 10 In referring to Exhibit Number 6, the standard 11 Q. 12 location, or the original location for this well, would put you near that 10-foot contour line; would that be correct? 13 Yes, yes, it would. Α. 14 15 And that would be very similar to where the Q. Moncrief well was? 16 The Moncrief well, yes, had 11. It would 17 Α. probably put us, like you said, close to the 10-foot zone. 18 But we're also moving towards the edge, and anytime you 19 move towards the edge you increase your risk. 20 21 Okay. Now, those wells over there in Section 30, Q. back to the west, those have dryhole symbols. Did those 22 23 actually produce, or were they dry tests, or do you know anything about those wells? 24

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Α.

The well on the east half of Section 30 produced

just a little bit out of the Strawn, and the well on the west side, if you'll look on Exhibit 5, did produce 200 MCF out of this Moncrief sand.

The problem that well -- I believe the problem that well had is that it was -- permeabilities were not quite as good as some of the wells, more towards the center of the channel -- excuse me, not the channel, the beachhead.

The well down in the south half of Section 31 also produced a little bit of gas out of the Moncrief sand. They had mechanical problems. Amoco originally operated that well, and they had some sort of downhole problem because they later went in and sidetracked the well and never got their production re-established.

Q. Referencing your structure -- I'm sorry -- yeah, your structure map, Exhibit Number 5, you have those contour lines pretty muchly running parallel to a north-and-south direction.

In this particular instance you want to be more
-- what? In the downdip direction from -- or more in a
westerly direction than a southern -- than an easterly
direction?

A. Yes, more westerly of the Moncrief Horseshoe
State Number 1 in the east half of 29, because it's the
well that produced the gas and water out of the zone, so

evidently a gas-water contact is real close to that well, 1 and we'd like to stay updip of that well. 2 So as opposed to moving like from a perpendicular 3 Q. course -- well, call it a channel. It's a -- you said a 4 5 beach deposit. Keeping it more perpendicular off of that, that 6 would move you back toward the east a little bit, which you 7 want to be more in the opposite direction? 8 9 Α. That's correct. If we move to the east we're going further downdip and closer to the wet well. 10 11 Q. What do you know about that Maralo well in 12 Section 31? Amoco originally drilled the well. That's the 13 Α. well I have on the left-hand side of Figure 4, on the 14 15 cross-section. But I have to assume when Maralo took over the 16 lease they took over operations. The well is currently 17 shut in. 18 EXAMINER STOGNER: Okay. Any other questions of 19 this witness? 20 21 MR. CARR: No further questions. 22 EXAMINER STOGNER: He may be excused. Do you have anything further in this case, Mr. 23 24 Carr? There's nothing further, Mr. Stogner. 25 MR. CARR:

1	EXAMINER STOGNER: If nobody else has anything
2	further in Case Number 11,438, this case will be taken
3	under advisement.
4	(Thereupon, these proceedings were concluded at
5	11:40 a.m.)
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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 December 11th, 1995.

STEVEN T. BRENNER

CCR No. 7

My commission expires: October 14, 1998

I do hereby certify that the foregoing is a complete record of the proceedings in

the final mer hearing of Case No. 11738

heard by me on 7 December 1995 .

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Oil Conservation Division