

IL CONSERVATION COMMISSIO
SANTA FE, NEW MEXICO

C
O
P
Y

September 13, 1945

AIRMAIL
SPECIAL DELIVERY

Gordon Goodwin, Esquire
1210 Shoreham Building
Washington, D. C.

Re: Lake McMillan Unit Agreement - Eddy County

Dear Mr. Goodwin:

It is the Commission's desire that your petition for the approval of the above captioned matter be filed as soon as possible.

The setting for hearing of pending petitions now ready is being held off in order that the petitions for approval of the three pending unit agreements, which have not as yet been filed, may be filed. When the petitions have been filed all pending matters can then be heard at one time.

Very truly yours,

Chief Clerk & Legal Adviser

CEL:MS

FEDERAL BUREAU OF
LAND CONSERVATION COMMISSION
SANTA FE, NEW MEXICO

August 23, 1945

AIRMAIL
SPECIAL DELIVERY

Gordon Goodwin, Esquire
1210 Shoreham Building
Washington 5, D. C.

Re: Lake McMillan Unit Agreement - Richfield Oil Corporation

Dear Mr. Goodwin:

Reference is made to your letter of August 14, relating to certain changes in the above captioned proposed unit agreement.

Mr. Graham and I have conferred as to the proposed changes. We will recommend to our respective employers acceptance of said modifications. The first one you named had previously had the same action by us in our joint telegram of August 14 to you.

Very truly yours,

Chief Clerk & Legal Adviser

CNL:MC
cc George Graham

C
O
P
Y

FEDERAL BUREAU OF INVESTIGATION
U. S. DEPARTMENT OF JUSTICE
NATIONAL CONSERVATION COMMISSION
SANTA FE, NEW MEXICO

C
O
P
Y

August 23, 1945

**AIRMAIL
SPECIAL DELIVERY**

Gordon Goodwin, Esquire
1210 Shoreham Building
Washington 5, D. C.

Re: Lake McMillan Unit Agreement - Richfield Oil Corporation

Dear Mr. Goodwin:

Reference is made to your letter of August 14, relating to certain changes in the above captioned proposed unit agreement.

Mr. Graham and I have conferred as to the proposed changes. We will recommend to our respective employers acceptance of said modifications. The first one you named had previously had the same action by us in our joint telegram of August 14 to you.

Very truly yours,

Chief Clerk & Legal Adviser

CBL:MS
cc George Graham

R I C H F I E L D O I L C O R P O R A T I O N

R I C H F I E L D B U I L D I N G • L O S A N G E L E S 1 3 • C A L I F O R N I A

October 24, 1945

Mr. Carl Livingston
c/o New Mexico Oil
Conservation Commission
Santa Fe, New Mexico

Re: Unit Agreement for the Develop-
ment and Operation of the Lake
McMillan Area, Eddy County, New
Mexico

Dear Mr. Livingston:

If you have any information as to the approximate date when the hearing on the above mentioned unit agreement will be held I will appreciate your advising me.

Also any information you can give me as to the points on which the Commission will desire testimony at the hearing will be helpful.

Very truly yours,

Gordon A. Goodwin
Gordon A. Goodwin
Attorney

GAG:McM

McM

'L CONSERVATION COMMISSIO'
SANTA FE, NEW MEXICO

C
O
P
Y

October 27, 1945

Gordon A. Goodwin, Esquire
Richfield Oil Corporation
Richfield Building
Los Angeles 13, California

Re: Lake McMillan Unit Agreement - Richfield Oil
Corporation.

Dear Mr. Goodwin:

This is to acknowledge receipt of your inquiry of October 24 and to advise you that you will be notified the day your petition in the above captioned matter is set for hearing. It is the established practice of this Commission to set a number of pending matters for hearing at the same time. One matter similar to yours is still outstanding and the prospective petitioners expect to submit their petition just as soon as the status of the execution of their agreement will warrant.

As to the last paragraph of your letter: In a proceeding for an order approving a unit agreement the petitioner ordinarily qualifies one or more geologists or petroleum engineers as experts. Such witnesses are examined along the lines of the advisability of such unit operation from the standpoint of the prevention of waste. To obtain a more definite idea, if you arrive a little in advance of the hearing, you can have the opportunity to examine the transcripts of testimony in one or two previous hearings.

Very truly yours,

Chief Clerk & Legal Adviser

CBL:MS

OIL CONSERVATION COMMISSION
SANTA FE, NEW MEXICO

C
O
P
Y

October 17, 1946

Mr. T. F. Rico
Richfield Oil Corporation
Richfield Building
Los Angeles, California

Re: Case 68 - Lake McMillan Unit Agreement, Eddy County
Re: Case 73 - Comanche Unit Agreement, Chaves County

Dear Mr. Rico:

This is to acknowledge the receipt of your letter of October 14 and the accompanying enclosures, the above two captioned executed and approved unit agreements. Each was today filed in its respective case file.

For the Commission I will state that a well commenced on unitized lands with respect to each unit agreement prior to November 1, 1946, will be treated to be a unit well under the respective unit agreement.

With kindest personal regards.

Very truly yours,

IL CONSERVATION COMMIS N
SANTA FE, NEW MEXICO

C
O
P
Y

December 11, 1945

Mr. Tom Rico
Richfield Oil Corporation
Richfield Building
Los Angeles 13, California

Re: Case No. 68 - Order No. 69-629

Dear Tom:

Enclosed please find an original of the above captioned order and one copy thereof.

Again please congratulate Mr. Phelan for the pointedness and brevity of presenting this case to the Commission, and do convey to Gordon Goodwin my best regards and fervent wish that he has made complete and speedy recovery.

Very truly yours,

Chief Clerk & Legal Adviser

CBL:MS

CS

RS

R I C H F I E L D O I L C O R P O R A T I O N

R I C H F I E L D B U I L D I N G . L O S A N G E L E S . C A L I F O R N I A

October 14, 1946

Oil Conservation Commission
State of New Mexico
Santa Fe, New Mexico

Attention: Mr. Carl Livingston

Gentlemen:

Re: Comanche Unit Agreement,
Chaves County, New Mexico.
Lake McMillan Unit Agreement,
Eddy County, New Mexico.

We have the pleasure of reporting to you that the Secretary of the Interior has now approved both the Comanche Unit Agreement and the Lake McMillan Unit Agreement, under which unit agreements Richfield Oil Corporation is the Unit Operator.

We are, therefore, enclosing herewith for your files the following:

1. Executed counterpart of the Comanche Unit Agreement dated July 1, 1946, bearing the approval of Assistant Secretary of the Interior C. Girard Davidson as of October 10, 1946.
2. Executed counterpart of the Lake McMillan Unit Agreement dated February 21st, 1946, bearing the approval of Acting Secretary of the Interior Oscar L. Chapman as of October 11, 1946.

It is our desire to immediately commence operations on the first test wells under each of these Unit Agreements, even though the formal effective date provided for in said Unit Agreements is the 1st of the calendar month next succeeding the date of approval, to wit, November 1, 1946.

At our request, the Secretary of the Interior has indicated that such wells commenced on unitized lands prior to November 1, 1946 will be held to be Unit Wells under the respective Unit Agreements.

We are, therefore, requesting your acknowledgement of the receipt of these documents and your confirmation on the part of your office that such test wells commenced on unitized lands prior to November 1, 1946 will be considered Unit Test Wells under the respective Unit Agreements.

Yours very truly,



T. F. Rico

COPY OF ORDER OF OIL CONSERVATION COMMISSION

"BEFORE THE OIL CONSERVATION COMMISSION
OF THE STATE OF NEW MEXICO

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

CASE NO. 68

ORDER NO. 629

THE APPLICATION OF RICHFIELD OIL COR-
PORATION FOR AN ORDER OF APPROVAL OF THE
LAKE McMILLAN UNIT AGREEMENT WHOSE UNIT
AREA LIES IN THE DELAWARE STRUCTURAL BASIN
NEAR THE NORTHERN RIM THEREOF IN T. 20 S.,
R. 26 E., T. 20 S., R. 27 E., T. 21 S., R.
25 E., and T. 21 S., R. 26 E., N.M.P.M.,
Eddy County, New Mexico.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at ten o'clock A. M., December 8,
1945, at Santa Fe, New Mexico, before the Oil Conservation Commission of
New Mexico, hereinafter referred to as the "Commission".

NOW, on this 10th day of December, 1945, the Commission having
before it for consideration the testimony adduced at the hearing of said
case and being fully advised in the premises;

IT IS THEREFORE ORDERED:

That the order herein shall be known as the:

"LAKE McMILLAN UNIT AGREEMENT ORDER"

SECTION 1. (a). That the project herein shall be known as the
Lake McMillan Unit Agreement and shall hereinafter be referred to as the
Project.

(b). That the plan by which the Project shall be operated shall
be embraced in the form of unit agreement designated as "Unit Agreement
For The Development And Operation Of The Lake McMillan Area, Eddy County,
New Mexico", annexed to petitioner's petition as Exhibit A, and such plan
shall be known as the Lake McMillan Unit Agreement Plan.

SECTION 2. That the Lake McMillan Unit Agreement Plan shall be
and is hereby approved.

SECTION 3. (a). That the Unit Area shall be:

New Mexico Principal Meridian, Eddy County, New Mexico.
T. 20 S., R. 26 E., Sec. 12, S $\frac{1}{2}$;
Sec. 13, all;
Sec. 14, E $\frac{1}{2}$ NE $\frac{1}{4}$, SE $\frac{1}{4}$;
Sec. 23, all;
Sec. 24, all;
Sec. 25, all;
Sec. 26, all;
Sec. 27, E $\frac{1}{2}$ SE $\frac{1}{4}$; SW $\frac{1}{4}$ SE $\frac{1}{4}$;
SE $\frac{1}{4}$ SW $\frac{1}{4}$;

Sec. 34, all;
Sec. 35, all;
Sec. 36, all

T. 20 S., R. 27 E., Sec. 7, S $\frac{1}{2}$;
Sec. 8, SW $\frac{1}{4}$;
Sec. 16, all;
Sec. 17, all;
Sec. 18, all;
Sec. 19, all;
Sec. 20, all;
Sec. 21, all;
Sec. 28, all;
Sec. 29, all;
Sec. 30, all;
Sec. 31, all;
Sec. 32, all;
Sec. 33, all.

T. 21 S., R. 25 E., Sec. 1, Lots 1, 2, 3, 4, 5,
6, 7, 8, 9, 10, 11,
12, 13, 14, 15, 16,
S $\frac{1}{2}$ (or all);
Sec. 2, Lots 1, 2, 3, 4, 5,
6, 7, 8, 9, 10, 11,
12, 13, 14, 15, 16,
S $\frac{1}{2}$ (or all);
Sec. 3, Lots 1, 8, 9, 16,
E $\frac{1}{2}$ SE $\frac{1}{4}$;
Sec. 11, all;
Sec. 12, all.

T. 21 S., R. 26 E., Sec. 4, Lots 3, 4, 5, 6, 11,
12, 13, 14, SW $\frac{1}{4}$
(or W $\frac{1}{2}$);
Sec. 5, Lots 1, 2, 3, 4, 5,
6, 7, 8, 9, 10, 11,
12, 13, 14, 15, 16,
S $\frac{1}{2}$ (or all);
Sec. 6, Lots 1, 2, 3, 4, 5,
6, 7, 8, 9, 10, 11,
12, 13, 14, 15, 16,
S $\frac{1}{2}$ (or all);
Sec. 7, all;
Sec. 8, all.

(b) The Unit Area may be enlarged or diminished as provided in said plan.

SECTION 4. That the unit operator shall file with the Commission an executed original, or executed counterparts thereof, of the Lake McMillan Unit Agreement not later than 30 days after the effective date thereof.

SECTION 5. That any party owning rights in the unitized substances who does not commit such rights to said Unit Agreement before the effective date thereof may thereafter become party thereto by subscribing to such Agreement or a counterpart thereof. The Unit Operator shall file with the Commission within 30 days an original of any such counterpart.

SECTION 6. That the order herein shall become effective on the first day of the calendar month next following the approval of Commissioner of Public Lands and the Secretary of the Interior and shall terminate ipso facto on the termination of said Unit Agreement. The last Unit Operator shall immediately notify the Commission in writing of such termination.

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

(SEAL)

OIL CONSERVATION COMMISSION

JOHN J. DEMPSEY, CHAIRMAN

/s/ John E. Miles
JOHN E. MILES, MEMBER

/s/ R. R. Spurrier
R. R. SPURRIER, SECRETARY

CERTIFICATE OF APPROVAL
OF THE STATE OF NEW MEXICO

The undersigned, having this day examined an agreement for the cooperative or unit operation and development of a prospective oil or gas field or area, which agreement is entitled "Unit Agreement for the Development and Operation of the Lake McMillan Area, Eddy County, New Mexico", entered into between RICHFIELD OIL CORPORATION, a Delaware corporation, as Unit Operator, and likewise subscribed by numerous Working Interest Owners and Royalty Owners, to which agreement this certificate is attached; and

WHEREAS, upon examination thereof 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 field;

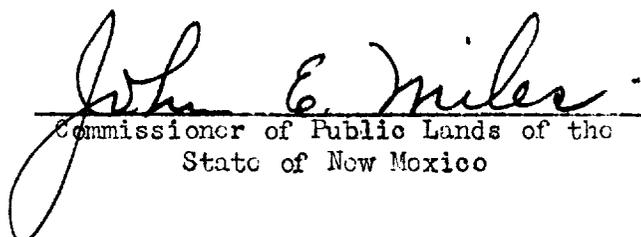
(b) that under the operations proposed the State will receive its fair share of the recoverable oil or gas in place under its lands in the area affected;

(c) that the agreement is in other respects for the best interests of the State;

(d) that the agreement provides for the unit operation of the field, for the allocation of production and the sharing of profits from the lands within the unit area covered by said agreement and committed thereto on an acreage basis, as specified in said agreement;

NOW, THEREFORE, by virtue of the authority conferred upon me by Chapter 88 of the Laws of the State of New Mexico, 1943, approved April 14, 1943, 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 as to the lands of the State of New Mexico included in said Unit Agreement for the Development and Operation of the Lake McMillan Area, Eddy County, New Mexico, and subject to all the provisions of the aforesaid Chapter 88 of the Laws of the State of New Mexico, 1943.

Executed this 8th day of August, 1946



Commissioner of Public Lands of the
State of New Mexico

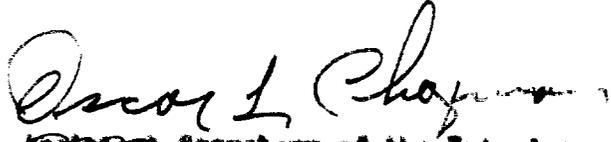
CERTIFICATION--DETERMINATION

Pursuant to the authority vested in the Secretary of the Interior by the act of August 9, 1946 (Public Law 696, 79th Cong., 2d Sess.), which amended the act of February 25, 1930, as amended (41 Stat. 437, 30 U.S.C. secs. 181, et seq.), I hereby take the following action this 11th day of Oct, 1946:

A. Certify and determine that the unit plan of development and operation in the attached agreement for the development and operation of the LAKE McHILLAN UNIT AREA, Eddy County, New Mexico, is necessary and advisable in the public interest for the purpose of more properly conserving the natural resources therein.

B. 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.

Provided, however, That no wells shall be drilled nor shall any exploration or prospecting for unmineral substances take place within the Carlsbad Bird Reservation, if the lands therein and within the boundaries of the Unit Area covered by this Unit Agreement become committed hereto, except with the consent in writing of the Secretary of the Interior, upon the advice of the Fish and Wildlife Service.


Assistant Secretary of the Interior.
Acting

OPERATING AGREEMENT

TO ACCOMPANY UNIT AGREEMENT FOR THE
DEVELOPMENT AND OPERATION OF THE
LAKE McMILLAN AREA, EDDY COUNTY, NEW
MEXICO.

THIS AGREEMENT, made this _____ day of _____, 1945, by and between RICHFIELD OIL CORPORATION, a Delaware corporation, hereinafter sometimes referred to as "Unit Operator" and sometimes referred to as "Richfield", and such other Working Interest Owners, as defined in the unit agreement hereinbelow described, who may subscribe this contract, which parties are hereinafter referred to collectively as "Working Interest Owners";

W I T N E S S E T H:

THAT, WHEREAS, the parties hereto have heretofore entered into a certain agreement entitled "Unit Agreement for the Development and Operation of the Lake McMillan Area, Eddy County, New Mexico", hereinafter referred to as "said unit agreement", which provides for the unit or cooperative development and operation of the Lake McMillan Area in Eddy County, New Mexico, as defined in said unit agreement; and

WHEREAS, Richfield Oil Corporation is the "Unit Operator" under said unit agreement and is also a Working Interest Owner under said unit agreement and enters into this agreement in both capacities, and wherever Richfield Oil Corporation is referred to herein as "Unit Operator" this agreement shall be binding upon Richfield Oil Corporation as Unit Operator, and wherever Richfield Oil Corporation is herein referred to as "Richfield" this agreement shall be binding upon Richfield Oil Corporation as a Working Interest Owner; and

WHEREAS, said unit agreement provides for a private arrangement and separate contract wherein and whereby Unit Operator and Working Interest Owners under said unit agreement shall agree among themselves as to the method of financing, handling, allocating, charging and paying for the costs and expenses of the development and operation of said area and the method of apportioning the costs of said operations; and

WHEREAS, the parties hereto now own or expect to acquire all of the operating rights on all of the lands committed to said unit agreement;

NOW, THEREFORE, in consideration of the premises and of the agreements hereinafter contained, it is mutually agreed by and between the parties hereto as follows, to wit:

1. UNIT AGREEMENT: Said unit agreement and all exhibits attached thereto are hereby made a part of this agreement and incorporated herein by reference.

2. JOINT ACCOUNT: As used herein the term "joint account" shall mean the accounting to be maintained by Unit Operator for the purpose of recording all costs, expenses, transfers, revenues and other transactions pertaining to the unitized lands and the participating area or areas therein and for the purpose of maintaining records and rendering statements to Working Interest Owners. Unit Operator shall keep a separate joint account for each separate participating area. Unit Operator shall keep a separate joint account between Neil H. Wills and Unit Operator, and separate joint accounts between each of the other Working Interest Owners and Unit Operator.

3. JOINT EXPENSE: All costs of drilling, developing, equipping, maintaining, operating and abandoning the unitized lands and producing, processing and marketing the oil and gas therefrom, and the cost of all premiums on lease bonds or other bonds required in its operations hereunder, are herein designated "joint expense", meaning and including the items set forth in "Exhibit A" attached hereto and made a part hereof, and such other items as are hereinafter specifically made chargeable to joint expense.

4. COSTS OF OPERATIONS:

(a) Unit Operator shall in the first instance pay all joint expenses and, except as provided in subdivision (b) of this section 4, shall charge the same to the various joint accounts hereinabove mentioned by allocating all joint expenses to the Working Interest Owners on an acreage basis so that each Working Interest Owner of a tract or tracts of land in a participating area shall have allocated to him such percentage of said joint expenses as the acreage of such tract or tracts of land within the participating area bears to the total acreage of the participating area; provided, however, that notwithstanding any other provision hereof to the contrary all joint expenses allocated to the tract or tracts of land within a participating area, the working interests on which are owned or controlled by Neil

H. Wills and Richfield, shall be charged to the joint account between Neil H. Wills and Richfield; and provided further that the portion of joint expenses represented by royalties and rentals paid for the account of Working Interest Owners shall not be apportioned on an acreage basis but shall in each instance be charged direct to the separate joint account of the Working Interest Owner owning the lease or operating agreement or other contract under which such rentals or royalties were paid, except that royalties and rentals paid for the account of Neil H. Wills and Richfield shall be charged to the joint account between Neil H. Wills and Richfield.

(b) (1) Unit Operator agrees, at its sole cost and expense, to drill a test well on the unit area to a depth of not less than six thousand feet (6,000'), unless at a lesser depth an igneous or metamorphic formation or some other condition or formation is encountered which cannot be penetrated by ordinary drilling methods, or which would render further drilling inadvisable or impracticable; provided, however, that such test well need not necessarily be the first well drilled pursuant to said unit agreement.

(2) If the first well drilled, or any subsequent well drilled pursuant to said unit agreement encounters unitized substances which can be produced in paying quantities at a lesser depth than six thousand feet (6,000') and is placed upon production and does not satisfy the conditions for the test well described in subdivision (b) (1) of this section, all such wells shall be considered to be drilled at joint expense and the first subsequent well drilled so as to satisfy the conditions of the well referred to in subdivision (b) (1) of this section shall be considered the free well.

(3) The cost and expense of drilling the free well referred to in subdivision (b) (1) of this section, to be paid for solely by Unit Operator, shall include abandonment operations if said free well is abandoned after having met the requirements of said subdivision (b) (1) as non-productive of unitized substances in paying quantities, but shall

not include any costs and expenses incurred and paid after reaching the depth of six thousand feet (6,000') for the drilling of such well to a further depth, or costs and expenses incurred in such well after unitized substances in paying quantities are encountered therein. If such free well is placed upon production all costs of maintenance, operation and abandonment thereof shall be at joint expense.

(c) Whenever a participating area or areas are revised, as provided in said unit agreement, the share of joint expenses of Working Interest Owners shall be accordingly apportioned and adjusted retroactively as of the date of the completion of the first well capable of producing unitized substances in paying quantities.

(d) Separate accounts shall be kept for separate participating areas. If a well is drilled to and unitized substances are produced from more than one separate participating area in any such single well, the production from the separate participating area shall be kept separate and the Working Interest Owners in each of said separate participating areas shall enter into a supplemental agreement providing for the reasonable distribution of the costs of drilling and operating such well or wells as between the respective Working Interest Owners in the separate participating areas. Where any other joint expense is not attributable to a single participating area it shall be allocated to all participating areas benefiting therefrom on a reasonable basis of allocation to be determined by Unit Operator.

5. REVENUES: Unit Operator shall credit to the separate joint accounts between the various Working Interest Owners and the Unit Operator as joint income such Working Interest Owners' allocated share (pursuant to the provisions of said unit agreement) of the gross proceeds from the sale of all unitized substances and the market value on the unitized lands of all unitized substances not sold but taken by Unit Operator or delivered in kind as royalties, except as herein provided, together with the appropriate allocated portion (pursuant to the provisions of said unit agreement) of the gross proceeds from any sundry sale or service rendered by Unit Operator for the benefit of unit operations; provided that all unitized substances allocated under said unit agreement to the tract or

tracts of land the working interests on which are owned or controlled by Neil H. Wills and Richfield, and the gross proceeds from any sundry sale or service on the same basis as hereinabove in this section provided shall be credited to the separate joint account between Neil H. Wills and Richfield, as hereinabove provided.

6. NET PROCEEDS: The term "net proceeds" as hereinafter used shall mean the excess of gross revenues from operations hereunder over and above gross joint expenses hereunder, as reflected separately in each separate joint account between Unit Operator and separate Working Interest Owners.

7. PARTICIPATION IN NET PROCEEDS: If, as and when net proceeds, as hereinabove defined, shall accrue in the separate joint account of any separate Working Interest Owner Unit Operator shall be entitled to establish, retain and maintain as a reserve operating fund such amount of the net proceeds as will equal the estimated cost of operations for the succeeding three (3) months; provided however, that Unit Operator shall not be entitled to retain for such purposes more than Twenty-five Thousand Dollars (\$25,000) of net proceeds in such reserve operating fund. Each Working Interest Owner shall contribute to said operating fund out of net proceeds only his proportionate amount thereof upon the same basis of allocation as is provided for in allocating joint expense. After the establishment and maintenance of such reserve operating fund Unit Operator shall deduct from the remaining net proceeds accrued to the credit of each separate Working Interest Owner, other than Neil H. Wills and Richfield, five per cent (5%) thereof which Unit Operator shall retain for its own use as compensation from such Working Interest Owners for its operations under said unit agreement and under this agreement. Unit Operator shall pay each separate Working Interest Owner, other than Neil H. Wills, in cash, on or before the last day of each succeeding calendar month, the remaining net proceeds accrued in the separate joint account between each such Working Interest Owner and Unit Operator, other than Neil H. Wills, from operations hereunder to the end of the preceding calendar month and not theretofore paid. All the remaining net proceeds accruing in the joint account between Unit Operator and Neil H. Wills shall be divided between Neil H. Wills and Richfield in the ratio of forty-five per cent (45%) thereof to Neil H. Wills and fifty-five per cent (55%) thereof to Richfield, and Neil H. Wills shall be paid his share thereof in cash, as above provided.

8. FREE USE OF OIL AND GAS: Unit Operator shall not be required to account for unitized substances produced under said unit agreement and used by Unit Operator in its operations thereunder or unavoidably lost. Unitized substances produced from a participating area and used in conformity with good operating practice for repressuring or recycling in such participating area shall not be deemed to have been saved or sold and shall not be accounted for under this agreement. If Unit Operator introduces into a participating area gas obtained from sources other than the participating area and used in repressuring, stimulating of production or increasing ultimate recovery therefrom, the cost of such gas shall be charged as a joint expense to such participating area.

9. OWNERSHIP OF OIL AND GAS: Unit Operator shall take and use or dispose of all of the unitized substances produced and saved from the unitized lands, excepting royalties paid in kind, and shall credit to the separate joint accounts between Unit Operator and the respective Working Interest Owners their allocated share of the market value of the oil, on the day such oil is shipped from the unitized lands, and shall credit to such joint accounts such allocated shares of the net proceeds derived from the sale of gas and other hydrocarbon substances produced from the unitized lands, but nothing in this agreement contained shall require Unit Operator to save or market gas from the unitized lands unless there be a surplus above operating requirements and a market at the well for same.

10. OWNERSHIP OF EQUIPMENT: Prior to the termination of this agreement the Working Interest Owners, other than Unit Operator, shall have no interest in any facilities, equipment, materials or supplies installed on the unitized lands under this agreement, or under said unit agreement, except the right to have their joint accounts credited with their allocated interest in any facilities, equipment, materials or supplies removed from the unitized lands, as herein provided, and as provided in Exhibit A. Upon the termination of this agreement if Unit Operator has then been reimbursed for all joint expenses incurred by it hereunder, including the cost of abandonment of any and all wells drilled on the unitized lands, except the free well as hereinabove provided, all facilities, equipment, materials and supplies shall be handled and divided as provided for in Exhibit A.

11. RIGHTS AND OBLIGATIONS OF UNIT OPERATOR: Subject to the provisions of said unit agreement, Unit Operator shall have full control and management of all development and operations in and upon the unitized lands, with the power to do

whatever in its judgment may be reasonably necessary or expedient therefor and, while Working Interest Owners shall have the right to consult with and advise Unit Operator in connection therewith, nevertheless the final determination in all matters shall rest solely with Unit Operator. Unit Operator shall:

(a) hire, direct and discharge all labor and employees for operations under said unit agreement, and the same shall be and remain the separate employees of Unit Operator, shall be carried on its payroll and subject to its sole direction, and Unit Operator shall furnish all materials, supplies and equipment for its operations under said unit agreement and keep the unitized lands and all property used in connection with said operations free of liens and encumbrances of every character arising from said operations;

(b) comply with the requirements of any applicable state and federal compensation, social security, unemployment and similar applicable laws with respect to any work or operations conducted by Unit Operator under said unit agreement, and the cost of such compliance shall be included in joint expense, where such expense is incurred for operations under said unit agreement;

(c) comply with all federal and state laws and regulations governing the development and exploitation of such oil and gas field saving to each Working Interest Owner its right to protest or contest any regulation or the enforcement thereof;

(d) pay before delinquency all taxes assessed to Unit Operator chargeable hereunder as joint expense;

(e) make all other expenditures chargeable hereunder as joint expense;

(f) prosecute or defend all litigation arising out of the operations on the unitized lands. All reasonable attorney's fees and other reasonable costs and expenses incurred by Unit Operator in connection with such prosecution shall be charged to joint expense hereunder;

(g) comply with the Workmen's Compensation Law of the State of the State of New Mexico and charge the cost thereof attributable to operations under said agreement as joint expense. Unit Operator shall

carry such contractor's and/or manufacturer's public liability insurance and such fire, explosion or other form of insurance for the benefit of operations under said unit agreement as Unit Operator shall consider necessary or advisable and shall charge the cost thereof to joint expense. If Unit Operator is required to furnish any bonds required by law or regulation or contract governing operations on the unitized lands the cost of such bond premiums shall be charged to joint expense;

(h) conduct its operations under said unit agreement in a good and workmanlike manner;

(i) upon written request furnish Working Interest Owners with copies of all run tickets and statements of unitized substances shipped or removed from any participating area;

(j) not, without the consent in writing of a majority in interest of the Working Interest Owners (being at least two), charge to joint expense the cost and expense of installations such as casinghead plant, or pipe lines situated off the unitized lands, or incur any cost or expense in excess of Five Thousand Dollars (\$5,000.) other than those reasonably necessary in drilling for, producing and marketing, or preparing for market, the unitized substances;

(k) keep true and correct books, accounts and records of its operations and permit the Working Interest Owners to inspect the same at any reasonable time during business hours.

12. COMPETITIVE BASIS OF DRILLING: Unit Operator may either contract to others the drilling of wells pursuant to said unit agreement, in which event the contract price shall be a joint expense for the work performed under the contract, or may drill wells with its own tools and labor, in which event the price therefor shall be a joint expense for the work performed, and such price shall not exceed the price offered on competitive bids of drilling contractors for like operations in said area.

13. STATEMENTS: Upon the completion of the first producing well Unit Operator will furnish to Working Interest Owners a statement of accumulated joint expenses, and thereafter, on or before the last day of each calendar month, Unit Operator shall furnish the Working Interest Owners with a statement or statements showing for the previous calendar month:

(a) all joint expenses incurred by it during the preceding calendar month in performing the operations required to be performed under said unit agreement and under this agreement, and the allocated portion of said joint expenses charged to the account of the Working Interest Owner receiving the statement;

(b) all oil, gas and other products shipped from the participating area by it during the preceding calendar month in quantities, qualities and gravities;

(c) all products sold and the amounts received for the joint accounts;

(d) the market value of any portion of unitized substances taken by Unit Operator for its own use;

(e) the allocations made of benefits under said unit agreement;

(f) all rentals and royalties paid for the account of the Working Interest Owner receiving the statement;

(g) the net proceeds or net deficit of the particular joint account, as the case may be.

14. WITHDRAWAL AND ASSIGNMENT: At any time any Working Interest Owner may at his election withdraw from this agreement and from said unit agreement upon surrendering and assigning to the other Working Interest Owners all of his right, title and interest in and to this agreement and in and to the underlying leases and contracts by, through and under which he claims his rights hereunder in the unitized lands or as to any one or more separate and distinct geological subsurface zones or formations underlying the unitized lands and thereupon terminate his rights hereunder and under said unit agreement and be relieved from all future duties, obligations and liabilities under this agreement which may be incurred after the date of such surrender and assignment as to the unitized lands, or as to the separate and distinct geological subsurface zones or formations surrendered and assigned; provided, however, that if any such party shall tender a surrender and assignment limited to separate and distinct geological subsurface zones or formations covering unitized lands whereon this type of transfer of title is not legally recognized or will not be approved by the Secretary or the Commissioner or Commission, then surrendering party agrees to make satisfactory arrangements with the other parties hereto whereby the surrendering party will exe-

ecute an instrument to accomplish the purposes of this section which will be acceptable legally and acceptable to the Secretary, the Commissioner or the Commission, whether such instrument be in the nature of a transfer of the entire legal title into the leases and other contracts affected, reserving to such party his working interest rights in the zones or horizons reserved, by operating agreement or trust agreement or otherwise, or, in the alternative, an instrument by which the surrendering party may retain the title and effect surrender by satisfactory operating agreement or trust agreement, or otherwise, and give to the remaining Working Interest Owners satisfactory security or indemnity against any future defaults under the lease or leases in which he has retained title. Any Working Interest Owner desiring to withdraw from this agreement and from said unit agreement and surrender and assign his interest, as hereinabove provided, shall first give written notice of his intention to the other Working Interest Owners in the manner and at the addresses set forth in said unit agreement for giving notices, and the other Working Interest Owners shall thereupon have an option for a period of ten (10) days after receipt of said notice to accept from such party a surrender and assignment, as herein provided. In the event any Working Interest Owner shall elect not to accept his proportionate interest or share in such assignment, the assignment shall be made to the Working Interest Owners electing to accept the same. In the event no Working Interest Owner elects to accept the interest of the withdrawing party, the withdrawing party, upon securing the consent of the Royalty Owners thereto, shall have the right to surrender to the owners of the land concerned, the interest which such withdrawing party desires to assign as above provided. Any such surrender and assignment shall be made to the Working Interest Owners electing to accept the same in the proportion which the respective interests of such Working Interest Owners bears to their total interest in the unitized lands; provided, however, that in the event either Neil H. Wills or Richfield desire to withdraw, their share of the interests held by them jointly shall first be offered only to the other of such two parties before the same shall be offered to any other Working Interest Owner, and the other of said two parties shall have the first exclusive right to take an assignment of the interest of the other upon the withdrawal of the other from this agreement. Any such surrender and assignment shall be made without cost or charge therefor to the Working Interest Owners accepting the same. Any such surrender and assignment shall become

effective and the withdrawing party shall be relieved of all future obligations under this agreement and under the unit agreement as to the unitized lands or separate and distinct geological zone or formation thereof upon the delivery of such surrender and assignment, except that as to unitized lands under federal leases the surrender and assignment and such release shall not become effective until the surrender and assignment is approved by the Secretary, and as to New Mexico state leases the surrender and assignment and such release shall not become effective until the surrender and assignment is approved by said Commissioner, and upon approval of such assignment by the Secretary of the Interior as to federal leases and the Commissioner of Public Lands as to State of New Mexico leases the withdrawing party shall be relieved of all obligations not theretofore accrued hereunder and under said unit agreement; provided however, that Unit Operator agrees that it will not withdraw from this agreement or from said unit agreement, as herein provided, until after the well provided for in subdivision (b) (1) of section 4 hereof shall have been drilled. Unit Operator also agrees that in the event it withdraws from this agreement and from the unit agreement as herein provided it will also resign as Unit Operator. Unit Operator shall have the right at any time to resign as Unit Operator, as provided in said unit agreement. Upon the resignation or removal of Richfield as Unit Operator, as provided for in said unit agreement, this agreement shall terminate, and if a new Unit Operator is appointed pursuant to the provisions of said unit agreement the Working Interest Owners will make a new agreement with such new Unit Operator concerning the method of handling, charging and paying for costs of operations. Unit Operator shall not, however, in any event be removed as Unit Operator without Unit Operator's consent, unless and until Unit Operator shall have been repaid and reimbursed for all joint expenses expended by Unit Operator on the unitized lands other than the free well hereinabove referred to.

15. ASSIGNMENTS: In the event any Working Interest Owner Owner desires to sell all or any part of his interest in the unitized lands, the other Working Interest Owners hereto shall have a preferential right to purchase the same. In such event the selling party shall promptly notify the other Working Interest Owners, in the manner provided for giving notices in the unit agreement, of the offer received by the selling party from a prospective purchaser ready, willing and able to purchase the same, together with the name and address of such prospec-

tive purchaser, and the price offered for such interest, and the other Working Interest Owners shall thereupon have an option for a period of ten (10) days after the receipt of said notice to purchase said interest proportionate to the respective interests of those Working Interest Owners who elect to purchase the same. The preferential right to purchase provided for in this section shall not apply where a corporate party hereto desires to dispose of its interest by merger, consolidation, reorganization, transfer to a subsidiary or affiliated company, or sell all of its assets; and provided further, that in the event either Neil H. Wills or Richfield desires to sell all or any part of his interest in the unitized lands and/or under this agreement, the other of said parties shall have a first preferential right over other Working Interest Owners to purchase the same before such interest is offered to any other Working Interest Owner.

16. **RENTALS:** Unit Operator, from and after the effective date of this agreement, on behalf of the respective Working Interest Owners, shall pay all rentals of whatsoever kind thereafter accruing to the United States, the State of New Mexico, and/or land owners, on account of unitized land, and all such rentals paid by Unit Operator shall be charged to the separate joint accounts of the appropriate Working Interest Owners in conformity with their respective rental obligations, and each separate Working Interest Owner hereby agrees to repay to Unit Operator at the times and in the manner provided in Exhibit A attached hereto, all such rentals advanced and paid for their accounts by Unit Operator, provided that all rentals on unitized lands, the working interests on which are owned or controlled by Neil H. Wills and Richfield shall be charged to the joint account between Neil H. Wills and Richfield, and Neil H. Wills shall repay to Unit Operator only forty-five per cent (45%) of such rentals paid for said joint account.

17. **LIENS:** In order to secure Unit Operator for the repayment to it by the Working Interest Owners of any and all rentals which may in the future be paid by Unit Operator for the account of the respective Working Interest Owners, Unit Operator shall have, and is hereby given and granted, a lien upon all of the right, title, interest and estate of each and/or all of such parties, respectively, in and to the leases, the leasehold rights, and operating agreement rights belonging to the respective Working Interest Owners and made subject to this agreement, and in and to the net proceeds under this agreement to which such Working Interest Owners would otherwise be entitled, and in and to the jointly owned property and equipment

located on unitized lands, to secure Unit Operator for the payment of each sum due or to become due to Unit Operator from each such Working Interest Owner for rentals so paid by Unit Operator. Should any such Working Interest Owner at any time fail for a period of fifteen (15) days after receipt of any statement herein provided for to repay Unit Operator for such rentals pursuant to such statement, then Unit Operator shall have the right to deduct and withhold from all net proceeds and monies which may be due or may hereafter become due such Working Interest Owner from Unit Operator hereunder, a sufficient amount of such monies to reimburse Unit Operator for such rentals for which Unit Operator has not been reimbursed by such Working Interest Owner as aforesaid. Unit Operator shall also have the right to invoke and apply any other and further legal or equitable remedies to which it may be entitled and which may be appropriate.

18. VOTING: Regardless of any other provision hereof, or any provision of said unit agreement to the contrary, the voting rights of the working interests on unitized lands owned or controlled by Neil H. Wills and Richfield shall be pooled, and regardless of the acreage content thereof all voting rights on such lands shall be exercised in the ratio of forty-five per cent (45%) of such rights to Neil H. Wills and fifty-five per cent (55%) of such voting rights to Richfield on all matters where voting is provided for by this agreement or by said unit agreement.

19. TAXES: Unit Operator shall render for ad valorem tax purposes the entire leasehold rights and interests covered by this agreement and all physical property located thereon or used in connection therewith, or such part thereof as may be subject to ad valorem taxation under existing laws, or which may be made subject to taxation under future laws, and shall pay for the benefit of the joint account all such ad valorem taxes at the time and in the manner required by law, which may be assessed upon or against all or any portion of such leasehold and/or operating rights and interests and the physical property located thereon or used in connection therewith. In the event the United States, the state, county, municipal, or other governmental authority or agency, levies a license, severance, production, or other tax on the oil or gas produced from the unitized lands, or any Unit Operator's right to operate on said lands, then, in that event, Unit Operator shall pay for the benefit of the joint account all such taxes at the time and in the manner required by law. Unit Operator shall charge to the separate joint

account of each Working Interest Owner such Working Interest Owner's proportionate share of such tax payments as provided by the accounting procedure attached hereto; provided however, that all taxes paid by reason of the unitized lands contributed to this agreement by Neil H. Wills and Richfield shall be charged to the joint account between Neil H. Wills and Richfield; and provided further that ad valorem taxes on physical property installed on any participating area shall be charged to the separate accounts only of those Working Interest Owners participating in the benefits from such participating area, and shall be prorated to such Working Interest Owner's accounts on an acreage basis in the same manner as joint expenses are prorated.

20. NO PARTNERSHIP CREATED: It is not the intention of the parties hereto to create, nor shall this agreement, nor said unit agreement, be construed as creating a co-partnership between the parties hereto or to render them liable as co-partners, and neither of the parties hereto shall be or act as the agent, servant or employee of the other for any purpose whatsoever.

21. OFFICIAL REPRESENTATIVE: Prior to the commencement of any drilling to be conducted under said unit agreement, each Working Interest Owner shall designate in writing, and give notice thereof to Unit Operator, a representative of such party, which representative shall continue as such until his power is revoked and a new representative is appointed. The representative of each party shall act for and in behalf of his principal in matters requiring joint action or approval under this agreement and under said unit agreement.

22. TERM: This agreement shall become effective upon the effective date of said unit agreement and the term of this agreement shall be the same as the term of said unit agreement, unless this agreement is sooner terminated as herein provided.

23. FAILURE OF TITLE: If title to any land or leases or operating agreements contributed to said unit agreement by Neil H. Wills or Richfield shall be lost or shall fail, the reduction in participation in the net proceeds, provided for by said unit agreement, shall be made in the joint account between Neil H. Wills and Richfield. As between Neil H. Wills and Richfield, however, the deduction from net proceeds in said joint account shall be made solely from the interest in net proceeds of the party contributing the land, lease or operating agreement as to which title was lost or failed.

24. ANTI-DISCRIMINATION: Unit Operator shall not discriminate against any employees or applicants for employment because of race, creed, color, or national origin, and shall require an identical provision to be included in all subcontracts.

25. COUNTERPARTS: This agreement may be executed in any number of counterparts with the same force and effect as if all parties had signed the same document.

26. NOTICES: All notices herein provided for may be given in the manner provided for giving notices in said unit agreement.

27. UNAVOIDABLE DELAY: The obligations of Unit Operator hereunder shall be suspended while Unit Operator is prevented from complying therewith in whole or in part by strikes, lockouts, action of the elements, war, the public enemy, laws, rules and regulations of any federal, state, municipal or other governmental agency, acts or requests of any governmental officer or agent purporting to act under authority, unavailability or delays in delivery of necessary materials and equipment, or other matters or conditions beyond the control of Unit Operator, whether or not similar to the matters or conditions herein specifically enumerated.

28. ~~Wherever~~ reference is herein made to Neil H. Wills or to the interests of Neil H. Wills it is agreed that the reference includes all the interests of Mary E. Wills, his wife, which are subject to this agreement.

29. HEIRS AND ASSIGNS: This agreement shall inure to the benefit of and be binding upon the respective heirs, executors, administrators, successors and assigns of the parties hereto.

IN WITNESS WHEREOF, the parties hereto have caused this agreement to be executed as of the day and year first hereinabove written.

RICHFIELD OIL CORPORATION

By _____
Vice President

Secretary

Neil H. Wills

Mary E. Wills

STATE OF CALIFORNIA)
) SS
COUNTY OF LOS ANGELES)

On this _____ day of _____, 1945, before me personally appeared FRANK A. MORGAN, to me personally known, who being by me duly sworn did say that he is the Vice President of RICHFIELD OIL CORPORATION and that the seal affixed to said instrument is the corporate seal of said corporation and that said instrument was signed and sealed in behalf of said corporation by authority of its Board of Directors, and said FRANK A. MORGAN acknowledged said instrument to be the free act of said corporation.

Witness my hand and official seal the day and year last above written.

Notary Public

My commission expires _____

STATE OF NEW MEXICO)
) SS
COUNTY OF _____)

On this _____ day of _____, 1945, before me personally appeared NEIL H. WILLS and MARY E. WILLS, to me known to be the persons described in and who executed the foregoing instrument, and acknowledged that they executed the same as their free act and deed.

Witness my hand and official seal the day and year last above written.

Notary Public

My commission expires _____

BEFORE THE OIL CONSERVATION COMMISSION
OF THE STATE OF NEW MEXICO

IN THE MATTER OF THE APPLICATION)
OF RICHFIELD OIL CORPORATION, A)
DELAWARE CORPORATION, FOR AN ORDER)
OF APPROVAL OF THE UNIT AGREEMENT)
FOR THE DEVELOPMENT AND OPERATION)
OF THE LAKE McMILLAN AREA, EDDY)
COUNTY, NEW MEXICO, WITHIN TOWNSHIP)
20 SOUTH, RANGE 26 EAST, AND TOWN-)
SHIP 20 SOUTH, RANGE 27 EAST, AND)
TOWNSHIP 21 SOUTH, RANGE 25 EAST,)
AND TOWNSHIP 21 SOUTH, RANGE 26)
EAST, NEW MEXICO PRINCIPAL MERIDIAN.)

TO THE OIL CONSERVATION COMMISSION OF THE STATE OF NEW MEXICO:

The application of RICHFIELD OIL CORPORATION, a Delaware corporation, hereinafter referred to as "Applicant", respectfully shows:

I.

There is presented to the Oil Conservation Commission of the State of New Mexico the proposed form of Unit Agreement for the Development and Operation of the Lake McMillan Area, Eddy County, New Mexico, hereinafter referred to as "said unit agreement"; that a true copy of the proposed form of unit agreement is attached hereto, marked "Exhibit A", and by reference made a part hereof; that the unit area described therein has heretofore been approved by the United States Geological Survey; that the form of unit agreement, Exhibit A, has heretofore been approved as to form by the Secretary of the Interior of the United States and a true copy of the letter-approval thereof is attached hereto, marked "Exhibit B", and by reference made a part hereof.

II.

That said unit agreement will tend to promote the conservation of oil and gas and the better utilization of res-

ervoir energy in the geologic structure covered by the unit area described therein, which is hereinafter referred to as "said unit area". The granting of this application is necessary and advisable in the public interest in that said geologic structure and said unit area cover a compact area of approximately twenty thousand eight hundred ninety(20,890) acres, consisting of approximately fifteen per cent (15%) privately owned land, twenty-two per cent (22%) land owned by the State of New Mexico, and sixty-three per cent (63%) land owned by the United States of America. The development of such an area by more than one operator operating independently of each other would result in duplication of effort, economic waste of materials and labor, and possible waste of natural resources and reservoir energy. The size of said unit area justifies operations on a large scale by a single operator under the unit agreement for the discovery, development, production and transportation of oil or gas, will promote conservation of natural resources, prevent avoidable waste of oil and gas, and result in better utilization of reservoir energy.

III.

That under the proposed unit operation the State of New Mexico will receive its fair share of the recoverable oil or gas in place under its lands in the proposed unit area. Said unit agreement provides for the unit operation of the unit area, for the allocation of production to the various tracts of land therein on an acreage basis, all as specified in said unit agreement, Exhibit A, reference to which is hereby made for further particulars.

IV.

That the separate institutions will participate in rentals due as to lands in such area, as under the terms of the previous-

ly granted leases, and in royalties in the proportion that their acreage bears to the total acreage included in the participating area or areas of such proposed unit; that the said unit agreement does not affect the rentals payable under state leases and reference is hereby made to said unit agreement, Exhibit A, for further particulars as to the method and allocation of royalties on an acreage basis.

V.

That such unit agreement is in other respects for the best interests of the state with respect to state lands by reason of all the facts hereinabove set forth.

VI.

That it is anticipated that a very high percentage of the holders of rights or interests in state lands and in federal lands within said unit area will be satisfied with and will join in said proposed unit agreement and commit their interests thereto by signature thereto. That by the private agreement to be entered into between the Working Interest Owners of lands committed to said unit agreement it will be agreed between all Working Interest Owners that your Applicant, as Unit Operator, will bear and pay all the costs and expenses of the development of the unit area, and that the other Working Interest Owners will not be required to contribute thereto; that your Applicant as Unit Operator will recover the money expended by it in the development and operation of said unit area only out of unitized substances produced under said unit agreement and belonging to the Working Interest Owners, and that the Working Interest Owners will share in the net proceeds remaining from the unit operations after Unit Operator has so recovered the cost of operations, which arrangement is known in the oil

industry as a "carried interest operation". That a true copy of the private agreement to be entered into between the Working Interest Owners of the lands committed to said unit agreement has been filed with the Oil Conservation Commission of the State of New Mexico for information purposes concurrently with the filing of this application. Royalty Owners, including the State of New Mexico, will not be affected by the arrangement between the Working Interest Owners and royalties will be paid on all unitized substances allocated to the various tracts of land within the participating area on an acreage basis.

VII.

Geological and Engineering Data:

That said unit area lies in the Delaware structural Basin near the northern rim thereof in T. 20 S., R. 26 E., T. 20 S., R. 27 E., T. 21 S., R. 25 E., and T. 21 S. R.26 E., New Mexico Principal Meridian, Eddy County, State of New Mexico. That said unit area is particularly described as follows:

T. 20 S., R. 26 E., Sec. 12, S-1/2;
Sec. 13, all;
Sec. 14, E-1/2 NE-1/4,
SE-1/4;
Sec. 23, all;
Sec. 24, all;
Sec. 25, all;
Sec. 26, all;
Sec. 27, E-1/2 SE-1/4,
SW-1/4 SE-1/4,
SE-1/4 SW-1/4;
Sec. 34, all;
Sec. 35, all;
Sec. 36, all.

T. 20 S., R. 27 E., Sec. 7, S-1/2;
Sec. 8, SW-1/4;
Sec. 16, all;
Sec. 17, all;
Sec. 18, all;
Sec. 19, all;
Sec. 20, all;
Sec. 21, all;
Sec. 28, all;
Sec. 29, all;
Sec. 30, all;
Sec. 31, all;
Sec. 32, all;
Sec. 33, all.

T. 21 S., R. 25 E., Sec. 1, Lots 1, 2, 3, 4,
5, 6, 7, 8, 9, 10,
11, 12, 13, 14, 15,
16, S-1/2 (or all);

Sec. 2, Lots 1, 2, 3, 4,
5, 6, 7, 8, 9, 10,
11, 12, 13, 14, 15,
16, S-1/2 (or all);

Sec. 3, Lots 1, 8, 9, 16,
E-1/2 SE-1/4;

Sec. 11, all;

Sec. 12, all.

T. 21 S., R. 26 E., Sec. 4, Lots 3, 4, 5, 6, 11,
12, 13, 14, SW-1/4
(or W-1/2);

Sec. 5, Lots 1, 2, 3, 4,
5, 6, 7, 8, 9, 10,
11, 12, 13, 14, 15,
16, S-1/2 (or all);

Sec. 6, Lots 1, 2, 3, 4,
5, 6, 7, 8, 9, 10,
11, 12, 13, 14, 15,
16, S-1/2 (or all);

Sec. 7, all;

Sec. 8, all.

That there is contained in the form of said unit agreement, Exhibit A attached hereto, as Exhibit A thereto, a map outlining the unit area and showing by distinct symbols or colors state land, privately owned land, and land owned by the United States of America identified by Land Office serial numbers, and the ownership of all land in said unit area. Reference is hereby made to said map for further particulars.

A regional map showing the location of said unit area is attached hereto and marked "Exhibit C" and by reference made a part hereof.

That said unit area lies in the Permian Basin of West Texas and Southeast New Mexico, near the northern rim of the Delaware structural Basin, the major synclinal feature which borders the Artesia-Maljamar oil district on the south and the highly productive Central Basin platform on the west, (see Exhibit C). These two structurally high belts are closely associated and in Permian time actually merged to form one single elevated province, the basinward border of

which was apparently similar to the edge of our continental shelf today. This curving shelf-like border, according to accepted geological thought, served as the foundation upon which were built numerous limestone reefs, one of which (the Capitan reef) can be mapped on the surface from Guadalupe Peak northeastward through Carlsbad, and thence by subsurface eastward and southeastward along the basinward border of the oil productive districts of Eddy and Lea Counties, New Mexico, and Winkler and Ward Counties, Texas. This reef and older ones lying parallel to, but farther from the basin border, are composed of highly porous limestone and dolomite which constitute the reservoir rock for the Permian oil fields of this highly productive belt.

The original platform and continental shelf upon which limestone reefs began to grow around the north and east borders of the Delaware Basin during Permian time was actually the result of structural uplift in early or pre-Permian time. Geological study of recent and deeper developments in West Texas and Southeast New Mexico has established that localized anticlinal structure and elevation in older rocks along the platform edge encouraged the first growth of limestone reefs in early Permian time; that the platform edge moved progressively seaward as one reef after another developed and grew during Permian time; and that exploration for oil accumulated on anticlinal structure in the unusually productive early Permian and pre-Permian rocks should be concentrated in those areas which lie shoreward (north and east) of the known Capitan reef.

For an excellent illustration of the above described relation of limestone reefs to the early Permian continental platform of this general area, reference should be made to the cross-section by Phillip B. King which appears as Fig. 2,

A on page 542 of A. A. P. G. Bulletin, Volume 26, 1942, reproduced as "Exhibit D" attached hereto and by reference made a part hereof. At the base of this illustration a structural terrace is shown in the Hueco or Wolfcamp limestone, and it is this structural terrace acting as the edge of the continental platform which encouraged the growth of limestone reefs through the Permian up to and including Capitan time. The Victoria Peak is now considered by many to be a reef, and other similar reefs as old as the Hueco limestone may exist here. The Lake McMillan block occupies a position on this diagram directly above the structural terrace shown in the Hueco limestone.

Geological exploration for a favorable site for wild-cattling in this district involves, among other things, the search for evidence of anticlinal structure. Of all the tools which have been tried in this district, where neither surface geology nor the seismograph will work, the magnetometer combined with interpretation of subsurface data is the most effective in discovering oil. The magnetometer appears to reflect in a general way the location of anticlinal structure in early Permian and pre-Permian rocks. It has been responsible for the discovery of some of this region's major oil fields, and, in addition, distinct magnetic anomalies are now recognized as being present in, or in close relation to, other fields which were discovered by chance or by different tools. Hobbs, Monument, the new Gulf-Drinkard discovery, Lynch, and smaller fields of Lea and Eddy Counties, the new Fullerton field in Andrews County, Cedar Lake in Gaines County, and Apco in Pecos County are known examples. The magnetometer map of the Lake McMillan area appears herein as "Exhibit E", by reference made a part hereof.

The area now covered by said unit area has been selected for wildcat exploration for oil because it combines several geological factors favorable for a major discovery, see "Exhibit F" attached hereto and by reference made a part hereof. These are:

1) Its regional location immediately "behind" (north of) the Capitan reef which now forms the north rim of the Delaware basin. Older porous limestone reefs, therefore, should be encountered which, regardless of localized structure, should be productive.

2) Its regional location immediately above the structural terrace which, in early Permian and older rocks, forms the structural rim of the Delaware basin. Regional structure is therefore favorable and the opportunity for local anticlinal structure is attractive.

3) Its magnetic high which indicates the presence of a local anticlinal structure in those lower Permian and pre-Permian rocks. These rocks in recent years have yielded this region's most valuable oil discoveries. This magnetic high is similar to those common to several known producing fields of this region.

4) Its location on the established up-dip edge of the Middle Delaware sand (Cherry Canyon formation), a promising reservoir horizon which has not been tested in a structurally favorable location. Reliable interpretation of well records has established that this northeastward trending line of major facies change passes through, or in the immediate vicinity of, said unit area.

In summary, it may be said that the proposed unit area occupies a geological location favorable from the standpoint of 1) regional structure, 2) major facies changes which involve porous limestone reefs and major sand units, 3) magneto-

meter evidence for localized anticlinal structure in deep-seated rocks. Based on the common practice of successful operating companies in this region, the first two of the above three factors are sufficient to qualify this area as desirable for a wildcat well. The magnetometer picture (see Exhibit E) provides additional supporting evidence for the attractiveness of this specific area. It should be emphasized, however, that the magnetometer cannot and does not portray geologic structure with the precision of the seismograph or the field geologist, but rather indicates merely the approximate position and character of the underlying structure.

Formations and prospective oil horizons to be penetrated.

The cross-section of Exhibit F portrays the numerous and complex facies changes which occur along this northern rim of the Delaware basin. Although major facies changes of this type are exposed along strike in the mountains to the southwest and provide unusually attractive possibilities for oil accumulation, their character and depth in this immediate area cannot be forecast with the usual precision. It is believed that the rock section to be penetrated will be about as follows:

<u>Depth</u>	<u>Formation</u>	<u>General Character</u>	<u>Possible Oil Zones</u>
0' - 600'	Tansill, Yates and Seven Rivers	Limestone, sand, gypsum, and red shale	
600' - 1500'	Queen, Grayburg, and Goat Seep	Sand, dolomite and limestone (reef)	Fair
1500' - 2800'	M. Delaware sand and San Andres	Sand and limestone (reef)	Excellent
2800' - 4400'	Victoria Peak	Limestone (reef)	Excellent
4400' - 4800'	Hueco	Limestone and chert	Fair
4800' - ?	Pennsylvanian and older	Limestone, dolomite and chert	Excellent

