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

7 1 July 1987

8 EXAMINER HEARING

9 IN THE MATTER OF:

10 Application of Yates Petroleum Corp- CASE  
11 oration for approval of a unit agree- 9159  
12 ment, Chaves County, New Mexico.

13 BEFORE: David R. Catanach, Examiner

14  
15 TRANSCRIPT OF HEARING

16  
17 A P P E A R A N C E S

18  
19 For the Division: Jeff Taylor  
20 Legal Counsel for the Division  
21 Oil Conservation Division  
22 State Land Office Bldg.  
23 Santa Fe, New Mexico 87501

24  
25 For the Applicant:

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MR. CATANACH: Call next Case  
No. 9159.

MR. TAYLOR: The application of  
Yates Petroleum Corporation for approval of a unit  
agreement, Chaves County, New Mexico.

MR. CATANACH: At the request  
of the applicant Case No. 9159 will be continued to the  
Examiner Hearing 15 July 1987.

(Hearing concluded.)

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C E R T I F I C A T E

I, SALLY W. BOYD, C.S.R., DO HEREBY CERTIFY the foregoing Transcript of Hearing before the Oil Conservation Division (Commission) was reported by me; that the said transcript is a full, true, and correct record prepared by me to the best of my ability.

Sally W. Boyd CSR

I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case No. 9159, heard by me on July 1 1987.

David R. Catonah, Examiner  
Oil Conservation Division

STATE OF NEW MEXICO  
ENERGY AND MINERALS DEPARTMENT  
OIL CONSERVATION DIVISION  
STATE LAND OFFICE BLDG.  
SANTA FE, NEW MEXICO

15 July 1987

EXAMINER HEARING

IN THE MATTER OF:

Application of Yates Petroleum Cor- CASE  
poration for approval of a unit agree- 9159  
ment, Chaves County, New Mexico.

BEFORE: Michael E. Stogner, Examiner

TRANSCRIPT OF HEARING

A P P E A R A N C E S

For the Applicant:

Chad Dickerson  
Attorney at Law  
DICKERSON, FISK & VANDIVER  
Seventh & Mahone/Suite E  
Artesia, New Mexico 88210

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## I N D E X

## KATHY COLBERT

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## LESLIE BENTZ

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MR. STOGNER: Call next Case Number 9159, which is the application of Yates Petroleum Corporation for approval of a unit agreement in Chaves County, New Mexico.

We'll call for appearances.

MR. DICKERSON: Mr. Examiner, I'm Chad Dickerson of Artesia, New Mexico, on behalf of the applicant and I have two witnesses.

MR. STOGNER: Are there any other appearances in this matter?

Will both witnesses please stand and raise your right hand?

(Witnesses sworn.)

MR. STOGNER: You may be seated.  
Thank you.

Mr. Dickerson?

KATHY COLBERT,  
being called as a witness and being duly sworn upon her oath, testified as follows, to-wit:

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DIRECT EXAMINATION

BY MR. DICKERSON:

Q Will you state your name, your occupation, and by whom you're employed, please?

A My name is Kathy Colbert. I'm employed as a landman by Yates Petroleum Corporation, Artesia, New Mexico.

Q Ms. Colbert, you have previously testified before this Division as a petroleum landman in the recent past, have you not?

A Yes, I have.

Q And are you familiar with the application filed by Yates in Case 9159?

A Yes, I am.

MR. DICKERSON: I tender this witness as a petroleum landman, Mr. Examiner.

MR. STOGNER: How do you spell your last name again?

A C-O-L-B-E-R-T.

MR. STOGNER: Colbert.

A Yes.

MR. STOGNER: Ms. Colbert is so qualified.

Q Ms. Colbert, will you summarize the pur-

1 pose of Yates' application in this case?

2 A Yates Petroleum Corporation wishes to ob-  
3 tain approval of our proposed Desert Rose Unit. This unit  
4 encompasses 2560.52 acres in Chaves County. We wish to ob-  
5 tain this approval to effectively explore and develop this  
6 area.

7 Q Will you turn to what we have submitted  
8 to the Division as Yates Exhibit Number One and orient the  
9 Examiner with regard to the location of this unit?

10 A Exhibit Number One is a plat of the pro-  
11 posed unit outline. This is in Chaves County, Township 8  
12 and 9 South, Range 26 East.

13 There are four tracts within this unit  
14 boundary; 49.98 percent is Federal, with 50.02 percent being  
15 State.

16 Q Ms. Colbert, directing your attention to  
17 Section 11, colored in yellow on your plat, what is the ex-  
18 piration date of that lease?

19 A Yes, the State lease located in Section  
20 11 of 9, 26, does expire 8-1-87.

21 Q And subject to the approval of this Divi-  
22 sion you would request that expedited attention be given to  
23 this application, would you not?

24 A Yes, we would.

25 Q Turn to Exhibit Number Two and tell the

1 Examiner what that instrument consists of.

2 A Exhibit Number Two is the unit agreement  
3 on the standard form for Federal and State lands. This  
4 agreement does designate Yates Petroleum Corporation as the  
5 operator.

6 Q And this proposed unit agreement has been  
7 submitted both to the office of the Commissioner Public  
8 Lands and to the Bureau of Land Management?

9 A That's correct.

10 Q What is your proposed interval to be uni-  
11 tized?

12 A The Abo formation at approximately 5200  
13 feet.

14 Q And you may want to refer, Ms. Colbert,  
15 to Exhibit Number One, what is the location of your proposed  
16 test well?

17 A The location of the proposed test well is  
18 in Section 11, 1790 feet from the north, 660 feet from the  
19 east.

20 Q And this instrument appoints Yates Petro-  
21 leum Corporation as operator, does it not?

22 A That's correct.

23 Q Would you turn to Exhibit B, which is a  
24 part of our Exhibit Two, being the unit agreement, and very  
25 briefly describe for the Examiner what information is shown

1 on Exhibit B?

2 A Exhibit B to the unit agreement sets out  
3 each tract within this unit outline. Each tract number con-  
4 tains not only the lease number, number of acres, expiration  
5 date, but also lists the burdens on each lease, lessee of  
6 record, and the current working interest owners of each  
7 lease.

8 Q Who are the current record interest  
9 owners or the owners of the working interest within the unit  
10 area?

11 A Within the unit area they are Yates  
12 Petroleum Corporation, Yates Drilling Company, Abo Petroleum  
13 Corporation, and Myco Industries, Inc.

14 Q And have all of these parties joined your  
15 proposed unit?

16 A Yes. 100 percent of the unit has been  
17 committed and all ratifications obtained.

18 Q Okay, turn to what we have submitted as  
19 Exhibit Number Three and tell the Examiner what this is.

20 A Exhibit Number Three is the proposed unit  
21 operating agreement. This is on an AAPL Form 610, 1977. It  
22 does cover such areas as acquisition and maintenance of  
23 leases. There is an accounting procedure attached to govern  
24 the joint operations.

25 Q And Article VI on page 4 of that

1 instrument states that Yates intends to be drilling your in-  
2 itial test well on or before August 1st of 1987, correct?

3 A Correct.

4 Q What's the proposed depth of your initial  
5 test well?

6 A Approximately 5200 feet to adequately  
7 test the Abo.

8 Q Ms. Colbert, turn to Exhibit A to that  
9 unit operating agreement and tell the Examiner what informa-  
10 tion is summarized on Exhibit A.

11 A Exhibit A lists not only the description  
12 of the unit outline but it does also set out all the par-  
13 ties, their percentages that are participating in this unit.

14 The initial test well will be paid for by  
15 these parties in the percentages listed.

16 Q And at the time of the application for  
17 final approval of this unit, the ratifications and joinders  
18 of all parties will be submitted to the appropriate regula-  
19 tory agencies, is that correct?

20 A Yes, it is.

21 Q Okay. What is the status, Ms. Colbert,  
22 of approval of this unit agreement by the Commissioner of  
23 Public Lands?

24 A We have been granted preliminary approval  
25 from the Commissioner of Public Lands and have a letter

1 stating that, dated June 26.

2 Q And that is your Exhibit Number Four sub-  
3 mitted to the Division?

4 A Yes.

5 Q What is the status of approval by the  
6 Bureau of Land Management regarding designation of this area  
7 as logically subject to unit development?

8 A As of last Friday I spoke with Armando  
9 Lopez with the BLM. He has assured me there is no problem  
10 with this unit. It will be approved; however, he pointed  
11 out he would not be able to get me a letter in time for the  
12 hearing today.

13 Q You anticipate no problems or delay  
14 beyond your lease expiration date of August 1st in obtaining  
15 such approval from the Bureau of Land Management?

16 A There should be none according to his  
17 assurances.

18 MR. DICKERSON: Mr. Examiner, I  
19 tender Exhibits One through Four and I have no further ques-  
20 tions of this witness.

21 MR. STOGNER: One through Four  
22 will be admitted into evidence at this time.

23

24

25

## 1 CROSS EXAMINATION

2 BY MR. STOGNER:

3 Q Ms. Colbert.

4 A Yes.

5 Q Will you submit a copy of that approval  
6 from the BLM once it becomes available?

7 A As soon as it is received, yes.

8 Q Okay. Now, on Exhibit Number Two, on  
9 page 3, of the unitized lands and the unitized substances,  
10 although you're going for the Abo formation, is it not true  
11 that all oil and gas in all formation are to be unitized in  
12 this area?

13 A That's what we would request, yes.

14 Q Okay.

15 MR. STOGNER: I have no further  
16 questions of this witness.17 Are there any other questions  
18 of Ms. Colbert?19 MR. DICKERSON: Mr. Examiner,  
20 do I understand you request that we submit a copy of the BLM  
21 letter to your office upon receipt of it?

22 MR. STOGNER: Yes.

23 MR. DICKERSON: Okay.

24 MR. STOGNER: Once it becomes  
25 available so we can make it a part of the record at that

1 time.

2 MR. DICKERSON: Okay.

3 I have no further questions.

4 MR. STOGNER: Ms. Colbert may  
5 be excused.

6 Mr. Dickerson.

7 MR. DICKERSON: Leslie Bentz,  
8 Mr. Examiner.

9

10 LESLIE BENTZ,

11 being called as a witness and being duly sworn upon her  
12 oath, testified as follows, to-wit:

13

14 DIRECT EXAMINATION

15 BY MR. DICKERSON:

16 Q Ms. Bentz, will you state your name, your  
17 occupation, and by whom you're employed?

18 A Yes. My name is Leslie Bentz. I'm  
19 employed as a petroleum geologist by Yates Petroleum.

20 Q And, Ms. Bentz, you have previously on  
21 several occasions testified before this Division as a  
22 petroleum geologist and had your credentials accepted and  
23 made a matter of record, didn't you?

24 A Yes, I have.

25 Q And you are familiar with the geological

1 Basis underlying the boundaries of the proposed Desert Rose  
2 Unit Area?

3 A I am.

4 MR. DICKERSON: Mr. Examiner,  
5 tender Ms. Bentz as a geologist.

6 MR. STOGNER: Ms. Bentz is so  
7 qualified.

8 Q Ms. Bentz, would you briefly orient the  
9 Examiner with regard to the geological basis for this pro-  
10 posed Desert Unit Area?

11 A The proposed unit is located on the east-  
12 ern edge of the South Pecos Slope Abo Pool. The field pro-  
13 duces from a sequence of alluvial channel sandstones in the  
14 Lower Permian Leonard Abo formation. The primary objective  
15 of the test well within the proposed Desert Rose Unit is to  
16 extend Abo gas production in this field.

17 Q Okay, will you refer to what we have sub-  
18 mitted as Yates Exhibit G-1 and summarize for the Examiner  
19 the information you've shown on that exhibit?

20 A Exhibit G-1 is an Isopach map of the  
21 McConkey sandstone, a sandstone occupying a stratigraphic  
22 interval approximately 350 feet below the top of the Abo  
23 formation.

24 The contour interval is five feet. The  
25 Desert Rose Unit outline is marked by a dashed line and the

1 proposed location and TD of the test well is shown.

2 Datum points utilized are noted with cir-  
3 cles and the appropriate value is so labeled. Abo gas pro-  
4 ducers are marked in red. A stratigraphic cross section A-  
5 A' is shown by a broken line and its wells are labeled by  
6 name.

7 The Isopach map shows two separate and  
8 distinct alluvial channels of the McConkey sandstone inter-  
9 val in echelon.

10 The western channel has been successfully  
11 exploited and over 4 BCF of gas has been produced to date.

12 Several wells have been located as to  
13 penetrate the eastern channel, although only one well has  
14 been completed in this zone.

15 The other wells are completed in deeper  
16 horizons in the Foor Ranch PrePermian gas pool.

17 The Wentworth RU No. 3 encountered 24  
18 feet of the McConkey sandstone interval and was completed  
19 for 1960 MCF gas per day.

20 Q That's the well, excuse me, located in  
21 the southwest quarter of Section 12 and which appears on  
22 your cross section?

23 A Yes, it is. It is currently shut in  
24 awaiting a pipeline connection.

25 The proposed drill site should encounter

1 a similar sandstone section but a thinner section would re-  
2 sult in a commercial gas well; therefore the Isopach thick-  
3 ness of 10 feet or greater of the McConkey sandstone inter-  
4 val is the justification of the unit outline.

5 Q Okay, refer to Exhibit Number Two and  
6 tell us what you -- or Exhibit G-2, and tell us what you  
7 show on that cross section.

8 A Okay. Exhibit G-2, stratigraphic cross  
9 section A-A', is located northwest to southeast across the  
10 proposed unit and also the proposed drill site.

11 The top of the Abo formation serves as  
12 the stratigraphic datum. The McConkey stratigraphic inter-  
13 val, the mapping horizon and justification for the proposed  
14 unit, is so noted.

15 The Martin "ADW" Federal No. 1, located  
16 on the western edge of the proposed unit, encountered 5 feet  
17 of the McConkey sandstone interval. The sandstone was non-  
18 porous and tight as it was on the very edge of hte channel.  
19 The well was plugged and abandoned.

20 Q Ms. Bentz, let me interrupt. That is the  
21 well which appears on Exhibit G-1 in the southwest quarter  
22 of Section 34?

23 A That's correct.

24 Q Okay, continue.

25 A The Wentworth "RU" No. 3 was completed as

1 an Abo producer from the McConkey zone, as previously men-  
2 tioned. The producing perforations are colored in red.

3 The proposed drill site is located imme-  
4 diately to the northwest of the Wentworth "RU" No. 3 and as  
5 the cross section illustrates, a similar sandstone section  
6 is expected.

7 Q Okay, in summary can you briefly state  
8 the geological basis for this proposed unit area?

9 A The proposed Desert Rose Unit outline is  
10 justified by extant data. History has shown that the McCon-  
11 key stratigraphic interval is a prolific gas producer in the  
12 western channel that has been developed and the parallel  
13 channel to the east should be as prolific. The acreage de-  
14 dicated to the proposed Desert Rose Unit encompasses the ex-  
15 tent of the eastern channel that is not currently held by  
16 production.

17 The Commissioner of Public Lands has re-  
18 quested that lands held by production not be included in  
19 proposed units.

20 Q In your opinion, Ms. Bentz, will the ap-  
21 proval of Yates' application in this case be in the interest  
22 of conservation, the prevention of waste, and the protection  
23 of correlative rights?

24 A Yes, it will.

25 MR. DICKERSON: Mr. Examiner,

1 move admission of Yates Exhibits G-1 and G-2, and I have no  
2 further questions of this witness.

3 MR. STOGNER: Exhibits G-1 and  
4 G-2 will be admitted into evidence at this time.

5

6 CROSS EXAMINATION

7 BY MR. STOGNER:

8 Q Ms. Bentz, was there any other  
9 geophysical control up in the extreme northeastern portion  
10 of this unit that was brought into account for your  
11 stratigraphic interval as outlined in this Exhibit G-1?

12 A No, sir.

13 Q That Martin "ADW" Well No. 1 in Section  
14 34, I show that to be a dry hole, is that correct?

15 A Yes, sir.

16 Q Was that particular five foot interval,  
17 was that ever tested?

18 A No, sir, it has no porosity in it. It is  
19 extremely tight. It's very characteristic of a sandstone  
20 when you catch it on the edge of the channel, a very  
21 distinct edge.

22 Q Let's see, just for the record, McConkey  
23 is M-C-C-O-N-K-E-Y. That's how it's spelled, right?

24 A Yes.

25 Q Okay.

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MR. STOGNER: I have no further questions of Ms. Bentz.

Are there any other questions of this witness?

MR. DICKERSON: No.

MR. STOGNER: If not, she may be excused.

Mr. Dickerson, do you have anything further in this case?

MR. DICKERSON: No, Mr. Examiner, I don't.

MR. STOGNER: If there is nothing further in this case, Case Number 9159 will be taken under advisement.

(Hearing concluded.)

## C E R T I F I C A T E

I, SALLY W. BOYD, C.S.R., DO  
HEREBY CERTIFY the foregoing Transcript of Hearing before  
the Oil Conservation Division (Commission) was reported by  
me; that the said transcript is a full, true, and correct  
record of the hearing, prepared by me to the best of my  
ability.

Sally W. Boyd CSR

I do hereby certify that the foregoing is  
a complete record of the proceedings in  
the Examiner hearing of Case No. 9159  
heard by me on 15 July 1987.

W. H. [Signature] Examiner  
Oil Conservation Division



June 9, 1987

Energy and Minerals Department  
Oil Conservation Division  
P. O. Box 2088  
Santa Fe, New Mexico 87501

*Case 9159*

Re: Desert Rose State and Federal Unit  
Chaves County, New Mexico

Gentlemen:

Enclosed for filing, please find three copies of the Application of Yates Petroleum Corporation for Approval of a Unit Agreement, Desert Rose State and Federal Unit Area, Chaves County, New Mexico.

We understand that this matter has been set for hearing before an Examiner on July 1, 1987, and we ask that we be furnished with a docket of said hearing.

Thank you.

Sincerely yours,

DICKERSON, FISK & VANDIVER

Chad Dickerson

CD:pv  
Enclosures

cc w/enclosure: Ms. Kathy Colbert

BEFORE THE OIL CONSERVATION DIVISION  
OF THE STATE OF NEW MEXICO

IN THE MATTER OF THE APPLICATION :  
OF YATES PETROLEUM CORPORATION :  
FOR APPROVAL OF A UNIT AGREEMENT, : CASE NO. 9159  
DESERT ROSE STATE AND FEDERAL UNIT :  
AREA, CHAVES COUNTY, NEW MEXICO :  
\_\_\_\_\_ :

APPLICATION

COMES NOW Yates Petroleum Corporation, by its attorneys, and in support hereof, respectfully states:

1. Applicant is the operator of the following lands in Chaves County, New Mexico:

Township 8 South, Range 26 East, N.M.P.M.

Sections 34 and 35: All

Township 9 South, Range 26 East, N.M.P.M.

Sections 2 and 11: All

containing 2,560.52 acres, more or less.

2. The Applicant seeks to commit the above described lands to an exploratory unit known as the Desert Rose State and Federal Unit. The unit consists of federal and state lands.

3. The ratification or approval of all leasehold owners, including the State of New Mexico and Bureau of Land Management, required to ratify such unit agreement will be forthcoming prior to the effective date of any order issued pursuant to this Application by the Division.

4. The approval of this Application is in the interest of conservation and will prevent waste and protect correlative rights.

WHEREFORE, Applicant prays:

A. That this Application be set for hearing before an examiner and that notice of said hearing be given as required by law.

B. That upon hearing, the Division enter its order approving the Desert Rose State and Federal Unit Agreement, with Applicant as operator, as an exploratory unit embracing the above described lands.

C. And for such other and further relief as may be just in the premises.

YATES PETROLEUM CORPORATION

By:   
Chad Dickerson

DICKERSON, FISK & VANDIVER  
Seventh and Mahone, Suite E  
Artesia, New Mexico 88210  
(505) 746-9841

Attorneys for Applicant

BEFORE THE OIL CONSERVATION DIVISION  
OF THE STATE OF NEW MEXICO

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FOR APPROVAL OF A UNIT AGREEMENT, : CASE NO. 9159  
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AREA, CHAVES COUNTY, NEW MEXICO :  
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By:   
Chad Dickerson

DICKERSON, FISK & VANDIVER  
Seventh and Mahone, Suite E  
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(505) 746-9841

Attorneys for Applicant

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OF THE STATE OF NEW MEXICO

IN THE MATTER OF THE APPLICATION :  
OF YATES PETROLEUM CORPORATION :  
FOR APPROVAL OF A UNIT AGREEMENT, : CASE NO. 9159  
DESERT ROSE STATE AND FEDERAL UNIT :  
AREA, CHAVES COUNTY, NEW MEXICO :  
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YATES PETROLEUM CORPORATION

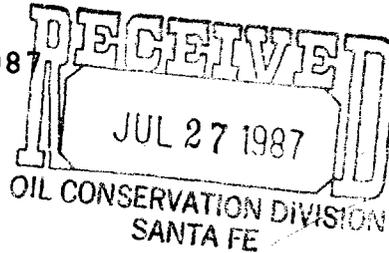
By:   
Chad Dickerson

DICKERSON, FISK & VANDIVER  
Seventh and Mahone, Suite E  
Artesia, New Mexico 88210  
(505) 746-9841

Attorneys for Applicant

July 24, 1987

Bureau of Land Management  
P.O. Box 1397  
Roswell, NM 88201



Re: Desert Rose Unit  
Chaves County, New Mexico  
3180(065)

Gentlemen:

On behalf of Yates Petroleum Corporation, application is hereby made for approval of the Desert Rose Unit, Chaves County, New Mexico. This exploratory unit consists of state and federal lands. All tracts are 100% committed at the date hereof. Submitted herewith are the following:

1. Original executed copy of the Unit Agreement, with Exhibits "A" and "B", with executed ratifications of all parties.
2. Original executed copy of the Unit Operating Agreement.
3. Copy of New Mexico Oil Conservation Division Order No. 8478 entered in Case No. 9159 on July 21, 1987, approving the Desert Rose Unit Agreement.

Please contact me if you have any questions or requirements. Your early attention will be appreciated as there is an August 1 spud date.

Thank you for your cooperation in this matter.

Sincerely yours,

DICKERSON, FISK & VANDIVER

Chad Dickerson

CD:bh

Enclosures

cc w/enclosure: Kathy Colbert  
State Land Office  
Oil Conservation Division ✓

July 24, 1987

State of New Mexico  
Commissioner of Public Lands  
P.O. Box 1148  
Santa Fe, NM 87504

ATTENTION: PETE MARTINEZ

Re: SLO REF. No. OG-212  
Proposed Desert Rose Unit  
Chaves County, New Mexico

Gentlemen:

On behalf of Yates Petroleum Corporation, application is hereby made for final approval of the captioned unit. Enclosed for this purpose are two originals of the Unit Agreement and Unit Operating Agreement, with ratifications attached. All tracts are committed.

Hearing before the New Mexico Oil Conservation Division was held in case number 9159 on July 15, 1987, and a copy of order R-8478 is enclosed. A copy of the Unit Agreement and Unit Operating Agreement is enclosed by copy of this letter to the Bureau of Land Management in Roswell. Bureau of Land Management approval of this unit is also being sought at this time.

Please advise if you need anything further in this regard. Your early attention will be appreciated as there is an August 1 spud date. Thank you.

Sincerely yours,

DICKERSON, FISK & VANDIVER



Chad Dickerson

CD:bh

Enclosures

cc: Kathy Colbert  
Bureau of Land Management  
New Mexico Oil Conservation Division ✓

UNIT AGREEMENT  
FOR THE DEVELOPMENT AND OPERATION  
OF THE  
DESERT ROSE UNIT AREA  
COUNTY OF CHAVES  
STATE OF NEW MEXICO  
NO.

THIS AGREEMENT, entered into as of the 8th day of June 19 87, 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 and gas interests in the unit area subject to this agreement; and

WHEREAS, the Mineral Leasing Act of February 25, 1920, 41 Statute 437, as amended 30 U.S.C. Section 181 et. seq., authorizes Federal lessees and their representatives to unite with each other, or jointly or separately with others, in collectively adopting and operating a unit plan of development or operations of any oil and gas pool, field, or like area, or any part thereof for the purpose of more properly conserving the natural resources thereof whenever determined and certified by the Secretary of the Interior to be necessary or advisable in the public interest; and

WHEREAS, the Commissioner of Public Lands of the State of New Mexico is authorized by an Act of the Legislature (Section 19-10-45, 46, 47 NM Statutes 1978 Annotated) to consent to or approve this agreement on behalf of the State of New Mexico, insofar as it covers and includes lands and mineral interest of the State of New Mexico; and

WHEREAS, the Oil Conservation Division of the New Mexico Energy and Minerals Department, hereinafter referred to as "Division", is authorized by an act of the Legislature (Chapter 70 and 71, NM Statutes 1978 Annotated) to approve this agreement and the conservation provisions hereof; and

WHEREAS, the parties hereto hold sufficient interests in the DESERT ROSE 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. ENABLING ACT AND REGULATIONS. The Mineral Leasing Act of February 25, 1920, as amended, supra, and all valid pertinent regulations including operating and unit plan regulations, heretofore issued thereunder or valid, pertinent and reasonable regulations hereafter issued thereunder are accepted and made a part of this agreement as to Federal lands, provided such regulations are not inconsistent with the terms of this agreement; and as to non-Federal lands, the oil and gas operating regulations in effect as of the effective date hereof governing drilling and producing operations, not inconsistent with the terms hereof or the laws of the State in which the non-Federal land is located, are hereby accepted and made a part of this agreement.

2. UNIT AREA. The following described land is hereby designated and recognized as constituting the unit area:

Township 8 South, Range 26 East, N.M.P.M.  
Sec. : 34: All  
Sec : 35: SE/4, W/2NE/4, SE/4NE/4, W/2, NE/4NE/4

Township 9 South, Range 26 East, N.M.P.M.  
Sec. : 2: Lots 1,2,3,4, S/2N/2, S/2  
Sec. : 11: All

Containing 2560.52 acres, more or less.

Exhibit "A" shows, in addition to the boundary of the unit area, 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 Exhibits "A" and "B" 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 in the Exhibits as owned by such party. Exhibits "A" and "B" shall be revised by the Unit Operator whenever changes in the unit area or in the ownership interests in the individual tracts render such revision necessary, or when requested by the Authorized officer, hereinafter referred to as "AO", or when requested by the Commissioner of Public Lands of the State of New Mexico, hereinafter referred to as "Land Commissioner", and not less than four (4) copies of the revised Exhibits shall be filed with the proper Bureau of Land Management office, and one (1) copy thereof shall be filed with the Land Commissioner, and one (1) copy with the New Mexico Oil Conservation Division of the Energy and Minerals Department, hereinafter referred to as "Division".

The above-described unit area shall, when practicable, be expanded to include therein any additional lands or shall be contracted to exclude lands whenever such expansion or contraction is deemed to be necessary or advisable to conform with the purposes of this agreement. Such expansion or contraction shall be effected in the following manner:

(a) Unit Operator, on its own motion (after preliminary concurrence by the AO), or on demand of the AO, or the Land Commissioner (after preliminary concurrence by the AO and the Land Commissioner) shall prepare a Notice of Proposed Expansion or Contraction describing the contemplated changes in the boundaries of the unit area, the reasons therefore, any plans for additional drilling, and the proposed effective date of the expansion or contraction, preferably the first day of a month subsequent to the date of notice.

(b) Said notice shall be delivered to the proper Bureau of Land Management office, the Land Commissioner and the Division, and copies thereof mailed to the last known address of each working interest owner, lessee and lessor whose interests are affected, advising that 30 days will be allowed for submission to the Unit Operator of any objections.

(c) Upon expiration of the 30-day period provided in the preceding item (b) hereof, Unit Operator shall file with the AO, the Land Commissioner and the Division, evidence of mailing of the Notice of Expansion or Contraction and a copy of any objections thereto which have been filed with Unit Operator, together with an application in triplicate, for approval of such expansion or contraction and with appropriate joinders.

(d) After due consideration of all pertinent information, the expansion or contraction shall, upon approval by the AO, the Land Commissioner and the Division, become effective as of the date prescribed in the notice thereof or such other appropriate date.

(e) Notwithstanding any prior elimination under the "Drilling to Discovery" section, all legal subdivisions of lands (i.e., 40 acres by Government survey or its nearest lot or tract equivalent; in instances of irregular surveys, unusually large lots or tracts shall be considered in multiples of 40 acres or the nearest aliquot equivalent thereof), no parts of which are entitled to be in a participating area on or before the fifth anniversary of the effective date of the first initial participating area established under this unit agreement, shall be eliminated automatically from this agreement, effective as of said fifth anniversary, and such lands shall no longer be a part of the unit area and shall no longer be subject to this agreement, unless diligent drilling operations are in progress on unitized lands not entitled to participation on said fifth anniversary, in which event all such lands shall remain subject hereto for so long as such drilling operations are continued diligently, with not more than ninety (90) days' time elapsing between the completion of one such well and the commencement of the next such well. All legal subdivisions of lands not entitled to be in a participating area within ten (10) years after the effective date of the first initial participating area approved under this agreement shall be automatically eliminated from this agreement as of said tenth anniversary. The Unit Operator shall, within ninety (90) days after the effective date of any elimination hereunder, describe the area so eliminated to the satisfaction of the AO and Land Commissioner and promptly notify all parties in interest. All lands reasonably proved productive of unitized substances in paying quantities by diligent drilling operations after the aforesaid 5-year period shall become participating in the same manner as during said first 5-year period. However, when such diligent drilling operations cease, all non-participating lands not then entitled to be in a participating area shall be automatically eliminated effective as of the 91st day thereafter.

Any expansion of the unit area pursuant to this section which embraces lands theretofore eliminated pursuant to this Subsection 2(e) shall not be considered automatic commitment or recommitment of such lands. If conditions warrant extension of the 10-year period specified in this subsection, a single extension of not to exceed two (2) years may be accomplished by consent of the owners of 90% of the working interests in the current non-participating unitized lands and the owners of 60% of the basic royalty interests (exclusive of the basic royalty interests of the United States) in non-participating unitized lands with approval of the AO and the Land Commissioner provided such extension application is submitted not later than sixty (60) days prior to the expiration of said 10-year period.

3. UNITIZED LAND AND UNITIZED SUBSTANCES. All land now or hereafter committed to this agreement shall constitute land referred to herein as "unitized land" or "land subject to this agreement". All oil and gas in any and all formations of the unitized land are unitized under the terms of this agreement and herein are called "unitized substances".

4. UNIT OPERATOR. YATES PETROLEUM CORPORATION hereby designated as Unit Operator and by signature hereto as Unit Operator 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 interest 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 only when such an interest is owned by it.

5. RESIGNATION OR REMOVAL OF UNIT OPERATOR. Unit Operator shall have the right to resign at any time prior to the establishment of a participating area or areas hereunder, but such resignation shall not become effective so as to release Unit Operator from the duties and obligations of Unit Operator and

terminate Unit Operator's rights as such for a period of six (6) months after notice of intention to resign has been served by Unit Operator on all working interest owners and the AO and the Land Commissioner and the Division, and until all wells then drilled hereunder are placed in a satisfactory condition for suspension or abandonment, whichever is required by the AO as to Federal lands and the Division as to State and fee lands, unless a new Unit Operator shall have been selected and approved and shall have taken over and assumed the duties and obligations of Unit Operator prior to the expiration of said period.

Unit Operator shall have the right to resign in like manner and subject to like limitations as above provided at any time after a participating area established hereunder is in existence, but in all instances of resignation or removal, until a successor Unit Operator is selected and approved as hereinafter provided, the working interest owners shall be jointly responsible for performance of the duties of Unit Operator, and shall not later than thirty (30) days before such resignation or removal becomes effective appoint a common agent to represent them in any action to be taken hereunder.

The resignation of Unit Operator shall not release Unit Operator from any liability for any default by it hereunder occurring prior to the effective date of its resignation.

The 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 as herein provided for the selection of a new Unit Operator. Such removal shall be effective upon notice thereof to the AO and the Land Commissioner.

The resignation or removal of Unit Operator under this agreement shall not terminate its 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 wells, equipment, materials, and appurtenances used in conducting the unit operations to the newly qualified successor Unit Operator or to the common agent, if no such new Unit Operator is selected, elected, to be used for the purpose of conducting unit operations hereunder. Nothing herein shall be construed as authorizing removal of any material, equipment, or appurtenances needed for the preservation of any wells.

6. SUCCESSOR UNIT OPERATOR. Whenever the Unit Operator shall tender his or its resignation as Unit Operator or shall be removed as hereinabove provided, or a change of Unit Operator is negotiated by the working interest owners, the owners of the working interests according to their respective acreage interests in all unitized land shall, pursuant to the approval of the parties requirements of the unit operating agreement, select a successor Unit 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 AO and approved by the Land Commissioner.

If no successor Unit Operator is selected and qualified as herein provided, the AO and the Land Commissioner, at their election may declare this unit agreement terminated.

7. ACCOUNTING PROVISIONS AND UNIT OPERATING AGREEMENT. If the Unit Operator is not the sole owner of working interests, costs and expenses incurred by Unit Operator in conducting unit operations hereunder shall be paid and apportioned among and borne by the owners of working interests, all in accordance with the agreement or agreements entered into by and between the Unit Operator and the owners of working 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 "unit operating agreement". Such unit operating agreement shall also provide the manner in which the working interest owners shall be entitled to receive their respective proportionate and allocated share of the benefits accruing hereto in conformity with their underlying operating agreements, leases, or other independent contracts, and such other rights and obligations as between Unit Operator and the working interest owners as may be agreed upon by Unit

Operator and the working interest owners; however, no such unit operating 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 inconsistency or conflict between this agreement and the unit operating agreement, this agreement shall govern. Two copies of any unit operating agreement executed pursuant to this section shall be filed in the proper Bureau of Land Management office and one true copy with the Land Commissioner, and one true copy with the Division prior to approval of this unit agreement.

8. 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 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.

9. DRILLING TO DISCOVERY. Within six (6) months after the effective date hereof, the Unit Operator shall commence to drill an adequate test well at a location approved by the AO, if on Federal land, or by the Land Commissioner, if on State land, and by the Division if on Fee land, unless on such effective date a well is being drilled in conformity with the terms hereof, and thereafter continue such drilling diligently until the Abo Formation has been tested or until at a lesser depth unitized substances shall be discovered which can be produced in paying quantities (to-wit: quantities sufficient to repay the costs of drilling, completing, and producing operations, with a reasonable profit) or the Unit Operator shall at any time establish to the satisfaction of the AO if on Federal land, or the Land Commissioner if on State land, or the Division if located on Fee land, that further drilling of said well would 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 5200 feet. Until the discovery of unitized substances capable of being produced in paying quantities, the Unit Operator shall continue drilling one well at a time, allowing not more than six (6) months between the completion of one well and the commencement of drilling operations for the next well, until a well capable of producing unitized substances in paying quantities is completed to the satisfaction of the AO if it be on Federal land or of the Land Commissioner if on State land, or the Division if on Fee land, or until it is reasonably proved that the unitized land is incapable of producing unitized substances in paying quantities in the formations drilled hereunder. Nothing in this section shall be deemed to limit the right of the Unit Operator to resign as provided in Section 5 hereof, or as requiring Unit Operator to commence or continue any drilling during the period pending such resignation becoming effective in order to comply with the requirements of this section.

The AO and Land Commissioner may modify any of the drilling requirements of this section by granting reasonable extensions of time when, in their opinion, such action is warranted.

Upon failure to commence any well as provided for in this section within the time allowed, prior to the establishment of a participating area, including any extension of time granted by the AO and the Land Commissioner, this agreement will automatically terminate. Upon failure to continue drilling diligently any well commenced hereunder, the AO and the Land Commissioner may, after fifteen (15) days' notice to the Unit Operator, declare this unit agreement terminated. The parties to this agreement may not initiate a request to voluntarily terminate this agreement during the first six (6) months of its term unless at least one obligation well has been drilled in accordance with the provisions of this section.

10. PLAN OF FURTHER DEVELOPMENT AND OPERATION. Within six (6) months after completion of a well capable of producing unitized substances in paying quantities, the Unit Operator shall submit for the approval of the AO, the Land Commissioner and Division, an acceptable plan of development and

operation for the unitized land which, when approved by the AO, the Land Commissioner and Division, shall constitute the further drilling and development obligations of the Unit Operator under this agreement for the period specified therein. Thereafter, from time to time before the expiration of any existing plan, the Unit Operator shall submit for the approval of the AO, the Land Commissioner and Division a plan for an additional specified period for the development and operation of the unitized land. Subsequent plans should normally be filed on a calendar year basis not later than March 1 each year. Any proposed modification or addition to the existing plan should be filed as a supplement to the plan.

Any plan submitted pursuant to this section shall provide for the timely exploration of the unitized area, and for the diligent drilling necessary for determination of the area or areas capable of producing unitized substances in paying quantities in each and every productive formation. This plan shall be as complete and adequate as the AO, the Land Commissioner and Division may determine to be necessary for timely development and proper conservation of the oil and gas resources of the unitized area and shall:

(a) specify the number and locations of any wells to be drilled and the proposed order and time for such drilling; and

(b) provide a summary of operations and production for the previous year.

Plans shall be modified or supplemented when necessary to meet changed conditions or to protect the interests of all parties to this agreement. Reasonable diligence shall be exercised in complying with the obligations of the approved plan of development and operation. The AO and the Land Commissioner are authorized to grant a reasonable extension of the 6-month period herein prescribed for submission of an initial plan of development and operation where such action is justified because of unusual conditions or circumstances.

After completion of a well capable of producing unitized substances in paying quantities, nor further wells, except such as may be necessary to afford protection against operations not under this agreement and such as may be specifically approved by the AO, the Land Commissioner and Division, shall be drilled except in accordance with an approved plan of development and operation.

11. PARTICIPATION AFTER DISCOVERY. Upon completion of a well capable of producing unitized substances in paying quantities, or as soon thereafter as required by the AO, the Land Commissioner or the Division, the Unit Operator shall submit for approval by the AO, the Land Commissioner and Division, a schedule, based on subdivisions of the public-land survey or aliquot parts thereof, of all land then regarded as reasonably proved to be productive of unitized substances in paying quantities. These lands shall constitute a participating area on approval of the AO, the Land Commissioner and Division, effective as of the date of completion of such well or the effective date of this unit agreement, whichever is later. The acreages of both Federal and non-Federal lands shall be based upon appropriate computations from the courses and distances shown on the last approved public-land survey as of the effective date of each initial participating area. The schedule shall also set forth the percentage of unitized substances to be allocated, as provided in Section 12 to each committed tract in the participating area so established, and shall govern the allocation of production commencing with the effective date of the participating area. A different participating area shall be established for each separate pool or deposit of unitized substances or for any group thereof which is produced as a single pool or zone, and any two or more participating areas so established may be combined into one, on approval of the AO, the Land Commissioner and the Division. When production from two or more participating areas is subsequently found to be from a common pool or deposit, the participating areas shall be combined into one, effective as of such appropriate date as may be approved or prescribed by the AO, the Land Commissioner and Division. The participating area or areas so established shall be revised from time to time, subject to the approval of the AO, the Land Commissioner, and Division to include additional lands then regarded as reasonably proved to be productive of unitized substances in paying quantities or which are necessary for unit operations, or to exclude lands then regarded as reasonably proved not to be productive of unitized substances in paying quantities, and the schedule of allocation percentages shall be revised accordingly. The effective date of any revision shall be the first of the month in which the knowledge or information is obtained on which

such revision is predicated; provided, however, that a more appropriate effective date may be used if justified by the Unit Operator and approved by the AO, the Land Commissioner and Division. No land shall be excluded from a participating area on account of depletion of its unitized substances, except that any participation area established under the provisions of this unit agreement shall terminate automatically whenever all completions in the formation on which the participating areas is based are abandoned.

It is the intent of this section that a participating area shall represent the area productive of unitized substances known or reasonably proved to be productive in paying quantities or which are necessary for unit operations; but, regardless of any revision of the participating area, nothing herein contained shall be construed as requiring any retroactive adjustment for production obtained prior to the effective date of the revision of the participating area.

In the absence of agreement at any time between the Unit Operator and the AO, the Land Commissioner and Division, as to the proper definition or redefinition of a participating area, or until a participating area has, or areas have, been established, the portion of all payments affected thereby shall, except royalty due the United States, be impounded in a manner mutually acceptable to the owners of committed working interests and the AO and the Land Commissioner. Royalties due to the United States and the State of New Mexico shall be determined by the AO for Federal lands and the Land Commissioner for the State lands and the amount thereof shall be deposited, as directed by the AO and the Land Commissioner until a participating area is finally approved and then adjusted in accordance with a determination of the sum due as Federal royalty on the basis of such approved participating area.

Whenever it is determined, subject to the approval of the AO, the Land Commissioner and the Division, that a well drilled under this agreement is not capable of production of unitized substances in paying quantities and inclusion in a participating area of the land on which it is situated in a participating area is unwarranted, production from such well shall, for the purposes of settlement among all parties other than working interest owners, be allocated to the land on which the well is located, unless such land is already within the participating area established for the pool or deposit from which such production is obtained. Settlement for working interest benefits from such a nonpaying unit well shall be made as provided in the unit operating agreement.

12. ALLOCATION OF PRODUCTION. All unitized substances produced from each participating area established under this agreement, except any part thereof used in conformity with good operating practices within the unitized area for drilling, operating, and other production for development purposes, for repressuring or recycling in accordance with a plan of development and operations which has been approved by the AO, Land Commissioner and Division, or unavoidably lost, shall be deemed to be produced equally on an acreage basis from the several tracts of unitized land of the participating area established for such production. For the purpose of determining any benefits accruing under this agreement, each such tract of unitized land shall have allocated to it such percentage of said production as the number of acres of such tract included in said participating area bears to the total acres of unitized land in said participating area, except that allocation of production hereunder for purposes other than for settlement of the royalty, over-riding royalty, or payment out of production obligations of the respective working interest owners, shall be on the basis prescribed in the unit operating agreement whether in conformity with the basis of allocation herein set forth or otherwise. It is hereby agreed that production of unitized substances from a participating area shall be allocated as provided herein regardless of whether any wells are drilled on any particular part or tract of the participating area. If any gas produced from one participating area is used for repressuring or recycling purposes in another participating area, the first gas withdrawn from the latter participating area for sale during the life of this agreement, shall be considered to be the gas so transferred, until an amount equal to that transferred shall be so produced for sale and such gas shall be allocated to the participating area from which initially produced as such area was defined at the time of such transferred gas was finally produced and sold.

13. DEVELOPMENT OR OPERATION OF NON-PARTICIPATING LAND OR FORMATIONS. Any party hereto owning or controlling the working interest in any unitized

land having thereon a regular well location may with the approval of the AO and the Land Commissioner, and the Division at such party's sole risk, costs, and expense, drill a well to test any formation provided the well is outside any participating area established for that formation, unless within ninety (90) days of receipt of notice from said party of his intention to drill the well, the Unit Operator elects and commences to drill the well in a like manner as other wells are drilled by the Unit Operator under this agreement.

If any well drilled under this section by a working interest owner results in production of unitized substances in paying quantities such that the land upon which it is situated may properly be included in a participating area, such participating area shall be established or enlarged as provided in this agreement and the well shall thereafter be operated by the Unit Operator in accordance with the terms of this agreement and the unit operating agreement.

If any well drilled under this section by a working interest owner that obtains production in quantities insufficient to justify the inclusion of the land upon which such well is situated in a participating area, such well may be operated and produced by the party drilling the same, subject to the conservation requirements of this agreement. The royalties in amount or value of production from any such well shall be paid as specified in the underlying lease and agreements affected.

14. ROYALTY SETTLEMENT. The United States and any State and any royalty owner who is entitled to take in kind a share of the substances now unitized hereunder shall hereafter be entitled to the right to take in kind its share of the unitized substances, and Unit Operator, or the working interest owner in case of the operation of a well by a working interest owner as herein provided for in special cases, shall make deliveries of such royalty share taken in kind in conformity with the applicable contracts, laws, and regulations. Settlement for royalty interest not taken in kind shall be made by working interest owners responsible therefore under existing contracts, laws and regulations, or by the Unit Operator on or before the last day of each month for unitized substances produced during the preceding calendar month; provided, however, that nothing in this section shall operate to relieve the lessees of any land from their respective lease obligations for the payment of any royalties due under their leases.

If gas obtained from lands not subject to this agreement is introduced in to any participating area hereunder, for use in repressuring, stimulation of production, or increasing ultimate recovery in conformity with a plan of development and operation approved by the AO and the Land Commissioner and the Division, a like amount of gas, after settlement as herein provided for any gas transferred from any other participating area and with appropriate deduction for loss from any cause, may be withdrawn from the formation into which the gas is introduced, royalty free as to dry gas, but not as to any products which may be extracted therefrom; provided that such withdrawal shall be at such time as may be provided in the approved plan of development and operation or as may otherwise be consented to by the AO and the Land Commissioner and the Division as conforming to good petroleum engineering practice; and provided further, that such right of withdrawal shall terminate on the termination of this unit agreement.

Royalty due the United States shall be computed as provided in 30 CFR Group 200 and paid in value or delivered in kind as to all unitized substances on the basis of the amounts thereof allocated to unitized Federal land as provided in Section 12 at the rates specified in the respective Federal lease, or at such other rate or rates as may be authorized by law or regulation and approved by the AO; provided, that for leases on which the royalty rate depends on the daily average production per well, said average production shall be determined in accordance with the operating regulations as though each participating area were a single consolidated lease.

Royalty due on account of State lands shall be computed and paid on the basis of all unitized substances allocated to such lands.

15. RENTAL SETTLEMENT. Rental or minimum royalties due on leases committed hereto shall be paid by appropriate working interest owners under existing contracts, laws, and regulations, provided that nothing herein contained shall operate to relieve the lessees of any land from their respective lease obligations for the payment of any rental or minimum royalty due under their leases. Rental or minimum royalty for lands of the United

States subject to this agreement shall be paid at the rate specified in the respective leases from the United States unless such rental or minimum royalty is waived, suspended, or reduced by law or by approval of the Secretary or his duly authorized representative.

Rentals on State of New Mexico lands subject to this agreement shall be paid at the rate specified in the respective leases.

With respect to any lease on non-federal land containing provisions which would terminate such lease unless drilling operations are commenced upon the land covered thereby within the time therein specified or rentals are paid for the privilege of deferring such drilling operations, the rentals required thereby shall, notwithstanding any other provision of this agreement, be deemed to accrue and become payable during the term thereof as extended by this agreement and until the required drilling operations are commenced upon the land covered thereby, or until some portion of such land is included within a participating area.

16. CONSERVATION. 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 or Federal law or regulation.

17. DRAINAGE. The Unit Operator shall take such measures as the AO and Land Commissioner deems appropriate and adequate to prevent drainage of unitized substances for unitized land by wells on land not subject to this agreement, which shall include the drilling of protective wells and which may include the payment of a fair and reasonable compensatory royalty, as determined by the AO, as to Federal leases and the Land Commissioner, as to State leases.

18. LEASES AND CONTRACTS CONFORMED AND EXTENDED. The terms, conditions, and provisions of all leases, subleases, and other contracts relating to exploration, drilling, development, or operation for oil or gas on lands committed to this agreement are hereby expressly modified and amended to the extent necessary to make the same conform to the provisions hereof, but otherwise to remain in full force and effect; and the parties hereto hereby consent that the Secretary, as to Federal leases and the Land Commissioner, as to State leases, shall and each by his approval hereof, or by the approval hereof by his duly authorized representative, does hereby establish, alter, change, or revoke the drilling, producing, rental minimum royalty, and royalty requirements of Federal leases committed hereto and the regulations in respect thereto to conform said requirements to the provisions of this agreement, and, without limiting the generality of the foregoing, all leases, subleases, and contracts are particularly modified in accordance with the following:

(a) The development and operation of lands subject to this agreement under the terms hereof shall be deemed full performance of all obligations for development and operation with respect to each and every separately owned tract subject to this agreement, regardless of whether there is any development of any particular tract of this unit area.

(b) Drilling and producing operations performed hereunder upon any tract of unitized lands will be accepted and deemed to be performed upon and for the benefit of each and every tract of unitized land, and no lease shall be deemed to expire by reason of failure to drill or produce wells situated on the land therein embraced.

(c) Suspension of drilling or producing operations on all unitized lands pursuant to direction or consent of the AO and the Land Commissioner, or his duly authorized representative, shall be deemed to constitute such suspension pursuant to such direction or consent as to each and every tract of unitized land. A suspension of drilling or producing operations limited to specified lands shall be applicable only to such lands.

(d) Each lease, sublease or contract relating to the exploration, drilling, development, or operation for oil or gas of lands other than those of the United States and State of New Mexico committed to this agreement which, by its terms might expire prior to the termination of this agreement, is hereby extended beyond any such terms so provided therein so that it shall be continued in full force and effect for and during the term of this agreement.

(e) Any Federal lease committed hereto shall continue in force beyond the term so provided therein or by law as to the land committed so long as such lease remains subject hereto, provided that production of unitized substances in paying quantities is established in paying quantities under this unit agreement prior to the expiration date of the term of such lease, or in the event actual drilling operations are commenced on unitized land, in accordance with provisions of this agreement, prior to the end of the primary term of such lease and are being diligently prosecuted at that time, such lease shall be extended for two years, and so long thereafter as oil or gas is produced in paying quantities in accordance with the provisions of the Mineral Leasing Act, as amended.

(f) Each sublease or contract relating to the operation and development of unitized substances from lands of the United States committed to this agreement, which by its terms would expire prior to the time at which the underlying lease, as extended by the immediately preceding paragraph, will expire, is hereby extended beyond any such term so provided therein so that it shall be continued in full force and effect for and during the term of the underlying lease as such term is herein extended.

(g) The segregation of any Federal lease committed to this agreement is governed by the following provision in the fourth paragraph of Section 17(j) of the Mineral Leasing Act, as amended by the Act of September 1, 1960, (74 Stat. 781-784) (30 U.S.C. 226(j)): "Any (Federal) lease heretofore or hereafter committed to any such (unit) plan embracing lands that are in part within and in part outside of the area covered by any such plan shall be segregated into separate leases as to the lands committed and the lands not committed as of the effective date of unitization. Provided, however that any such lease as to the non-unitized portion shall continue in force and effect for the term thereof, but for not less than two years from the date of such segregation and so long thereafter as oil or gas is produced in paying quantities."

(h) In the event the Initial Test Well is commenced prior to the expiration date of the shortest term State Lease within the Unit Area, any lease embracing lands of the State of New Mexico which is made the subject to this agreement, shall continue in force beyond the term provided therein as to the lands committed hereto until the termination hereof.

(i) Any lease embracing lands of the State of New Mexico having only a portion of its lands committed hereto, shall be segregated as to the portion committed and the portion not committed, and the terms of such lease shall apply separately to such segregated portions commencing as the effective date hereof; 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 in such lease, if oil or gas is discovered and is capable of being produced in paying quantities from some part of the lands embraced in such lease at the expiration of the secondary term of such lease; or if, at the expiration of the secondary term, the lessee or the Unit Operator is then engaged in bona fide drilling or reworking operations on some part of the lands embraced in such lease, the same as to all lands embraced therein, shall remain in full force and effect so long as such operations are being diligently prosecuted, and if they result in the production of oil or gas; said lease shall continue in full force and effect as to all the lands embraced therein, so long thereafter as oil or gas in paying quantities is being produced from any portion of said lands.

19. COVENANTS RUN WITH LAND. 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 lease subject hereto shall be and hereby is conditioned upon the assumption of all privileges and obligations hereunder by the grantee, transferee, or other successor in interest. No assignment or transfer of any working interest, royalty, or other interest subject hereto shall be binding upon Unit Operator until the first day of the calendar month after Unit Operator is furnished with the original, photostatic, or certified copy of the instrument of transfer.

20. EFFECTIVE DATE AND TERM. This agreement shall become effective upon approval by the AO and the Land Commissioner or their duly authorized representative and shall automatically terminate five (5) years from said

effective date unless:

(a) Upon application by the Unit Operator such date of expiration is extended by the AO and the Land Commissioner; or

(b) It is reasonably determined prior to the expiration of the fixed term or any extension thereof that the unitized land is incapable of production of unitized substances in paying quantities in the formations tested hereunder, and after notice of intention to terminate this agreement on such ground is given by the Unit Operator to all parties in interest at their last known addresses, this agreement is terminated with approval of the AO and the Land Commissioner; or

(c) a valuable discovery of unitized substances in paying quantities has been made or accepted on unitized land during said initial term or any extension thereof, in which event this agreement shall remain in effect for such term and so long thereafter as unitized substances can be produced as to Federal lands and are being produced as to State lands in quantities sufficient to pay for the cost of producing same from wells on unitized land within any participating area established hereunder. Should production cease and diligent drilling operations to restore production or new production are not in progress or reworking within sixty (60) days and production is not restored or should new production not be obtained in paying quantities on committed lands within this unit area, this agreement will automatically terminate effective the last day of the month in which the last unitized production occurred; or.

(d) It is voluntarily terminated as provided in this agreement. Except as noted herein this agreement may be terminated at any time prior to the discovery of unitized substances which can be produced in paying quantities by not less than 75 per centum, on an acreage basis, of the working interest owners signatory hereto, with the approval of the AO and the Land Commissioner. The Unit Operator shall give notice of any such approval to all parties hereto. Voluntary termination may not occur during the first six (6) months of this agreement unless at least one obligation well shall have been drilled in conformance with Section 9.

21. RATE OF PROSPECTING, DEVELOPMENT, AND PRODUCTION. The AO is hereby vested with authority to alter or modify from time to time, in his discretion, the quantity and rate of production under this agreement when such quantity and rate are not fixed pursuant to Federal or State law, or do not conform to any State-wide voluntary conservation or allocation program which is established, recognized, and generally adhered to by the majority of operators in such State. The above authority is hereby limited to alteration or modifications which are in the public interest. The public interest to be served and the purpose thereof, must be stated in the order of alteration or modification. Without regard to the foregoing, the AO is also hereby vested with authority to alter or modify from time to time, in his discretion, the rate of prospecting and development and the quantity and rate of production under this agreement when such alteration or modification is in the interest of attaining the conservation objectives stated in this agreement and is not in violation of any applicable Federal or State law; provided, further, that no such alteration or modification shall be effective as to any land of the State of New Mexico, as to the rate of prospecting and developing in the absence of the specific written approval thereof by the Commissioner and also to any lands of the State of New Mexico or privately owned lands subject to this agreement as to the quantity and rate of production in the absence of specific written approval thereof by the Division.

Powers in the section vested in the AO shall only be exercised after notice to Unit Operator and opportunity for hearing to be held not less than 15 days from notice.

22. APPEARANCES. Unit Operators shall, after notice to other parties affected, have the right to appear for and on behalf of any and all interest affected hereby before the Department of the Interior and the Commissioner of Public Lands and Division, and to appeal from orders issued under the regulations of said Department or Land Commissioner and Division or to apply for relief from any of said regulations, or in any proceedings relative to operations before the Department or the Land Commissioner and Division or any other legally constituted authority; provided, however, that any other interested party shall also have the right at its own expense to be heard in any such proceeding.

23. NOTICES. All notices, demands, or statements required hereunder to be given or rendered to the parties hereto shall be in writing and shall be personally delivered to the party or parties, or sent by postpaid registered or certified mail, to the last known address of the party or parties.

24. NO WAIVER OF CERTAIN RIGHTS. Nothing contained in this agreement shall be construed as a waiver by any party hereto of the right to assert any legal or constitutional right or defense as to the validity or invalidity of any law of the State where unitized lands are located, or of the United States, or regulations issued thereunder in any way affecting such party, or as a waiver by any such party of any right beyond his or its authority to waive.

25. UNAVOIDABLE DELAY. All obligations under this agreement requiring the Unit Operator to commence or continue drilling, or to operate on, or produce unitized substances from any of the lands covered by this agreement, shall be suspended while the Unit Operator, despite the exercise of due care and diligence, is prevented from complying with such obligations, in whole or in part, by strikes, acts of God, Federal, State, or municipal law or agencies, unavoidable accidents, uncontrollable delays in transportation, inability to obtain necessary materials or equipment in open market, or other matters beyond the reasonable control of the Unit Operator whether similar to matters herein enumerated or not.

26. NONDISCRIMINATION. In connection with the performance of work under this agreement, the Unit Operator agrees to comply with all the provisions of Section 202 (1) to (7) inclusive of Executive Order 11246 (30 F.R. 12319), as amended which are hereby incorporated by reference in this agreement.

27. LOSS OF TITLE. In the event title to any tract of unitized land shall fail and the true owner cannot be induced to join in this unit agreement, such tract shall be automatically regarded as not committed hereto, and there shall be such readjustment of future costs and benefits as may be required on account of the loss of such title. In the event of a dispute as to title to any royalty, working interest, or other interests subject thereto, payment or delivery on account thereof may be withheld without liability for interest until the dispute is finally settled; provided, that, as to Federal and State lands or leases, no payments of funds due the United States or the State of New Mexico should be withheld, but such funds shall be deposited as directed by the AO and such funds of the State of New Mexico shall be deposited as directed by the Land Commissioner, to be held as unearned money pending final settlement of the title dispute, and then applied as earned or returned in accordance with such final settlement.

Unit Operator as such is relieved from any responsibility for any defect or failure of any title hereunder.

28. NON-JOINDER AND SUBSEQUENT JOINDER. If the owner of any substantial interest in a tract within the unit area fails or refuses to subscribe or consent to this agreement, the owner of the working interest in that tract may withdraw the tract from this agreement by written notice delivered to the proper Bureau of Land Management office, the Land Commissioner, the Division and the Unit Operator prior to the approval of this agreement by the AO and Commissioner. Any oil or gas interests in lands within the unit area not committed hereto prior to final approval may thereafter be committed hereto by the owner or owners thereof subscribing or consenting to this agreement, and, if the interest is a working interest, by the owner of such interest only subscribing to the unit operating agreement. After operations are commenced hereunder, the right of subsequent joinder, as provided in this section, by a working interest owner is subject to such requirements or approval(s), if any, pertaining to such joinder, as may be provided for in the unit operating agreement. After final approval hereof, joinder by a non-working interest owner must be consented to in writing by the working interest owner committed hereto and responsible for the payment of any benefits that may accrue hereunder in behalf of such non-working interest. A non-working interest may not be committed to this unit agreement unless the corresponding working interest is committed hereto. Joinder to the unit agreement by a working interest owner, at any time, must be accompanied by appropriate joinder to the unit operating agreement, in order for the interest to be regarded as committed to this agreement. Except as may otherwise herein be provided, subsequent joinders to this agreement shall be effective as of the date of the filing with the AO, the Land Commissioner and the Division of duly executed

counterparts of all or any papers necessary to establish effective commitment of any interest and/or tract to this agreement.

29. COUNTERPARTS. 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.

30. SURRENDER. Nothing in this agreement shall prohibit the exercise by any working interest owner of the right to surrender vested in such party by any lease, sublease, or operating agreement as to all or any part of the lands covered thereby, provided that each party who will or might acquire such working interest by such surrender or by forfeiture as hereafter set forth, is bound by the terms of this agreement.

If as a result of any such surrender, the working interest rights as to such lands become vested in any party other than the fee owner of the unitized substances, said party may forfeit such rights and further benefits from operation hereunder as to said land to the party next in the chain of title who shall be and become the owner of such working interest.

If, as a result of any such surrender or forfeiture, working interest rights become vested in the fee owner of the unitized substances, such owner may:

(a) accept those working interest rights subject to this agreement and the unit operating agreement; or

(b) lease the portion of such land as is included in a participating area established hereunder subject to this agreement and the unit operating agreement; or

(c) provide for the independent operation of any part of such land that is not then included within a participating area established hereunder.

If the fee owner of the unitized substances does not accept the working interest rights subject to this agreement and the unit operating agreement or lease such lands as above provided within six (6) months after the surrendered or forfeited, working interest rights become vested in the fee owner, the benefits and obligations of operations accruing to such lands under this agreement and the unit operating agreement shall be shared by the remaining owners of unitized working interests in accordance with their respective working interest ownerships, and such owners of working interests shall compensate the fee owner of unitized substances in such lands by paying sums equal to the rentals, minimum royalties, and royalties applicable to such lands under the lease in effect when the lands were unitized.

An appropriate accounting and settlement shall be made for all benefits accruing to or payments and expenditures made or incurred on behalf of such surrendered or forfeited working interest subsequent to the date of surrender or forfeiture, and payment of any monies found to be owing by such an accounting shall be made as between the parties within thirty (30) days.

The exercise of any right vested in a working interest owner to reassign such working interest to the party from whom obtained shall be subject to the same conditions as set forth in this section in regard to the exercise of a right to surrender.

31. TAXES. The working interest owners shall render and pay for their account and the account of the royalty owners all valid taxes on or measured by the unitized substances in and under or that may be produced, gathered and sold from the land covered by this agreement after its effective date, or upon the proceeds derived therefrom. The working interest owners on each tract shall and may charge the proper proportion of said taxes to royalty owners having interest in said tract, and may currently retain and deduct a sufficient amount of the unitized substances or derivative products, or net proceeds thereof, from the allocated share of each royalty owner to secure reimbursement for the taxes so paid. No such taxes shall be charged to the United States or the State of New Mexico or to any lessor who has a contract



EXHIBIT "B"  
 TO UNIT AGREEMENT  
 DESERT ROSE  
 CHAVES COUNTY, NEW MEXICO

TRACT #	LAND DESCRIPTION	# OF ACRES	SERIAL NO. AND EXP. DATE	ROYALTY OWNERSHIP %	LESSEE OF RECORD	ROYALTY & %	WORKING INTEREST OWNER & PERCENTAGE
1.	T8S-R26E Sec. 34: Sec. 35: All SE/4, W/2NE/4, SE/4NE/4, W/2	1240.00	NM-27790 4/30/88	USA 12.5%	Yates Petroleum Corporation - 25% Yates Drilling Company - 25% Abo Petroleum Corporation - 25% Mycos Industries, Inc. - 25%	Ardelle K. Martin - 5%	Yates Petroleum Corporation - 25% Yates Drilling Company - 25% Abo Petroleum Corporation - 25% Mycos Industries, Inc. - 25%
2.	T8S-R26E Sec. 35: NE/4NE/4	40.00	NM-55902 4/30/93	USA 12.5%	Yates Petroleum Corporation-100%	None	Yates Petroleum Corporation -100%
<u>TOTAL</u>		<u>1280.00</u>	<u>ACRES OF FEDERAL LANDS</u>				
3.	T9S-R26E Sec. 11: All	640.00	LG-4429 8/1/87	State 12.5%	Yates Petroleum Corporation-100%	None	Yates Petroleum Corporation - 25% Yates Drilling Company - 25% Abo Petroleum Corporation - 25% Mycos Industries, Inc. - 25%
4.	T9S-R26E Sec. 2: Lots 1,2, 3,4, S/2N/2, S/2	640.52	LG-4918 12/1/87	State 12.5%	Yates Petroleum Corporation-100%	None	Yates Petroleum Corporation - 25% Yates Drilling Company - 25% Abo Petroleum Corporation - 25% Mycos Industries, Inc. - 25%
<u>TOTAL</u>		<u>1280.52</u>	<u>ACRES OF STATE LANDS</u>				

EXHIBIT "B"  
TO UNIT AGREEMENT  
DESERT ROSE  
CHAVES COUNTY, NEW MEXICO

RECAPITULATION

1,280.00 Acres Federal Lands	49.9898% of Unit Area
<u>1,280.52 Acres State Lands</u>	<u>50.0102% of Unit Area</u>
TOTAL <u>2,560.52 Acres All Lands</u>	<u>100.0000% of Unit Area</u>