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. 13,053

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

ORIGINAL

REPORTER'S TRANSCRIPT OF PROCEEDINGS

EXAMINER HEARING

BEFORE: MICHAEL E. STOGNER, Hearing Examiner

RECEIVED

April 24th, 2003

MAY 8 2003

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, April 24th, 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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APPLICANT'S WITNESS:

TIM MILLER (Geologist)

Direct Examination by Mr. Carr
Examination by Examiner Stogner

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REPORTER'S CERTIFICATE

22

* * *

EXHIBITS

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* * *

APPEARANCES

FOR THE DIVISION:

DAVID K. BROOKS, JR.
Attorney at Law
Energy, Minerals and Natural Resources Department
Assistant General Counsel
1220 South St. Francis Drive
Santa Fe, New Mexico 87505

FOR THE APPLICANT:

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

* * *

WHEREUPON, the following proceedings were had at 1 2 8:58 a.m.: EXAMINER STOGNER: At this time I will call Case 3 4 Number 13,053. This is the Application of Yates Petroleum Corporation for approval of a unit agreement, this time in 5 Chaves County, New Mexico. 6 Call for appearances. 7 MR. CARR: May it please the Examiner, my name is 8 William F. Carr with the Santa Fe office of Holland and 9 10 Hart, L.L.P. We represent Yates Petroleum Corporation in 11 this matter, and I have one witness. Any other appearances? 12 EXAMINER STOGNER: 13 Will the witness please stand to be sworn? (Thereupon, the witness was sworn.) 14 15 TIM MILLER, the witness herein, after having been first duly sworn upon 16 17 his oath, was examined and testified as follows: DIRECT EXAMINATION 18 BY MR. CARR: 19 20 Q. Would you state your name for the record, please? My name is Tim Miller. 21 Α. Mr. Miller, where do you reside? 22 Q. I reside in Carlsbad, New Mexico. 23 A. By whom are you employed? 24 Q. 25 Yates Petroleum Corporation. Α.

Q. And what is your position with Yates? 1 I'm a geologist. 2 Α. Have you previously testified before this 3 Q. Division and had your credentials as an expert in petroleum 4 geology accepted and made a matter of record? 5 Α. Yes, they have. 6 Are you familiar with the proposed Stare State 7 Q. 8 Exploratory Unit? 9 Α. Yes, I am. And how do you spell Stare? 10 Q. 11 A. S-t-a-r-e. 12 Q. Have you made a geological study of the area which is involved in this Application? 13 14 Α. Yes, I have. 15 Q. Are you familiar with the status of the lands in 16 the Stare State Exploratory Unit? 17 A. Yes, I am. 18 Q. Are you prepared to share the results of your 19 work with Mr. Stogner? 20 Α. Yes, I am. 21 MR. CARR: Are the witness's qualifications 22 acceptable? 23 EXAMINER STOGNER: Mr. Miller is so qualified. 24 Q. (By Mr. Carr) Initially, state what it is that 25 seeks with this Application.

- Yates seeks the approval of the proposed Stare 1 Α. State Exploratory Unit, a voluntary exploratory unit 2 3 containing approximately about 1600 acres of State lands, located in Chaves County, New Mexico. 4 And you've prepared exhibits for presentation 5 Q. here today? 6 Yes, I have. 7 A. Let's go to what is marked Exhibit 1, and I'd ask Q. 8 9 you to identify that. This is the unit agreement for development of 10 Α. operations of the Stare State Exploratory Unit in Chaves 11 County, New Mexico. 12 And this is based on the state/federal form unit 13 Q. agreement; is that right? 14 Yes, it is. 15 Α.
 - Let's go to Exhibit 2. Would you identify that? Q.

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- Α. Exhibit 2 is a land plat taken off the land map of an outline of the Stare State Unit. It encompasses in Township 9 South 27 East, all of Section 8, the south half of Section 9 and all of Section 16, and these are all State leases.
 - Would you go now to Exhibit 3 and review that? Q.
- A. This is basically the Stare State Unit description of the different lands encompassed, the net acres and the lessor and royalty owners and the lessee of

1	record.
2	Q. This is a 100-percent state land?
3	A. Yes.
4	Q. 100-percent Yates and Yates companies in terms of
5	working interest ownership?
6	A. Yes, it is.
7	Q. There are no overrides?
8	A. No.
9	Q. Is Yates looking at a lease expiration anytime
10	soon?
11	A. Yes, the leases expire August 1st of 2003.
12	Q. Has the Commissioner of Public Lands given
13	preliminary approval to the proposed unit?
14	A. Yes, he has.
15	Q. And is Yates Exhibit Number 4 a copy of the
16	letter from the State Land Office giving this preliminary
17	approval?
18	A. Yes, it is.
19	Q. Does Yates desire to be designated unit operator?
20	A. Yes, we do.
21	Q. And this agreement provides for the periodic
22	filing of the plans of development, does it not?
23	A. Yes, it does.
24	Q. And when are these plans to be filed?
25	A. As soon as the unit is approved.

Q. And then do you file plans at six-month and then 1 annual intervals thereafter? 2 3 A. Yes. What horizons are being unitized in the proposed 0. 4 Stare State Exploratory Unit? 5 All horizons are being proposed to be unitized. 6 Α. Could you explain where it is that the initial 7 Q. 8 test well is going to be drilled? And you might just refer to Exhibit 5. Exhibit 5 is a plat, and of course it's a gross 10 A. isopach also of base of Pennsylvanian, top of Strawn. 11 initial test well will be in the northwest corner of 12 Section 8 of 9 South, 27 East. It will be 660 from the 13 14 north, 660 from the west. And that's the Stare State Unit Well Number 1, 15 Q. correct? 16 Yes, it is. 17 A. And to what depth do you intend to drill? 18 Q. Approximately drill to 6700 feet. 19 Α. 20 Q. What is the primary objective in this unit? The primary objective for this unit is the Strawn 21 Α. sands, and this will be a wildcat well drilled into the 22 basement, Granite Wash. 23 Have there been any Strawn penetrations in the 24 O. unit area to date? 25

- A. Not in the unit -- There is one down in the south half, the Elk Oil Company's Luce State Com Number 1.
 - Q. And that is the only one?
 - A. That is the only one.

- Q. Are there secondary objectives?
- A. Yes, there are some secondary objectives in the drilling of the Stare State Number 1. They would be Abo sands, Wolfcamp limes, Cisco limes and possibly some Siluro-Devonian dolomite and possibly the Granite Wash.
- Q. Let's now look at Exhibit Number 5, the gross isopach, and I'd ask you to review the information on this exhibit for Mr. Stogner.
- A. Okay, Exhibit Number 5, as I stated before, is a gross isopach from the base of the Pennsylvanian, otherwise base of Cisco, to the top of Strawn. And basically what this shows is a thick that basically runs from the southeast part of the map, if you look down to Section 16, or section to the north of Section 9, you have the contour lines 325 feet, 300 feet and trending to the west and the northwest through the north half of Section 8 into the south half of Section 6 and the north half of Section 7.

We feel that to encompass more than one Strawn sand out here, if you have a thicker package from the base of the Pennsylvanian to the top of Strawn, you just have a better chance of encompassing more than one Strawn sand.

It enables you to have a better sand-shale package. Like I stated before, have more than one sand, and hopefully have better targets in the Strawn interval.

O. What is Exhibit 6?

- A. Exhibit 6 is a structure map on top of the Wolfcamp. And if we look at the unit outline, especially in Section 8 where the Stare State Unit Number 1 is proposed, going along again, if you refer back to Exhibit 5, you'll see the structure, you have a low coming up through the north half of Section 8, to the northwest corner of Section 8, up into Section 6. This low corresponds to the gross isopach thickness map in Exhibit 5 where you would hopefully have thicker accumulations of the Strawn interval, and this Wolfcamp structure map, which is higher structurally and an age so that it corresponds with the gross isopach map in Exhibit 5.
- Q. Let's go to Exhibit 7, the structure map on top of the Cisco.
- A. Structure map on top of the Cisco is similar to the one beforehand on the Wolfcamp. This once again shows a low coming in this -- basically directly from the east in the north half of Section 8, trending to the west through the northwest quarter of Section 8, into the south half of Section 6 and the north half of 7, one again kind of restating the gross isopach map of Section 5 where we

figure we have development of thicker Strawn sections for the Stare State Number 1.

- Q. There's a trace for a cross-section A-A' on this exhibit, is there not?
 - A. Yes, there is.

- Q. Let's go to that cross-section, stratigraphic cross-section, which has been marked for identification as Yates Exhibit 8.
- A. Okay, as you can see on the cross-section, basically it is probably what I call a combination cross-section. It doesn't basically go strictly north, south, east, west.

Basically what I am trying to show, if we start down in the south of Section 16 where this starts on A, Yates Petroleum Corporation's East Wind State Number 1, it was a Yates Petroleum test that was drilled down into the Siluro-Devonian. And as you see on the map, it -- what this is depicting -- again, this is hung on the top -- basically, this is hung on top of the Strawn to give you an idea from top of Strawn to the top of, in certain areas, the top of Siluro-Devonian or the top of the -- the thickness of the Strawn interval. As you can see here, it is relatively thin on the structure map on the top of Cisco, you're coming off of structure to the west.

If we move up to the second well, the Elk Oil

Company Luce State Number 1, which is 660 south, 2310 from the east, the yellow-colored interval once again is the Strawn. It is increasing in thickness. You are going down the flank of this Cisco structure. If you recall Exhibit 5, you have a thicker section of Strawn.

If you look down towards the bottom of the Elk well in the Strawn section at about 6230, you will see a little crossover which is colored in red, neutron density, meaning some natural gas in these sandstones. Some of these sandstones in the Strawn, as you look in the Elk Oil Luce State, have some clean gamma rays, 6220, 6230. Sometimes the Strawn sands in the lower sections are hot or you have high gamma-ray readings.

If we move through the third well, which is the proposed Stare State Unit, we are hoping to encounter a thicker section of Strawn, which hopefully will enable us to have possibly more than one Strawn sand, two or three possibly.

The structure -- The Cisco structure map, which of course is the Exhibit 7, shows us in the center of this low, and we -- as is showed on the Exhibit 5, the gross isopach, we would have a -- hopefully -- we hope to encounter a thicker section of Strawn sands, once again, which will enable us to maybe make a productive well out of the Strawn.

Moving again to the next well, the Plains Radio
Broadcasting Camel State Number 3, which is in the
northeast quarter of Section 7, you slightly came
upstructure. The Strawn thins some down towards the bottom
in the Strawn section, you see 6210 to -20. They did
perforate in the Strawn sand in that well. It accumulated
only 4.5 million cubic feet of gas, and it only produced
from March of 1988 to March of -- I mean February of 1988
to March of 1989.

This -- Once again, the Strawn was thinning coming upstructure, meaning you didn't have a thicker section, and you just have a very thin productive sand.

The next well on the cross-section, the Plains Radio, which is in the northwest quarter of Section 7, the Plains Radio Camel Number 1, it has a slightly thicker interval of Strawn. You see a lower Strawn sand in this well, perforated. The red is the colored version of the crossover of the neutron density, meaning gas effect. It has so far accumulated 360 million cubic feet of gas. It has first produced from September of 1981, and this is data through October of 2002. This sort of starts to substantiate that if you have a -- the thicker section of Strawns, you might pick up better productive Strawn sands.

The next one on the cross-section is the Plains Radio Camel State Number 1 [sic]. This again has similar

thickness of Strawn, and this is the best Strawn sand out there, as you can see towards the bottom of the Strawn section in the yellow-colored interval. It is perf'd between 6220 down to -50. Very high porosity crossover.

The well has produced 1.3 BCF of gas since October of 1986 through -- I mean since August of 1986, through October of 2002.

The next well, the Plains Radio Camel Number 4, which is in the northeast quarter of Section 2, similar thickness of Strawn. It has several sands in it. It is not as -- even though it has more sands than the Camel State Number 2, it doesn't have the better porosity as in the Camel State Number 2. It has produced 122 million cubic feet of gas since June of 1988 through October of 2002.

- Q. And that's in the northeast of Section 6, correct?
 - A. Yes.

- Q. All right.
- A. Northeast of Section 6.
- Q. All right, let's move on to the wells in 5.
- A. Okay, the wells in 5, coming back in the cross-section as you are going towards the east, the Carl A.

 Schellinger Glo State Number 1, you have -- This actually has a thinner section of Strawn. This is sort of an

exception. We have a Strawn sand down at the bottom of the interval, 62- -- basically around 6230 to -50.

Now, this is one of the Strawn sands that have a hard gamma-ray. You do not have good crossover, but sometimes these sands, because they are a combination of chert, subigneous rocks, limestone, dolomite, they're a little different than, say, the Camel Number 2, which was over in Section Number 6. This well so far has produced 656 million cubic feet of gas out of that Strawn interval since December of 1987 through October, 2002.

The last two sections -- or the last two wells on the cross-section, it's the southeast quarter of Section 5, Carl Schellinger's Campbell Station Number 6, it has a thicker section of Strawn. This again was perforated basically from starting around 6311 down to 6337. It has accumulated around 264 million cubic of gas since April of 1989 to October, 2002.

And the last one, which is the farthest east well on the cross-section, is the Carl Schellinger Campbell Station Number 4 in Section 4. Is perforated up in the middle part of the Strawn and from basically 66- -- or 6243 down to 6327. It has produced 540 million cubic feet of gas since December of 1984 through October of 2002, and as you can see they still have another sand in there at around 6400 that they have not gone down and perforated those to

add additional production to this well.

Basically what the cross-section, to summarize it is showing, that as you move from -- as you move from structurally higher and down structurally lower, the thicker sections of the Strawn would seem to say that you have the better chance of more productive Strawn sands, if you have a thicker section of gross footage in the Strawn of around 180 feet or better. We feel that's kind of a fair cutoff to maybe encounter productive Strawn sands.

- Q. And in the Stare State Unit Well Number 1 it looks like you have a thickness of probably 250 feet or more; isn't that right?
- A. Yes, yes, we feel that putting it in there -again, looking at the Exhibit 7 for top of structure of the
 Cisco, the low comes running in there from the east to the
 west. And again on Exhibit 5 the gross isopach map, as Mr.
 Carr says, we feel that we have around 250 feet of total
 Strawn section, which hopefully will enable us to have
 maybe two or three productive Strawn sands.
- Q. The Siluro-Devonian is also potentially productive in this area, correct?
 - A. Yes, it is.
- Q. Would you refer to Yates Exhibit Number 9 and review that?
 - A. Exhibit Number 9 is a structure map on top of the

Siluro-Devonian. Wells have penetrated this formation in the area. None has been basically that productive out of it. There has been some test in it.

Probably the one that has produced the most would be the Yates Petroleum East Wind State Number 1, which is the first well in the cross-section on the left-hand side. It is basically still producing out of the Siluro-Devonian and is not that good of a well. It has only made 36 million cubic feet of gas since 1988 through November of 2002.

There have been some other wells that have been tried. Plains Radio Camel State Number 2, which is the best Strawn well, they perf'd down in the Siluro-Devonian 6412 to 6426, and they swabbed 10 barrels of saltwater per hour. There's been some other tests that has had some gas shows as shown in the cross-section. We feel that we would be maybe -- putting the Stare State in there, that there is a faint possibility we could have some production in the Siluro-Devonian, but we view that as a secondary objective.

- Q. Is Exhibit 10 a written summary of your geological presentation?
 - A. Yes, it is.

Q. Referring to this and the exhibits you've presented, could you summarize for Mr. Stogner the reasons behind Yates' proposal to develop this area under a unit

plan?

- A. Yates -- Once again, the summarized write-up is proposing to develop a unit plan. We have several leases that expire August 1st of 2003. We feel with the proposed well, the Stare State Number 1, which is in Section 8, 660 from the north and 660 from the west, 6700 feet, that this will enable us to save these leases with this one well, and we are hoping to establish further Strawn production going to the southeast from where it is in the Camel State Number 2, several other wells to the north and northwest in the area.
- Q. If in fact you drill a successful well at the location of the Stare State Number 1, this could in fact result in additional Strawn development south and east of the current Strawn play?
 - A. Yes, it will.
- Q. In your opinion, will approval of the Application and the development of this area under the proposed unit plan be in the best interest of conservation, the prevention of waste and the protection of correlative rights?
 - A. Yes, it will.
- Q. Were Exhibits 1 through 10 either prepared by you or compiled at your direction?
 - A. Yes, they were.

1	Q. And have you reviewed them?
2	A. Yes, I have.
3	Q. Can you testify as to their accuracy?
4	A. Yes.
5	MR. CARR: At this time, Mr. Stogner, we'd move
6	the admission into evidence of Yates Exhibits 1 through 10.
7	EXAMINER STOGNER: Exhibits 1 through 10 will be
8	admitted into evidence at this time.
9	MR. CARR: That concludes my direct examination
10	of Mr. Miller.
11	EXAMINATION
12	BY EXAMINER STOGNER:
13	Q. Mr. Miller, please indulge me here. On Exhibit
14	Number 2 there are two units mentioned, at least, in your
15	exhibits today. What can you tell me, or can you tell me
16	anything, about that Campbell Station Unit first, up north?
17	When it was formed, if it's still intact? Do you know
18	anything about it?
19	A. I do not know that much about it. The wells,
20	again, are producing out of some Strawn and some Abo sands.
21	Q. And the wells that are producing, you're still
22	saying that Carl
23	A Schellinger.
24	Q Schellinger is still the operator?
25	A. Yes.

20 Now, the well in Section 17, which takes in that Q. 1 little corner just outside there to the north -- I'm sorry, 2 to the south and west, the East Wind State Unit Well Number 3 4 1 --5 Α. Yes. 6 Q. -- what is the East Wind Unit, State Unit? Well, that was a unit that was proposed by Yates 7 back in the 1980s. It is now contracted, and so basically 8 the unit doesn't exist anymore. 9 Do you know what acreage that took in before it 10 Q. 11 was contracted? Not without going back and looking at it. Α. I know 12 off the map down in Sections -- I think it would be 33 and 13

A. Not without going back and looking at it. I know off the map down in Sections -- I think it would be 33 and 34, there were the East Wind States 2 and 3 that were drilled. Total acreage, I couldn't tell you at this time what it encompassed.

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- Q. Do you know if any parts of Sections 8, that south half of 9 or 16 were included in that old Yates unit?
 - A. Well, I know the unit did not go up that far.
- Q. Okay. Now, you've presented some evidence today showing that old Elk Oil Company well in Section, I believe 8, but there were two other old wells within this unit agreement area, and that's the one up in the northeast northeast of 8 and the one over in the northwest -- I'm sorry -- yeah, the northwest northwest of 16. Now, they

1	seem to be shallow wells.
2	A. Yes.
3	Q. Can you elaborate a little bit more on
4	A. Well, they were shallow wells, they were drilled
5	down to the San Andres, and basically tested the San Andres
6	and basically were nonproductive.
7	Q. Now, one was a Yates well; was that correct?
8	A. No, the one up in the
9	Q. Oh, I'm sorry, neither one of them are Yates
10	wells?
11	A. No, right.
12	Q. Do you know how old those wells are?
13	A. Those wells were drilled, if I remember right, in
14	the 1960s.
15	EXAMINER STOGNER: In the 1960s. I don't believe
16	I have any other questions of Mr. Miller.
17	MR. CARR: That concludes our presentation in
18	this case.
19	EXAMINER STOGNER: If there's nothing further in
20	Case 13,053, this case will be taken under advisement.
21	And I'll also note that the expiration date is
22	August. I'll put a fast track on this one.
23	(Thereupon, these proceedings were concluded at
24	9:25 a.m.) I do hereby certify that the foregoing a complete record of the proceedings in
25	the Examiner hearing of Case No. 13053 * heard by me on 24 Paril 2003

STEVEN T. BREWIER CCR Division
(505) 989 931 4 Servetion Division

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 April 26th, 2003.

STEVEN T. BRENNER

CCR No. 7

My commission expires: October 16th, 2006

UNIT AGREEMENT

FOR THE DEVELOPMENT AND OPERATION

OF THE

STARE STATE EXPLORATORY UNIT CHAVES COUNTY, NEW MEXICO

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THIS AGREEMENT, entered into as of the <u>24th</u> day of <u>March</u>, 2003, by and between the parties subscribing, ratifying or consenting hereto, and herein referred to as the "parties hereto";

WITNESSETH:

WHEREAS, the parties hereto are the owners of working, royalty, or other oil or gas interests in the unit area subject to this agreement; and

WHEREAS, the Commissioner of Public Lands of the State of New Mexico is authorized by an Act of the Legislature (Sec 3, Chap. 88, Laws 1943) as amended by Sec. 1 of Chapter 162, Laws of 1951, (Chap. 19, Art. 10, Sec. 45, N. M. Statutes 1978 Annot.), to consent to and approve the development or operation of State Lands under agreements made by lessees of State Land jointly or severally with other lessees where such agreements provide for the unit operation or development of part of or all of any oil or gas pool, field, or area; and

WHEREAS, the Commissioner of Public Lands of the State of New Mexico is authorized by an Act of the Legislature (Sec. 1, Chap. 162), (Laws of 1951, Chap. 19, Art. 10, Sec. 47, N. M. Statutes 1978 Annotated) to amend with the approval of lessee, evidenced by the lessee's execution of such agreement or otherwise, any oil and gas lease embracing State Lands so that the length of the term of said lease may coincide with the term of such agreements for the unit operation and development of part or all of any oil or gas pool, field, or area; and

WHEREAS, the Oil Conservation Division of the Energy and Minerals Department of the State of New Mexico (hereinafter referred to as the "Division"), is authorized by an Act of the Legislature (Chap. 72, Laws 1935, as amended, being Section 70-2-1 et seq. New Mexico Statutes Annotated, 1978 Compilation) to approve this agreement and the conservation provisions hereof; and

BEFORE THE OIL CONSERVATION DIVISION
Santa Fe, New Mexico
Case No. 13053 Exhibit No. 1
Submitted by:

WHEREAS, the parties hereto hold sufficient interests in the <u>STARE STATE EXPLORATORY</u>

UNIT AREA covering the land hereinafter described to give reasonably effective control of operations therein; and

WHEREAS, it is the purpose of the parties hereto to conserve natural resources, prevent waste and secure other benefits obtainable through development and operation of the area subject to this agreement under the terms, conditions and limitations herein set forth;

NOW, THEREFORE, in consideration of the premises and the promises herein contained, the parties hereto commit to this agreement their respective interests in the below defined unit area, and agree severally among themselves as follows:

1. UNIT AREA: The following described land is hereby designated and recognized as

constituting the unit area:

'

Township 9 South, Range 27 East, N.M.P.M.

Section 8: All Section 9: S2 Section 16: All

Containing 1600 acres, more or less

Chaves County, New Mexico

Exhibit "A" attached hereto is a map showing the unit area and the boundaries and identity of tracts and leases in said area to the extent known to the unit operator. Exhibit "B" attached hereto is a schedule showing to the extent known to the unit operator the acreage, percentage and kind of ownership of oil and gas interests in all lands in the unit area. However, nothing herein or in said schedule or map shall be construed as a representation by any party hereto as to the ownership of any interest other than such interest or interests as are shown on said map or schedule as owned by such party. Exhibit "A" and "B" shall be revised by the unit operator whenever changes in ownership in the unit area render such revisions necessary or when requested by the Commissioner of Public Lands, hereinafter referred to as "Commissioner" or the Oil Conservation Division, hereinafter referred to as the "Division".

All land committed to this agreement shall constitute land referred to herein as "unitized land" or "land subject to this agreement".

- 2. <u>UNITIZED SUBSTANCES:</u> All oil, gas, natural gasoline, and associated fluid hydrocarbons in any and all formations of the unitized land are unitized under the terms of this agreement and herein are called "unitized substances".
- 3. <u>UNIT OPERATOR: Yates Petroleum Corporation</u>, whose address is <u>105 South Fourth Street</u>.

 <u>Artesia, New Mexico 88210</u> is hereby designated as unit operator and by signature hereto commits to this

agreement all interest in unitized substances vested in it as set forth in Exhibit "B", and agrees and consents to accept the duties and obligations of unit operator for the discovery, development and production of unitized substances as herein provided. Whenever reference is made herein to the unit operator, such reference means the unit operator acting in that capacity and not as an owner of interests in unitized substances, and the term "working interest owner" when used herein shall include or refer to unit operator as the owner of a working interest when such an interest is owned by it.

4. <u>RESIGNATION OR REMOVAL OF UNIT OPERATOR</u>: Unit operator shall have the right to resign at any time but such resignation shall not become effective until a successor unit operator has been selected and approved in the manner provided for in Section 5 of this agreement. The resignation of the unit operator shall not release the unit operator from any liability or any default by it hereunder occurring prior to the effective date of its resignation.

Unit operator may, upon default or failure in the performance of its duties or obligations hereunder, be subject to removal by the same percentage vote of the owners of working interests determined in like manner as herein provided for the selection of a new unit operator. Such removal shall be effective upon notice thereof to the Commissioner and the Division.

The resignation or removal of the unit operator under this agreement shall not terminate his right, title or interest as the owner of a working interest or other interest in unitized substances, but upon the resignation or removal of unit operator becoming effective, such unit operator shall deliver possession of all equipment, materials, and appurtenances used in conducting the unit operations and owned by the working interest owners to the new duly qualified successor unit operator, or to the owners thereof if no such new unit operation is elected, to be used for the purpose of conducting unit operations hereunder. Nothing herein shall be construed as authorizing removal of any material, equipment and appurtenances needed for the preservation of wells.

5. <u>SUCCESSOR UNIT OPERATOR:</u> Whenever the unit operator shall resign as unit operator or shall be removed as hereinabove provided, the owners of the working interests according to their respective acreage interests in all unitized land shall by a majority vote select a successor unit operator; provided that, if a majority but less than seventy five percent (75%) of the working interests qualified to vote is owned by one party to this agreement, a concurring vote of sufficient additional parties, so as to constitute in the aggregate not less than seventy-five percent (75%) of the total working interests, shall be required to select a new operator. Such

selection shall not become effective until (a) a unit operator so selected shall accept in writing the duties and responsibilities of unit operator, and (b) the selection shall have been approved by the Commissioner. If no successor unit operator is selected and qualified as herein provided, the Commissioner at his election, with notice to the Division, may declare this unit agreement terminated.

- 6. ACCOUNTING PROVISIONS: The unit operator shall pay in the first instance all costs and expenses incurred in conducting unit operations hereunder, and such costs and expenses and the working interest benefits accruing hereunder shall be apportioned among the owners of the unitized working interests in accordance with an operating agreement entered into by and between the unit operator and the owners of such interests, whether one or more, separately or collectively. Any agreement or agreements entered into between the working interest owners and the unit operator as provided in this section, whether one or more, are herein referred to as the "Operating Agreement". No such agreement shall be deemed either to modify any of the terms and conditions of this unit agreement or to relieve the unit operator of any right or obligation established under this unit agreement and in case of any inconsistencies or conflict between this unit agreement and the operating agreement, this unit agreement shall prevail.
- 7. RIGHTS AND OBLIGATIONS OF UNIT OPERATOR: Except as otherwise specifically provided herein, the exclusive right, privilege and duty of exercising any and all rights of the parties hereto which are necessary or convenient for prospecting for, producing, storing, allocating and distributing the unitized substances are hereby delegated to and shall be exercised by the unit operator as herein provided. Acceptable evidence of title to said rights shall be deposited with said unit operator and, together with this agreement, shall constitute and define the rights, privileges and obligations of unit operator. Nothing herein, however, shall be construed to transfer title to any land or to any lease or operating agreement, it being understood that under this agreement the unit operator, in its capacity as unit operator, shall exercise the rights of possession and use vested in the parties hereto only for the purposes herein specified.
- 8. <u>DRILLING TO DISCOVERY:</u> The unit operator shall, within sixty (60) days after the effective date of this agreement, commence operations upon an adequate test well for oil and gas upon some part of the lands embraced within the unit area and shall drill said well with due diligence to a depth sufficient to attain the top of the <u>Basement</u> formation or to such a depth as unitized substances shall be discovered in paying quantities at a lesser depth or until it shall, in the opinion of unit operator, be determined that the further drilling of said well shall be

unwarranted or impracticable; provided, however, that unit operator shall not, in any event, be required to drill said well to a depth in excess of <u>6,700</u> feet. Until a discovery of a deposit of unitized substances capable of being produced in paying quantities (to wit: quantities sufficient to repay the cost of drilling and producing operations with a reasonable profit) unit operator shall continue drilling diligently, one well at a time, allowing not more than six months between the completion of one well and the beginning of the next well, until a well capable of producing unitized substances in paying quantities is completed to the satisfaction of the Commissioner or until it is reasonably proven to the satisfaction of the unit operator that the unitized land is incapable of producing unitized substances in paying quantities in the formation drilled hereunder.

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Any well commenced prior to the effective date of this agreement upon the unit area and drilled to the depth provided herein for the drilling of an initial test well shall be considered as complying with the drilling requirements hereof with respect to the initial well. The Commissioner may modify the drilling requirements of this section by granting reasonable extensions of time when in his opinion such action is warranted. Upon failure to comply with the drilling provisions of this article the Commissioner may, after reasonable notice to the unit operator and each working interest owner, lessee and lessor at their last known addresses, declare this unit agreement terminated, and all rights, privileges and obligations granted and assumed by this unit agreement shall cease and terminate as of such date.

9. OBLIGATIONS OF UNIT OPERATOR AFTER DISCOVERY OF UNITIZED SUBSTANCES:
Should unitized substances in paying quantities be discovered upon the unit area, the unit operator shall on or before six months from the time of the completion of the initial discovery well and within thirty days after the expiration of each twelve months period thereafter, file a report with the Commissioner and Division of the status of the development of the unit area and the development contemplated for the following twelve months period.

It is understood that one of the main considerations for the approval of this agreement by the Commissioner of Public Lands is to secure the orderly development of the unitized lands in accordance with good conservation practices so as to obtain the greatest ultimate recovery of unitized substances.

After discovery of unitized substances in paying quantities, unit operator shall proceed with diligence to reasonably develop the unitized area as a reasonably prudent operator would develop such area under the same or similar circumstances.

If the unit operator should fail to comply with the above covenant for reasonable development this agreement may be terminated by the Commissioner as to all lands of the State of New Mexico embracing undeveloped regular well spacing or proration units, but in such event, the basis of participation by the working interest owners shall remain the same as if this agreement had not been terminated as to such lands; provided, however, the Commissioner shall give notice to the unit operator and the lessees of record in the manner prescribed by (Sec. 19-10-20 N.M. Statutes 1978 Annotated,) of intention to cancel on account of any alleged breach of said covenant for reasonable development and decision entered thereunder shall be subject to appeal in the manner prescribed by (Sec. 19-10-23 N.M. Statutes 1978 Annotated), and, provided further, in any event the unit operator shall be given a reasonable opportunity after a final determination within which to remedy any default, failing in which this agreement shall be terminated as to all lands of the State of New Mexico embracing undeveloped regular well spacing or proration units.

Notwithstanding any of the provisions of this Agreement to the contrary, all undeveloped regular well spacing or proration unit tracts within the unit boundaries embracing lands of the State of New Mexico shall be automatically eliminated from this Agreement and shall no longer be a part of the unit or be further subject to the terms of this Agreement unless at the expiration of five years (5) after the first day of the month following the effective date of this Agreement diligent drilling operations are in progress on said tracts.

10. PARTICIPATION AFTER DISCOVERY: Upon completion of a well capable of producing unitized substances in paying quantities, the owners of working interests shall participate in the production therefrom and in all other producing wells which may be drilled pursuant hereto in the proportions that their respective leasehold interests covered hereby on an acreage basis bears to the total number of acres committed to this unit agreement, and such unitized substances shall be deemed to have been produced from the respective leasehold interests participating therein. For the purpose of determining any benefits accruing under this agreement and the distribution of the royalties payable to the State of New Mexico and other lessors, each separate lease shall have allocated to it such percentage of said production as the number of acres in each lease respectively committed to this agreement bears to the total number of acres committed hereto.

Notwithstanding any provisions contained herein to the contrary, each working interest owner shall have the right to take such owner's proportionate share of the unitized substances in kind or to personally sell or dispose of the same, and nothing herein contained shall be construed as giving or granting to the unit operator the

right to sell or otherwise dispose of the proportionate share of any working interest owner without specific authorization from time to time so to do.

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11. <u>ALLOCATION OF PRODUCTION</u>: All unitized substances produced from each tract in the unitized area established under this agreement, except any part thereof used for production or development purposes hereunder, or unavoidably lost, shall be deemed to be produced equally on an acreage basis from the several tracts of the unitized land, and for the hereunder, or unavoidably lost, shall be deemed to be produced equally on an acreage basis from the several tracts of the unitized land, and for the purpose of determining any benefits that accrue on an acreage basis, each such tract shall have allocated to it such percentage of said production as its area bears to the entire unitized area. It is hereby agreed that production of unitized substances from the unitized area shall be allocated as provided herein, regardless of whether any wells are drilled on any particular tracts of said unitized area.

12. <u>PAYMENT OF RENTALS, ROYALTIES AND OVERRIDING ROYALTIES:</u> All rentals due the State of New Mexico shall be paid by the respective lease owners in accordance with the terms of their leases.

All royalties due to the State of New Mexico under the terms of the leases committed to this agreement shall be computed and paid on the basis of all unitized substances allocated to the respective leases committed hereto; provided, however, the State shall be entitled to take in kind its share of the unitized substances allocated to the respective leases, and in such case the unit operator shall make deliveries of such royalty share in accordance with the terms of the respective leases.

All rentals, if any, due under any leases embracing lands other than the State of New Mexico, shall be paid by the respective lease owners in accordance with the terms of their leases and all royalties due under the terms of any such leases shall be paid on the basis of all unitized substances allocated to the respective leases committed hereto.

If the unit operator introduces gas obtained from sources other than the unitized substances into any producing formation for the purpose of repressuring, stimulating or increasing the ultimate recovery of unitized substances therefrom, a like amount of gas, if available, with due allowance for loss or depletion from any cause may be withdrawn from the formation into which the gas was introduced royalty free as to dry gas but not as to the products extracted therefrom; provided, that such withdrawal shall be at such time as may be provided in a plan of operation consented to by the Commissioner and approved by the Division as conforming to good petroleum

engineering practices; and provided further, that such right of withdrawal shall terminate on the termination of this unit agreement.

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If any lease committed hereto is burdened with an overriding royalty, payment out of production or other charge in addition to the usual royalty, the owner of such lease shall bear and assume the same out of the unitized substances allocated to the lands embraced in each such lease as provided herein.

13. LEASES AND CONTRACTS CONFORMED AND EXTENDED INSOFAR AS THEY APPLY TO LANDS WITHIN THE UNITIZED AREA: The terms, conditions and provision of all leases, subleases, operating agreements and other contracts relating to the exploration, drilling development or operation for oil or gas of the lands committed to this agreement, shall as of the effective date hereof, be and the same are hereby expressly modified and amended insofar as they apply to lands within the unitized area to the extent necessary to make the same conform to the provisions hereof and so that the respective terms of said leases and agreements will be extended insofar as necessary to coincide with the terms of this agreement and the approval of this agreement by the Commissioner and the respective lessors and lessees shall be effective to conform the provisions and extend the terms of each such lease as to lands within the unitized area to the provisions and terms of this agreement; but otherwise to remain in full force and effect. Each lease committed to this agreement, insofar as it applies to lands within the unitized area, shall continue in force beyond the term provided therein as long as this agreement remains in effect, provided, drilling operations upon the initial test well provided for herein shall have been commenced or said well is in the process of being drilled by the unit operator prior to the expiration of the shortest term lease committed to this agreement. Termination of this agreement shall not affect any lease which pursuant to the terms thereof or any applicable laws would continue in full force and effect thereafter. The commencement, completion, continued operation or production on each of the leasehold interests committed to this agreement and operations or production pursuant to this agreement shall be deemed to be operations upon and production from each leasehold interest committed hereto and there shall be no obligation on the part of the unit operator or any of the owners of the respective leasehold interests committed hereto to drill offset to wells as between the leasehold interests committed to this agreement, except as provided in Section 9 hereof.

Any lease embracing lands of the State of New Mexico of which only a portion is committed hereto shall be segregated as to the portion committed and as to the portion not committed and the terms of such leases shall apply separately as two separate leases as to such segregated portions, commencing as of the effective date

hereof. Notwithstanding any of the provisions of this agreement to the contrary, any lease embracing lands of the State of New Mexico having only a portion of its lands committed hereto shall continue in full force and effect beyond the term provided therein as to all lands embraced within the unitized area and committed to this agreement, in accordance with the terms of this agreement. If oil and gas, or either of them, are discovered and are being produced in paying quantities from some part of the lands embraced in such lease which part is committed to this agreement at the expiration of the secondary term of such lease, such production shall not be considered as production from lands embraced in such lease which are not within the unitized area, and which are not committed thereto, and drilling or reworking operations upon some part of the lands embraced within the unitized area and committed to this agreement shall be considered as drilling and reworking operations only as to lands embraced within the unit agreement and not as to lands embraced within the lease and not committed to this unit agreement; provided, however, as to any lease embracing lands of the State of New Mexico having only a portion of its lands committed hereto upon which oil and gas, or either of them, has been discovered is discovered upon that portion of such lands not committed to this agreement, and are being produced in paying quantities prior to the expiration of the primary term of such lease, such production in paying quantities shall serve to continue such lease in full force and effect in accordance with its terms as to all of the lands embraced in said lease.

- 14. <u>CONSERVATION</u>: Operations hereunder and production of unitized substances shall be conducted to provide for the most economical and efficient recovery of said substances without waste, as defined by or pursuant to State laws or regulations.
- 15. <u>DRAINAGE</u>: In the event a well or wells producing oil or gas in paying quantities should be brought in on land adjacent to the unit area draining unitized substances from the lands embraced therein, unit operator shall drill such offset well or wells as a reasonably prudent operator would drill under the same or similar circumstances.
- 16. <u>COVENANTS RUN WITH LAND</u>: The covenants herein shall be construed to be covenants running with the land with respect to the interests of the parties hereto and their successors in interest until this agreement terminates, and any grant, transfer or conveyance of interest in land or leases subject hereto shall be and hereby is conditioned upon the assumption of all privileges and obligations hereunder to the grantee, transferee or other successor in interest. No assignment or transfer or any working, royalty, or other interest subject hereto

shall be binding upon unit operator until the first day of the calendar month after the unit operator is furnished with the original, photostatic, or certified copy of the instrument of transfer.

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- 17. EFFECTIVE DATE AND TERM: This agreement shall become effective upon approval by the Commissioner and the Division and shall terminate in <u>five</u> years after such date unless (a) such date of expiration is extended by the Commissioner, or (b) a valuable discovery of unitized substances has been made on unitized land during said initial term or any extension thereof in which case this agreement shall remain in effect so long as unitized substances are being produced in paying quantities from the unitized land and, should production cease, so long thereafter as diligent operations are in progress for the restoration of production or discovery of new production and so long thereafter as the unitized substances so discovered are being produced as aforesaid. This agreement may be terminated at any time by not less than seventy-five percent (75%) on an acreage basis of the owners of the working interests, signatory hereto, with the approval of the Commissioner and with notice to Division. Likewise, the failure to comply with the drilling requirements of Section 8 hereof, may subject this agreement to termination as provided in said section.
- 18. <u>RATE OF PRODUCTION:</u> All production and the disposal thereof shall be in conformity with allocations, allotments, and quotas made or fixed by the Division, and in conformity with applicable laws and lawful regulations.
- 19. <u>APPEARANCES</u>: Unit operator shall, after notice to other parties affected, have the right to appear for and on behalf of any and all interests affected hereby, before the Commissioner of Public Lands and the Division, and to appeal from orders issued under the regulations of the Commissioner or Division, or to apply for relief from any of said regulations or in any proceedings on its own behalf relative to operations pending before the Commissioner or Division; provided, however, that any other interest party shall also have the rights at his own expense to appear and to participate in any such proceeding.
- 20. <u>NOTICES:</u> All notices, demands or statements required hereunder to be given or rendered to the parties hereto, shall be deemed fully given, if given in writing and sent by postpaid registered mail, addressed to such party or parties at their respective addresses, set forth in connection with the signatures hereto or to the ratification or consent hereof, or to such other address as any such party may have furnished in writing to party sending the notice, demand, or statement.

21. LOSS OF TITLE: In the event title to any tract of unitized land or substantial interest therein shall fail, and the true owner cannot be induced to join the unit agreement so that such tract is not committed to this agreement, or the operation thereof hereunder becomes impracticable as a result thereof, such tract may be eliminated from the unitized area, and the interest of the parties readjusted as a result of such tract being eliminated from the unitized area. In the event of a dispute as to the title to any royalty, working, or other interest subject hereto, the unit operator may withhold payment or delivery of the allocated portion of the unitized substances involved on account thereof, without liability for interest until the dispute in finally settled, provided that no payments of funds due the State of New Mexico shall be withheld. Unit operator, as such, is relieved from any responsibility for any defect or failure of any title hereunder.

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22. <u>SUBSEQUENT JOINDER</u>: Any oil or gas interest in lands within the unit area not committed hereto, prior to the submission of the agreement for final approval by the Commissioner and the Division, may be committed hereto by the owner or owners of such rights, subscribing or consenting to this agreement, or executing a ratification thereof, and if such owner is also a working interest owner, by subscribing to the operating agreement providing for the allocation of costs of exploration, development and operation. A subsequent joinder shall be effective as of the first day of the month following the approval by the Commissioner and the filing with the Division of duly executed counterparts of the instrument or instruments committing the interest of such owner to this agreement, but such joining party or parties, before participating in any benefits hereunder, shall be required to assume and pay to unit operator, their proportionate share of the unit expenses incurred prior to such party's or parties joinder in the unit agreement, and the unit operator shall make appropriate adjustments caused by such joinder, without any retroactive adjustment of revenue.

23. <u>COUNTERPARTS</u>: This agreement may be executed in any number of counterparts, no one of which needs to be executed by all parties, or may be ratified or consented to by separate instrument in writing specifically referring hereto, and shall be binding upon all those parties who have executed such a counterpart, ratification, or consent hereto with the same force and effect as if all such parties had signed the same document, and regardless of whether or not it is executed by all other parties owning or claiming an interest in the lands within the above described unit area.

IN WITNESS WHEREOF, the undersigned parties hereto have caused this agreement to be executed as of the respective dates set forth opposite their signatures.

UNIT OPERATOR AND WORKING INTEREST OWNERS

YATES PETROLEUM CORPORATION YATES DRILLING COMPANY ABO PETROLEUM CORPORATION MYCO INDUSTRIES, INC.

Date 3-24-03	-	Attorney-in-Fac	Spathing	RB
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G. Patterson, Attorney-in-Fa	act for YATES	S PETROLEUM CORP	ORATION, YATES DRILL	ING COMPANY, ABO
PETROLEUM CORPORATI	ON and MYC	O INDUSTRIES, INC.,	all New Mexico corporat	ions, on behalf of said
corporations.			/	
My commission expires:		-	Borbara ne Notary Public	loon

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EXHIBIT "B" STARE STATE EXPLORATORY UNIT CHAVES COUNTY, NEW MEXICO

TRACT NUMBER	DESCRIPTION OF LANDS	NET ACRES	SERIAL NUMBER AND EXPIRATION DATE	LESSOR & ROYALTY	LESSEE OF RECORD	OVERRIDING ROYALTY	WORKING INTEREST	
1.	T9S,R27E Sec. 8: W2 Chaves County, NM	320.00	VO-5338 8/1/03	State of New Mexico 1/6	Yates Petroleum Corporation	None	Yates Petroleum Corporation Yates Drilling Company Abo Petroleum Corporation Myco Industries, Inc.	70.000% 10.000% 10.000% 10.000%
2.	T9S,R27E Sec. 8: E2 Chaves County, NM	320.00	VO-5339 8/1/03	State of New Mexico 1/6	Yates Petroleum Corporation	None	Yates Petroleum Corporation Yates Drilling Company Abo Petroleum Corporation Myco Industries, Inc.	70.000% 10.000% 10.000% 10.000%
3.	T9S,R27E Sec. 9: N2SW4 Chaves County, NM	80.00	VO-5 364 9/1/03	State of New Mexico 1/6	Yates Petroleum Corporation	None	Yates Petroleum Corporation Yates Drilling Company Abo Petroleum Corporation Myco Industries, Inc.	70.000% 10.000% 10.000% 10.000%
4.	T9S,R27E Sec. 9: SE4 Chaves County, NM	160.00	VA-1815 9/1/03	State of New Mexico 1/8	Yates Petroleum Corporation	None	Yates Petroleum Corporation Yates Drilling Company Abo Petroleum Corporation Myco Industries, Inc.	70.000% 10.000% 10.000% 10.000%
5.	T9S,R27E Sec. 16: W2 Chaves County, NM	320.00	VA-2067 11/1/04	State of New Mexico 1/8	Yates Petroleum Corporation	None	Yates Petroleum Corporation Yates Drilling Company Abo Petroleum Corporation Myco Industries, Inc.	70.000% 10.000% 10.000% 10.000%
6.	T9S,R27E Sec. 16: E2 Chaves County, NM	320.00	VA-2055 11/1/04	State of New Mexico 1/8	Yates Petroleum Corporation	None	Yates Petroleum Corporation Yates Drilling Company Abo Petroleum Corporation Myco Industries, Inc.	70.000% 10.000% 10.000% 10.000%
7.	T9S,R27E Sec. 9: S2SW4 Chaves County, NM	80.00	VO-6335 9/1/06	State of New Mexico 1/6	Yates Petroleum Corporation	None	Yates Petroleum Corporation Yates Drilling Company Abo Petroleum Corporation Myco Industries, Inc.	70.000% 10.000% 10.000% 10.000%
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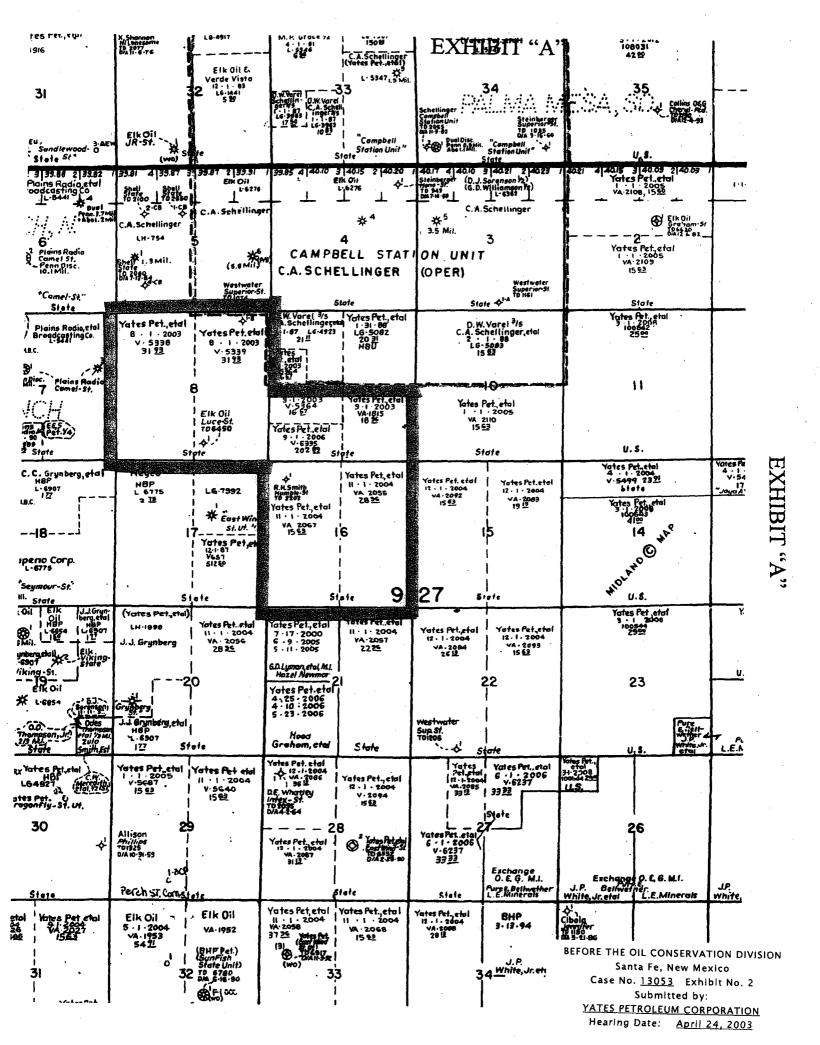


EXHIBIT "B" STARE STATE EXPLORATORY UNIT CHAVES COUNTY, NEW MEXICO

TRACT NUMBER	DESCRIPTION OF LANDS	NET ACRES	SERIAL NUMBER AND EXPIRATION DATE	LESSOR &	LESSEE OF RECORD	OVERRIDING ROYALTY	WORKING INTEREST	
1.	T9S,R27E Sec. 8: W2 Chaves County, NM	320.00	VO-5338 8/1/03	State of New Mexico 1/6	Yates Petroleum Corporation	None	Yates Petroleum Corporation Yates Drilling Company Abo Petroleum Corporation Myco Industries, Inc.	70.000% 10.000% 10.000% 10.000%
2.	T9S.R27E Sec. 8: E2 Chaves County, NM	320.00	VO-5339 8/1/03	State of New Mexico 1/6	Yates Petroleum Corporation	None	Yates Petroleum Corporation Yates Drilling Company Abo Petroleum Corporation Myco Industries, Inc.	70.000% 10.000% 10.000% 10.000%
3.	T9S,R27E Sec. 9: N2SW4 Chaves County, NM	80.00	VO-5364 9/1/03	State of New Mexico 1/6	Yates Petroleum Corporation	None	Yates Petroleum Corporation Yates Drilling Company Abo Petroleum Corporation Myco Industries, Inc.	70.000% 10.000% 10.000% 10.000%
4.	T9S,R27E Sec. 9: SE4 Chaves County, NM	160.00	VA-1815 9/1/03	State of New Mexico 1/8	Yates Petroleum Corporation	None	Yates Petroleum Corporation Yates Drilling Company Abo Petroleum Corporation Myco Industries, Inc.	70.000% 10.000% 10.000% 10.000%
5.	T9S,R27E Sec. 16: W2 Chaves County, NM	320.00	VA-2067 11/1/04	State of New Mexico 1/8	Yates Petroleum Corporation	None	Yates Petroleum Corporation Yates Drilling Company Abo Petroleum Corporation Myco Industries, Inc.	70.000% 10.000% 10.000% 10.000%
6.	T9S,R27E Sec. 16: E2 Chaves County, NM	320.00	VA-2055 11/1/04	State of New Mexico 1/8	Yates Petroleum Corporation	None	Yates Petroleum Corporation Yates Drilling Company Abo Petroleum Corporation Myco Industries, Inc.	70.000% 10.000% 10.000% 10.000%
7.	T9S,R27E Sec. 9: S2SW4 Chaves County, NM	80.00	VO-6335 9/1/06	State of New Mexico 1/6	Yates Petroleum Corporation	None	Yates Petroleum Corporation Yates Drilling Company Abo Petroleum Corporation Myco Industries, Inc.	70.000% 10.000% 10.000% 10.000%
	TOTAL ACRES	<u>1600.00</u>						

BEFORE THE OIL CONSERVATION DIVISION

Santa Fe, New Mexico

Case No. 13053 Exhibit No. 3

Submitted by:

YATES PETROLEUM CORPORATION

STATE LANDS

<u>100%</u>

Hearing Date: April 24, 2003



PATRICK H. LYONS COMMISSIONER

State of New Mexico Commissioner of Public Lands

310 OLD SANTA FE TRAIL P.O. BOX 1148 SANTA FE, NEW MEXICO 87504-1148 COMMISSIONER'S OFFICE

Phone (505) 827-5760 Fax (505) 827-5766 www.nmstatelands.org

APR 1 0 2003

April 8, 2003

Yates Petroleum Corporation 105 South Fourth Street Artesia, New Mexico 88210

Attention: Mr. Robert Bullock

Re:

Preliminary Approval

Proposed Stare State Exploratory Unit

Chaves County, New Mexico

Dear Mr. Bullock:

This office has received the unexecuted copy of the unit agreement, which you have submitted for the proposed Stare State Exploratory Unit area, Chaves County, New Mexico. This agreement meets the general requirements of the Commissioner of Public Lands, who has this date granted you preliminary approval as to form and content.

Preliminary approval shall not be construed to mean final approval of this agreement in any way and will not extend any short-term leases, until final approval and an effective date have been given.

When submitting your agreement for final approval, please submit the following:

- 1. Application for final approval by the Commissioner setting forth the tracts that have been committed and the tracts that have not been committed.
- 2. Pursuant to Rule 19.2.100.51, applications for approval shall contain a statement of facts showing:
 - a. That such agreement will tend to promote the conservation of oil and gas and the better utilization of reservoir energy.
 - b. That under the proposed unit operation, the State of New Mexico will receive its fair share of the recoverable oil and gas in place under its lands in the proposed unit area.
 - c. That each beneficiary institution of the State of New Mexico will receive its fair and equitable share of the recoverable oil and gas under its lands within the unit area.
 - d. That such unit agreement is in other respects for the best interest of the trust.
- 3. All ratifications from the Lessees of Record and Working Interest Owners. All signatures should be acknowledged by a notary and one set must contain original signatures.
- 4. Order of the New Mexico Oil Conservation Division. Our approval will be conditioned upon subsequent favorable approval by the New Mexico Oil Conservation Division.

BEFORE THE OIL CONSERVATION DIVISION

Santa Fe, New Mexico

Case No. <u>13053</u> Exhibit No. 4

Submitted by:

YATES PETROLEUM CORPORATION

Hearing Date: April 24, 2003

"WORKING FOR EDUCATION"

Yates Petroleum Corporation April 8, 2003 Page 2

- 5. Please submit two copies of the Unit Agreement.
- 6. A copy of the Unit Operating Agreement (if applicable).
- 7. Copies of all the well records for the initial unit well.
- 8. Your filing fee in the amount of \$90.00 has been received.

If you have any questions or if we may be of further help, please contact Pete Martinez at (505) 827-5791.

Very truly yours,

PATRICK H. LYONS

COMMISSIONER OF PUBLIC LANDS

JAMI BAILEY, Director

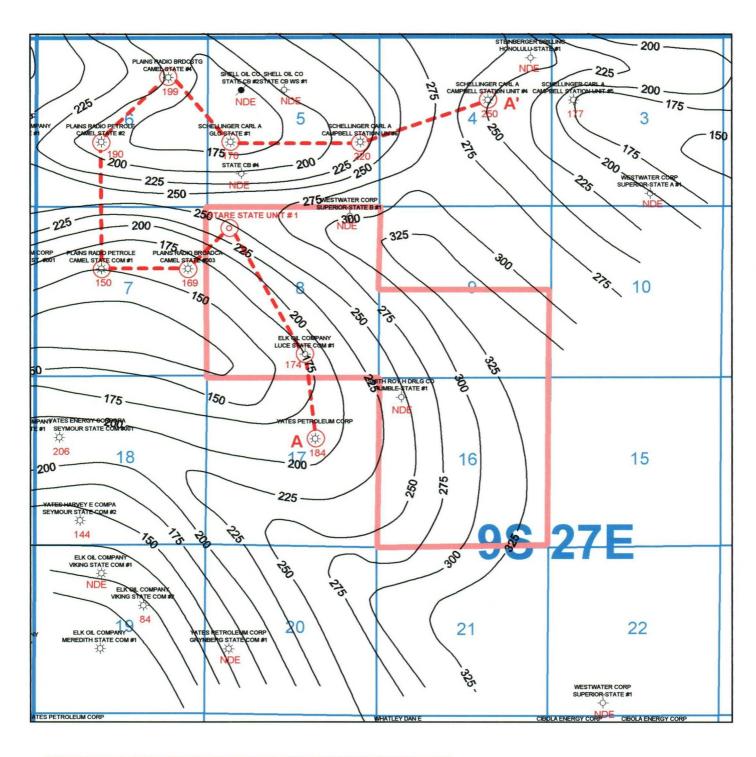
Oil, Gas and Minerals Division

(505) 827-5744

PL/JB/pm

cc: OCD-Santa Fe, Attention: Mr. Roy Johnson

William F. Carr



YATES PETROLEUM CORPORATION GROSS ISOPACH BASE PENNSYLVANIAN-TOP STRAWN CI = 25' Author: TIM MILLER Scale: 1:3000 STARE GRISO.GMP

STARE STATE UNIT

BEFORE THE OIL CONSERVATION DIVISION

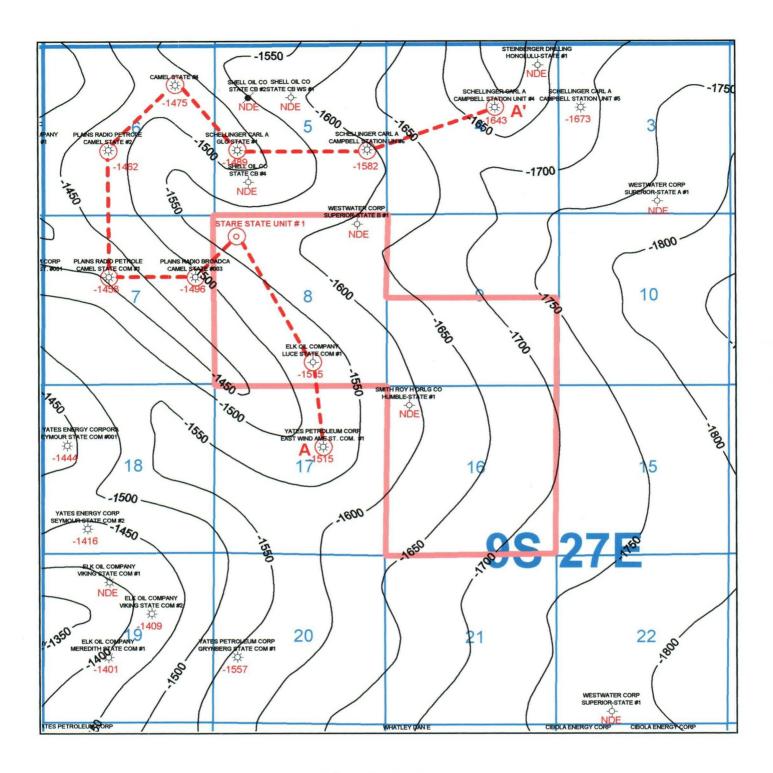
Santa Fe, New Mexico

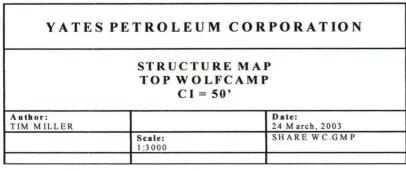
Case No. 13053 Exhibit No. 5

Submitted by:

YATES PETROLEUM CORPORATION

Hearing Date: April 24, 2003





STARE STATE UNIT

BEFORE THE OIL CONSERVATION DIVISION

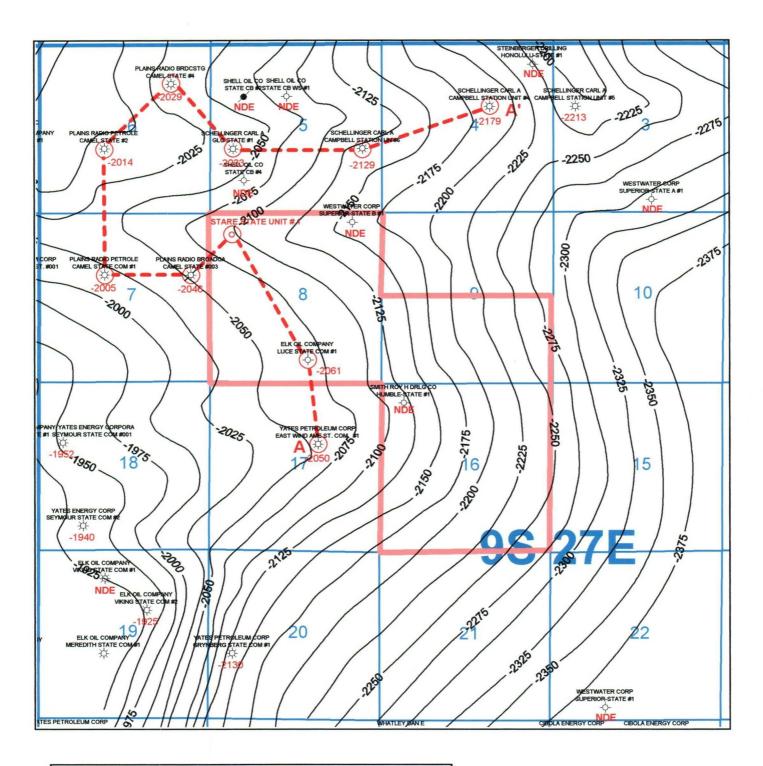
Santa Fe, New Mexico

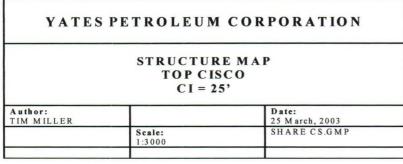
Case No. 13053 Exhibit No. 6

Submitted by:

YATES PETROLEUM CORPORATION

Hearing Date: April 24, 2003





STARE STATE UNIT

BEFORE THE OIL CONSERVATION DIVISION

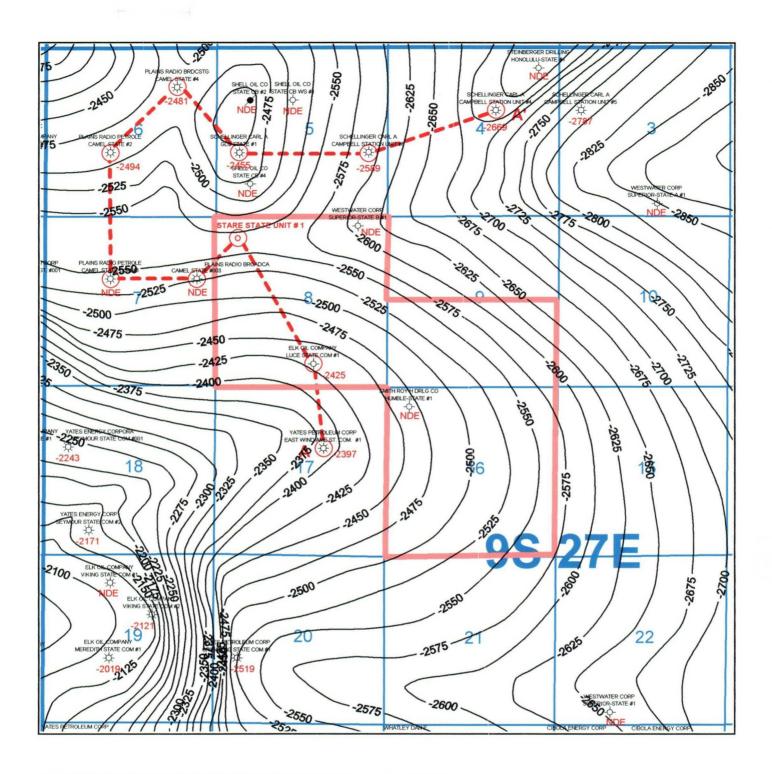
Santa Fe, New Mexico

Case No. 13053 Exhibit No. 7

Submitted by:

YATES PETROLEUM CORPORATION

Hearing Date: April 24, 2003



YATES	PETROLEUM	I CORPORATION
	STRUCTUR SILURO-DE CI = 2	VONIAN
Author: TIM MILLER		Date: 24 March, 2003
	Scale: 1:3000	SHARE SD.GMP

STARE STATE UNIT

BEFORE THE OIL CONSERVATION DIVISION
Santa Fe, New Mexico
Case No. 13053 Exhibit No. 9
Submitted by:
YATES PETROLEUM CORPORATION
Hearing Date: April 24, 2003

Stare State Unit Secs: All 8, S/2 9, All 16 9S-27E Chaves County, New Mexico

Yates Petroleum Corporation proposes the Stare State Unit. This unit is composed of all of section 8, south half of section 9, and all of section 16 of 9S-27E in Chaves County, New Mexico. Yates Petroleum proposes to drill the Stare State Unit #1 in section 8-9S-27E, 660 FNL & 660 FWL to 6,700 feet. This proposed well will adequately test the Abo sands, Wolfcamp limes, Cisco limes, Strawn sands, and Siluro-Devonian dolomite and TD in the Pre-Cambrian Granite Wash.

The primary objective in this Stare State Unit #1 is the Strawn sand. The Strawn sands are productive intervals in this area. The best well is the Camel State #2 in 6-9S-27E, which has produced 1.3 bcf from Strawn sand. Other wells that have produced in the area from these sands are: the Camel #1 in 7-9S-27E (316 mmcf), Campbell Station #4 in 4-9S-27E (540 mmcf), Camel #4 in 6-9S-27E (122 mmcf), Glo State #1 in 5-9S-27E (656 mmcf), and the Campbell Station #6 in 5-9S-27E (264 mmcf).

The Gross Isopach Map of the Base of Penn-Top of Strawn reveals a thick trend from the west to the southeast in the south half of section 6 and the north half of section 7 through section 8 (northwest to southeast) to the south half of section 9 and on through section 16. Yates Petroleum believes that to have thicker accumulations of productive Strawn sands the thickness of the Base of Penn – Top Strawn should generally be 180 feet +. The Camel State #1 & #3 have 150 and 169 feet respectively and they have produced only 316 mmcf and 4 mmcf. There are some exceptions such as the Glo State #1 (170') in 5-9S-27E, which has produced 656 mmcf and the Campbell Station #6 (220') which has only produced 264 mmcf. The Top Wolfcamp and the Top Cisco structure maps substantiate this thickening interval from the Base Penn to Top Strawn with a low trending relatively in the same direction as the Gross Isopach map reveals.

The Cross-Section A-A' displays the thickening and thinning of the Base of Penn to Top of Strawn through the various productive wells. Our Stare State Unit #1 well would have a thickness of 250 feet or better to encounter productive Strawn sands. This cross-section also shows that possibly the Siluro-Devonian could be a productive interval since there is some production from this formation in the East Wind "AME" State Com #1 in 17-9S-27E. A Siluro-Devonian structure map reveals the geologic structure in the area.

Yates Petroleum Corporation proposes the Stare State Unit in 9S-27E. This unit is composed of all of section 8, south half of section 9, and all of section 16. The proposed well, Stare State Unit #1 in 8-9S-27E (660 FNL & 660 FWL) will adequately test the Strawn sands as the primary objective and the secondary objectives would be the Abo sands, Wolfcamp limes, Cisco limes, and the Siluro-Devonian dolomite down to a total depth of 6,700 feet in the Pre-Cambrian Granite Wash..

BEFORE THE OIL CONSERVATION DIVISION

Santa Fe, New Mexico

Case No. 13053 Exhibit No. 10

Submitted by:

YATES PETROLEUM CORPORATION

Hearing Date: April 24, 2003