

CASE 2985: Application of SHELL
OIL CO. for approval of the
BOOTLEG RIDGE UNIT AGREEMENT.

CASE No.

2985

Application,

TRANSCRIPTS,

SMALL Exhibits

ETC.

JUN 21 1965

[illegible]

February 20, 1953

Enclosure

COPY TO HQ 1003

NOTED - STAFF

RECEIVED

JUN 24 1965

U. S. GEOLOGICAL SURVEY
ROSWELL, NEW MEXICO



2/85
SHELL OIL COMPANY

MAIN OFFICE OCT 1958
Roswell, New Mexico

1964 MAR 15 1964
MAR 15 1964

Subject: Bootleg Ridge Unit
Lea County, New Mexico

Commissioner of Public Lands
P. O. Box 791
Santa Fe, New Mexico

Attention Mrs. Marian Rhea, Supervisor Unit Division

New Mexico Oil Conservation Commission
P. O. Box 871
Santa Fe, New Mexico

Gentlemen:

In order to complete your files we are attaching a fully executed copy of the Bootleg Ridge Deep Unit Agreement. As a matter of information, the unit test was spudded at 12:30 P.M. on February 27, 1964, and the well is presently drilling ahead.

We wish to take this opportunity to thank each of you for your cooperation in getting this unit approved. We certainly appreciate it.

Yours very truly,

C. V. Lawrence
Roswell Division Land Manager

Attachment

MAIN OFFICE OCC

SHELL OIL COMPANY

P. O. Box 1858
Roswell, New Mexico

1964 FEB 27 PM 1:23

February 26, 1964

Subject: Lea County, New Mexico
Bilberry Area
Bootleg Ridge Deep Unit

New Mexico Oil Conservation Commission
P. O. Box 871
Santa Fe, New Mexico

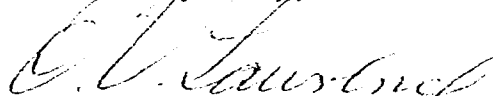
Attention Mr. Dan Nutter

Gentlemen:

During the hearing on the above mentioned unit, you asked that we furnish you with a copy of the letter from the Director of the U.S.G.S. giving preliminary approval to this unit.

In response to your request, we are enclosing a copy of the letter, dated January 23, 1964, from the Director for your information and files. We expect to have final approval of this unit in the next day or so, and we will furnish you a fully approved copy of the unit agreement at an early date.

Yours very truly,



O. V. Lawrence
Roswell Division Land Manager



IN REPLY REFER TO:

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

WASHINGTON 25, D. C.

1964 FEB 27 PM 1:23
JAN 23 1964

Shell Oil Company
P. O. Box 1858
Roswell, New Mexico

Attention: Mr. O. V. Lawrence

Gentlemen:

Your application of January 15 filed with the Regional Oil and Gas Supervisor, Roswell, New Mexico, requests the designation of 10,817.84 acres, more or less, in Lea County, New Mexico, as logically subject to exploration and development under the unitization provisions of the Mineral Leasing Act, as amended.

Pursuant to unit plan regulations of December 22, 1950, 30 CFR 226.3 (1961 reprint) the land requested as described in your application and outlined on your plat marked "Exhibit A, Bootleg Ridge Unit Area" is hereby designated as a logical unit area. Inasmuch as unitization will be limited to formations 2,700 feet below the top of the Delaware limestone, the unit agreement submitted for the area hereby designated should be identified as the "Bootleg Ridge Deep" unit agreement.

The unit agreement submitted for the area designated should provide for the drilling of the initial well to test formations of the Siluro-Devonian age, or to a depth of 15,500 feet. The 1961 reprint of the standard form of unit agreement should be used with the addition of the language required by the State of New Mexico, and the following modifications:

1. Replace section 3 of the 1961 reprint with the following new section:

"3. UNITIZED LANDS AND UNITIZED SUBSTANCES - All land committed to this agreement, as to all formations lying 2700 feet below the top of the Delaware limestone as identified at a subsea depth of minus 1028 feet on sonic log of the John H. Trigg, Red Tank Unit well No. 1-22, in sec. 22, T. 22 S., R. 32 E., N.M.P.M., shall constitute land referred to herein as unitized land or land subject to this agreement. All oil and gas in any and all formations lying 2700 feet below the top of the Delaware limestone, as identified above, are unitized under the terms of this agreement and are herein called unitized substances."

2. The Fair Employment Section of the 1961 reprint should be replaced with the following new section.

"Nondiscrimination: In connection with the performance of work under this agreement, the operator agrees to comply with all the provisions of Section 301 (1) to (7) inclusive, of Executive Order 10925, as amended (28 F.R. 6485) which are hereby incorporated by reference in this agreement."

3. Change item 6(b) on page 7 of the 1961 reprint to read:

"(b) The selection shall have been filed with the Supervisor. If no successor unit operator is selected and qualified as herein provided, the Director at his election may declare this unit agreement terminated."

In the absence of any type of land requiring special provisions or of any objections not now apparent, a duly executed agreement identical with said form as modified will be approved if submitted in approvable status within a reasonable period of time. However, the right is reserved to deny approval of any executed agreement, which in our opinion, does not have full commitment of sufficient lands to afford effective control of unit operations.

When the executed agreement is transmitted to the Supervisor for approval include the latest status of all acreage. In preparation of Exhibits A and B, follow closely the format of the sample exhibits attached to the 1961 reprint of the standard form.

Inasmuch as this area contains State of New Mexico lands, please contact the Commissioner of Public Lands at Santa Fe, New Mexico, before soliciting joinders.

Sincerely yours,



Acting Director

BEFORE THE
NEW MEXICO OIL CONSERVATION COMMISSION
Santa Fe, New Mexico
February 5, 1964

EXAMINER HEARING

IN THE MATTER OF:

Application of Shell Oil Company for a unit
agreement, Lea County, New Mexico.

Case No. 293

BEFORE: DANIEL S. NUTTER, EXAMINER

TRANSCRIPT OF HEARING

DEARNLEY-MEIER REPORTING SERVICE, Inc.

FARMINGTON, N. M.
PHONE 325-1182

SANTA FE, N. M.
PHONE 983-3971

ALBUQUERQUE, N. M.
PHONE 243-6691



DEARNLEY, MEIER, WILKINS and CROWNOVER

General Court Reporting Service

Suite 1120 Simms Building Albuquerque, New Mexico Phone 243-6691

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Santa Fe, New Mexico
February 5, 1964

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IN THE MATTER OF:

Application of Shell Oil Company for
a unit agreement, Lea County, New
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CASE NO. 2985

BEFORE: DANIEL S. NUTTER, EXAMINER

TRANSCRIPT OF HEARING

MR. NUTTER: Call Case 2985.

MR. DURRETT: Application of Shell Oil Company for a
unit agreement, Lea County, New Mexico.

MR. MORRIS: If the Examiner please, I am Richard Morris of
Seth, Montgomery, Federici and Andrews, Santa Fe, appearing for
Shell Oil Company. We will have two witness in this case, Mr. O.
V. Lawrence, who will testify concerning the land matters involved
and Mr. Mark Robinson will testify concerning the geological
aspects of the case.

(Witnesses sworn)



DEARNLEY, MEIER, WILKINS and CROWNOVER

General Court Reporting Service

Suite 1120 Simms Building Albuquerque, New Mexico Phone 243-6691

O. V. LAWRENCE,

called as a witness herein, having been first duly sworn on oath,
was examined and testified as follows:

DIRECT EXAMINATION

BY MR. MORRIS:

Q Mr. Lawrence, please state your name, by whom you are
employed, and in what capacity and where you are located?

A O. V. Lawrence, Shell Oil Company, Division Land Manager,
Roswell, New Mexico.

Q And you have previously testified before the Commission
or one of its Examiners, have you not?

A I have.

Q Are you familiar with the application of Shell in Case
2985?

A Yes, I am.

Q Was the land work involved in the Bootleg Ridge Unit
done by you or under your direction?

A Yes, it was.

Q What is it that Shell Oil Company seeks by this application?

A We seek the approval of a unit consisting of 10,817.84
acres of land in Townships 22 and 23 South, Ranges 32 and 33 East,
Lea County, New Mexico.

Q Do you have a copy of the proposed Bootleg Ridge Unit
agreement?



A Yes, I do have.

Q Has that been marked as Exhibit One in this case?

A It has.

Q We have just the one copy at this time. If the Commission desires other copies, we will furnish them. If you would refer to that exhibit, and to Exhibit "A" attached to it, would you explain the plat which is Exhibit "A" and some of the pertinent features of it?

A Yes, sir, Exhibit "A" is merely a plat showing the outline of the unit, the type of land which is inside the unit, being State and Federal land and also the tract numbers which tie into Exhibit "B".

Q Now, referring to Exhibit "B", what is shown by that exhibit?

A Merely a breakdown of each tract as to description and the number of heirs, the leases, the royalty owner, the overriding owner, and that is about it.

Q Who are the working interest owners in this unit?

A There are 14 working interests, being Continental, Shell, Union, Phillips, Richards Oil, Inc., Perry R. Bass, Gulf, Cabot Corp., Mrs. V. K. Ross, Southern California Petroleum Corporation, Culberson-Irwin, Charles B. Reid, and Richfield.

Q Of these working interests, how many are committed percentage wise?

A 95 percent of the working interests have told us that



they would. We have not heard from Richfield, who owns the other five percent, they are merely considering.

Q Are there numerous overriding royalty interests in the various tracts comprising this unit area?

A They have all been contacted and we are receiving ratifications daily from these overriding royalty owners.

Q Have any such interest owners refused to ratify your unit?

A Not to date.

Q Mr. Lawrence, you said you have Federal and State lands in this unit. Have you been in touch with the USGS concerning their preliminary approval of the form of the unit?

A Yes, sir, we have and we do have preliminary approval from the Director in Washington.

Q And what form generally is the unit agreement in?

A It is the standard form of agreement which type of agreement would include State and Federal lands.

Q Have you been in touch with the State Land Office concerning obtaining its approval to the proposed unit?

A Yes, we have.

Q What is the status of that at this time?

A It is presently being considered.

Q Do you actually have any indication of approval from the State Land Office at this time?

A I do not, sir.



Q Under the unit agreement itself, Mr. Lawrence, who will be the unit operators?

A Shell Oil Company.

Q What formations will be unitized?

A The unit agreement provides for a Suro-Devonian test or a well to 15,500 feet, or to commercial production at a lesser depth.

Q What reasons are there for the exclusion of the shallower formations?

A This unit covers only the zones below 2700 feet, below the top of the Delaware Limestone. The reason for this deeper depth is that this will exclude from unitization the upper portion of the Delaware Limestone, which has been condemned by shallow dry holes in this area.

Q Does the unit agreement provide and impose a drilling obligation upon the unit operator?

A Yes, it does. Within six months upon its approval, a well must be commenced, this well I spoke of.

Q Is there a depth requirement for that well?

A Yes. 15,500 feet, or to test the Suro-Devonian, or commercial production at a shallower depth.

Q Does the unit agreement have a segregation clause in it?

A Yes, it does.

Q Does it have provisions for expansion and constriction?

A Yes, sir, it does.



Q Was the unit agreement prepared by you or under your direction?

A Yes, it was prepared by me and under my direction, both.

Q All right.

MR. MORRIS: At this time, we offer Exhibit One into evidence.

MR. NUTTER: Applicant's Exhibit One will be admitted in evidence.

MR. MORRIS: That is all I have at this time, Mr. Nutter, of Mr. Lawrence.

MR. NUTTER: Are there any questions of Mr. Lawrence?

MR. DURRETT: Yes, sir, I have a question.

CROSS EXAMINATION

BY MR. DURRETT:

Q Mr. Lawrence, when and if you receive approval of this unit from the Commissioner of Public Lands, would you furnish us a copy of that?

A Yes, sir.

MR. DURRETT: Thank you.

* * * *

CROSS EXAMINATION

BY MR. NUTTER:

Q Mr. Lawrence, you said you had tentative approval from



DEARNLEY, MEIER, WILKINS and CROWNOVER

General Court Reporting Service

Suite 1120 Simms Building Albuquerque, New Mexico Phone 243-6691

the USGS for the unit, has the unit been submitted to the Commissioner of Public Lands?

A Yes, it has.

Q You just haven't heard any reply?

A That is true, sir.

Q So, you don't know whether there will have to be any changes made in the unit agreement as submitted here, or not, to conform with whatever the Commissioner of Public Lands may think necessary in the unit agreement; if he hasn't approved this, it might be different, in other words?

A It could be, yes, sir.

MR. MORRIS: I would like to make one comment. Mr. Lawrence is quite right, he has received no indication one way or another from the Commissioner of Public Lands. I have myself been in touch with Mrs. Ray of the Unit Division, and with the Commissioner, and we are still negotiating for his approval on this. There are problems, but negotiations are still pending.

MR. NUTTER: They haven't broken down?

MR. MORRIS: No, sir, almost.

MR. NUTTER: Are there further questions of Mr. Lawrence? He may be excused.

MARK ROBINSON,
called as a witness herein, having been first duly sworn on oath,
was examined and testified as follows:



DIRECT EXAMINATION

BY MR. MORRIS:

Q Please state your name, by whom you are employed, and in what capacity, and where you are located?

A Mark Robinson, Division Exploration Manager, Shell Oil Company, Roswell, New Mexico.

Q And Mr. Robinson, you have previously testified before the Commission or one of its Examiners, have you not?

A Yes, sir, that is right.

Q Was the geologic work in the area of the proposed unit done by you or under your direction?

A Yes, that's right.

Q Referring to what we have marked as Exhibit Number Two, which is a structure map of the unit area, would you point out the pertinent features of that exhibit?

A Yes, sir. That is a geophysical map based on a little better than one mile spacing seismographic work. It is contoured on the Mississippian Limestone, which is a deep reflector in this area, which we believe depicts structure more or less compatible with the objects on the Suro-Devonian. As you can see, there is a sizeable enclosure contoured there and the proposed unit area, we feel, fairly embraces the area that will be potentially productive.

Q All right.

A I would also like to add that we would appreciate it if



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you would mail that back to us when you have considered it, and keep it confidential.

Q Mr. Robinson, in your opinion, does the proposed unit area adequately cover the structure enclosure as you see it at this time?

A Yes, sir.

Q Do you have a tentative location for the initial well to be drilled in this area if the unit is approved?

A Yes, sir. Our tentative location is in the South Half of Section 25, however, it is possible it may be moved into the North Half of Section 36. In any event, we feel it would be a very good test of the crest of the structure.

Q Would you care to comment generally upon the desirability of the unit operation in this particular area?

A Yes, the unit plan of operation is we feel very well suited to drilling such a test, a very deep test as we propose here, and as the Commission has seen by the many deep tests being drilled in this area, under the unit plan of operation, by forming this large unit, which again we feel fairly covers the structure, correlative rights will be protected for the mutual benefit of all parties.

Q Was Exhibit Number Two prepared by you or under your direction?

A Yes, it was.

MR. MORRIS: We offer Exhibit Two in evidence. Mr. Examiner,



and we request, as Mr. Robinson already has, that it be held confidential, and returned to him. I believe he has noted his address on the exhibit.

MR. NUTTER: This exhibit can be returned to Mr. Robinson at the expiration of the time for any appeal of this case.

MR. MORRIS: That is all we have of this witness.

MR. NUTTER: Are there any questions of Mr. Robinson?

CROSS EXAMINATION

BY MR. NUTTER:

Q Mr. Robinson, how near is the closest Suro-Devonian production to this area?

A It is in the Bell Lake Field, eight miles northwest.

Q Do you have a copy of the log of the Trigg, which is the key well depicting the vertical limits of this unit?

A Yes, sir, I do. I misquoted, Bell Lake is northeast.

Q Now, is the 2700 feet below the top of the Delaware Limestone identified on that log?

A The Delaware Limestone is identified, but the other- -

Q The marker is 2700 feet below the top of that, isn't it?

A Yes.

Q Would you indicate the top of the unitized substances; that is what we would want a record of?

A Well, actually, a few feet below the total depth of this well. You want me to just draw a line on the bottom?

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Q Your marker is 2700 feet below the top of the Limestone and the top is at minus 1028?

A That is identified on the log.

Q That is identified?

A Yes, sir.

Q That will be fine. Just so long as it can be pinned down.

MR. NUTTER: Are there any other questions of Mr. Robinson? He may be excused. Do you have anything further, Mr. Morris?

MR. MORRIS: No, sir.

MR. NUTTER: Does anyone have anything they wish to offer in Case 2985? We will take the case under advisement.

* * * *



DEARNLEY, MEIER, WILKINS and CROWNOVER

General Court Reporting Service

Phone 243-6691

Albuquerque, New Mexico

Suite 1120 Simms Building

STATE OF NEW MEXICO
COUNTY OF BERNALILLO

I, ROY D. WILKINS, Notary Public in and for the County of Bernalillo, State of New Mexico, do hereby certify that the foregoing and attached Transcript of Hearing before the New Mexico Oil Conservation Commission was reported by me, and that the same is a true and correct record of the said proceedings, to the best of my knowledge, skill, and ability.

WITNESS my Hand and Seal of Office, this 18th day of February, 1964.

Roy D. Wilkins
NOTARY PUBLIC

My Commission Expires:
September 6, 1967.

I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case No. 2985 heard by me on 2/5, 1964.

[Signature], Examiner
New Mexico Oil Conservation Commission



DEARNLEY-MEIER REPORTING SERVICE, Inc.

FARMINGTON, N. M.
PHONE 325-1162

SANTA FE, N. M.
PHONE 983-3971

ALBUQUERQUE, N. M.
PHONE 243-6691

BEFORE THE
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BY MR. NUTTER:

Q Mr. Robinson, how near is the closest Suro-Devonian production to this area?

A It is in the Bell Lake Field, eight miles northwest.

Q Do you have a copy of the log of the Trigg, which is the key well depicting the vertical limits of this unit?

A Yes, sir, I do. I misquoted, Bell Lake is northeast.

Q Now, is the 2700 feet below the top of the Delaware Limestone identified on that log?

A The Delaware Limestone is identified, but the other- -

Q The marker is 2700 feet below the top of that, isn't it?

A Yes.

Q- Would you indicate the top of the unitized substances; that is what we would want a record of?

A Well, actually, a few feet below the total depth of this well. You want me to just draw a line on the bottom?



DEARNLEY, MEIER, WILKINS and CROWNOVER

General Court Reporting Service

Suite 1120 Simms Building Albuquerque, New Mexico Phone 243-6601

Q Your marker is 2700 feet below the top of the Limestone and the top is at minus 1028?

A That is identified on the log.

Q That is identified?

A Yes, sir.

Q That will be fine. Just so long as it can be pinned down.

MR. NUTTER: Are there any other questions of Mr. Robinson? He may be excused. Do you have anything further, Mr. Morris?

MR. MORRIS: No, sir.

MR. NUTTER: Does anyone have anything they wish to offer in Case 2985? We will take the case under advisement.

* * * *



DEARNLEY, MEIER, WILKINS and CROWNOVER

General Court Reporting Service

Suite 1120 Simms Building Albuquerque, New Mexico Phone 243-6691

STATE OF NEW MEXICO
COUNTY OF BERNALILLO

I, ROY D. WILKINS, Notary Public in and for the County of Bernalillo, State of New Mexico, do hereby certify that the foregoing and attached Transcript of Hearing before the New Mexico Oil Conservation Commission was reported by me, and that the same is a true and correct record of the said proceedings, to the best of my knowledge, skill, and ability.

WITNESS my Hand and Seal of Office, this 18th day of February, 1964.

Roy D. Wilkins
NOTARY PUBLIC

My Commission Expires:
September 6, 1967.

I do hereby certify that the foregoing is
a complete and correct transcript of the hearing in
the case of No. 2485-64
heard at 2/5

[Signature]
New Mexico Oil Conservation Commission



February 19, 1964

Mr. R. M. Richardson
P. O. Box 819
Roswell, New Mexico

Re: Bootleg Ridge Deep Unit
Lea County, New Mexico

Dear Mr. Richardson:

The Commissioner of Public Lands approved the Bootleg Ridge Deep Unit Agreement as of February 14, 1964, and we handed to you Certificates of Approval.

We are enclosing Official Receipt No. G-36792 in the amount of Ninety (\$90.00) Dollars which covers the filing fee.

Please furnish us a completely conformed copy of this Unit when approved by the United States Geological Survey.

Very truly yours,

E. S. BOHNNY WALKER
COMMISSIONER OF PUBLIC LANDS

BY:
(Mrs.) Marian M. Rhea, Supervisor
Unit Division

ESW/mmr/v

cc: Oil Conservation Commission

Shell Oil Company
P. O. Box 1858
Roswell, New Mexico

BEFORE THE OIL CONSERVATION COMMISSION
OF THE STATE OF NEW MEXICO

IN THE MATTER OF THE HEARING
CALLED BY THE OIL CONSERVATION
COMMISSION OF NEW MEXICO FOR
THE PURPOSE OF CONSIDERING:

CASE No. 2985
Order No. R-2652

APPLICATION OF SHELL OIL COMPANY
FOR APPROVAL OF THE BOOTLEG RIDGE
DEEP UNIT AGREEMENT, LEA COUNTY,
NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 o'clock a.m. on
February 5, 1964, at Santa Fe, New Mexico, before Examiner
Daniel S. Nutter.

NOW, on this 13th day of February, 1964, the Commission,
a quorum being present, having considered the testimony, the
record, and the recommendations of the Examiner, and being fully
advised in the premises,

FINDS:

(1) That due public notice having been given as required by
law, the Commission has jurisdiction of this cause and the subject
matter thereof.

(2) That the applicant, Shell Oil Company, seeks approval
of the Bootleg Ridge Deep Unit Agreement covering 10,818 acres,
more or less, of State and Federal lands in Townships 22 and 23
South, Ranges 32 and 33 East, NMPM, Lea County, New Mexico.

(3) That approval of the proposed Bootleg Ridge Deep Unit
Agreement will in principle tend to promote the conservation of
oil and gas and the prevention of waste.

IT IS THEREFORE ORDERED:

(1) That the Bootleg Ridge Deep Unit Agreement is hereby
approved.

(2) That the plan under which the unit area shall be oper-
ated shall be embraced in the form of a unit agreement for the
development and operation of the Bootleg Ridge Deep Unit Area,

-2-

CASE No. 2985
Order No. R-2652

and such plan shall be known as the Bootleg Ridge Deep Unit Agreement Plan.

(3) That the Bootleg Ridge Deep Unit Agreement Plan is hereby approved in principle as a proper conservation measure; provided, however, that notwithstanding any of the provisions contained in said unit agreement, this approval shall not be considered as waiving or relinquishing, in any manner, any right, duty, or obligation which is now, or may hereafter be, vested in the Oil Conservation Commission of New Mexico by law relative to the supervision and control of operations for the exploration and development of any lands committed to the Bootleg Ridge Deep Unit, or relative to the production of oil or gas therefrom.

(4) (a) That the unit area shall be:

NEW MEXICO PRINCIPAL MERIDIAN

LEA COUNTY, NEW MEXICO

TOWNSHIP 22 SOUTH, RANGE 32 EAST

Section 22: E/2
Sections 23 through 26: All
Section 27: E/2
Sections 35 and 36: All

TOWNSHIP 22 SOUTH, RANGE 33 EAST

Section 19: All
Sections 29 through 32: All

TOWNSHIP 23 SOUTH, RANGE 32 EAST

Section 1: All

TOWNSHIP 23 SOUTH, RANGE 33 EAST

Sections 5 through 8: All

containing 10,817.84 acres, more or less.

(b) That the unit area may be enlarged or contracted as provided in said plan; provided, however, that administrative approval for expansion or contraction of the unit area must also be obtained from the Secretary-Director of the Commission.

(5) That the unit operator shall file with the Commission an executed original or executed counterpart of the Bootleg Ridge Deep Unit Agreement within 30 days after the effective date thereof. In the event of subsequent joinder by any party or expansion or contraction of the unit area, the unit operator shall file with the Commission within 30 days thereafter counterparts of the unit agreement reflecting the subscription of those interests having joined or ratified.

-3-

CASE No. 2985
Order No. R-2652

(6) That this order shall become effective upon the approval of said unit agreement by the Commissioner of Public Lands for the State of New Mexico and the Director of the United States Geological Survey, and shall terminate ipso facto upon the termination of said unit agreement. The last unit operator shall notify the Commission immediately in writing of such termination.

(7) That jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION


Jack M. Campbell
JACK M. CAMPBELL, Chairman

E. S. Walker
E. S. WALKER, Member

A. L. Porter, Jr.
A. L. PORTER, Jr., Member & Secretary

esr/

GOVERNOR
JACK M. CAMPBELL
CHAIRMAN

State of New Mexico
Oil Conservation Commission



LAND COMMISSIONER
E. S. JOHNNY WALKER
MEMBER

P. O. BOX 871
SANTA FE

STATE GEOLOGIST
A. L. PORTER, JR.
SECRETARY - DIRECTOR

February 13, 1964

Re: Case No. 2985
Order No. 2652
Applicant:
Shell Oil Company

Mr. Richard S. Morris
Seth, Montgomery, Federici & Andrews
Attorneys at Law
350 East Palace
Santa Fe, New Mexico

Dear Sir:

Enclosed herewith are two copies of the above-referenced
Commission order recently entered in the subject case.

Very truly yours,

A. L. Porter, Jr.

A. L. PORTER, JR.
Secretary-Director

ix/

Carbon copy of order also sent to:

Hobbs OCC x

Artesia OCC

Astec OCC

OTHER

BEFORE THE OIL CONSERVATION COMMISSION
OF THE STATE OF NEW MEXICO

IN THE MATTER OF THE PETITION
CALLED IN THE OIL CONSERVATION
COMMISSION OF NEW MEXICO FOR
THE PURPOSE OF CONSIDERING:

CASE NO. 2965
Order No. R-2632

APPLICATION OF SHELL OIL COMPANY
FOR APPROVAL OF THE BOOTLEG RIDGE
DEEP UNIT AGREEMENT, LEA COUNTY,
NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 o'clock a.m. on
February 5, 1964, at Santa Fe, New Mexico, before Examiner
Daniel C. Mutter.

NOW, on this 13th day of February, 1964, the Commission,
a quorum being present, having considered the testimony, the
record, and the recommendations of the Examiner, and being fully
advised in the premises,

FINDS:

(1) That due public notice having been given as required by
law, the Commission has jurisdiction of this cause and the subject
matter thereof.

(2) That the applicant, Shell Oil Company, seeks approval
of the Bootleg Ridge Deep Unit Agreement covering 10,515 acres,
more or less, of State and Federal lands in Townships 22 and 23
South, Ranges 32 and 33 East, NEEN, Lea County, New Mexico.

(3) That approval of the proposed Bootleg Ridge Deep Unit
Agreement will in principle tend to promote the conservation of
oil and gas and the prevention of waste.

IT IS THEREFORE ORDERED:

(1) That the Bootleg Ridge Deep Unit Agreement is hereby
approved.

(2) That the plan under which the unit area shall be oper-
ated shall be submitted in the form of a unit agreement for the
development and operation of the Bootleg Ridge Deep Unit Area.

and such plan shall be known as the Bootleg Ridge Deep Unit Agreement Plan.

(3) That the Bootleg Ridge Deep Unit Agreement Plan is hereby approved in principle as a proper conservation measure; provided, however, that notwithstanding any of the provisions contained in said unit agreement, this approval shall not be considered as waiving or relinquishing, in any manner, any right, duty, or obligation which is now, or may hereafter be, vested in the oil conservation commission of New Mexico by law relative to the supervision and control of operations for the exploration and development of any lands committed to the Bootleg Ridge Deep Unit, or relative to the production of oil or gas therefrom.

(4) (a) That the unit area shall be:

NEW MEXICO PRINCIPAL RESERVES

LEA COUNTY, NEW MEXICO

TOWNSHIP 22 NORTH, RANGE 32 EAST

Section 22: 1/2
Sections 23 through 26: All
Section 27: 1/2
Sections 35 and 36: All

TOWNSHIP 22 NORTH, RANGE 33 EAST

Section 19: All
Sections 29 through 32: All

TOWNSHIP 23 NORTH, RANGE 32 EAST

Section 1: All

TOWNSHIP 23 NORTH, RANGE 33 EAST

Sections 3 through 6: All

containing 10,017.84 acres, more or less.

(b) That the unit area may be enlarged or contracted as provided in said plan; provided, however, that administrative approval for expansion or contraction of the unit area must also be obtained from the Secretary-Director of the Commission.

(5) That the unit operator shall file with the Commission an executed original or executed counterpart of the Bootleg Ridge Deep Unit Agreement within 30 days after the effective date thereof. In the event of subsequent joinder by any party or expansion or contraction of the unit area, the unit operator shall file with the Commission within 30 days thereafter counterparts of the unit agreement reflecting the subscription of those interests having joined or retired.

-1-
CASE No. 2985
Order No. R-2632

(6) That this order shall become effective upon the approval of said unit agreement by the Commissioner of Public Lands for the State of New Mexico and the Director of the United States Geological Survey, and shall terminate ~~upon~~ ~~facto~~ upon the termination of said unit agreement. The last unit operator shall notify the Commission immediately in writing of such termination.

(7) That jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

JACK N. CAMPBELL, Chairman

H. B. WALKER, Member

A. L. PORTER, Jr., Member & Secretary

S E A L

osx/

BEFORE THE NEW MEXICO OIL CONSERVATION COMMISSION

APPLICATION OF SHELL OIL
COMPANY FOR APPROVAL OF
THE BOOTLEG RIDGE UNIT
AGREEMENT, LEA COUNTY, NEW
MEXICO

Case No. 2189

APPLICATION

Comes now the Shell Oil Company by its attorneys and applies to the New Mexico Oil Conservation Commission for approval of the Bootleg Ridge Unit Agreement, Lea County, New Mexico, and in support of its application states:

1. That the Shell Oil Company is the operator of the proposed Bootleg Ridge Unit, comprising 10,817.84 acres of Federal and State lands in Lea County, New Mexico as follows:

Township 22 South, Range 32 East

Section 22:	E $\frac{1}{2}$
Section 23:	All
Section 24:	All
Section 25:	All
Section 26:	All
Section 27:	E $\frac{1}{2}$
Section 35:	All
Section 36:	All

Township 22 South, Range 33 East

Section 19:	All
Section 29:	All
Section 30:	All
Section 31:	All
Section 32:	All

Township 23 South, Range 32 East

Section 1:	All
------------	-----

Township 23 South, Range 33 East

Section 5:	All
Section 6:	All
Section 7:	All
Section 8:	All.

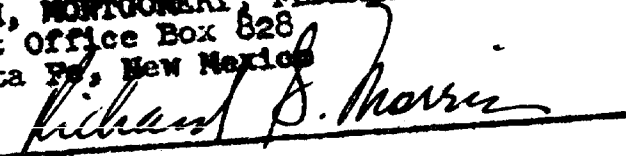
2. That the Bootleg Ridge Unit Agreement covers all formations underlying said lands which are beneath a point 2700 feet below the top of the Delaware formation.

3. That approval of the Bootleg Ridge Unit Agreement will be in the best interest of conservation, will prevent waste, and will protect correlative rights.

WHEREFORE, the Shell Oil Company requests that this application be set for hearing before the Commission, or one of its Examiners, and that the Commission enter its order approving this application.

SETH, MONTGOMERY, FEDERICI & ANDREWS
Post Office Box 828
Santa Fe, New Mexico

By



Attorneys for Applicant.

BEFORE THE NEW MEXICO OIL CONSERVATION COMMISSION

APPLICATION OF SHELL OIL
COMPANY FOR APPROVAL OF
THE BOOTLEG RIDGE UNIT
AGREEMENT, LEA COUNTY, NEW
MEXICO

Case No. 2985

APPLICATION

Comes now the Shell Oil Company by its attorneys and applies to the New Mexico Oil Conservation Commission for approval of the Bootleg Ridge Unit Agreement, Lea County, New Mexico, and in support of its application states:

1. That the Shell Oil Company is the operator of the proposed Bootleg Ridge Unit, comprising 10,817.84 acres of Federal and State lands in Lea County, New Mexico as follows:

Township 22 South, Range 32 East

Section 22:	E $\frac{1}{2}$
Section 23:	All
Section 24:	All
Section 25:	All
Section 26:	All
Section 27:	E $\frac{1}{2}$
Section 35:	All
Section 36:	All

Township 22 South, Range 33 East

Section 19:	All
Section 29:	All
Section 30:	All
Section 31:	All
Section 32:	All

Township 23 South, Range 32 East

Section 1:	All
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Township 23 South, Range 33 East

Section 5:	All
Section 6:	All
Section 7:	All
Section 8:	All.

2. That the Bootleg Ridge Unit Agreement covers all formations underlying said lands which are beneath a point 2700 feet below the top of the Delaware formation.

3. That approval of the Bootleg Ridge Unit Agreement will be in the best interest of conservation, will prevent waste, and will protect correlative rights.

WHEREFORE, the Shell Oil Company requests that this application be set for hearing before the Commission, or one of its Examiners, and that the Commission enter its order approving this application.

SETH, MONTGOMERY, FEDERICI & ANDREWS
Post Office Box 828
Santa Fe, New Mexico

By

Richard S. Morris

Attorneys for Applicant.

-2- Case 2980 continued from page 1

North, Range 13 West, and authorizing the drilling of a well for said unit at an unorthodox location 1625 feet from the South line and 1250 feet from the West line of said Section 15, Town of Farmington, San Juan County, New Mexico.

- CASE 2981: Application of Gulf Oil Corporation for a unit agreement, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval of the Northwest Eumont Unit Area comprising 2,760 acres, more or less, of State and fee lands in Township 19 South, Range 36 East, Lea County, New Mexico.
- CASE 2982: Application of Gulf Oil Corporation for a waterflood project, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to institute a waterflood project in the Eumont Gas Pool by the injection of water into the Queen formation through 15 wells in Sections 11, 14, 15, 22 and 23, Township 19 South, Range 36 East, Lea County, New Mexico.
- CASE 2983: Application of The Pure Oil Company for a unit agreement, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval of the Brinninstool Unit Area comprising 17,237 acres, more or less, of Federal and State lands in Townships 23 and 24 South, Ranges 32 and 33 East, Lea County, New Mexico.
- CASE 2984: Application of The Pure Oil Company and Continental Carbon Company to utilize natural gas in a carbon black plant, Lea County, New Mexico. Applicants, in the above-styled cause, seek authority to utilize approximately 7 MCF of Devonian gas per day in the Continental Carbon Company carbon black plant near Eunice, New Mexico, said gas to be produced from The Pure Oil Company Wilson Deep Unit Well No. 1, located in the SE/4 NW/4 of Section 13, Township 21 South, Range 34 East, Lea County, New Mexico.
- CASE 2985: Application of Shell Oil Company for a unit agreement, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval of the Bootleg Ridge Unit Area comprising 10,818 acres, more or less, of State and Federal lands in Townships 22 and 23 South, Ranges 32 and 33 East, Lea County, New Mexico.

DOCKET: EXAMINER HEARING - WEDNESDAY - FEBRUARY 5, 1964

9:00 A.M. - OIL CONSERVATION COMMISSION CONFERENCE ROOM,
STATE LAND OFFICE BUILDING - SANTA FE, NEW MEXICO

The following cases will be heard before Daniel S. Nutter, Examiner, or Elvis A. Utz, Alternate Examiner:

- CASE 2976: Application of Midland Production Corporation for directional drilling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to directionally drill its Hill & Meeker Phillips Cryer Well No. 34-2 located 2310 feet from the South and West lines of Section 34, Township 10 South, Range 36 East, to bottom in the Devonian formation 1980 feet from the North and West lines of said Section 34, Lea County, New Mexico.
- CASE 2977: Application of Cities Service Oil Company for a dual completion, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval of the dual completion (conventional) of its Brunson C Well No. 4, located in Unit J of Section 3, Township 22 South, Range 37 East, Lea County, New Mexico, to produce oil from the Blinberry and Drinkard Oil Pools through parallel strings of 1 1/2 inch and 2 1/16 inch tubing, respectively.
- CASE 2978: Application of Union Oil Company of California for a waterflood expansion, Chaves County, New Mexico. Applicant, in the above-styled cause, seeks authority to expand its South Caprock Queen Unit Waterflood Project, Caprock Queen Pool, Chaves County, New Mexico, by the conversion of nine additional wells located in Sections 28, 29, and 33, Township 14 South, Range 31 East, and Sections 3 and 4, Township 15 South, Range 31 East, to water injection.
- CASE 2979: Application of Pan American Petroleum Corporation for salt water disposal, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks authority to dispose of produced salt water into the Abo formation through its U. S. A. Malco Refineries 'G' Well No. 13, located 2302 feet from the South line and 1650 feet from the West line of Section 10, Township 18 South, Range 27 East, Empire Abo Pool, Eddy County, New Mexico.
- CASE 2980: Application of Pioneer Production Corporation for force-pooling and an unorthodox location, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks an order force-pooling all mineral interests in the Basin-Dakota Pool underlying the W/2 of Section 15, Township 29

CASE 2986: Application of Shell Oil Company to establish a GOR limit, Lea County, New Mexico. Applicant, in the above-styled cause, seeks the establishment of a special gas-oil ratio limitation of 5,000 cubic feet of gas for each barrel of oil produced in the Mesa-Queen Pool, Lea County, New Mexico.

CASE 2987: Application of Shell Oil Company for a waterflood project, Chaves County, New Mexico. Applicant, in the above-styled cause, seeks authority to institute a pilot waterflood project in the South Bitter Lake-San Andres Pool, by the injection of water into the San Andres formation through three wells at unorthodox locations in Sections 27 and 34, Township 10 South, Range 25 East, Chaves County, New Mexico.

CASE 2480 (Reopened):

In the matter of Case No. 2480 being reopened pursuant to the provisions of Order No. R-2182-A which continued for a period of one year the temporary 80-acre proration units established by Order No. R-2182, Henshaw-Wolfcamp Pool, Eddy County, New Mexico. All interested parties may appear and show cause why said pool should not be developed on 40-acre proration units.

CASE 2988: In the matter of the hearing called by the Oil Conservation Commission on its own motion to permit George E. Willett and all other interested parties to appear and show cause why the SDD Hare Well No. 7, located 600 feet from the South line and 1360 feet from the East line of Section 14, Township 29 North, Range 11 West, San Juan County, New Mexico, should not be plugged in accordance with a Commission-approved plugging program.

BEFORE THE NEW MEXICO OIL CONSERVATION COMMISSION

APPLICATION OF SHELL OIL
COMPANY FOR APPROVAL OF
THE BOOTLEG RIDGE UNIT
AGREEMENT, LEA COUNTY, NEW
MEXICO

Case No. 1985

APPLICATION

Comes now the Shell Oil Company by its attorneys and applies to the New Mexico Oil Conservation Commission for approval of the Bootleg Ridge Unit Agreement, Lea County, New Mexico, and in support of its application states:

1. That the Shell Oil Company is the operator of the proposed Bootleg Ridge Unit, comprising 10,817.84 acres of Federal and State lands in Lea County, New Mexico as follows:

Township 22 South, Range 32 East

Section 22:	E $\frac{1}{2}$
Section 23:	All
Section 24:	All
Section 25:	All
Section 26:	All
Section 27:	E $\frac{1}{2}$
Section 35:	All
Section 36:	All

Township 22 South, Range 33 East

Section 19:	All
Section 29:	All
Section 30:	All
Section 31:	All
Section 32:	All

Township 23 South, Range 32 East

Section 1:	All
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Township 23 South, Range 33 East

Section 5:	All
Section 6:	All
Section 7:	All
Section 8:	All.

DOCKET MAILED

Date 1-24-64

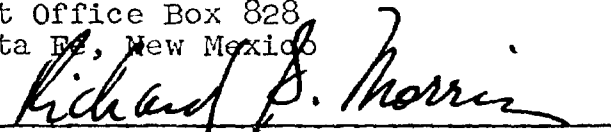
2. That the Bootleg Ridge Unit Agreement covers all formations underlying said lands which are beneath a point 2700 feet below the top of the Delaware formation.

3. That approval of the Bootleg Ridge Unit Agreement will be in the best interest of conservation, will prevent waste, and will protect correlative rights.

WHEREFORE, the Shell Oil Company requests that this application be set for hearing before the Commission, or one of its Examiners, and that the Commission enter its order approving this application.

SETH, MONTGOMERY, FEDERICI & ANDREWS
Post Office Box 828
Santa Fe, New Mexico

By



Attorneys for Applicant.

JMD/esr

IN THE MATTER OF THE HEARING
CALLED BY THE OIL CONSERVATION
COMMISSION OF NEW MEXICO FOR
THE PURPOSE OF CONSIDERING:

Order No. R- 2652

ORDER OF THE COMMISSION

This cause came on for hearing at 9 o'clock a.m. ~~Other~~
February 5, 1964, at Santa Fe, New Mexico, before Daniel S. Nutter,
~~Examiner duly appointed by the Oil Conservation Commission of New~~
~~Mexico, hereinafter referred to as the "Commission," in accordance~~
~~with Rule 1214 of the Commission Rules and Regulations.~~

NOW, on this _____ day of February, 19 64, the Commission,
a quorum being present, having considered the ~~appears on the testimony,~~
~~the record, and the~~ ~~exhibits adduced,~~ and the recommendations of the Examiner,
~~_____~~, and being fully advised in the premises,

(1) That due public notice having been given as required by law, the Commission has jurisdiction of this cause and the subject matter thereof.

(2) That the applicant, Shell Oil Company, seeks approval of the Bootleg Ridge Deep Unit Agreement covering 10,818 acres, more or less, of State and Federal lands in Townships 22 and 23 South, Ranges 32 and 33 East, NMPM, Lea County, New Mexico.

(3) That approval of the proposed Bootleg Ridge ~~Dev.~~ Unit Agreement will in principle tend to promote the conservation of oil and gas and the prevention of waste.

(1) That the Bootleg Ridge Deep Unit Agreement is hereby approved.

(2) That the plan under which the unit area shall be operated shall be embraced in the form of a unit agreement for the development and operation of the Bootleg Ridge Deep Unit Area, and such plan shall be known as the Bootleg Ridge Deep Unit Agreement Plan.

(3) That the Bootleg Ridge Deep Unit Agreement Plan is hereby approved in principle as a proper conservation measure; provided, however, that notwithstanding any of the provisions contained in said unit agreement, this approval shall not be considered as waiving or relinquishing, in any manner, any right, duty, or obligation which is now, or may hereafter be, vested in the Oil Conservation Commission of New Mexico by law relative to the supervision and control of operations for the exploration and development of any lands committed to the Bootleg Ridge Deep Unit, or relative to the production of oil or gas therefrom.

(4) (a) That the unit area shall be:

NEW MEXICO PRINCIPAL MERIDIAN

LEA COUNTY, NEW MEXICO

Township 22 South, Range 32 East

Section 22: E/2

Sections 23 through 26: All

Section 27: E/2

Sections 35 and 36: All

Township 22 South, Range 33 East

Section 19: All

Sections 29 through 32: All

Township 23 South, Range 32 East

Section 1: All

Township 23 South, Range 33 East

Sections 5 through 8: All

10,817.84

containing 10,818 acres, more or less.

(b) That the unit area may be enlarged or contracted as provided in said plan; provided, however, that administrative approval for expansion or contraction of the unit area must also be obtained from the Secretary-Director of the Commission.

(5) That the unit operator shall file with the Commission an executed original or executed counterpart of the Bootleg Ridge ~~Unit~~ Unit Agreement within 30 days after the effective date thereof. In the event of subsequent joinder by any party or expansion or contraction of the unit area, the unit operator shall file with the Commission within 30 days thereafter counterparts of the unit agreement reflecting the subscription of those interests having joined or ratified.

(6) That this order shall become effective upon the approval of said unit agreement by the Commissioner of Public Lands for the State of New Mexico and the Director of the United States Geological Survey, and shall terminate ipso facto upon the termination of said unit agreement. The last unit operator shall notify the Commission immediately in writing of such termination.

(7) That jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

THIS AGREEMENT, entered into as of the 15th day of January, 1964, 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 Stat. 437,
as amended, 30 U. S. C. Secs. 181 et seq., authorized Federal lessees
and their representatives to unit with each other, or jointly or separately
with others, in collectively adopting and operating a cooperative or unit
plan of development or operation of any oil or 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 (Sec. 7-11-39 N.M. Statutes
1953 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
interests of the State of New Mexico; and,

WHEREAS, the Oil Conservation Commission of the State of New Mexico
is authorized by an Act of the Legislature (Article 3, Chapter 65, Volume 9,
Part 2, 1953 Statutes) to approve this agreement and the conservation
provisions hereof; and,

WHEREAS, the parties hereto hold sufficient interests in the Bootleg
Ridge Deep Unit Area covering the land hereinafter described to give reason-
ably 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

RECEIVED
FEB 17 1964
U. S. GEOLOGICAL SURVEY
ROSWELL, NEW MEXICO

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 State of New Mexico 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 of New Mexico are hereby accepted and made a part of this agreement.

2. UNIT AREA. The area specified on the map attached hereto marked Exhibit "A" is hereby designated and recognized as constituting the unit area, containing 10,817.84 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 land 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 in said map or schedule as owned by such party. Exhibits "A" and "B" shall be revised by the Unit Operator whenever changes in the unit area render such revision necessary, or when requested by the Oil and Gas Supervisor, hereinafter referred to as "Supervisor," or when requested by the Commissioner of Public Lands of the State of New Mexico, hereinafter referred to as "State Land Commissioner," and not less than seven copies of the revised exhibits shall be filed with the Supervisor, and two (2) copies thereof shall be filed with the State Land Commissioner and one (1) copy with the New Mexico Oil Conservation Commission, hereinafter referred to as "State Commission."

The above-described unit area shall when practicable be expanded to include therein any additional tract or tracts regarded as reasonably

necessary or advisable for the purposes of this agreement, or shall be contracted to exclude lands not within any participating area whenever such expansion or contraction is 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, or on demand of the Director of the Geological Survey, hereinafter referred to as "Director," or on demand of the State Land Commissioner, after preliminary concurrence by the Director, shall prepare a notice of proposed expansion or contraction describing the contemplated changes in the boundaries of the unit area, the reasons therefor, and the proposed effective date thereof, preferably the first day of a month subsequent to the date of notice.

(b) Said notice shall be delivered to the Supervisor, the State Land Commissioner and the State Commission 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 Supervisor, the State Land Commissioner and the State Commission evidence of mailing of the notice of expansion or contraction and a copy of any objections thereto which have been filed with the Unit Operator, together with an application in sufficient number, 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 Director, the State Land Commissioner and the State Commission, become effective as of the date prescribed in the notice thereof.

(e) All legal subdivisions of unitized lands (i.e., 40 acres by Government survey or its nearest lot or tract equivalent in instances of irregular surveys, however, unusually large lots or tracts shall be considered in multiples of 40 acres, or the nearest aliquot equivalent thereof, for the purpose of elimination under this subsection), no parts of which are entitled to be in a participating area within five years after the first day of the month following the effective date of the first initial participating area established under this unit agreement, shall be eliminated

automatically from this agreement, effective as of the first day thereafter, and such lands shall no longer be a part of the unit area and shall no longer be subject to this agreement, unless at the expiration of said five-year period diligent drilling operations are in progress on unitized lands not entitled to participation, in which event all such lands shall remain subject hereto for so long as such drilling operations are continued diligently, with not more than 90 days time elapsing between the completion of one such well and the commencement of the next such well, except that the time allowed between such wells shall not expire earlier than 30 days after the expiration of any period of time during which drilling operations are prevented by a matter beyond the reasonable control of unit operator as set forth in the section hereof entitled "Unavoidable Delay;" provided that all legal subdivisions of lands not in a participating area and not entitled to become participating under the applicable provisions of this agreement within ten years after said first day of the month following the effective date of said first initial participating area shall be eliminated as above specified. Determination of creditable "Unavoidable Delay" time shall be made by Unit Operator and subject to approval of the Director and the State Land Commissioner. The Unit Operator shall, within 90 days after the effective date of any elimination hereunder, describe the area so eliminated to the satisfaction of the Director and the Commissioner and promptly notify all parties in interest.

If conditions warrant extension of the ten-year period specified in this sub-section 2 (e), a single extension of not to exceed two years may be accomplished by consent of the owners of 90 per cent of the current unitized working interests and 60 per cent of the current unitized basic royalty interests (exclusive of the basic royalty interests of the United States), on a total nonparticipating-acreage basis, respectively, with approval of the Director, and the State Land Commissioner provided such extension application is submitted to the Director and to the State Land Commissioner not later than 60 days prior to the expiration of said ten-year period.

Any expansion of the unit area pursuant to this section which embraces lands theretofore eliminated pursuant to this sub-section 2 (e) shall not be considered automatic commitment or recommitment of such lands.

3. UNITIZED LAND AND UNITIZED SUBSTANCES. All land committed to this Agreement, as to all formations lying 2700 feet below the top of the Delaware limestone as identified at a subsea depth of minus 1028 feet on "sonic" log of the John H. Trigg, Red Tank Unit well No. 1-22, in Sec. 22, T-22-S, R-32-E, NMPM, shall constitute land referred to herein as "unitized land" or "land subject to this Agreement." All oil and gas in any and all formations lying 2700 feet below the top of the Delaware limestone, as identified above, are unitized under the terms of this Agreement and are herein called "unitized substances."

4. UNIT OPERATOR. Shell Oil Company with offices at Midland, Texas, is hereby designated as Unit Operator and by signature hereto as Unit Operator commits to this agreement all interests in unitized substances vested in it 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 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 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 months after notice of intention to resign has been served by Unit Operator on all working interest owners and the Director, the State Land Commissioner and State Commission and until all wells then drilled hereunder are placed in a satisfactory condition for suspension or abandonment whichever is required by the Supervisor as to Federal Lands and by the State Commission as to State 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 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 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 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 Director and the State 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 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 Operator 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 any wells.

6. SUCCESSION 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 working interest owners, the owners of the working interests in the participating area or areas according to their respective acreage interests in such participating area or areas, or until a participating area shall have been established, the owners of the working interests according to their respective acreage interests in all unitized land, shall by majority vote select a successor Unit Operator; provided that, if a majority but less than 75 per cent of the working interests qualified to vote are owned by one party to this agreement, a concurring vote of one or more additional working interest owners 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 filed with the Supervisor and approved by the State Land Commissioner. If no successor Unit Operator is selected and qualified as herein provided, the Director and State 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 the unit agreement and the unit operating agreement, this unit agreement shall prevail. Three (3) true copies of any unit operating agreement executed pursuant to this section should be filed with the Supervisor and one (1) true copy with the State Land Commissioner, prior to approval of this unit agreement by the Director.

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 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.

9. DRILLING TO DISCOVERY. Within six months after the effective date hereof, the Unit Operator shall begin to drill an adequate test well at a location approved by the Supervisor if on Federal land or by the State Land Commissioner if on State land, unless on such effective date a well is being drilled conformably with the terms hereof, and thereafter continue such drilling diligently until the Siluro-Devonian 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 and producing operations, with a reasonable profit) or the Unit Operator shall at any time establish to the satisfaction of the Supervisor if on Federal land, or the State Land Commissioner if on State 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 15,500 feet. Until the discovery of a deposit of unitized substances capable of being produced in paying quantities, the 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 said Supervisor if it be on Federal land or of the State Land Commissioner if on State 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 Director and State Land Commissioner may modify the drilling requirements of this section by granting reasonable extensions of time when, in their opinion, such action is warranted.

Upon failure to comply with the drilling provisions of this section, the Director and State Land 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.

10. PLAN OF FURTHER DEVELOPMENT AND OPERATION. Within six months after completion of a well capable of producing unitized substances in paying quantities, the Unit Operator shall submit for the approval of the Supervisor and the State Land Commissioner an acceptable plan of development and operation for the unitized land which, when approved by the Supervisor and the State Land Commissioner, shall constitute the further drilling and operating 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 Supervisor and the State Land Commissioner a plan for an additional specified period for the development and operation of the unitized land. Any plan submitted pursuant to this section shall provide for the exploration of the unitized area and for the diligent drilling necessary for determination of the area or areas thereof capable of producing unitized substances in paying quantities in each and every productive formation and shall be as complete and adequate as the Supervisor and the State Land Commissioner 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 location of any wells to be drilled and the proposed order and time for such drilling; and,

(b) to the extent practicable specify the operating practices regarded as necessary and advisable for the proper conservation of natural resources. Separate plans may be submitted for separate productive zones, subject to the approval of the Supervisor and the State Land Commissioner. Said plan or 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. The Supervisor and State Land Commissioner are authorized to grant a reasonable extension of the six-month period herein prescribed for submission of an initial plan of development where such action is justified because of unusual conditions or circumstances. After completion hereunder of a well capable of

producing any unitized substance in paying quantities, no further wells, except such as may be necessary to afford protection against operations not under this agreement or such as may be specifically approved by the Supervisor and the State Land Commissioner shall be drilled except in accordance with a plan of development approved as herein provided.

11. PARTICIPATION AFTER DISCOVERY. Upon completion of a well capable of producing unitized substances in paying quantities, the Unit Operator shall within the month of such completion, if practicable, or as soon thereafter as required by the Supervisor or the State Land Commissioner submit for approval by the Director and the State Land Commissioner a schedule, based on subdivisions of the public land survey or aliquot parts thereof of all unitized land then regarded as reasonably proved to be productive of unitized substances in paying quantities; all lands in said schedule on approval of the Director and the State Land Commissioner to constitute a participating area, effective as of the date of completion of such well or the effective date of the 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 the initial participating area. Said schedule also shall set forth the percentage of unitized substances to be allocated as herein provided to each unitized tract in the participating area so established, and shall govern the allocation of production from and after the date the participating area becomes effective. A separate participating area shall be established in like manner for each separate pool or deposit of unitized substances or for any group thereof produced as a single pool or zone, and any two or more participating areas so established may be combined into one with the consent of the owners of all working interests in the lands within the participating areas so to be combined, on approval of the Director and the State Land Commissioner. The participating area or areas so established shall be revised from time to time, subject to like approval, whenever such action appears proper as a result of further drilling operations or otherwise, to include additional land then regarded as reasonably proved to be productive in paying quantities, or to exclude land then regarded as reasonably proved not to be productive in paying quantities and the percentage of allocation shall also be revised accordingly. The effective date of any revision shall be the first of the month in which is obtained the knowledge or information 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 Director and the State Land Commissioner. No land shall be excluded from a participating area on account of depletion of the unitized substances.

It is the intent of this section that a participating area shall represent the area known or reasonably estimated to be productive in paying quantities; 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 Director and the State Land Commissioner as to the proper definition or redefinition of a participating area, or until a participating area has, or areas have, been established as provided herein, the portion of all payments affected thereby may be impounded in a manner mutually acceptable to the owners of working interests, except royalties due the United States and the State of New Mexico, which shall be determined by the Supervisor for Federal lands and the State Land Commissioner for State lands and the amount thereof deposited, as directed by the Supervisor and the State Land Commissioner respectively, to be held as unearned money until a participating area is finally approved and then applied as earned or returned in accordance with a determination of the sum due as Federal and State royalty on the basis of such approved participating area.

Whenever it is determined, subject to the approval of the Supervisor, as to wells drilled on Federal land and of the State Land Commissioner as to wells drilled on State land that a well drilled under this agreement is not capable of production in paying quantities and inclusion 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 so long as such land is not within a participating area established for the pool or deposit from which such production is obtained. Settlement for working interest benefits from such a 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, camp and other production or development purposes, for repressuring or recycling in accordance with a plan of development approved by the Supervisor, and State Land Commissioner and the State Commission, 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 and, 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, overriding 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 said 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 such last-mentioned 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 constituted at the time of such final production.

13. DEVELOPMENT OR OPERATION OF NON-PARTICIPATING LAND OR FORMATIONS. Any party or parties hereto owning or controlling the working interests in any unitized land having thereon a regular well location may with the approval of the Supervisor as to Federal land the State Land Commissioner as to State Land, and subject to the provisions of the Unit Operating Agreement, at such party's or parties' sole risk, costs, and expense drill a well at such location on such land to test any formation for which a participating area has not been established or to test any

formation for which a participating area has been established if such location is not within said participating area, unless within 90 days of receipt of notice from said party of his intention to drill the well the Unit Operator elects and commences to drill such a well in like manner as other wells are drilled by the Unit Operator under this agreement.

If any well drilled as aforesaid by a working interest owner results in production 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 as aforesaid by a working interest owner obtains production in quantities insufficient to justify the inclusion in a participating area of the land upon which such well is situated, 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 the State of New Mexico and all royalty owners who, under existing contract, are entitled to take in kind a share of the substances now unitized hereunder produced from any tract, shall hereafter be entitled to the right to take in kind their share of the unitized substances allocated to such tract, and Unit Operator, or in case of the operation of a well by a working interest owner as herein in special cases provided for, such working interest owner, shall make deliveries of such royalty share taken 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 therefor under existing contracts, laws and regulations on or before the last day of each month for unitized substances produced during the preceding calendar month; provided, however, that nothing herein contained 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 into any participating area hereunder, for use in repressuring, stimulation of production, or increasing ultimate recovery, which shall be in conformity with a plan first approved by the Supervisor, the State Land Commissioner, and the State Commission, a like amount of gas, after settlement as herein provided for any gas transferred from any other participating area and 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 the plan of operations or as may otherwise be consented to by the Supervisor, the State Land Commissioner and the State Commission 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 the operating regulations 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 herein at the rates specified in the respective Federal leases, or at such lower rate or rates as may be authorized by law or regulations; 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 of New Mexico shall be computed and paid as to all unitized substances on the basis of the amounts allocated to such lands.

15. RENTAL SETTLEMENT. Rental or minimum royalties due on leases committed hereto shall be paid by working interest owners responsible therefor 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 in lieu thereof 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 rates specified in the respective leases.

With respect to any lease on non-Federal land containing provisions which would terminate such lease unless drilling operations were within the time therein specified commenced upon the land covered thereby or rentals 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 thereafter until the required drilling operations are commenced upon the land covered thereby or 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 appropriate and adequate measures to prevent drainage of unitized substances from unitized land by wells on land not subject to this agreement, or, with prior consent of the Director and the State Land Commissioner, pursuant to applicable regulations pay a fair and reasonable compensatory royalty as determined by the Supervisor for Federal lands or as approved by the State Land Commissioner for New Mexico State lands.

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 operations 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 State 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 and State 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 part or separately owned tract subject to this agreement, regardless of whether there is any development of any particular part or tract of the unit area, notwithstanding anything to the contrary in any lease, operating agreement or other contract by and between the parties hereto, or their respective predecessors in interest, or any of them.

(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 Secretary and the State Land Commissioner or their 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.

(d) Any Federal lease for a fixed term of twenty (20) years or any renewal thereof or any part of such lease which is made subject to this agreement shall continue in force beyond the term provided therein until the termination hereof. Any other 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 is had 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 the 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 Revision of 1960.

(e) 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.

(f) Any lease embracing lands of the State of New Mexico which is made subject to this agreement, shall continue in force beyond the term provided therein as to the lands committed hereto until the termination hereof.

(g) The segregation of any Federal lease committed to this agreement is governed by the following provision in the fourth paragraph of Sec. 17 (j) of the Mineral Leasing Act, as amended by the Act of September 2, 1960, (74 Stat. 781-784): "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 land committed and the lands not committed as of the effective date of unitization: Provided, however, that any such lease as to the nonunitized 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) 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 provisions of such lease shall apply separately to such segregated portions commencing as of the effective date hereof; provided, however, 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 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 interest 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 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 Director and the State Land Commissioner or their duly authorized representatives as of the date of approval by the Director and shall terminate five (5) years from said effective date unless:

(a) such date of expiration is extended by the Director and the State 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 the agreement on such ground is given by the Unit Operator to all parties in interest at their last known addresses, the agreement is terminated with the approval of the Director and State Land Commissioner, or

(c) a valuable discovery of unitized substances has been made or accepted on unitized land during said initial term or any extension thereof, in which event the agreement shall remain in effect for such term and so long as unitized substances can be produced in quantities sufficient to pay for the cost of producing same from wells on unitized land within any participating area established hereunder 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 can be produced as aforesaid, or

(d) it is terminated as heretofore provided in this agreement. This agreement may be terminated at any time by not less than 75 per centum, on an acreage basis, of the owners of working interests signatory hereto, with

the approval of the Director and State Land Commissioner; notice of any such approval to be given by the Unit Operator to all parties hereto.

21. RATE OF PROSPECTING, DEVELOPMENT AND PRODUCTION. The Director 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 is not fixed pursuant to Federal or State law or does 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, such authority being hereby limited to alteration or modification in the public interest, the purpose thereof and the public interest to be served thereby to be stated in the order of alteration or modification. Without regard to the fore-going, the Director is also hereby vested with authority to alter or modify from time to time at 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 State Land Commissioner and as to the lands of the State of New Mexico subject to this agreement as to the quantity and rate of production in the absence of specific written approval thereof by the State Commission.

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

22. CONFLICT OF SUPERVISION. Neither the Unit Operator nor the working interest owners nor any of them shall be subject to any forfeiture, termination or expiration of any rights hereunder or under any leases or contracts subject hereto, or to any penalty or liability on account of delay or failure in whole or in part to comply with any applicable provision thereof to the extent that the Unit Operator, working interest owners or any of them are hindered, delayed or prevented from complying therewith by reason of failure of the Unit Operator to obtain in the exercise of due diligence, the concurrence of proper representatives of the United States

and proper representatives of the State of New Mexico in and about any matters or thing concerning which it is required herein that such concurrence be obtained. The parties hereto, including the State Commission, agree that all powers and authority vested in the State Commission in and by any provisions of this agreement are vested in the State Commission and shall be exercised by it pursuant to the provisions of the laws of the State of New Mexico and subject in any case to appeal or judicial review as may now or hereafter be provided by the laws of the State of New Mexico.

23. APPEARANCES. 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 Department of Interior, the Commissioner of Public Lands of the State of New Mexico and the New Mexico Oil Conservation Commission and to appeal from orders issued under the regulations of said Department, the State Land Commissioner or State Commission or to apply for relief from any of said regulations or in any proceedings relative to operations before the Department of the Interior, the State Land Commissioner or State Commission or any other legally constituted authority; provided, however, that any other interested party shall also have the right at his own expense to be heard in any such proceeding.

24. NOTICES. 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 personally delivered to the party or sent by postpaid registered mail or certified mail, addressed to such party or parties at their respective addresses set forth in connection with the signatures hereto or the ratification or consent hereof or to such other address as any such party may have furnished in writing to the party sending the notice, demand or statement.

25. NO WAIVER OF CERTAIN RIGHTS. Nothing in this agreement contained 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 wherein said 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.

26. 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, but only so long as, 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 in open market, or other matters beyond the reasonable control of the Unit Operator whether similar to matters herein enumerated or not.

27. NONDISCRIMINATION. In connection with the performance of work under this agreement, the operator agrees to comply with all of the provisions of Section 301 (1) to (7) inclusive, of Executive Order 10925 as amended (28 F.R. 6485), which are hereby incorporated by reference in this agreement.

28. 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 as 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 land or leases, no payments of funds due the United States or the State of New Mexico should be withheld, but such funds of the United States shall be deposited as directed by the Supervisor and such funds of the State of New Mexico shall be deposited as directed by the State 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.

29. 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 said tract from this agreement by written notice to the Director, the State Land Commissioner, and the Unit Operator prior to the approval of this agreement by the Director. Any oil or gas interests in lands within the unit area not committed hereto prior to submission of this agreement for 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 also 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 approvals, 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. Joinder by any owner of a non-working interest, at any time, must be accompanied by appropriate joinder by the owner of the corresponding working interest in order for the interest to be regarded as 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, if more than one committed working interest owner is involved, in order for the interest to be regarded as committed to this unit agreement. Except as may otherwise herein be provided, subsequent joinders to this agreement shall be effective as of the first day of the month following the filing with the Supervisor, the State Land Commissioner and the State Commission of duly executed counterparts of all or any papers necessary to establish effective commitment of any tract to this agreement unless objection to such joinder is duly made within sixty (60) days by the Director; provided, however, that as to State lands such subsequent joinder must be approved by the State Land Commissioner.

30. 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.

IN WITNESS WHEREOF, the parties hereto have caused this agreement to be executed and set opposite their respective names the date of execution.

ATTEST:

R. L. Huchison
Secretary

Date: FEB 7 1964

SHELL OIL COMPANY

By

J. L. Lindsey
Attorney in Fact

Address; P. O. Box 1509

Midland, Texas

Unit Operator and Working Interest
Owner

17 1 21 23 24 33

STATE OF TEXAS)
)
COUNTY OF MIDLAND)

Before me, the undersigned authority, on this day personally appeared J. V. Lindsey, known to me to be the person whose name is subscribed to the foregoing instrument as Attorney in Fact for Shell Oil Company, a Delaware corporation, and acknowledged to me that he executed the same for the purposes and consideration therein expressed, and as the free act and deed of said Shell Oil Company in the capacity therein stated.

Given under my hand and seal of office this 7 day of February,
1964.

My Commission Expires:

June 1, 1965

Rosalyn Magee Rosalyn Magee
Notary Public in and for
Midland County, Texas.

**CONSENT AND RATIFICATION
BOOTLEG RIDGE DEEP UNIT AGREEMENT
EMBRACING LANDS IN LEA COUNTY, NEW MEXICO**

The undersigned (whether one or more) hereby acknowledge receipt of a copy of the Unit Agreement for the Development and Operation of the Bootleg Ridge Deep Unit Area embracing lands situated in Lea County, New Mexico, which said agreement is dated the 15th day of January, 1964, and acknowledge that they have read the same and are familiar with the terms and conditions thereof. The undersigned also being the owners of the leasehold, royalty or other interests in the lands or minerals embraced in said unit area, as indicated on the schedule attached to said Unit Agreement as Exhibit "B", do hereby commit all of their said interests to the Bootleg Ridge Deep Unit Agreement and do hereby consent thereto and ratify all of the terms and provisions thereof, exactly the same as if the undersigned had executed the original of said Unit Agreement or a counterpart thereof.

IN WITNESS WHEREOF, this instrument is executed by the undersigned as of the date set forth in their respective acknowledgments.

ATTEST:

Marguerite Wright
Secretary

RICHARDSON OILS, INC.
By: E. W. Sampson President
FERRY R. BASS
NANCY LEE BASS

CORPORATE

1 28

STATE OF TEXAS
COUNTY OF TARRANT

The foregoing instrument was acknowledged before me this 4 day of February, 1964, by E. W. Sampson who is President of RICHARDSON OILS, INC., for and on behalf of said corporation.

My Commission expires:
June 1, 1965

Joan Barnhart
Notary Public

INDIVIDUAL

STATE OF TEXAS
COUNTY OF TARRANT

The foregoing instrument was acknowledged before me this 4 day of February, 1964, by FERRY R. BASS and wife NANCY LEE BASS.

My Commission expires:
June 1, 1965

Joan Barnhart
Notary Public

**CONSENT AND RATIFICATION
BOOTLEG RIDGE DEEP UNIT AGREEMENT
EMBRACING LANDS IN LEA COUNTY, NEW MEXICO**

The undersigned (whether one or more) hereby acknowledge receipt of a copy of the Unit Agreement for the Development and Operation of the Bootleg Ridge Deep Unit Area embracing lands situated in Lea County, New Mexico, which said agreement is dated the 15th day of January, 1964, and acknowledge that they have read the same and are familiar with the terms and conditions thereof. The undersigned also being the owners of the leasehold, royalty or other interests in the lands or minerals embraced in said unit area, as indicated on the schedule attached to said Unit Agreement as Exhibit "B", do hereby commit all of their said interests to the Bootleg Ridge Deep Unit Agreement and do hereby consent thereto and ratify all of the terms and provisions thereof, exactly the same as if the undersigned had executed the original of said Unit Agreement or a counterpart thereof.

IN WITNESS WHEREOF, this instrument is executed by the undersigned as of the date set forth in their respective acknowledgments.

SOUTHERN CALIFORNIA PETROLEUM CORPORATION

William M. Mannon
William M. Mannon, Vice President
J. M. Weidman
J. M. Weidman, Asst. Secretary

CORPORATE

2 8 9

STATE OF CALIFORNIA)
COUNTY OF LOS ANGELES)

5 6 11 12

The foregoing instrument was acknowledged before me this 11th day of February, 1964, by William M. Mannon & J. M. Weidman who are Vice President & Asst. Secretary, resp. of SOUTHERN CALIFORNIA PETROLEUM CORPORATION, for and on behalf of said corporation.

My Commission expires:

JANE McLAIN - Notary Public,
State of California - Principal Office, Los Angeles County
My Commission Expires March 25, 1967
4250 Wilshire Blvd., Los Angeles 5, Calif.

Jane McLain
Notary Public

INDIVIDUAL

STATE OF _____)
COUNTY OF _____)

The foregoing instrument was acknowledged before me this _____ day of _____, 1964, by _____.

My Commission expires:

Notary Public

**CONSENT AND RATIFICATION
BOOTLEG RIDGE DEEP UNIT AGREEMENT
EMBRACING LANDS IN LEA COUNTY, NEW MEXICO**

The undersigned (whether one or more) hereby acknowledge receipt of a copy of the Unit Agreement for the Development and Operation of the Bootleg Ridge Deep Unit Area embracing lands situated in Lea County, New Mexico, which said agreement is dated the 15th day of January, 1964, and acknowledge that they have read the same and are familiar with the terms and conditions thereof. The undersigned also being the owners of the leasehold, royalty or other interests in the lands or minerals embraced in said unit area, as indicated on the schedule attached to said Unit Agreement as Exhibit "B", do hereby commit all of their said interests to the Bootleg Ridge Deep Unit Agreement and do hereby consent thereto and ratify all of the terms and provisions thereof, exactly the same as if the undersigned had executed the original of said Unit Agreement or a counterpart thereof.

IN WITNESS WHEREOF, this instrument is executed by the undersigned as of the date set forth in their respective acknowledgments.

Marion Culbertson
Marion Culbertson

Wallace W. Irwin
Kathleen Irwin

E. A. Culbertson and Wallace W. Irwin: Lessee of Record and Working Interest owners under Tracts 2-8-9. Overriding Royalty owners under Tracts 5-6-11-12

Marion Culbertson, wife of E. A. Culbertson: Overriding royalty under Tracts 9-10-11-12-13-14

Kathleen Irwin, wife of Wallace W. Irwin: Overriding royalty under Tracts 2-3-4-5-6-7-8

_____ of _____, 1964,
and on behalf of said corporation.

My Commission expires:

Notary Public

INDIVIDUAL

STATE OF TEXAS)
COUNTY OF MIDLAND)

The foregoing instrument was acknowledged before me this 3rd day of February, 1964, by E. A. & MARION CULBERTSON and WALLACE W. & KATHLEEN IRWIN.
My Commission expires: June 1, 1965

Dorene Franklin DORENE FRANKLIN
Notary Public

CONSENT AND RATIFICATION
BOOTLEG RIDGE DEEP UNIT AGREEMENT
EMBRACING LANDS IN LEA COUNTY, NEW MEXICO

The undersigned (whether one or more) hereby acknowledge receipt of a copy of the Unit Agreement for the Development and Operation of the Bootleg Ridge Deep Unit Area embracing lands situated in Lea County, New Mexico, which said agreement is dated the 15th day of January, 1964, and acknowledge that they have read the same and are familiar with the terms and conditions thereof. The undersigned also being the owners of the leasehold, royalty or other interests in the lands or minerals embraced in said unit area, as indicated on the schedule attached to said Unit Agreement as Exhibit "B", do hereby commit all of their said interests to the Bootleg Ridge Deep Unit Agreement and do hereby consent thereto and ratify all of the terms and provisions thereof, exactly the same as if the undersigned had executed the original of said Unit Agreement or a counterpart thereof.

IN WITNESS WHEREOF, this instrument is executed by the undersigned as of the date set forth in their respective acknowledgments.

UNION OIL COMPANY OF CALIFORNIA

By: John Hansen
Attorney-in-Fact

CORPORATE

3 4 6 10 12 13 32

STATE OF TEXAS, }
COUNTY OF MIDLAND. }

The foregoing instrument was acknowledged before me this 10th day of February, 1964, by JOHN HANSEN who is Attorney-in-Fact of Union Oil Company of California, for and on behalf of said corporation.

My Commission expires:
June 1, 1965

John H. Hansen
Notary Public

INDIVIDUAL

STATE OF _____ }
COUNTY OF _____ }

The foregoing instrument was acknowledged before me this _____ day of _____, 1964, by _____.

My Commission expires:

Notary Public

CONSENT AND RATIFICATION
BOOTLEG RIDGE DEEP UNIT AGREEMENT
EMBRACING LANDS IN LEA COUNTY, NEW MEXICO

The undersigned (whether one or more) hereby acknowledge receipt of a copy of the Unit Agreement for the Development and Operation of the Bootleg Ridge Deep Unit Area embracing lands situated in Lea County, New Mexico, which said agreement is dated the 15th day of January, 1964, and acknowledge that they have read the same and are familiar with the terms and conditions thereof. The undersigned also being the owners of the leasehold, royalty or other interests in the lands or minerals embraced in said unit area, as indicated on the schedule attached to said Unit Agreement as Exhibit "B", do hereby commit all of their said interests to the Bootleg Ridge Deep Unit Agreement and do hereby consent thereto and ratify all of the terms and provisions thereof, exactly the same as if the undersigned had executed the original of said Unit Agreement or a counterpart thereof.

IN WITNESS WHEREOF, this instrument is executed by the undersigned as of the date set forth in their respective acknowledgments.

Royce E. Hudson

William A. Hudson

Edward R. Hudson

Josephine T. Hudson

5 7 11 14 CORPORATE

5 7 11 14

STATE OF _____)
COUNTY OF _____)

The foregoing instrument was acknowledged before me this _____ day of _____, 1964, by _____ who is _____ of _____, for and on behalf of said corporation.

My Commission expires:

Notary Public

INDIVIDUAL

STATE OF TEXAS)
COUNTY OF TARRANT)

The foregoing instrument was acknowledged before me this 3rd day of February, 1964, by William A. Hudson and Roxie E. Hudson, his wife, and Edward R. Hudson and Josephine T. Hudson, his wife

My Commission expires:
June 1, 1965

Laura Shelton
Notary Public

CONSENT AND RATIFICATION
BOOTLEG RIDGE DEEP UNIT AGREEMENT
EMBRACING LANDS IN LEA COUNTY, NEW MEXICO

The undersigned (whether one or more) hereby acknowledge receipt of a copy of the Unit Agreement for the Development and Operation of the Bootleg Ridge Deep Unit Area embracing lands situated in Lea County, New Mexico, which said agreement is dated the 15th day of January, 1964, and acknowledge that they have read the same and are familiar with the terms and conditions thereof. The undersigned also being the owners of the leasehold, royalty or other interests in the lands or minerals embraced in said unit area, as indicated on the schedule attached to said Unit Agreement as Exhibit "B", do hereby commit all of their said interests to the Bootleg Ridge Deep Unit Agreement and do hereby consent thereto and ratify all of the terms and provisions thereof, exactly the same as if the undersigned had executed the original of said Unit Agreement or a counterpart thereof.

IN WITNESS WHEREOF, this instrument is executed by the undersigned as of the date set forth in their respective acknowledgments.

CONTINENTAL OIL COMPANY
BY R. L. Adams
Attorney in Fact

CORPORATE 15 16 17 22 27 Adams

STATE OF Texas)
COUNTY OF Tarrant)

The foregoing instrument was acknowledged before me this 31 day of January, 1964, by R. L. ADAMS who is ATTORNEY IN FACT of CONTINENTAL OIL COMPANY, for and on behalf of said corporation.

My Commission expires: 6-1-65

Barbara Lee Nelson
Notary Public

INDIVIDUAL

STATE OF _____)
COUNTY OF _____)

The foregoing instrument was acknowledged before me this _____ day of _____, 1964, by _____.

My Commission expires: _____

Notary Public

CONSENT AND RATIFICATION
BOOTLEG RIDGE DEEP UNIT AGREEMENT
EMBRACING LANDS IN LEA COUNTY, NEW MEXICO

The undersigned (whether one or more) hereby acknowledge receipt of a copy of the Unit Agreement for the Development and Operation of the Bootleg Ridge Deep Unit Area embracing lands situated in Lea County, New Mexico, which said agreement is dated the 15th day of January, 1964, and acknowledge that they have read the same and are familiar with the terms and conditions thereof. The undersigned also being the owners of the leasehold, royalty or other interests in the lands or minerals embraced in said unit area, as indicated on the schedule attached to said Unit Agreement as Exhibit "B", do hereby commit all of their said interests to the Bootleg Ridge Deep Unit Agreement and do hereby consent thereto and ratify all of the terms and provisions thereof, exactly the same as if the undersigned had executed the original of said Unit Agreement or a counterpart thereof.

IN WITNESS WHEREOF, this instrument is executed by the undersigned as of the date set forth in their respective acknowledgments.

_____ Charles B. Read
_____ Jean Read
_____ 20

CORPORATE

STATE OF _____)
COUNTY OF _____)

The foregoing instrument was acknowledged before me this _____ day of _____, 1964, by _____ who is _____ of _____, for and on behalf of said corporation.

My Commission expires: _____

Notary Public

INDIVIDUAL

STATE OF NEW MEXICO)
COUNTY OF CHAVES)

The foregoing instrument was acknowledged before me this 13th day of February, 1964, by Charles B. Read and wife, Jean Read.

My Commission expires: _____

June 12, 1967

Joyce Ann Wilson
Notary Public

Alice Carolan
Notary Public in and for Washington
County, Oklahoma

1

**CONSENT AND RATIFICATION
BOOTLEG RIDGE DEEP UNIT AGREEMENT
EMBRACING LANDS IN LEA COUNTY, NEW MEXICO**

The undersigned (whether one or more) hereby acknowledge receipt of a copy of the Unit Agreement for the Development and Operation of the Bootleg Ridge Deep Unit Area embracing lands situated in Lea County, New Mexico, which said agreement is dated the 15th day of January, 1964, and acknowledge that they have read the same and are familiar with the terms and conditions thereof. The undersigned also being the owners of the leasehold, royalty or other interests in the lands or minerals embraced in said unit area, as indicated on the schedule attached to said Unit Agreement as Exhibit "B", do hereby commit all of their said interests to the Bootleg Ridge Deep Unit Agreement and do hereby consent thereto and ratify all of the terms and provisions thereof, exactly the same as if the undersigned had executed the original of said Unit Agreement or a counterpart thereof.

IN WITNESS WHEREOF, this instrument is executed by the undersigned as of the date set forth in their respective acknowledgments.

ATTEST: *W. O. Mortlock*

Assistant Secretary

GULF OIL CORPORATION

By: *F. O. Mortlock*

Attorney in Fact

CORPORATE

29

STATE OF NEW MEXICO

COUNTY OF CHAVES

Law	<i>W. O. Mortlock</i>
Serv.	<i>Att. in Fact</i>
Exp.	
Prod.	<i>2/13/64</i>

The foregoing instrument was acknowledged before me this 13th day of February, 1964, by F. O. Mortlock who is Attorney in Fact of Gulf Oil Corporation, for and on behalf of said corporation.

My Commission expires:
My Commission Expires August 15, 1966

Don Marie Cooper
Notary Public

INDIVIDUAL

STATE OF _____

COUNTY OF _____

The foregoing instrument was acknowledged before me this _____ day of _____, 1964, by _____.

My Commission expires:

Notary Public

CONSENT AND RATIFICATION
BOOTLEG RIDGE DEEP UNIT AGREEMENT
EMBRACING LANDS IN LEA COUNTY, NEW MEXICO

The undersigned (whether one or more) hereby acknowledge receipt of a copy of the Unit Agreement for the Development and Operation of the Bootleg Ridge Deep Unit Area embracing lands situated in Lea County, New Mexico, which said agreement is dated the 15th day of January, 1964, and acknowledge that they have read the same and are familiar with the terms and conditions thereof. The undersigned also being the owners of the leasehold, royalty or other interests in the lands or minerals embraced in said unit area, as indicated on the schedule attached to said Unit Agreement as Exhibit "B", do hereby commit all of their said interests to the Bootleg Ridge Deep Unit Agreement and do hereby consent thereto and ratify all of the terms and provisions thereof, exactly the same as if the undersigned had executed the original of said Unit Agreement or a counterpart thereof.

IN WITNESS WHEREOF, this instrument is executed by the undersigned as of the date set forth in their respective acknowledgments.

WITNESSES:

CABOT CORPORATION

BY:

John W. Chisholm, Attorney in Fact

CORPORATE

Tract 30

STATE OF TEXAS
COUNTY OF GRAY

The foregoing instrument was acknowledged before me this 12 day of February, 1964, by John W. Chisholm who is Attorney in Fact of Cabot Corporation, for and on behalf of said corporation.

My Commission expires: June 1, 1965

J. Max Hickey
Notary Public

J. MAX HICKEY
Notary Public, Gray County, Texas

INDIVIDUAL

STATE OF _____
COUNTY OF _____

The foregoing instrument was acknowledged before me this _____ day of _____, 1964, by _____.

My Commission expires: _____

Notary Public

**CONSENT AND RATIFICATION
BOOTLEG RIDGE DEEP UNIT AGREEMENT
EMBRACING LANDS IN LEA COUNTY, NEW MEXICO**

The undersigned (whether one or more) hereby acknowledge receipt of a copy of the Unit Agreement for the Development and Operation of the Bootleg Ridge Deep Unit Area embracing lands situated in Lea County, New Mexico, which said agreement is dated the 15th day of January, 1964, and acknowledge that they have read the same and are familiar with the terms and conditions thereof. The undersigned also being the owners of the leasehold, royalty or other interests in the lands or minerals embraced in said unit area, as indicated on the schedule attached to said Unit Agreement as Exhibit "B", do hereby commit all of their said interests to the Bootleg Ridge Deep Unit Agreement and do hereby consent thereto and ratify all of the terms and provisions thereof, exactly the same as if the undersigned had executed the original of said Unit Agreement or a counterpart thereof.

IN WITNESS WHEREOF, this instrument is executed by the undersigned as of the date set forth in their respective acknowledgments.

THE PURE OIL COMPANY
By *G. W. Hancock*
Division Manager,
Southern Producing Division

CORPORATE

31

APPROVED
Desc. <u>B</u>
Form <u>one</u>
Terms <u>B</u>
m om

STATE OF TEXAS)
COUNTY OF HARRIS)

The foregoing instrument was acknowledged before me this 4 day of February, 1964, by G. W. Hancock who is Division Manager of the Southern Producing Division of The Pure Oil Company, for and on behalf of said corporation.

My Commission expires:
June 1, 1965

Jo Ann Brewer JO ANN BREWER
Notary Public

INDIVIDUAL

STATE OF _____)
COUNTY OF _____)

The foregoing instrument was acknowledged before me this _____ day of _____, 1964, by _____.

My Commission expires:

Notary Public

CONSENT AND RATIFICATION
BOOTLEG RIDGE DEEP UNIT AGREEMENT
EMBRACING LANDS IN LEA COUNTY, NEW MEXICO

The undersigned (whether one or more) hereby acknowledge receipt of a copy of the Unit Agreement for the Development and Operation of the Bootleg Ridge Deep Unit Area embracing lands situated in Lea County, New Mexico, which said agreement is dated the 15th day of January, 1964, and acknowledge that they have read the same and are familiar with the terms and conditions thereof. The undersigned also being the owners of the leasehold, royalty or other interests in the lands or minerals embraced in said unit area, as indicated on the schedule attached to said Unit Agreement as Exhibit "B", do hereby commit all of their said interests to the Bootleg Ridge Deep Unit Agreement and do hereby consent thereto and ratify all of the terms and provisions thereof, exactly the same as if the undersigned had executed the original of said Unit Agreement or a counterpart thereof.

IN WITNESS WHEREOF, this instrument is executed by the undersigned as of the date set forth in their respective acknowledgments.

_____ Howard W. Jennings
Peggy P. Jennings
_____ 1

CORPORATE

STATE OF _____)
COUNTY OF _____)

The foregoing instrument was acknowledged before me this _____ day of _____, 1964, by _____ who is _____ of _____, for and on behalf of said corporation.

My Commission expires: _____

Notary Public

INDIVIDUAL

STATE OF NEW MEXICO)
COUNTY OF CHAVES)

The foregoing instrument was acknowledged before me this 13th day of February, 1964, by Howard W. Jennings and wife, Peggy P. Jennings.

My Commission expires:
June 10, 1967

Joyce Ann Wilson

Notary Public

RECEIVED
FEB 17 1964

U. S. GEOLOGICAL SURVEY
ROSWELL, NEW MEXICO

CONSENT AND RATIFICATION
BOOTLEG RIDGE DEEP UNIT AGREEMENT
EMBRACING LANDS IN LEA COUNTY, NEW MEXICO

The undersigned (whether one or more) hereby acknowledge receipt of a copy of the Unit Agreement for the Development and Operation of the Bootleg Ridge Deep Unit Area embracing lands situated in Lea County, New Mexico, which said agreement is dated the 15th day of January, 1964, and acknowledge that they have read the same and are familiar with the terms and conditions thereof. The undersigned also being the owners of the leasehold, royalty or other interests in the lands or minerals embraced in said unit area, as indicated on the schedule attached to said Unit Agreement as Exhibit "B", do hereby commit all of their said interests to the Bootleg Ridge Deep Unit Agreement and do hereby consent thereto and ratify all of the terms and provisions thereof, exactly the same as if the undersigned had executed the original of said Unit Agreement or a counterpart thereof.

IN WITNESS WHEREOF, this instrument is executed by the undersigned
as of the date set forth in their respective acknowledgments.

as of the date set forth in their respective acknowledgments.

1

CORPORATE

STATE OF _____)
COUNTY OF _____)

The foregoing instrument was acknowledged before me this _____ day of _____, 1964, by _____ who is _____ of _____, for and on behalf of said corporation.

My Commission expires:

Notary Public

INDIVIDUAL.

STATE OF NEW MEXICO
COUNTY OF LEA

The foregoing instrument was acknowledged before me this 4th day of February, 1964, by Giles L. Matthews and Sadie Ray Matthews, his wife.

My Commission expires:
August 13, 1966

Thomas G. Johnson
Notary Public

RECEIVED
FEB 17 1964

U. S. GEOLOGICAL SURVEY
ROSWELL, NEW MEXICO

CONSENT AND RATIFICATION
BOOTLEG RIDGE DEEP UNIT AGREEMENT
EMBRACING LANDS IN LEA COUNTY, NEW MEXICO

The undersigned (whether one or more) hereby acknowledge receipt of a copy of the Unit Agreement for the Development and Operation of the Bootleg Ridge Deep Unit Area embracing lands situated in Lea County, New Mexico, which said agreement is dated the 15th day of January, 1964, and acknowledge that they have read the same and are familiar with the terms and conditions thereof. The undersigned also being the owners of the leasehold, royalty or other interests in the lands or minerals embraced in said unit area, as indicated on the schedule attached to said Unit Agreement as Exhibit "B", do hereby commit all of their said interests to the Bootleg Ridge Deep Unit Agreement and do hereby consent thereto and ratify all of the terms and provisions thereof, exactly the same as if the undersigned had executed the original of said Unit Agreement or a counterpart thereof.

IN WITNESS WHEREOF, this instrument is executed by the undersigned as of the date set forth in their respective acknowledgments.

_____ Carl Whigham
Susie Ann Whigham

CORPORATE

3 7

STATE OF _____)
COUNTY OF _____)

The foregoing instrument was acknowledged before me this _____ day of _____, 1964, by _____ who is _____ of _____, for and on behalf of said corporation.

My Commission expires: _____

Larry M. Kildow
Notary Public

INDIVIDUAL

STATE OF New Mexico)
COUNTY OF San Juan)

The foregoing instrument was acknowledged before me this 29th day of January, 1964, by Carl Whigham and Susie Ann Whigham.

My Commission expires: _____
My Commission Expires May 7, 1965

Larry M. Kildow
Notary Public

RECORDED
FEB 17 1964

U. S. GEOLOGICAL SURVEY
ROSALIE CO. FIELD

CONSENT AND RATIFICATION
BOOTLEG RIDGE DEEP UNIT AGREEMENT
EMBRACING LANDS IN LEA COUNTY, NEW MEXICO

The undersigned (whether one or more) hereby acknowledge receipt of a copy of the Unit Agreement for the Development and Operation of the Bootleg Ridge Deep Unit Area embracing lands situated in Lea County, New Mexico, which said agreement is dated the 15th day of January, 1964, and acknowledge that they have read the same and are familiar with the terms and conditions thereof. The undersigned also being the owners of the leasehold, royalty or other interests in the lands or minerals embraced in said unit area, as indicated on the schedule attached to said Unit Agreement as Exhibit "B", do hereby commit all of their said interests to the Bootleg Ridge Deep Unit Agreement and do hereby consent thereto and ratify all of the terms and provisions thereof, exactly the same as if the undersigned had executed the original of said Unit Agreement or a counterpart thereof.

IN WITNESS WHEREOF, this instrument is executed by the undersigned as of the date set forth in their respective acknowledgments.

_____ Marie B. Quattus
4 8 10-14

CORPORATE

STATE OF _____)
COUNTY OF _____)

The foregoing instrument was acknowledged before me this _____ day of _____, 1964, by _____ who is _____ of _____, for and on behalf of said corporation.

My Commission expires: _____

Notary Public

INDIVIDUAL

STATE OF NEW MEXICO)
COUNTY OF CHAVES)

The foregoing instrument was acknowledged before me this 8th day of February, 1964, by Marie B. Quattus.

My Commission expires: 10-5-67

Notary Public

7. 8. 1964
FEB 11 1964
NOTARY PUBLIC
LEA COUNTY, NEW MEXICO

CONSENT AND RATIFICATION
BOOTLEG RIDGE DEEP UNIT AGREEMENT
EMBRACING LANDS IN LEA COUNTY, NEW MEXICO

The undersigned (whether one or more) hereby acknowledge receipt of a copy of the Unit Agreement for the Development and Operation of the Bootleg Ridge Deep Unit Area embracing lands situated in Lea County, New Mexico, which said agreement is dated the 15th day of January, 1964, and acknowledge that they have read the same and are familiar with the terms and conditions thereof. The undersigned also being the owners of the leasehold, royalty or other interests in the lands or minerals embraced in said unit area, as indicated on the schedule attached to said Unit Agreement as Exhibit "B", do hereby commit all of their said interests to the Bootleg Ridge Deep Unit Agreement and do hereby consent thereto and ratify all of the terms and provisions thereof, exactly the same as if the undersigned had executed the original of said Unit Agreement or a counterpart thereof.

IN WITNESS WHEREOF, this instrument is executed by the undersigned as of the date set forth in their respective acknowledgments.

Martha L. Hendrix
Walter E. Shepard

Robert E. Payne
Ruth L. Payne

CORPORATE

15 16 22
19 20

STATE OF _____
COUNTY OF _____

The foregoing instrument was acknowledged before me this _____ day of _____, 1964, by _____ who is _____ of _____, for and on behalf of said corporation.

My Commission expires: _____

Notary Public

INDIVIDUAL

STATE OF FLORIDA
COUNTY OF BREVARD

The foregoing instrument was acknowledged before me this 3rd day of February, 1964, by ROBERT E. PAYNE AND RUTH L. PAYNE, his wife.

My Commission expires:
May 1st, 1965

Martha L. Hendrix
Notary Public
State of Florida at Large.

FEB 27 1964

CONSENT AND RATIFICATION
BOOTLEG RIDGE DEEP UNIT AGREEMENT
EMBRACING LANDS IN LEA COUNTY, NEW MEXICO

The undersigned (whether one or more) hereby acknowledge receipt of a copy of the Unit Agreement for the Development and Operation of the Bootleg Ridge Deep Unit Area embracing lands situated in Lea County, New Mexico, which said agreement is dated the 15th day of January, 1964, and acknowledge that they have read the same and are familiar with the terms and conditions thereof. The undersigned also being the owners of the leasehold, royalty or other interests in the lands or minerals embraced in said unit area, as indicated on the schedule attached to said Unit Agreement as Exhibit "B", do hereby commit all of their said interests to the Bootleg Ridge Deep Unit Agreement and do hereby consent thereto and ratify all of the terms and provisions thereof, exactly the same as if the undersigned had executed the original of said Unit Agreement or a counterpart thereof.

IN WITNESS WHEREOF, this instrument is executed by the undersigned as of the date set forth in their respective acknowledgments.

Marguerite Armitage Payne
Marguerite Armitage Payne, Individually
and as Co-matrix of the Estate of
Albert Cole Payne, Deceased

CORPORATE

Page 19

STATE OF _____
COUNTY OF _____

The foregoing instrument was acknowledged before me this _____ day of _____, 1964, by _____ who is _____ of _____, for and on behalf of said corporation.

My Commission expires: _____

Notary Public

INDIVIDUAL

STATE OF Texas
COUNTY OF Midland

The foregoing instrument was acknowledged before me this 25 day of February, 1964, by Marguerite Armitage Payne, Individually and in the capacity therein stated.

My Commission expires: _____

6-1-65

Notary Public

Rosalyn Magee

Rosalyn Magee
Notary Public in and for
Midland County, Texas

CONSENT AND RATIFICATION
BOOTLEG RIDGE DEEP UNIT AGREEMENT
EMBRACING LANDS IN LEA COUNTY, NEW MEXICO

The undersigned (whether one or more) hereby acknowledge receipt of a copy of the Unit Agreement for the Development and Operation of the Bootleg Ridge Deep Unit Area embracing lands situated in Lea County, New Mexico, which said agreement is dated the 15th day of January, 1964, and acknowledge that they have read the same and are familiar with the terms and conditions thereof. The undersigned also being the owners of the leasehold, royalty or other interests in the lands or minerals embraced in said unit area, as indicated on the schedule attached to said Unit Agreement as Exhibit "B", do hereby commit all of their said interests to the Bootleg Ridge Deep Unit Agreement and do hereby consent thereto and ratify all of the terms and provisions thereof, exactly the same as if the undersigned had executed the original of said Unit Agreement or a counterpart thereof.

IN WITNESS WHEREOF, this instrument is executed by the undersigned as of the date set forth in their respective acknowledgments.

_____ Ora R. Hall
Edna Lane Hall
_____ 17

CORPORATE

STATE OF _____
COUNTY OF _____

The foregoing instrument was acknowledged before me this _____ day of _____, 1964, by _____ who is _____ of _____, for and on behalf of said corporation.

My Commission expires: _____

Notary Public

INDIVIDUAL

STATE OF New Mexico
COUNTY OF Chaves

The foregoing instrument was acknowledged before me this 31st day of January, 1964, by Ora R. Hall, Jr. and Edna Lane Hall, his wife.

My Commission expires: April 11, 1968

Bessie L. Gordon
Notary Public

RECORDED
FEB 17 1964
U.S. DEPT. OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

CONSENT AND RATIFICATION
BOOTLEG RIDGE DEEP UNIT AGREEMENT
EMBRACING LANDS IN LEA COUNTY, NEW MEXICO

The undersigned (whether one or more) hereby acknowledge receipt of a copy of the Unit Agreement for the Development and Operation of the Bootleg Ridge Deep Unit Area embracing lands situated in Lea County, New Mexico, which said agreement is dated the 15th day of January, 1964, and acknowledge that they have read the same and are familiar with the terms and conditions thereof. The undersigned also being the owners of the leasehold, royalty or other interests in the lands or minerals embraced in said unit area, as indicated on the schedule attached to said Unit Agreement as Exhibit "B", do hereby commit all of their said interests to the Bootleg Ridge Deep Unit Agreement and do hereby consent thereto and ratify all of the terms and provisions thereof, exactly the same as if the undersigned had executed the original of said Unit Agreement or a counterpart thereof.

IN WITNESS WHEREOF, this instrument is executed by the undersigned as of the date set forth in their respective acknowledgments.

Jean S. Brady
Stewart F. Brady

17 18 CORPORATE

STATE OF _____)
COUNTY OF _____)

The foregoing instrument was acknowledged before me this _____ day of _____, 1964, by _____ who is _____ of _____, for and on behalf of said corporation.

My Commission expires:

Notary Public

INDIVIDUAL

STATE OF OKLAHOMA)
COUNTY OF COMANCHE)

The foregoing instrument was acknowledged before me this 31 day of February, 1964, by Jean S. Brady and Stewart F. Brady.

My Commission expires:
18 November 1967.


James D. Early
Notary Public in and for Comanche
County, Oklahoma

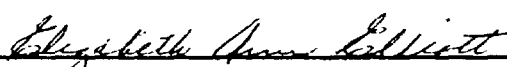
RECORDED
FEB 17 1964
NOTARY PUBLIC
JAMES D. EARLY

**CONSENT AND RATIFICATION
BOOTLEG RIDGE DEEP UNIT AGREEMENT
EMBRACING LANDS IN LEA COUNTY, NEW MEXICO**

The undersigned (whether one or more) hereby acknowledge receipt of a copy of the Unit Agreement for the Development and Operation of the Bootleg Ridge Deep Unit Area embracing lands situated in Lea County, New Mexico, which said agreement is dated the 15th day of January, 1964, and acknowledge that they have read the same and are familiar with the terms and conditions thereof. The undersigned also being the owners of the leasehold, royalty or other interests in the lands or minerals embraced in said unit area, as indicated on the schedule attached to said Unit Agreement as Exhibit "B", do hereby commit all of their said interests to the Bootleg Ridge Deep Unit Agreement and do hereby consent thereto and ratify all of the terms and provisions thereof, exactly the same as if the undersigned had executed the original of said Unit Agreement or a counterpart thereof.

IN WITNESS WHEREOF, this instrument is executed by the undersigned as of the date set forth in their respective acknowledgments.


Frank O. Elliott


Elizabeth Ann Elliott
CORPORATE 18

STATE OF _____)
COUNTY OF _____)

The foregoing instrument was acknowledged before me this _____ day of _____, 1964, by _____ who is _____ of _____, for and on behalf of said corporation.

My Commission expires:

Notary Public

INDIVIDUAL

STATE OF NEW MEXICO)
COUNTY OF CHAVES)

The foregoing instrument was acknowledged before me this 29th day of January, 1964, by Frank O. Elliott and Elizabeth Ann Elliott, His wife.

My Commission expires:
June 1, 1966


Notary Public

CONSENT AND RATIFICATION
BOOTLEG RIDGE DEEP UNIT AGREEMENT
EMBRACING LANDS IN LEA COUNTY, NEW MEXICO

The undersigned (whether one or more) hereby acknowledge receipt of a copy of the Unit Agreement for the Development and Operation of the Bootleg Ridge Deep Unit Area embracing lands situated in Lea County, New Mexico, which said agreement is dated the 15th day of January, 1964, and acknowledge that they have read the same and are familiar with the terms and conditions thereof. The undersigned also being the owners of the leasehold, royalty or other interests in the lands or minerals embraced in said unit area, as indicated on the schedule attached to said Unit Agreement as Exhibit "B", do hereby commit all of their said interests to the Bootleg Ridge Deep Unit Agreement and do hereby consent thereto and ratify all of the terms and provisions thereof, exactly the same as if the undersigned had executed the original of said Unit Agreement or a counterpart thereof.

IN WITNESS WHEREOF, this instrument is executed by the undersigned as of the date set forth in their respective acknowledgments.

_____ Earl C. Lovick
_____ Minnie S. Lovick

CORPORATE

23

STATE OF _____)
COUNTY OF _____)

The foregoing instrument was acknowledged before me this _____ day of _____, 1964, by _____ who is _____ of _____, for and on behalf of said corporation.

My Commission expires:

Notary Public

INDIVIDUAL

STATE OF New Mexico)
COUNTY OF Lea)

The foregoing instrument was acknowledged before me this 4th day of February, 1964, by Earl C. Lovick and Minnie S. Lovick, his wife.

My Commission expires:

Randolph M. Richardson
Notary Public

CONSENT AND RATIFICATION
BOOTLEG RIDGE DEEP UNIT AGREEMENT
EMBRACING LANDS IN LEA COUNTY, NEW MEXICO

The undersigned (whether one or more) hereby acknowledge receipt of a copy of the Unit Agreement for the Development and Operation of the Bootleg Ridge Deep Unit Area embracing lands situated in Lea County, New Mexico, which said agreement is dated the 15th day of January, 1964, and acknowledge that they have read the same and are familiar with the terms and conditions thereof. The undersigned also being the owners of the leasehold, royalty or other interests in the lands or minerals embraced in said unit area, as indicated on the schedule attached to said Unit Agreement as Exhibit "B", do hereby commit all of their said interests to the Bootleg Ridge Deep Unit Agreement and do hereby consent thereto and ratify all of the terms and provisions thereof, exactly the same as if the undersigned had executed the original of said Unit Agreement or a counterpart thereof.

IN WITNESS WHEREOF, this instrument is executed by the undersigned as of the date set forth in their respective acknowledgments.

Everett G. Foltz 24
ESTATE OF LARGERIE HARRIS, DEC'D
FARMERS & MERCHANTS BANK, ADM.
BY John W. Floyd 24
Vice Pres. & Trust Officer
CORPORATE

STATE OF NEW MEXICO }
COUNTY OF DONA ANA }

The foregoing instrument was acknowledged before me this 11th day of February, 1964, by John W. Floyd who is Vice Pres. & Trust Officer of Farmers & Merchants Bank, for and on behalf of said corporation.

My Commission expires:

Notary Public
Dona Ana County, New Mexico
Commission Expires 10-26-67

Dee M. Patton
Notary Public

INDIVIDUAL

STATE OF NEW MEXICO }
COUNTY OF DONA ANA }

The foregoing instrument was acknowledged before me this 11th day of February, 1964, by Everett G. Foltz
My Commission expires:

Notary Public
Dona Ana County, New Mexico
Commission Expires 10-26-67

Dee M. Patton
Notary Public

CONSENT AND RATIFICATION
BOOTLEG RIDGE DEEP UNIT AGREEMENT
EMBRACING LANDS IN LEA COUNTY, NEW MEXICO

The undersigned (whether one or more) hereby acknowledge receipt of a copy of the Unit Agreement for the Development and Operation of the Bootleg Ridge Deep Unit Area embracing lands situated in Lea County, New Mexico, which said agreement is dated the 15th day of January, 1964, and acknowledge that they have read the same and are familiar with the terms and conditions thereof. The undersigned also being the owners of the leasehold, royalty or other interests in the lands or minerals embraced in said unit area, as indicated on the schedule attached to said Unit Agreement as Exhibit "B", do hereby commit all of their said interests to the Bootleg Ridge Deep Unit Agreement and do hereby consent thereto and ratify all of the terms and provisions thereof, exactly the same as if the undersigned had executed the original of said Unit Agreement or a counterpart thereof.

IN WITNESS WHEREOF, this instrument is executed by the undersigned as of the date set forth in their respective acknowledgments.

_____ NS Grove 25
_____ AT Bran

CORPORATE

STATE OF _____)
COUNTY OF _____)

The foregoing instrument was acknowledged before me this _____ day of _____, 1964, by _____ who is _____ of _____, for and on behalf of said corporation.

My Commission expires: _____

Notary Public

INDIVIDUAL

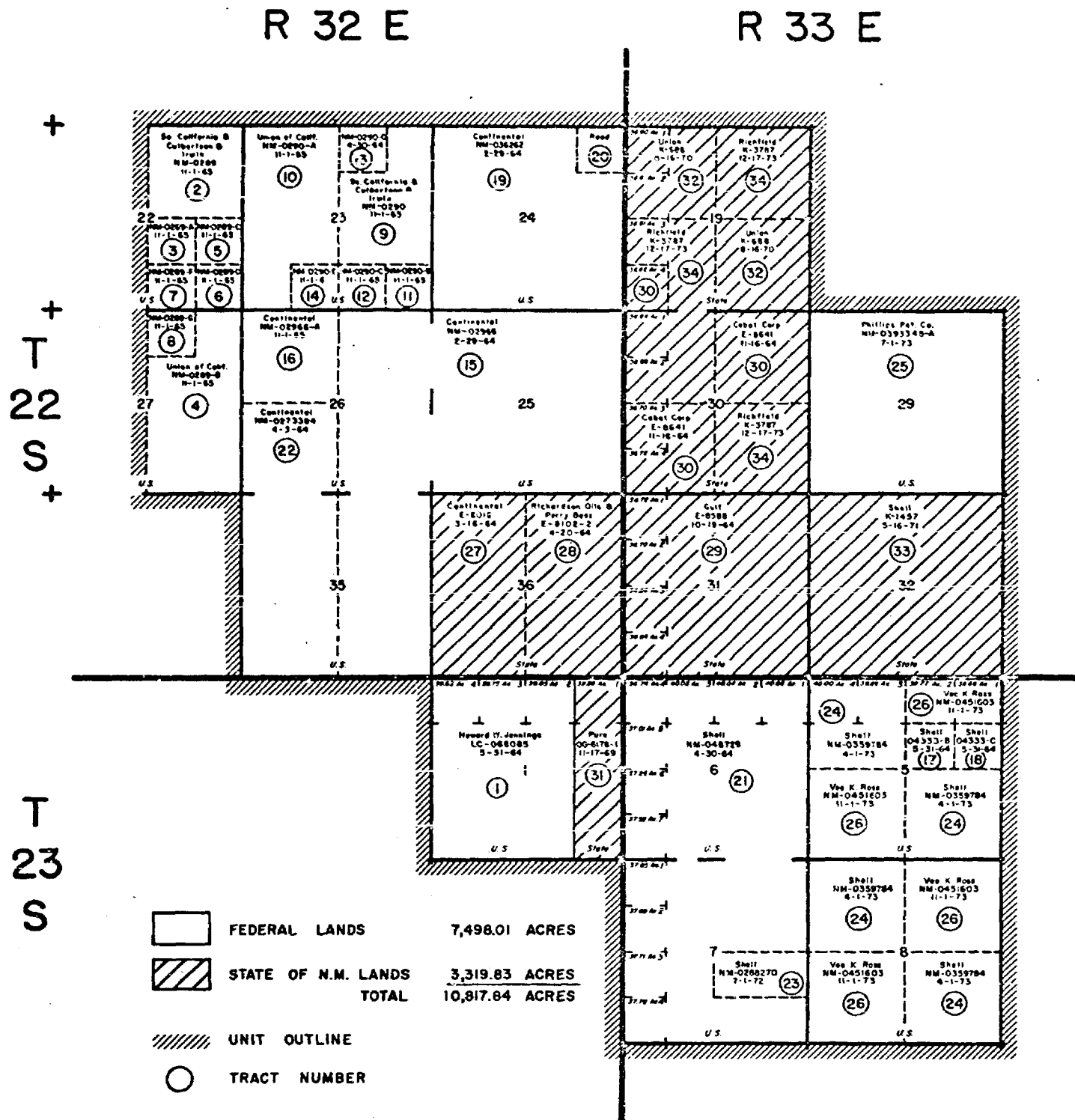
STATE OF COLORADO)
COUNTY OF DENVER)

The foregoing instrument was acknowledged before me this 3 day of FEBR, 1964, by NS GROVE & GF GROVE.

My Commission expires: _____

January 21, 1965

Delmer C. Lipke
Notary Public



BOOTLEG RIDGE DEEP UNIT AREA

LEA COUNTY, NEW MEXICO

EXHIBIT "A"

EXHIBIT "B"

SCHEDULE SHOWING THE OWNERSHIP OF

ALL LANDS IN THE UNIT AREA - BOOTLEG

RIDGE DEEP UNIT - LEA COUNTY, NEW MEXICO

FEDERAL LANDS

Note: Assignment of lease from Howard W. Jennings, Inc., to Perry R. Bass and Richardson Oils, Inc., was forwarded to the Bureau of Land Management under date of February 4, 1964.

6.	<u>T-22-S, R-32-E</u> Sec. 22: SE/4SE/4	40.00	NM-0289-D 10-31-65	USA 12 1/2%	Union Oil Co. of Calif.	All	Kathleen Irwin Southern Calif. Pet. E. A. Culbertson Wallace W. Irwin	1% 2% 1% 1%	Union Oil Co. of Calif.	All
7.	<u>T-22-S, R-32-E</u> Sec. 22: SW/4SE/4	40.00	NM-0289-F 10-31-65	USA 12 1/2%	William A. Hudson Edward R. Hudson	1/2 1/2	Carl Whigham Kathleen Irwin	2% 2%	William A. Hudson Edward R. Hudson	1/2 1/2
8.	<u>T-22-S, R-32-E</u> Sec. 27: NW/4NE/4	40.00	NM-0289-G 10-31-65	USA 12 1/2%	Southern Calif. Pet. Corp. E. A. Culbertson Wallace W. Irwin	1/2 1/4 1/4	Kathleen Irwin Marie B. Quantius	1% 1%	Southern Calif. Pet. Corp. E. A. Culbertson Wallace W. Irwin	1/2 1/4 1/4
9.	<u>T-22-S, R-32-E</u> Sec. 23: N/2SE/4, S/2NE/4, N3/4NE/4	200.00	NM-0290 10-31-65	USA 12 1/2%	Southern Calif. Pet. Corp. E. A. Culbertson Wallace W. Irwin	1/2 1/4 1/4	Marion Culbertson	1%	Southern Calif. Pet. Corp. E. A. Culbertson Wallace W. Irwin	1/2 1/4 1/4
10.	<u>T-22-S, R-32-E</u> Sec. 23: NW/4, N/2SW/4, SW/4SW/4	280.00	NM-0290-A 10-31-65	USA 12 1/2%	Union Oil Co. of Calif.	All	Marie B. Quantius Marion Culbertson	1% 1%	Union Oil Co. of Calif.	All
11.	<u>T-22-S, R-32-E</u> Sec. 23: SE/4SE/4	40.00	NM-0290-B 10-31-65	USA 12 1/2%	William A. Hudson Edward R. Hudson	1/2 1/2	Southern Calif. Pet. Corp. Wallace W. Irwin Marion Culbertson E. A. Culbertson Southern Calif. Pet. Corp.	2% 1% 1% 1% 1% 2%	William A. Hudson Edward R. Hudson	1/2 1/2
12.	<u>T-22-S, R-32-E</u> Sec. 23: SW/4SE/4	40.00	NM-0290-C 10-31-65	USA 12 1/2%	Union Oil Co. of Calif.	All	E. A. Culbertson Wallace W. Irwin Marion Culbertson	1% 1% 1%	Union Oil Co. of Calif.	All
13.	<u>T-22-S, R-32-E</u> Sec. 23: NW/4NE/4	40.00	NM-0290-D 10-31-65	USA 12 1/2%	Union Oil Co. of Calif.	All	Marion Culbertson	1%	Union Oil Co. of Calif.	All

14.	<u>T-22-S, R-32-E</u> Sec. 23: SE/4SW/4	40.00	NM-0290-E 10-31-65	USA 12 3/4%	William A. Hudson Edward R. Hudson	1/2 1/2	Marion Culbertson Marie B. Quantius	1% 1%	William A. Hudson Edward R. Hudson	1/2 1/2
15.	<u>T-22-S, R-32-E</u> Sec. 25: All Sec. 26: E/2 Sec. 35: E/2	1280.00	NM-02966 2-29-64	USA 12 3/4%	Continental Oil Co.	All	Robert E. Payne: \$200 per acre out of	.5% Co.	Continental Oil	All
16.	<u>T-22-S, R-32-E</u> Sec. 26: NW/4	160.00	NM-02966-A 10-31-65	USA 12 3/4%	Continental Oil Co.	All	Robert E. Payne: \$200 per acre out of	.5% Co.	Continental Oil	All
17.	<u>T-23-S, R-33-E</u> Sec. 5: SW/4NE/4	40.00	NM-04333-B 5-31-64	USA 12 3/4%	Shell Oil Company	All	Ora R. Hall, Jr. Jean S. Brady	4% 1%	Shell Oil Company	All
18.	<u>T-23-S, R-33-E</u> Sec. 5: SE/4NE/4	40.00	NM-04333-C 5-31-64	USA 12 3/4%	Shell Oil Company	All	Frank O. Elliott Jean S. Brady	4% 1%	Shell Oil Company	All
19.	<u>T-22-S, R-32-E</u> Sec. 24: S/2, S/2N/2, N/2NW/4, NW/4NE/4	600.00	NM-036262 2-29-64	USA 12 3/4%	Continental Oil Co.	All	Robert E. Payne: \$200 per acre out of	.5% Co.	Continental Oil	All
20.	<u>T-22-S, R-32-E</u> Sec. 24: NE/4 NE/4	40.00	NM-036262-B 2-29-64	USA 12 3/4%	Charles B. Read	All	Robert E. Payne: \$200 per acre out of	.5% Co.	Charles B. Read	All
21.	<u>T-23-S, R-33-E</u> Sec. 6: All Sec. 7: Lots 1, 2, 3, 4, E/2W/2, NE/4, S/2SE/4	1179.44	NM-048792 4-30-64	USA 12 3/4%	Shell Oil Company	All	William A. & Edward R. Hudson	5.46875% Co.	Shell Oil Co.	All
22.	<u>T-22-S, R-32-E</u> Sec. 26: SW/4 Sec. 35: W/2	480.00	NM-0273384 4-3-64	USA 12 3/4%	Continental Oil Co.	All	Robert E. Payne: \$200 per acre out of	.5% Co.	Continental Oil	All

23.	<u>T-23-S, R-33-E</u> Sec. 7: N/2SE/4	80.00	NM-0288270	USA	12½%	Shell Oil Company	All	Earl G. Levick	5%	Shell Oil Co.	All
24.	<u>T-23-S, R-33-E</u> Sec. 5: Lots 3, 4, S/2NW/4, SE/4 Sec. 8: NW/4, SE/4	639.89	NM-0359784	USA	12½%	Shell Oil Company	All	Everett G. Foltz and Laverge Harris Estate	5%	Shell Oil Co.	All
25.	<u>T-22-S, R-33-E</u> Sec. 29: All	640.00	NM-0393345-A	USA	12½%	Phillips Petroleum Company	All	N. S. Grove	5%	Phillips Petro- leum Co.	All
26.	<u>T-23-S, R-33-E</u> Sec. 5: Lots 1, 2, SW/4 Sec. 8: NE/4SW/4	559.43	NM-0451603	USA	12½%	Vee K. Ross Phillips Petroleum Company	1/2 1/2	Vee K. Ross	2.5%	Vee K. Ross Phillips Petro- leum Co.	1/2 1/2

Note: Assignment of undivided 1/2 interest from Vee K. Ross to
Phillips Petroleum Co. was forwarded to the Bureau of
Land Management under date of January 17, 1964.

26 TRACTS FEDERAL LAND, 7,498.01 ACRES 69.31% OF UNIT AREA

STATE OF NEW MEXICO LANDS

27.	<u>T-22-S, R-32-E</u> Sec. 36: W/2	320.00	E-8016	State	12½%	Continental Oil Co.	All	None		Continental Oil Co.	All
28.	<u>T-22-S, R-32-E</u> Sec. 36: E/2	320.00	E-8102-2	State	12½%	Richardson Oils, Inc. & Perry R. Bass	All	None		Richardson Oils, Inc. & Perry R. Bass	All
29.	<u>T-22-S, R-33-E</u> Sec. 31: All	626.72	E-8588	State	12½%	Gulf Oil Corporation	All	None		Gulf Oil Corpor- ation	All

30.	<u>T-22-S, R-33-E</u> Sec. 19: Lot 4 Sec. 30: NE/4, Lots 3, 4, E/2SW/4	350.04	E-8641 11-16-64	State 12½%	Cabot Corporation	All	None	Cabot Corp.	All
31.	<u>T-23-S, R-32-E</u> Sec. 1: Lot 1, SE/4NE/4, E/2SE/4	159.95	OG-6178-1 11-17-69	State 12½%	The Pure Oil Co.	All	None	The Pure Oil Co.	All
32.	<u>T-22-S, R-33-E</u> Sec. 19, Lots 1, 2, E/2 NW/4, SE/4	313.21	K-638 8-16-70	State 12½%	Union Oil Co. of Calif.	All	None	Union Oil Co. of Calif.	All
33.	<u>T-22-S, R-33-E</u> Sec. 32: All	640.00	K-1457 5-16-71	State 12½%	Shell Oil Company	All	None	Shell Oil Co.	All
34.	<u>T-22-S, R-33-E</u> Sec. 19: Lot 3, E/2SW/4, NE/4 Sec. 30: Lots, 1, 2, E/2NW/4, SE/4	589.91	K-3787 12-17-73	State 12½%	Richfield Oil Corp.	All	None	Richfield Oil Corp.	All

8 TRACTS STATE OF NEW MEXICO LANDS, 3,319.83 ACRES 30.69% OF UNIT AREA

30.	<u>T-22-S, R-33-E</u> Sec. 19: Lot 4 Sec. 30: NE/4, Lots 3, 4, E/2SW/4	350.04	E-8641 11-16-64	State 12 $\frac{1}{2}$ %	Cabot Corporation	All	None	Cabot Corp.	All
31.	<u>T-23-S, R-32-E</u> Sec. 1: Lot 1, SE/4NE/4, E/2SE/4	159.95	OG-6178-1 11-17-69	State 12 $\frac{1}{2}$ %	The Pure Oil Co.	All	None	The Pure Oil Co.	All
32.	<u>T-22-S, R-33-E</u> Sec. 19, Lots 1, 2, E/2 NW/4, SE/4	313.21	K-688 8-16-70	State 12 $\frac{1}{2}$ %	Union Oil Co. of Calif.	All	None	Union Oil Co. of Calif.	All
33.	<u>T-22-S, R-33-E</u> Sec. 32: All	640.00	K-1457 5-16-71	State 12 $\frac{1}{2}$ %	Shell Oil Company	All	None	Shell Oil Co.	All
34.	<u>T-22-S, R-33-E</u> Sec. 13: Lot 3, E/2SW/4, NE/4 Sec. 30: Lots, 1, 2, E/2NW/4, SE/4	589.91	K-3787 12-17-73	State 12 $\frac{1}{2}$ %	Richfield Oil Corp.	All	None	Richfield Oil Corp.	All

8 TRACTS STATE OF NEW MEXICO LANDS, 3,319.83 ACRES 30.69% OF UNIT AREA

TOTAL: 26 TRACTS FEDERAL LANDS 7,498.01 ACRES 69.31% OF UNIT AREA

8 TRACTS STATE LANDS 3,319.83 ACRES 30.69% OF UNIT AREA

34 TRACTS 10,817.84 ACRES 100.00% OF UNIT AREA

* WORKING INTEREST SHOWN AS TO UNITIZED LANDS AND SUBSTANCES, TO-WIT:

" UNITIZED LANDS AND UNITIZED SUBSTANCES - All land committed to this agreement, as to all formations lying 2700 feet below the top of the Delaware limestone as identified at a subsea depth of minus 1028 feet on sonic log of the John H. Trigg, Red Tank Unit Well No. 1-22, in Sec. 22, T-22-S., R-2-E., N.M.P.M., shall constitute land referred to herein as unitized land or land subject to this agreement. All oil and gas in any and all formations lying 2700 feet below the top of the Delaware limestone, as identified above, are unitized under the terms of this agreement and are herein called unitized substances."

9

BEFORE THE OIL CONSERVATION COMMISSION
OF THE STATE OF NEW MEXICO

IN THE MATTER OF THE PETITION
CALLED BY THE OIL CONSERVATION
COMMISSION OF NEW MEXICO FOR
THE PURPOSE OF CONSIDERING:

CASE NO. 2885
Order No. K-2682

APPLICATION OF SHELL OIL COMPANY
FOR APPROVAL OF THE BOOTLEG RIDGE
DEEP UNIT AGREEMENT, LEA COUNTY,
NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 o'clock a.m. on
February 5, 1964, at Santa Fe, New Mexico, before Examiner
Daniel S. Mutter.

Now, on this 13th day of February, 1964, the Commission,
a quorum being present, having considered the testimony, the
record, and the recommendations of the Examiner, and being fully
advised in the premises,

FINDS:

(1) That due public notice having been given as required by
law, the Commission has jurisdiction of this cause and the subject
matter thereof.

(2) That the applicant, Shell Oil Company, seeks approval
of the Bootleg Ridge Deep Unit Agreement covering 10,818 acres,
more or less, of State and Federal lands in Townships 22 and 23
South, Ranges 32 and 33 East, N.M.P., Lea County, New Mexico.

(3) That approval of the proposed Bootleg Ridge Deep Unit
Agreement will in principle tend to promote the conservation of
oil and gas and the prevention of waste.

IT IS THEREFORE ORDERED:

(1) That the Bootleg Ridge Deep Unit Agreement is hereby
approved.

(2) That the plan under which the unit area shall be oper-
ated shall be embraced in the form of a unit agreement for the
development and operation of the Bootleg Ridge Deep Unit Area,

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CASE No. 2986
Order No. R-2652

and such plan shall be known as the Bootleg Ridge Deep Unit Agreement Plan.

(3) That the Bootleg Ridge Deep Unit Agreement Plan is hereby approved in principle as a proper conservation measure; provided, however, that notwithstanding any of the provisions contained in said unit agreement, this approval shall not be considered as waiving or relinquishing, in any manner, any right, duty, or obligation which is now, or may hereafter be, vested in the Oil Conservation Commission of New Mexico by law relative to the supervision and control of operations for the exploration and development of any lands committed to the Bootleg Ridge Deep Unit, or relative to the production of oil or gas therefrom.

(4) (a) That the unit area shall be:

NEW MEXICO PRINCIPAL MERIDIAN

LEA COUNTY, NEW MEXICO

TOWNSHIP 22 NORTH, RANGE 32 EAST

Section 22: E/2
Sections 23 through 26: All
Section 27: E/2
Sections 35 and 36: All

TOWNSHIP 22 NORTH, RANGE 33 EAST

Section 19: All
Sections 29 through 32: All

TOWNSHIP 23 NORTH, RANGE 32 EAST

Section 1: All

TOWNSHIP 23 NORTH, RANGE 33 EAST

Sections 5 through 8: All

containing 10,317.84 acres, more or less.

(b) That the unit area may be enlarged or contracted as provided in said plan; provided, however, that administrative approval for expansion or contraction of the unit area must also be obtained from the Secretary-Director of the Commission.

(5) That the unit operator shall file with the Commission an executed original or executed counterpart of the Bootleg Ridge Deep Unit Agreement within 30 days after the effective date thereof. In the event of subsequent joinder by any party or expansion or contraction of the unit area, the unit operator shall file with the Commission within 30 days thereafter counterparts of the unit agreement reflecting the subscription of those interests having joined or ratified.

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(6) That this order shall become effective upon the approval of said unit agreement by the Commissioner of Public Lands for the State of New Mexico and the Director of the United States Geological Survey, and shall terminate into State upon the termination of said unit agreement. The last unit operator shall notify the Commission immediately in writing of such termination.

(7) That jurisdiction of this clause is retained for the entry of such further orders as the Commission may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

JACK M. CAMPBELL, Chairman

E. S. WALKER, Member

A. L. PORTER, Jr., Member & Secretary

S E A L

esr/

5

CERTIFICATE OF APPROVAL

BY COMMISSIONER OF PUBLIC LANDS, STATE OF NEW MEXICO

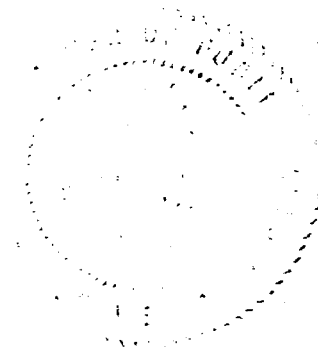
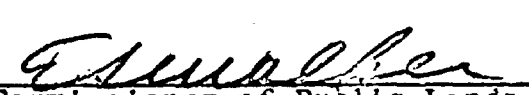
BOOTLEG RIDGE DEEP UNIT
LEA COUNTY, NEW MEXICO

There having been presented to the undersigned Commissioner of Public Lands of the State of New Mexico for examination, the attached Agreement for the development and operation of acreage which is described within the attached Agreement, dated January 15, 1964, which has been executed or is to be executed by parties owning and holding oil and gas leases and royalty interests in and under the property described, and upon examination of said Agreement, the Commissioner finds:

- (a) That such agreement will tend to promote the conservation of oil and gas and the better utilization of reservoir energy in said area.
- (b) That under the proposed agreement the State of New Mexico will receive its fair share of the recoverable oil or gas in place under its lands in the 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 area.
- (d) That such agreement is in other respects for the best interests of the state, with respect to state lands.

NOW, THEREFORE, by virtue of the authority conferred upon me under Sections 7-11-39, 7-11-40, 7-11-41, 7-11-47, 7-11-48, New Mexico Statutes Annotated 1953 Compilation, I, the undersigned, Commissioner of Public Lands of the State of New Mexico, for the purpose of more properly conserving the oil and gas resources of the State, do hereby consent to and approve the said Agreement, and any leases embracing lands of the State of New Mexico within the area shall be and the same are hereby amended to conform with the terms thereof, and shall remain in full force and effect according to the terms and conditions of said Agreement. This approval is subject to all of the provisions of the aforesaid statutes.

IN WITNESS WHEREOF, this Certificate of Approval is executed, with seal affixed, this 14th day of February 19 64.

Commissioner of Public Lands
of the State of New Mexico



CERTIFICATION * DETERMINATION

No. 14-08-0001 8585

Pursuant to the authority vested in the Secretary of Interior as to Federal Lands, under the Act approved February 25, 1920, 41 Stat. 437, as amended, 30 U. S. C. Secs. 181, et seq., and delegated to the Director of United States Geological Survey pursuant to Departmental Order No. 2365 of October 8, 1947, 43 C. F. R. Sec. 4.611, 12 F. R. 6784, I do hereby:

A. Approve the attached agreement for the development and operation of the Bootleg Ridge Deep Unit Area, Lea County, New Mexico.

B. Certify and determine that the Unit Plan of development and operation contemplated in the attached agreement is necessary and advisable in the public interest for the purpose of more properly conserving the natural resources.

C. Certify and determine that the drilling, producing, rental, minimum royalty, and royalty requirements of all Federal leases committed to said agreement are hereby established, altered, changed or revoked to conform with the terms and conditions of this agreement.

FEB 26 1964

Date

ACTING DIRECTOR, UNITED STATES
GEOLOGICAL SURVEY.

Bootleg Ridge Deep Unit Agreement,
Lea County, New Mexico

RECEIVED
MAR 2 1964
U. S. GEOLOGICAL SURVEY
ROSWELL, NEW MEXICO

RECEIVED
FEB 17 1964
U. S. GEOLOGICAL SURVEY
ROSWELL, NEW MEXICO

UNIT AGREEMENT
FOR THE DEVELOPMENT AND OPERATION OF THE
BOOTLEG RIDGE DEEP UNIT AREA
LEA COUNTY, NEW MEXICO

THIS AGREEMENT, entered into as of the 15th day of January, 1964, 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 Stat. 437, as amended, 30 U. S. C. Secs. 181 et seq., authorized Federal lessees and their representatives to unit with each other, or jointly or separately with others, in collectively adopting and operating a cooperative or unit plan of development or operation of any oil or 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 (Sec. 7-11-39 N.M. Statutes 1953 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 interests of the State of New Mexico; and,

WHEREAS, the Oil Conservation Commission of the State of New Mexico is authorized by an Act of the Legislature (Article 3, Chapter 65, Volume 9, Part 2, 1953 Statutes) to approve this agreement and the conservation provisions hereof; and,

WHEREAS, the parties hereto hold sufficient interests in the Bootleg Ridge Deep 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

BEFORE EXAMINER NUTTER
OIL CONSERVATION COMMISSION
EXHIBIT NO. 1
CASE NO. 2985

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 State of New Mexico 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 of New Mexico are hereby accepted and made a part of this agreement.

2. UNIT AREA. The area specified on the map attached hereto marked Exhibit "A" is hereby designated and recognized as constituting the unit area, containing 10,817.84 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 land 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 in said map or schedule as owned by such party. Exhibits "A" and "B" shall be revised by the Unit Operator whenever changes in the unit area render such revision necessary, or when requested by the Oil and Gas Supervisor, hereinafter referred to as "Supervisor," or when requested by the Commissioner of Public Lands of the State of New Mexico, hereinafter referred to as "State Land Commissioner," and not less than seven copies of the revised exhibits shall be filed with the Supervisor, and two (2) copies thereof shall be filed with the State Land Commissioner and one (1) copy with the New Mexico Oil Conservation Commission, hereinafter referred to as "State Commission."

The above-described unit area shall when practicable be expanded to include therein any additional tract or tracts regarded as reasonably

necessary or advisable for the purposes of this agreement, or shall be contracted to exclude lands not within any participating area whenever such expansion or contraction is 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, or on demand of the Director of the Geological Survey, hereinafter referred to as "Director," or on demand of the State Land Commissioner, after preliminary concurrence by the Director, shall prepare a notice of proposed expansion or contraction describing the contemplated changes in the boundaries of the unit area, the reasons therefor, and the proposed effective date thereof, preferably the first day of a month subsequent to the date of notice.

(b) Said notice shall be delivered to the Supervisor, the State Land Commissioner and the State Commission 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 Supervisor, the State Land Commissioner and the State Commission evidence of mailing of the notice of expansion or contraction and a copy of any objections thereto which have been filed with the Unit Operator, together with an application in sufficient number, 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 Director, the State Land Commissioner and the State Commission, become effective as of the date prescribed in the notice thereof.

(e) All legal subdivisions of unitized lands (i.e., 40 acres by Government survey or its nearest lot or tract equivalent in instances of irregular surveys, however, unusually large lots or tracts shall be considered in multiples of 40 acres, or the nearest aliquot equivalent thereof, for the purpose of elimination under this subsection), no parts of which are entitled to be in a participating area within five years after the first day of the month following the effective date of the first initial participating area established under this unit agreement, shall be eliminated

automatically from this agreement, effective as of the first day thereafter, and such lands shall no longer be a part of the unit area and shall no longer be subject to this agreement, unless at the expiration of said five-year period diligent drilling operations are in progress on unitized lands not entitled to participation, in which event all such lands shall remain subject hereto for so long as such drilling operations are continued diligently, with not more than 90 days time elapsing between the completion of one such well and the commencement of the next such well, except that the time allowed between such wells shall not expire earlier than 30 days after the expiration of any period of time during which drilling operations are prevented by a matter beyond the reasonable control of unit operator as set forth in the section hereof entitled "Unavoidable Delay;" provided that all legal subdivisions of lands not in a participating area and not entitled to become participating under the applicable provisions of this agreement within ten years after said first day of the month following the effective date of said first initial participating area shall be eliminated as above specified. Determination of creditable "Unavoidable Delay" time shall be made by Unit Operator and subject to approval of the Director and the State Land Commissioner. The Unit Operator shall, within 90 days after the effective date of any elimination hereunder, describe the area so eliminated to the satisfaction of the Director and the Commissioner and promptly notify all parties in interest.

If conditions warrant extension of the ten-year period specified in this sub-section 2 (e), a single extension of not to exceed two years may be accomplished by consent of the owners of 90 per cent of the current unitized working interests and 60 per cent of the current unitized basic royalty interests (exclusive of the basic royalty interests of the United States), on a total nonparticipating-acreage basis, respectively, with approval of the Director, and the State Land Commissioner provided such extension application is submitted to the Director and to the State Land Commissioner not later than 60 days prior to the expiration of said ten-year period.

Any expansion of the unit area pursuant to this section which embraces lands theretofore eliminated pursuant to this sub-section 2 (e) shall not be considered automatic commitment or recommitment of such lands.

3. UNITIZED LAND AND UNITIZED SUBSTANCES. All land committed to this Agreement, as to all formations lying 2700 feet below the top of the Delaware limestone as identified at a subsea depth of minus 1028 feet on "sonic" log of the John H. Trigg, Red Tank Unit well No. 1-22, in Sec. 22, T-22-S, R-32-E, NMPM, shall constitute land referred to herein as "unitized land" or "land subject to this Agreement." All oil and gas in any and all formations lying 2700 feet below the top of the Delaware limestone, as identified above, are unitized under the terms of this Agreement and are herein called "unitized substances."

4. UNIT OPERATOR. Shell Oil Company with offices at Midland, Texas, is hereby designated as Unit Operator and by signature hereto as Unit Operator commits to this agreement all interests in unitized substances vested in it 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 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 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 months after notice of intention to resign has been served by Unit Operator on all working interest owners and the Director, the State Land Commissioner and State Commission and until all wells then drilled hereunder are placed in a satisfactory condition for suspension or abandonment whichever is required by the Supervisor as to Federal Lands and by the State Commission as to State 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 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 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 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 Director and the State 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 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 Operator 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 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 working interest owners, the owners of the working interests in the participating area or areas according to their respective acreage interests in such participating area or areas, or until a participating area shall have been established, the owners of the working interests according to their respective acreage interests in all unitized land, shall by majority vote select a successor Unit Operator; provided that, if a majority but less than 75 per cent of the working interests qualified to vote are owned by one party to this agreement, a concurring vote of one or more additional working interest owners 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 filed with the Supervisor and approved by the State Land Commissioner. If no successor Unit Operator is selected and qualified as herein provided, the Director and State 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 the unit agreement and the unit operating agreement, this unit agreement shall prevail. Three (3) true copies of any unit operating agreement executed pursuant to this section should be filed with the Supervisor and one (1) true copy with the State Land Commissioner, prior to approval of this unit agreement by the Director.

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 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.

9. DRILLING TO DISCOVERY. Within six months after the effective date hereof, the Unit Operator shall begin to drill an adequate test well at a location approved by the Supervisor if on Federal land or by the State Land Commissioner if on State land, unless on such effective date a well is being drilled conformably with the terms hereof, and thereafter continue such drilling diligently until the Siluro-Devonian 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 and producing operations, with a reasonable profit) or the Unit Operator shall at any time establish to the satisfaction of the Supervisor if on Federal land, or the State Land Commissioner if on State 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 15,500 feet. Until the discovery of a deposit of unitized substances capable of being produced in paying quantities, the 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 said Supervisor if it be on Federal land or of the State Land Commissioner if on State 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 Director and State Land Commissioner may modify the drilling requirements of this section by granting reasonable extensions of time when, in their opinion, such action is warranted.

Upon failure to comply with the drilling provisions of this section, the Director and State Land 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.

10. PLAN OF FURTHER DEVELOPMENT AND OPERATION. Within six months after completion of a well capable of producing unitized substances in paying quantities, the Unit Operator shall submit for the approval of the Supervisor and the State Land Commissioner an acceptable plan of development and operation for the unitized land which, when approved by the Supervisor and the State Land Commissioner, shall constitute the further drilling and operating 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 Supervisor and the State Land Commissioner a plan for an additional specified period for the development and operation of the unitized land. Any plan submitted pursuant to this section shall provide for the exploration of the unitized area and for the diligent drilling necessary for determination of the area or areas thereof capable of producing unitized substances in paying quantities in each and every productive formation and shall be as complete and adequate as the Supervisor and the State Land Commissioner 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 location of any wells to be drilled and the proposed order and time for such drilling; and,

(b) to the extent practicable specify the operating practices regarded as necessary and advisable for the proper conservation of natural resources. Separate plans may be submitted for separate productive zones, subject to the approval of the Supervisor and the State Land Commissioner. Said plan or 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. The Supervisor and State Land Commissioner are authorized to grant a reasonable extension of the six-month period herein prescribed for submission of an initial plan of development where such action is justified because of unusual conditions or circumstances. After completion hereunder of a well capable of

producing any unitized substance in paying quantities, no further wells, except such as may be necessary to afford protection against operations not under this agreement or such as may be specifically approved by the Supervisor and the State Land Commissioner shall be drilled except in accordance with a plan of development approved as herein provided.

11. PARTICIPATION AFTER DISCOVERY. Upon completion of a well capable of producing unitized substances in paying quantities, the Unit Operator shall within the month of such completion, if practicable, or as soon thereafter as required by the Supervisor or the State Land Commissioner submit for approval by the Director and the State Land Commissioner a schedule, based on subdivisions of the public land survey or aliquot parts thereof of all unitized land then regarded as reasonably proved to be productive of unitized substances in paying quantities; all lands in said schedule on approval of the Director and the State Land Commissioner to constitute a participating area, effective as of the date of completion of such well or the effective date of the 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 the initial participating area. Said schedule also shall set forth the percentage of unitized substances to be allocated as herein provided to each unitized tract in the participating area so established, and shall govern the allocation of production from and after the date the participating area becomes effective. A separate participating area shall be established in like manner for each separate pool or deposit of unitized substances or for any group thereof produced as a single pool or zone, and any two or more participating areas so established may be combined into one with the consent of the owners of all working interests in the lands within the participating areas so to be combined, on approval of the Director and the State Land Commissioner. The participating area or areas so established shall be revised from time to time, subject to like approval, whenever such action appears proper as a result of further drilling operations or otherwise, to include additional land then regarded as reasonably proved to be productive in paying quantities, or to exclude land then regarded as reasonably proved not to be productive in paying quantities and the percentage of allocation shall also be revised accordingly. The effective date of any revision shall be the first of the month in which is obtained the knowledge or information 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 Director and the State Land Commissioner. No land shall be excluded from a participating area on account of depletion of the unitized substances.

It is the intent of this section that a participating area shall represent the area known or reasonably estimated to be productive in paying quantities; 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 Director and the State Land Commissioner as to the proper definition or redefinition of a participating area, or until a participating area has, or areas have, been established as provided herein, the portion of all payments affected thereby may be impounded in a manner mutually acceptable to the owners of working interests, except royalties due the United States and the State of New Mexico, which shall be determined by the Supervisor for Federal lands and the State Land Commissioner for State lands and the amount thereof deposited, as directed by the Supervisor and the State Land Commissioner respectively, to be held as unearned money until a participating area is finally approved and then applied as earned or returned in accordance with a determination of the sum due as Federal and State royalty on the basis of such approved participating area.

Whenever it is determined, subject to the approval of the Supervisor, as to wells drilled on Federal land and of the State Land Commissioner as to wells drilled on State land that a well drilled under this agreement is not capable of production in paying quantities and inclusion 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 so long as such land is not within a participating area established for the pool or deposit from which such production is obtained. Settlement for working interest benefits from such a 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 camp and other production or development purposes, for repressuring or recycling in accordance with a plan of development approved by the Supervisor, and State Land Commissioner and the State Commission, 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 and, 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, overriding 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 said 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 such last-mentioned 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 constituted at the time of such final production.

13. DEVELOPMENT OR OPERATION OF NON-PARTICIPATING LAND OR FORMATIONS. Any party or parties hereto owning or controlling the working interests in any unitized land having thereon a regular well location may with the approval of the Supervisor as to Federal land, the State Land Commissioner as to State Land, and subject to the provisions of the Unit Operating Agreement, at such party's or parties' sole risk, costs, and expense drill a well at such location on such land to test any formation for which a participating area has not been established or to test any

formation for which a participating area has been established if such location is not within said participating area, unless within 90 days of receipt of notice from said party of his intention to drill the well the Unit Operator elects and commences to drill such a well in like manner as other wells are drilled by the Unit Operator under this agreement.

If any well drilled as aforesaid by a working interest owner results in production 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 as aforesaid by a working interest owner obtains production in quantities insufficient to justify the inclusion in a participating area of the land upon which such well is situated, 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 the State of New Mexico and all royalty owners who, under existing contract, are entitled to take in kind a share of the substances now unitized hereunder produced from any tract, shall hereafter be entitled to the right to take in kind their share of the unitized substances allocated to such tract, and Unit Operator, or in case of the operation of a well by a working interest owner as herein in special cases provided for, such working interest owner, shall make deliveries of such royalty share taken 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 therefor under existing contracts, laws and regulations on or before the last day of each month for unitized substances produced during the preceding calendar month; provided, however, that nothing herein contained 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 into any participating area hereunder, for use in repressuring, stimulation of production, or increasing ultimate recovery, which shall be in conformity with a plan first approved by the Supervisor, the State Land Commissioner, and the State Commission, a like amount of gas after settlement as herein provided for any gas transferred from any other participating area and 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 the plan of operations or as may otherwise be consented to by the Supervisor, the State Land Commissioner and the State Commission 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 the operating regulations 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 herein at the rates specified in the respective Federal leases, or at such lower rate or rates as may be authorized by law or regulations; 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 of New Mexico shall be computed and paid as to all unitized substances on the basis of the amounts allocated to such lands.

15. RENTAL SETTLEMENT. Rental or minimum royalties due on leases committed hereto shall be paid by working interest owners responsible therefor 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 in lieu thereof 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 rates specified in the respective leases.

With respect to any lease on non-Federal land containing provisions which would terminate such lease unless drilling operations were within the time therein specified commenced upon the land covered thereby or rentals 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 thereafter until the required drilling operations are commenced upon the land covered thereby or 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 appropriate and adequate measures to prevent drainage of unitized substances from unitized land by wells on land not subject to this agreement, or, with prior consent of the Director and the State Land Commissioner, pursuant to applicable regulations pay a fair and reasonable compensatory royalty as determined by the Supervisor for Federal lands or as approved by the State Land Commissioner for New Mexico State lands.

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 operations 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 State 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 and State 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 part or separately owned tract subject to this agreement, regardless of whether there is any development of any particular part or tract of the unit area, notwithstanding anything to the contrary in any lease, operating agreement or other contract by and between the parties hereto, or their respective predecessors in interest, or any of them.

(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 Secretary and the State Land Commissioner or their 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.

(d) Any Federal lease for a fixed term of twenty (20) years or any renewal thereof or any part of such lease which is made subject to this agreement shall continue in force beyond the term provided therein until the termination hereof. Any other 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 is had 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 the 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 Revision of 1960.

(e) 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.

(f) Any lease embracing lands of the State of New Mexico which is made subject to this agreement, shall continue in force beyond the term provided therein as to the lands committed hereto until the termination hereof.

(g) The segregation of any Federal lease committed to this agreement is governed by the following provision in the fourth paragraph of Sec. 17 (j) of the Mineral Leasing Act, as amended by the Act of September 2, 1960, (74 Stat. 781-784): "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 land committed and the lands not committed as of the effective date of unitization: Provided, however, that any such lease as to the nonunitized 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) 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 provisions of such lease shall apply separately to such segregated portions commencing as of the effective date hereof; provided, however, 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 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 interest 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 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 Director and the State Land Commissioner or their duly authorized representatives as of the date of approval by the Director and shall terminate five (5) years from said effective date unless:

(a) such date of expiration is extended by the Director and the State 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 the agreement on such ground is given by the Unit Operator to all parties in interest at their last known addresses, the agreement is terminated with the approval of the Director and State Land Commissioner, or

(c) a valuable discovery of unitized substances has been made or accepted on unitized land during said initial term or any extension thereof, in which event the agreement shall remain in effect for such term and so long as unitized substances can be produced in quantities sufficient to pay for the cost of producing same from wells on unitized land within any participating area established hereunder 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 can be produced as aforesaid, or

(d) it is terminated as heretofore provided in this agreement. This agreement may be terminated at any time by not less than 75 per centum, on an acreage basis, of the owners of working interests signatory hereto, with

the approval of the Director and State Land Commissioner; notice of any such approval to be given by the Unit Operator to all parties hereto.

21. RATE OF PROSPECTING, DEVELOPMENT AND PRODUCTION. The Director 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 is not fixed pursuant to Federal or State law or does 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, such authority being hereby limited to alteration or modification in the public interest, the purpose thereof and the public interest to be served thereby to be stated in the order of alteration or modification. Without regard to the foregoing, the Director is also hereby vested with authority to alter or modify from time to time at 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 State Land Commissioner and as to the lands of the State of New Mexico subject to this agreement as to the quantity and rate of production in the absence of specific written approval thereof by the State Commission.

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

22. CONFLICT OF SUPERVISION. Neither the Unit Operator nor the working interest owners nor any of them shall be subject to any forfeiture, termination or expiration of any rights hereunder or under any leases or contracts subject hereto, or to any penalty or liability on account of delay or failure in whole or in part to comply with any applicable provision thereof to the extent that the Unit Operator, working interest owners or any of them are hindered, delayed or prevented from complying therewith by reason of failure of the Unit Operator to obtain in the exercise of due diligence, the concurrence of proper representatives of the United States

and proper representatives of the State of New Mexico in and about any matters or thing concerning which it is required herein that such concurrence be obtained. The parties hereto, including the State Commission, agree that all powers and authority vested in the State Commission in and by any provisions of this agreement are vested in the State Commission and shall be exercised by it pursuant to the provisions of the laws of the State of New Mexico and subject in any case to appeal or judicial review as may now or hereafter be provided by the laws of the State of New Mexico.

23. APPEARANCES. 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 Department of Interior, the Commissioner of Public Lands of the State of New Mexico and the New Mexico Oil Conservation Commission and to appeal from orders issued under the regulations of said Department, the State Land Commissioner or State Commission or to apply for relief from any of said regulations or in any proceedings relative to operations before the Department of the Interior, the State Land Commissioner or State Commission or any other legally constituted authority; provided, however, that any other interested party shall also have the right at his own expense to be heard in any such proceeding.

24. NOTICES. 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 personally delivered to the party or sent by postpaid registered mail or certified mail, addressed to such party or parties at their respective addresses set forth in connection with the signatures hereto or the ratification or consent hereof or to such other address as any such party may have furnished in writing to the party sending the notice, demand or statement.

25. NO WAIVER OF CERTAIN RIGHTS. Nothing in this agreement contained 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 wherein said 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.

26. 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, but only so long as, 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 in open market, or other matters beyond the reasonable control of the Unit Operator whether similar to matters herein enumerated or not.

27. NONDISCRIMINATION. In connection with the performance of work under this agreement, the operator agrees to comply with all of the provisions of Section 301 (1) to (7) inclusive, of Executive Order 10925 as amended (28 F.R. 6485), which are hereby incorporated by reference in this agreement.

28. 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 as 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 land or leases, no payments of funds due the United States or the State of New Mexico should be withheld, but such funds of the United States shall be deposited as directed by the Supervisor and such funds of the State of New Mexico shall be deposited as directed by the State 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.

29. 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 said tract from this agreement by written notice to the Director, the State Land Commissioner, and the Unit Operator prior to the approval of this agreement by the Director. Any oil or gas interests in lands within the unit area not committed hereto prior to submission of this agreement for 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 also 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 approvals, 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. Joinder by any owner of a non-working interest, at any time, must be accompanied by appropriate joinder by the owner of the corresponding working interest in order for the interest to be regarded as 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, if more than one committed working interest owner is involved, in order for the interest to be regarded as committed to this unit agreement. Except as may otherwise herein be provided, subsequent joinders to this agreement shall be effective as of the first day of the month following the filing with the Supervisor, the State Land Commissioner and the State Commission of duly executed counterparts of all or any papers necessary to establish effective commitment of any tract to this agreement unless objection to such joinder is duly made within sixty (60) days by the Director; provided, however, that as to State lands such subsequent joinder must be approved by the State Land Commissioner.

30. 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.

IN WITNESS WHEREOF, the parties hereto have caused this agreement to be executed and set opposite their respective names the date of execution.

SHELL OIL COMPANY

ATTEST:

By _____

Address; _____

Secretary

Unit Operator and Working Interest
Owner

Date: _____

Working Interest Owners

ATTEST:

Date: _____ Secretary

By _____
Address: _____

ATTEST:

Date: _____ Secretary

By _____
Address: _____

ATTEST:

Date: _____ Secretary

By _____
Address: _____

ATTEST:

Date: _____ Secretary

By _____
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Date: _____ Secretary

By _____
Address: _____

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Date: _____ Secretary

By _____
Address: _____

ATTEST:

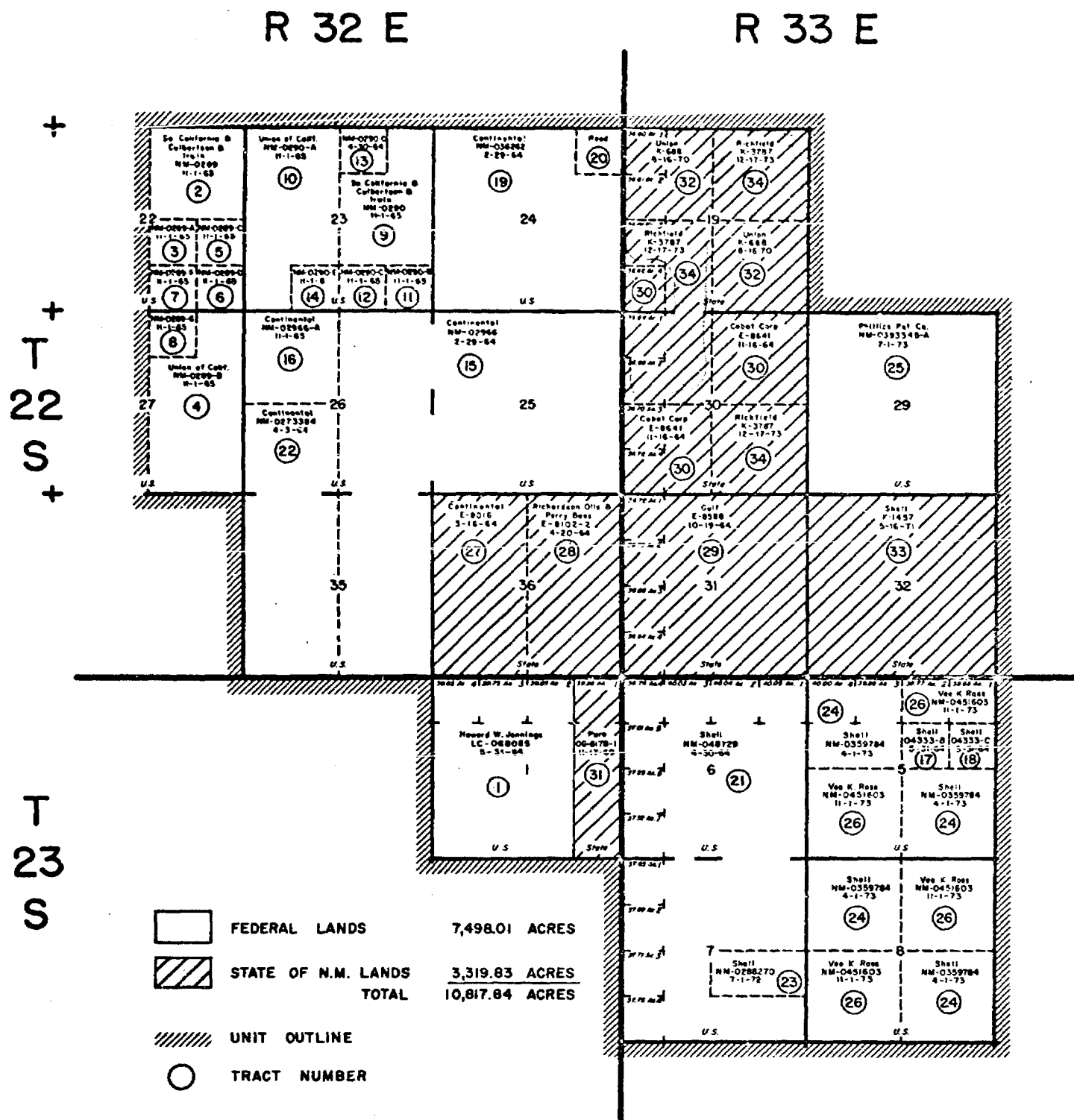
Date: _____ Secretary

By _____
Address: _____

ATTEST:

Date: _____ Secretary

By _____
Address: _____



BOOTLEG RIDGE DEEP UNIT AREA

LEA COUNTY, NEW MEXICO

EXHIBIT "A"

EXHIBIT "B"
SCHEDULE SHOWING THE OWNERSHIP OF
ALL LANDS IN THE UNIT AREA - - BOOTLEG
RIDGE DEEP UNIT - - LEA COUNTY, NEW MEXICO

Tract Number	Description	No. of Acres	Serial No. and Expiration Date	Basic		Lessee of Record and Percent	Overriding Royalty and Percent	Working Interest *
				Royalty & Percent				
FEDERAL LANDS								
1.	T-23S, R-32E Sec. 1; Lots 2, 3, 4; SW/4, S/2 NW/4, SW/4 NE/4, W/2 SE/4	479.25	LC-068085 5-31-64	USA 12½%		Howard W. Jennings, Inc. All	Giles Matthews \$1000 per acre out of 3% Howard W. Jennings .5%	Perry R. Bass and Richardson Oils, Inc. All
2.	T-22-S, R-32E Sec. 22; NE/4	160.00	NM-0289 10-31-65	USA 12½%		Southern Calif. Pet. Corp. E. A. Culbertson Wallace W. Irwin	Kathleen Irwin	1% Southern Calif. Pet. Corp. E. A. Culbertson Wallace W. Irwin 1/2 1/4 1/4
3.	T-22S, R-32E Sec. 22; NW/4 SE/4	40.00	NM-0289-A 10-31-65	USA 12½%		Union Oil of Calif.	Carl Wigham Kathleen Irwin	2% Union Oil Co. of Calif. All
4.	T-22-S, R-32E Sec. 27; SE/4, S/2 NE/4, NE/4 NE/4	280.00	NM-0289-B 10-31-65	USA 12½%		Union Oil of Calif.	Kathleen Irwin Marie B. Quantius	1% Union Oil Co. of Calif. All
5.	T-22-S, R-32E Sec. 22; NE/4 SE/4	40.00	NM-0289-C 10-31-65	USA 12½%		William A. Hudson Edward R. Hudson	Kathleen Irwin Southern Calif. Pet. E. A. Culbertson Wallace W. Irwin	1% William A. Hudson 2% Edward R. Hudson 1% 1% 1%
6.	T-22-S, R-32-E Sec. 22; SE/4 SE/4	40.00	NM-0289-D 10-31-65	USA 12½%		Union Oil Co. of Calif.	Kathleen Irwin Southern Calif. Pet. E. A. Culbertson Wallace W. Irwin	1% Union Oil Co. of 2% Calif. 1% 1% 1%
7.	T-22-S, R-32-E Sec. 22; SW/4 SE/4	40.00	NM-0289-F 10-31-65	USA 12½%		William A. Hudson Edward R. Hudson	Carl Wigham Kathleen Irwin	2% William A. Hudson 1% Edward R. Hudson 1/2
8.	T-22-S, R-32-E Sec. 27; NW/4 NE/4	40.00	NM-0289-G 10-31-65	USA 12½%		Southern Calif. Pet. Corp. E. A. Culbertson Wallace W. Irwin	Kathleen Irwin Marie B. Quantius	1% Southern Calif. Pet. Corp. E. A. Culbertson Wallace W. Irwin 1/2 1/4 1/4

9.	T-22-S, R-32-E Sec. 23; N/2 SE/4, S/2 NE/4, NE/4 NE/4	200.00	NM-0290 10-31-65	USA 12 $\frac{1}{2}$ %	Southern Calif. Pet. Corp. E. A. Culbertson Wallace W. Irwin	1/2 1/4 1/4	Marion W. Culbertson	1%	Southern Calif. Pet. Corp. E. A. Culbertson Wallace W. Irwin	1/2 1/4 1/4
10.	T-22-S, R-32-E Sec. 23; NW/4, N/2 SW/4, SW/4 SW/4	280.00	NM-0290-A 10-31-65	USA 12 $\frac{1}{2}$ %	Union Oil Co. of Calif.	All	Marie B. Quantius Marion W. Culbertson	1% 1%	Union Oil Co. of Calif.	All
11.	T-22-S, R-32-E Sec. 23; SE/4 SE/4	40.00	NM-0290-B 10-31-65	USA 12 $\frac{1}{2}$ %	William A. Hudson Edward R. Hudson	1/2 1/2	Southern Calif. Pet. Corp. Wallace W. Irwin Marion W. Culbertson E. A. Culbertson	2% 1% 1% 1%	William A. Hudson Edward R. Hudson	1/2 1/2
12.	T-22-S, R-32-E Sec. 23; SW/4 SE/4	40.00	NM-0290-C 10-31-65	USA 12 $\frac{1}{2}$ %	Union Oil Co. of Calif.	All	Southern Calif. Pet. Corp. E. A. Culbertson Wallace W. Irwin Marion W. Culbertson	2% 1% 1% 1%	Union Oil Co. of Calif.	All
13.	T-22-S, R-32-E Sec. 23; NW/4 NE/4	40.00	NM-0290-D 10-31-65	USA 12 $\frac{1}{2}$ %	Union Oil Co. of Calif.	All	Marion W. Culbertson	1%	Union Oil Co. of Calif.	All
14.	T-22-S, R-32-E Sec. 23; SE/4 SW/4	40.00	NM-0290-E 10-31-65	USA 12 $\frac{1}{2}$ %	William A. Hudson Edward R. Hudson	1/2 1/2	Marion W. Culbertson Marie B. Quantius	1% 1%	William A. Hudson Edward R. Hudson	1/2 1/2
15.	T-22-S, R-32-E Sec. 25; A.1 Sec. 26; E/2 Sec. 35; E/2	1280.00	NM-0296 2-29-64	USA 12 $\frac{1}{2}$ %	Continental Oil Co.	All	Robert E. Payne: per acre out of	\$200 .5%	Continental Oil Co.	All
16.	T-22-S, R-32-E Sec. 26; NW/4	160.00	NM-02966-A 10-31-65	USA 12 $\frac{1}{2}$ %	Continental Oil Co.	All	Robert E. Payne: per acre out of	\$200 .5%	Continental Oil Co.	All
17.	T-23-S, R-33-E Sec. 5; SW/4 NE/4	40.00	NM-04333-B 5-31-64	USA 12 $\frac{1}{2}$ %	Shell Oil Company	All	Ora R. Hall, Jr. Jean S. Brady	4% 1%	Shell Oil Company	All
18.	T-23-S, R-33-E Sec. 5; SE/4 NE/4	40.00	NM-04333-C 5-31-64	USA 12 $\frac{1}{2}$ %	Shell Oil Company	All	Frank O. Elliott Jean S. Brady	4% 1%	Shell Oil Company	All
19.	T-22-S, R-32-E Sec. 24; S/2, S/2 N/2, N/2 NW/4, NW/4 NE/4	600.00	NM-036262 2-29-64	USA 12 $\frac{1}{2}$ %	Continental Oil Co.	All	Robert E. Payne: per acre out of	\$200 .5%	Continental Oil Co.	All

20.	T-22-S, R-32-E Sec. 21; NE/4 NE/4	40.00	NM-036262-B 2-29-64	USA 12 $\frac{1}{2}$ %	Charles B. Read	ALL	Robert E. Payne: \$200 per acre out of .5%	Charles B. Read	ALL
21.	T-23-S, R-33-E Sec. 6; All Sec. 7; Lots 1, 2, 3, 4, E/2 W/2, NE/4, S/2 SE/4	1179.44	NM-048792 4-30-64	USA 12 $\frac{1}{2}$ %	Shell Oil Company	ALL	William A. & Edward R. Hudson 5.46875%	Shell Oil Company	ALL
22.	T-22-S, R-32-E Sec. 26; SW/4 Sec. 35; W/2	480.00	NM-0273384 4-3-64	USA 12 $\frac{1}{2}$ %	Continental Oil Co.	ALL	Robert E. Payne: \$200 per acre out of .5%	Continental Oil Co.	ALL
23.	T-23-S, R-33-E Sec. 7; N/2 SE/4	80.00	NM-0288270 6-30-72	USA 12 $\frac{1}{2}$ %	Shell Oil Company	ALL	Earl G. Levick	Shell Oil Company	ALL
24.	T-23-S, R-33-E Sec. 5; Lots 3, 4, S/2 NW/4, SE/4 Sec. 8; NW/4, SE/4	639.89	NM-0359784 3-31-73	USA 12 $\frac{1}{2}$ %	Shell Oil Company	ALL	Everett G. Foltz La Verge Harris Estate	Shell Oil Company	ALL
25.	T-22-S, R-33-E Sec. 29; All	640.00	NM-0393345-A 6-30-73	USA 12 $\frac{1}{2}$ %	Phillips Petroleum Co.	ALL	N. S. Grove	Phillips Petroleum Co.	ALL
26.	T-23-S, R-33-E Sec. 5; Lots 1, 2, Sec. 8; NE/4, SW/4	559.43	NM-0451603 10-31-73	USA 12 $\frac{1}{2}$ %	Vee K. Ross Phillips Petroleum Co.	1/2	Vee K. Ross	Vee K. Ross Phillips Petroleum Co.	1/2

26 TRACTS FEDERAL LAND, 7,498.01 ACRES 69.31% OF UNIT AREA

STATE OF NEW MEXICO LANDS

27.	T-22-S, R-32-E Sec. 30; W/2	320.00	E-8016 3-16-64	State 12 $\frac{1}{2}$ %	Continental Oil Co.	ALL	None	Continental Oil Co.	ALL
28.	T-22-S, R-32-E Sec. 30; E/2	320.00	E-8102-2 4-20-64	State 12 $\frac{1}{2}$ %	Richardson Oils, Inc. & Perry R. Bass	None	None	Richardson Oils, Inc. & Perry R. Bass	ALL
29.	T-22-S, R-33-E Sec. 31; All	626.72	E-8588 10-19-64	State 12 $\frac{1}{2}$ %	Gulf Oil Corporation	ALL	None	Gulf Oil Corporation	ALL
30.	T-22-S, R-33-E Sec. 19; Lot 4 Sec. 30; NE/4, Lots 3, 4, E/2 SW/4	350.04	E-8641 11-16-64	State 12 $\frac{1}{2}$ %	Cabot Corporation	ALL	None	Cabot Corporation	ALL

31.	T-23-S, R-32-E Sec. 1; Lot 1, SE/4 NE/4, E/2 SE/4	159.95	OG-6178-1 11-17-69	State 12 $\frac{1}{2}$ %	The Pure Oil Co.	ALL	None	The Pure Oil Co.	ALL
32.	T-22-S, R-33-E Sec. 15; Lots 1, 2, E/2 NW/4, SE/4	313.21	K-688 8-16-70	State 12 $\frac{1}{2}$ %	Union Oil Co. of Calif.	ALL	None	Union Oil Co. of Calif.	ALL
33.	T-22-S, R-33-E Sec. 32; All	640.00	K-1457 5-16-71	State 12 $\frac{1}{2}$ %	Shell Oil Company	ALL	None	Shell Oil Company	ALL
34.	T-22-S, R-33-E Sec. 19; Lot 3, E/2 SW/4, NE/4 Sec. 30; Lots 1, 2, E/2 NW/4, SE/4	589.91	K-3787 12-17-73	State 12 $\frac{1}{2}$ %	Richfield Oil Corp.	ALL	None	Richfield Oil Corp.	ALL

8 TRACTS STATE OF NEW MEXICO LANDS, 3,319.83 ACRES 30.69% OF UNIT AREA

TOTAL: 26 TRACTS FEDERAL LANDS 7,498.01 ACRES 69.31% OF UNIT AREA
8 TRACTS STATE LANDS 3,319.83 ACRES 30.69% OF UNIT AREA
34 TRACTS 10,817.84 ACRES 100.00% OF UNIT AREA

* WORKING INTEREST SHOWN AS TO UTILIZED LANDS AND SUBSTANCES: TO WIT,

"ALL DEPTHS AND FORMATIONS BELOW 2700' BENEATH THE TOP OF THE DELAWARE LIMESTONE AS IDENTIFIED AT
A SUBSEA DEPTH OF MINUS 1028' ON SONIC LOG OF THE JOHN H. TRIGG RED TANK UNIT WELL #1-22 LOCATED
IN SEC. 22, T-22-S, R-32-E, NMPV."

Case No.

2985

Missing File