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. 13,052

APPLICATION OF YATES PETROLEUM CORPORATION FOR APPROVAL A UNIT AGREEMENT, LEA COUNTY, NEW MEXICO

ORIGINAL

REPORTER'S TRANSCRIPT OF PROCEEDINGS

EXAMINER HEARING

BEFORE: DAVID R. CATANACH, Hearing Examiner

RECEIVED

May 22nd, 2003

JUN . 5 2003

Santa Fe, New Mexico

Oil Conservation Division

This matter came on for hearing before the New Mexico Oil Conservation Division, DAVID R. CATANACH, Hearing Examiner, on Thursday, May 22nd, 2003, at the New Mexico Energy, Minerals and Natural Resources Department, 1220 South Saint Francis Drive, Room 102, Santa Fe, New Mexico, Steven T. Brenner, Certified Court Reporter No. 7 for the State of New Mexico.

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APPEARANCES

3

APPLICANT'S WITNESS:

<u>JOHN AMIET</u> (Geologist)

Direct Examination by Mr. Carr
Examination by Examiner Catanach

4 13

REPORTER'S CERTIFICATE

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* * *

EXHIBITS

Applicant's	Identified	Admitted
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* * *

APPEARANCES

FOR THE DIVISION:

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FOR THE APPLICANT:

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Santa Fe, New Mexico 87504-2208
By: WILLIAM F. CARR

* * *

1	WHEREUPON, the following proceedings were had at
2	8:41 a.m.:
3	EXAMINER CATANACH: All right, at this time I'll
4	call Case 13,052, the Application of Yates Petroleum
5	Corporation for approval a unit agreement, Lea County, New
6	Mexico.
7	Call for appearances.
8	MR. CARR: May it please the Examiner, my name is
9	William F. Carr with the Santa Fe office of Holland and
10	Hart, L.L.P. We represent Yates Petroleum Corporation in
11	this matter, and I have one witness.
12	EXAMINER CATANACH: Any additional appearances?
13	Okay, will the witness please stand to be sworn
14	in?
15	(Thereupon, the witness was sworn.)
16	JOHN AMIET,
17	the witness herein, after having been first duly sworn upon
18	his oath, was examined and testified as follows:
19	DIRECT EXAMINATION
20	BY MR. CARR:
21	Q. Would you state your name for the record, please?
22	A. John Amiet.
23	Q. Where do you reside?
24	A. Artesia, New Mexico.
25	Q. By whom are you employed?

Yates Petroleum. 1 A. And what is your position with Yates? 2 Q. I'm a geologist with Yates. 3 Α. Mr. Amiet, have you previously testified before 4 Q. 5 this Division and had your credentials as an expert in 6 petroleum geology accepted and made a matter of record? 7 Α. Yes, I have. 8 Q. Are you familiar with the Application filed in this case on behalf of Yates? 9 10 Α. Yes, I am. Are you familiar with the proposed Waylon State 11 0. Exploratory Unit and the status of the lands in that unit 12 area? 13 Yes. 14 Α. 15 Have you made a geological study of the area Q. which is the subject of this Application? 16 Α. Yes, I have. 17 And are you prepared to share the results of your 18 Q. work with the Examiners? 19 20 A. Yes. 21 MR. CARR: Are Mr. Amiet's qualifications 22 acceptable? EXAMINER CATANACH: 23 They are. (By Mr. Carr) Would you briefly state for the 24 Q. 25 Examiners what it is that Yates seeks with this

Application?

- A. Yates is seeking approval of the proposed Waylon State Exploratory Unit. This is a voluntary exploratory unit containing approximately 2560 acres of State of New Mexico lands, located in Lea County, New Mexico.
- Q. Have you prepared exhibits for presentation here today?
 - A. Yes, I have.
- Q. Let's go to what has been marked as Yates Exhibit
 Number 1. I'd ask you to identify that and explain what it
 is.
- A. This is a unit agreement. It's based on the state/fee form for an exploratory unit.
 - Q. And what is Exhibit 2?
- A. This is Exhibit A to the unit agreement. It reviews the status of the acreage. It shows that there are seven State of New Mexico leases and one fee lease.
 - Q. And now let's go to Exhibit 3. What is this?
- A. This is Exhibit B to the unit agreement. It shows the ownership breakdown. It identifies the Yates leases. There are seven State of New Mexico Yates leases.

Elk Oil has a 320-acre lease in the north half of Section 21 of 11 South, 34 East. Elk has decided to participate in this unit.

There's one 80-acre fee lease, Bogle, located in

7 the west half of Section 15 of 11 South, 34 East. 1 Bogle parties have been contacted by phone and by letter. 2 They have declined to participate, so their acreage will be 3 developed on a lease basis. 4 There's also Lots 1, 2, 3 and 4 of Section 15. 5 This is 53.92 acres that's currently unleased State of New 6 Mexico lands. The State at this time has decided not to 7 8 lease this acreage due to environmental concerns. Evidently this is a dry lakebed or a playa lake, and 9 10 they're concerned about the environmental concerns. And so at this time they're not leasing this acreage. We'll refer 11 to this later on with another exhibit. 12 With the acreage that has been committed to this 13 Q. unit, does Yates have effective control of unit operations? 14 Yes, they do. 15 Α. Have you reviewed this Application and the 16 0. unleased lands with the Commissioner of Public Lands? 17 Yes, I have, I met with Mr. Martinez and his 18 Α. 19

- group in mid-April, and he's given us an approval letter from the State Land Office.
 - Q. And is that included as Yates Exhibit Number 4?
 - Yes, it is. Α.

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- And how have they determined that these unleased Q. tracts will be handled?
 - Α. If they decide to lease this 53.9 acres in the

8 future, this acreage will be committed to the unit. 1 And that's set forth as a condition in the 2 Q. 3 State's preliminary approval? Α. Yes, it is. 4 Does Yates desire to be designated operator of 5 0. the proposed unit? 6 7 Yes. Α. Let's go to Exhibit Number 5, the AFE for the 8 0. 9 proposed initial well. Would you review that, please? 10 Α. This AFE sets out the dryhole and completed well costs. A completed well in this area will run 11 approximately \$1783. Due to the problems we've had with 12 this playa lake, we're using a spudder to hold one of the 13 leases that expired on May 1st, 2003, so we'd like to 14 15 develop this as soon as we can. 16 0. Does the unit agreement provide for the periodic filing of plans of development? 17 18 A. Yes. And are those plans to be filed with the OCD as 19 Q. 20 well as the State Land Office? 21 Α. Yes. And how often are they filed? 22 0. As referred to in Article 9 of the unit 23

Subsequent plans are 12 months

agreement, the initial plan is six months after completion

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of the first well.

thereafter.

- Q. What horizons are being unitized in the proposed Waylon State Fee Exploratory Unit?
 - A. All horizons.
 - Q. And where is this test well to be drilled?
- A. That location is 1700 feet from the south line and 660 feet from the west line of Township 11 South, Range 34 East, of New Mexico.
 - Q. And how deep will it be drilled?
- A. The initial well has a tentative TD of 12,750 feet to the lower Mississippian limestone.
- Q. Is the lower Mississippian limestone the primary objective in the well -- in the unit?
- A. Actually, Atoka-Morrow is the primary objective.

 This will be a wildcat well. And I might mention, there's only one Atoka-Morrow penetration within the unit area, and this was a dry hole.
 - Q. Are there secondary objectives?
- A. The Mississippian lime and upper Permo-Penn carbonates would be secondary objectives.
- Q. Mr. Amiet, let's go to what's been marked as Exhibit Number 6. Would you identify that and review the information on the exhibit?
- A. This is a structure map on top of the Austin formation or Mississippian, upper Mississippian zone. It

shows the unit area with the bold red outline. It

identifies several Atoka-Morrow producers. Actually,

there's four of them. All of these are outside the unit

area. They're shown with the solid purple circles. I

might mention that only two of these were economic wells.

As I've mentioned, there's only one Atoka-Morrow

penetration within the unit area. This was a dry hole.

Our location is shown with the bold red circle.

Yates is looking for sand development, so we're looking for structural low areas. These low areas can be very productive, but they're long, narrow channels that are sometimes difficult to follow. These are shown with the blue lines. These subtle channels are sometimes very difficult to follow, and risky.

The cross-section that I'll refer to in a minute is shown with the green line.

- Q. Are you ready to go to that cross-section?
- A. Yes, I am.

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- Q. Okay, let's go to Exhibit Number 7.
- A. This is a west-east structural cross-section.

 The sands are shown in yellow. The solid blue is
- 22 indicating the upper Mississippian or Austin limestone.
- We'll start with the well on the left, the
 Blitzen. This is a well that was not an economic well,
 although it did produce from the Morrow. It made about 267

million cubic feet of gas, was not close to being an economic well. But it does have some sand in it. It was not in the channel.

Come a little farther to the east, and we think is the main part of the channel. As I've said, you have to use 3-D seismic to delineate these channels, since they're sometimes very narrow in terms of 400 to 500 feet wide.

The next well, there is no sand, and you can see the limestone is very thick. But again, you come about a thousand feet to the northeast, we think there's a potential location, and this would be our first location.

And then there's another potential channel and another -- the Donner State Com Number 1 well. Again, it's showing a thick limestone. It seems where you have the real thick limestone there is no sand. Where you have sands that have cut down into the limestone, a lot of times it's limestone that's thinner, and that's indicating erosion from the overlying sands.

The well farthest on the right is the Carper McAlester. This is one of the economic wells in the area. It did hit the channel and has made over a BCF to date, and it's still making about 350 MCF a day.

Q. Is Exhibit Number 8 a written summary of your geological presentation?

12 Yes, it is. 1 Α. Referring to this summary, could you summarize 2 Q. for the Examiner why it is that Yates is proposing to 3 develop this area under a unit plan? 4 These are expensive wells to drill, almost \$1.8 5 Α. million per completed well. These channels are very narrow 6 7 and sinuous. They're difficult to delineate, even with 3-D 8 seismic, because these sands are often thin, from 20 to 30 feet thick. 9 10 We think the formation of the unit will thus 11 result in a more reasonable development of these reserves, 12 and the pool can more effectively be developed under a unit 13 plan. 14 In your opinion, will approval of this Q. 15 Application be in the best interests of conservation, the prevention of waste and the protection of correlative 16 rights? 17 18 Α. Yes. Were Exhibits 1 through 8 prepared by you or 19 Q. 20 compiled under your direction?

A. Yes.

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- MR. CARR: At this time, Mr. Examiner, we move the admission into evidence of Yates Exhibits 1 through 8.
- EXAMINER CATANACH: Exhibits 1 through 8 are admitted.

EXAMINATION

BY EXAMINER CATANACH:

- Q. Mr. Amiet, has Elk Oil signed the unit agreement?
- A. Yes, they have. They've decided to participate.
- Q. Okay. So the only acreage that's outstanding is the unleased acreage, at this point?
- A. That's correct, the Bogle parties have decided to develop their acreage on a lease basis, and then this Playa lake is currently unleased, approximately 54 acres.

And the State at this time has not committed themselves to lease it. It was on the May sale, but they pulled it. And so right now they've decided not to lease this acreage.

- Q. Okay, so the Bogle interest is in Section 15.
- A. That's 80 acres in the west half of Section 15.

 You can see it on the lease map.
 - Q. Section 15. Okay, so that's going to be included in the unit, but it's going to be developed on a lease basis?
 - A. That's correct.
- Q. Okay. And the other -- the lake-bed tract is also in Section 15. That's shown as Lots 1, 2, 3 and -- I'm sorry, where is that acreage?
- A. That's in Section 15, kind of right in the center of Section 15. It's 54 acres.

Q. So it's kind of carved out of some quarter-1 2 quarter sections? 3 Α. Yes. 0. I see. 4 5 In fact, it's shown on -- The structure map on 6 top of the Austin shows the location of the lake with a 7 blue outline. 8 ο. So they just took that 53.92 acres out? what --9 10 Α. That's correct, they don't want to lease it at 11 this time. 12 Q. So the remaining acreage in some of those quarter 13 sections is already leased --14 That's correct. Α. -- they just carved out that 53 --15 0. 16 That's correct. In fact, there was some Α. 17 confusion. We didn't know that when we first applied for 18 this unit, or first started checking it out, we didn't know that that 54 acres was not leased. We assumed it was, and 19 20 then we started looking at the land, and it didn't add up to 640 acres. 21 22 We got to checking, and there was confusion on 23 the State's part also. They weren't sure whether it was a 24 lease or not until they got checking.

And there's I guess only two -- there's two lakes

in this area that are unleased, playa lakes. It's the first time I've heard of this.

- Q. Yeah. So when and if they decide to lease that acreage, how will that work? Will Yates get --
 - A. We will bid --

- Q. -- they will lease it to you, or --
- A. We will bid on it, but -- The high bidder is going to get the acreage, but the State has stipulated in their -- I think it was Exhibit 5 -- that it will be committed to the unit, whoever acquires the lease.
 - Q. I see.
- A. So any wells from that time on will be in the unit.
 - Q. Okay, interesting.

Okay, you said -- you mentioned one of the Atoka-Morrow wells was commercial, the one in -- down in Section -- well, the one in the southeast part of this map?

- A. That's right, and that's --
- Q. In Section 25, I guess?
- A. -- like I say, it's -- Section 25. It's made about a BCF and 23 MBO to date, and it's still making about 340 MCF a day. So it's a good, economic well.

Also, the well clear up in the north part of the map, the purple circle in Section 11, is also an economic well. Those are the only two economic deep wells on this

1 map.

There are some producers up in the northwest quarter of the map, but these are Permo-Penn shallow Cisco producers that -- Virtually all of those have been abandoned. This was developed in the 1960s.

- Q. So the plan is to drill down into the Mississippian, just to test it, basically?
- A. That's correct. Our primary targets are Atoka-Morrow, although we've had some good success in the upper Mississippian, making some decent gas wells. So we'll take the well down into the Mississippian.
- Q. Is there any Mississippian production on this map?
- A. There's a well -- not an economic, there's a well just to the north that you could say would be economic or close to economic.

But there's been -- a few of these wells have made, you know -- In fact, the well in Section 23, in the southern portion, has made about 42 million from the Mississippian. But obviously it's not an economic well.

- Q. Are you referring to the Comet --
- A. Yes, the Comet "AUC" State Number 1.
 - Q. Okay.
- A. The Mississippian generally in this area is a very erratic, undependable producer, but it's something you

want to look at. 1 So the blue lines on this map that depict the 2 Q. 3 edges of the channels --That's correct, the center part of the channel 4 5 that we think -- we're trying, again, using the 3-D seismic 6 trying to define lows where the sand would have been 7 deposited during Atoka-Morrow time. 8 0. So these are basically developed on 3-D seismic? Yes, you just about have to have 3-D seismic, 9 Α. 10 because these channels are so narrow, and they're not always straight. 11 Well, just out of curiosity, why would you --12 Q. 13 Your proposed location looks to be right on the edge of 14 that channel. Is that right? 15 Well, I'm thinking -- You're referring to the red circle in 14? Yeah, I've got it right in the center of the 16 17 blue line, unless it's --18 Q. Okay, so the blue lines depict the channels? 19 Α. Yes. 20 EXAMINER CATANACH: Okay, I see what you're saying, I got you. 21 22 Okay, I believe that's all I have, Mr. Carr. 23 MR. CARR: And that concludes our presentation in this case. 24 25 EXAMINER CATANACH: Okay, there being nothing

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further in this case, Case 13,052 will be taken under
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      advisement.
                   (Thereupon, these proceedings were concluded at
 3
      8:58 a.m.)
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                                              I do hereby certify that the foregoing is
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                                              a complete record of the proceedings in
                                             the Examiner hearing of Case No. 13054
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                                             heard by me on
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                                               Oil Conservation Division
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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 23rd, 2003.

STEVEN T. BRENNER

CCR No. 7

My commission expires: October 16th, 2006