

Case No.

67

Application, Transcript,
Small Exhibits, Etc.

NIL CONSERVATION COMMISSION
SANTA FE, NEW MEXICO

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February 23, 1946

Honorable Clarence E. Hinkle
Hervey, Dow & Hinkle
Roswell, New Mexico

Re: Case 67 - Order No. 628

My dear Clarence:

This is to acknowledge receipt of the approved copy of the Rocky Arroyo Unit Agreement forwarded in your letter of February 19. Said approved copy is today filed in the case.

Kindest personal regards.

Very truly yours,

Chief Clerk & Legal Adviser

CBL:MS

J. M. HERVEY
HIRAH M. DOW
CLARENCE E. HINKLE
W. E. BONDURANT, JR.

LAW OFFICES
HERVEY, DOW & HINKLE
ROSWELL, NEW MEXICO

February 19, 1946

GEORGE H. HUNKER, JR.

New Mexico Oil Conservation Commission
Santa Fe, New Mexico

Attention: Carl B. Livingston

Dear Mr. Livingston:

This will acknowledge receipt of your letter of February 15, 1946, relative to the filing of an approved copy of the Rocky Arroyo Unit Agreement with the Oil Conservation Commission.

In view of what you state in your letter and the fact that if production is obtained the allowable will be fixed on the basis of the proration units in the agreement, we have determined that it would be best to file an approved copy with the Commission, which we enclose herewith.

Yours very truly,

HERVEY, DOW & HINKLE

BY 

CEH/c
encls.

cc- Mr. R. A. Pierce
Potash Company of America
Carlsbad, New Mexico

OIL CONSERVATION COMMISS N
SANTA FE, NEW MEXICO

December 11, 1945

Honorable Clarence Hinkle
Hervey, Dow, Hill & Hinkle
Roswell, New Mexico

Re: Case No. 67 - Order No. 628.

Dear Clarence:

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

Very truly yours,

Chief Clerk & Legal Adviser

CBL:MS

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REPORT OF 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. 67

ORDER NO. 628

THE APPLICATION OF THE POTASH COMPANY
OF AMERICA FOR AN ORDER OF APPROVAL OF
ROCKY ARROYO UNIT AGREEMENT WHOSE UNIT
AREA COVERS 23,040.29 ACRES SITUATED
IN TOWNSHIPS 20, 20 $\frac{1}{2}$, 21 AND 22 SOUTH,
RANGES 23 AND 24 EAST, 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:

"ROCKY ARROYO UNIT AGREEMENT ORDER"

SECTION 1. (a). That the project herein shall be known as the Rocky Arroyo 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 for the development and operation of the Rocky Arroyo Unit Area referred to in the petitioner's petition and filed with said petition and such plan shall be known as the Rocky Arroyo Unit Agreement Plan.

SECTION 2. That the Rocky Arroyo Unit Agreement Plan shall be and is hereby approved.

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

E $\frac{1}{2}$ W $\frac{1}{2}$, NE $\frac{1}{2}$, and S $\frac{1}{2}$ Section 33, All of Sections 24 and 35, Township 20 South, Range 24 East, All of fractional Sections 33, 34, 35 and 36, Township 20 $\frac{1}{2}$ South, Range 23 East. All of Sections 1, 2, 3, 4, 9, 10, 11, 12, 13, 14, 15, 16, 21, 22, 23, 24, 25, 26, 27, 28, 33, 34, 35, and 36, Township 21 South, Range 23 East, All of Sections 1, 2, 3, N $\frac{1}{2}$ and NE $\frac{1}{2}$ S $\frac{1}{2}$, S $\frac{1}{2}$ SW $\frac{1}{2}$ Section 4, E $\frac{1}{2}$ Section 9, All of Sections 10 and 11, SW $\frac{1}{4}$ SW $\frac{1}{4}$ and NE $\frac{1}{4}$ SW $\frac{1}{4}$ and NW $\frac{1}{4}$ Section 12, Township 22 South, Range 23 East, N.M.P.M., Eddy County, New Mexico.

(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 Rocky Arroyo 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.

OIL CONSERVATION COMMISSION

JOHN J. DEMPSEY, CHAIRMAN

John E. Miles
JOHN E. MILES, MEMBER

R. R. Spurrier
R. R. SPURRIER, SECRETARY.

SEAL

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. 67

ORDER NO. 628

THE APPLICATION OF THE POTASH COMPANY
OF AMERICA FOR AN ORDER OF APPROVAL OF
ROCKY ARROYO UNIT AGREEMENT WHOSE UNIT
AREA COVERS 23,040.29 ACRES SITUATED
IN TOWNSHIPS 20, 20 $\frac{1}{2}$, 21 AND 22 SOUTH,
RANGES 23 AND 24 EAST, 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:

"ROCKY ARROYO UNIT AGREEMENT ORDER"

SECTION 1. (a). That the project herein shall be known as the Rocky Arroyo 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 for the development and operation of the Rocky Arroyo Unit Area referred to in the petitioner's petition and filed with said petition and such plan shall be known as the Rocky Arroyo Unit Agreement Plan.

SECTION 2. That the Rocky Arroyo Unit Agreement Plan shall be and is hereby approved.

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

E $\frac{1}{2}$ NW $\frac{1}{4}$, NE $\frac{1}{4}$, and S $\frac{1}{2}$ Section 33, All of Sections 34 and 35, Township 20 South, Range 24 East, All of fractional Sections 33, 34, 35 and 36, Township 20 $\frac{1}{2}$ South, Range 23 East. All of Sections 1, 2, 3, 4, 9, 10, 11, 12, 13, 14, 15, 16, 21, 22, 23, 24, 25, 26, 27, 28, 33, 34, 35, and 36, Township 21 South, Range 23 East, All of Sections 1, 2, 3, N $\frac{1}{2}$ and NE $\frac{1}{4}$ S $\frac{1}{2}$ SE $\frac{1}{4}$ Section 4, E $\frac{1}{2}$ Section 9, All of Sections 10 and 11, SW $\frac{1}{4}$ SW $\frac{1}{4}$ and NE $\frac{1}{4}$ SW $\frac{1}{4}$ and NW $\frac{1}{4}$ Section 12, Township 22 South, Range 23 East, N.M.P.M., Eddy County, New Mexico.

(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 Rocky Arroyo 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.

OIL CONSERVATION COMMISSION

JOHN J. DEMPSEY, CHAIRMAN

(SGD) JOHN E. MILES
JOHN E. MILES, MEMBER

(SGD) R. R. SPURRIER
R. R. SPURRIER, SECRETARY.

SEAL

LAW OFFICES
HERVEY, DOW, HILL & HINKLE
ROSWELL, NEW MEXICO

J. M. HERVEY
HIRAM M. DOW
CURTIS HILL
CLARENCE E. HINKLE

November 23, 1945

W. E. BONDURANT, JR.

Mr. Carl B. Livingston
Chief Clerk & Legal Adviser
New Mexico Oil Conservation Commission
Santa Fe, New Mexico.

Re: Case 67 - Rocky Arroyo Unit
Agreement, Eddy County, N.M.

Dear Carl:

This will acknowledge receipt of your letter of November 21st, advising that the above case with others is to be heard before the Oil Conservation Commission on December 8, 1945 at 10 o'clock A.M., and which will be satisfactory.

With kindest regards.

Very truly yours,

HERVEY, DOW, HILL & HINKLE

BY 

CEH/mds

NOTICE FOR PUBLICATION
STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

The Oil Conservation Commission as provided by law hereby gives notice of the following hearing to be held at Santa Fe, New Mexico, at 10 A.M., December 8, 1945:

CASE 67.

In the matter of the application of the Potash Company of America for an order of approval of Rocky Arroyo Unit Agreement whose unit area covers 23,040.29 acres situated in Townships 20, 20½, 21 and 22 South, Ranges 23 and 24 East, Eddy County, New Mexico.

CASE 68.

In the matter of the application of Richfield Oil Corporation 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

CASE 69.

In the matter of the application of oil operators in Eddy County by Chuck Aston for an order to designate the 1800'-2000' producing horizon in the following described tracts, located in the Premier Field Eddy County, New Mexico, as the Seven Rivers Pool of the Premier Field and that this aforementioned pool have defined pool status in all matters concerning allowable, etc: S½ Sec. 22, S½ Sec. 23, W½ Sec. 25, all sections 26 and 27, T. 17S, R. 30E. All oil produced from the Seven Rivers formation to be measured in separate tanks so that pipeline runs can be properly recorded and reported. The major producing zones in the Premier Field are Zones 5 and 6 of the Grayburg formation and encountered at depths from 3100 to 3300'.

CASE 70

In the matter of the application of the New Mexico Nomenclature Committee for an order revising Order 588 defining fields in these respects: To designate all so-called "fields" defined in said order and in all supplements issued thereunder as "pools". Delete from definition of Grayburg-Jackson pool all of secs. 13, 24 and 25, T. 17 S., R. 31 E., and add to definition of Maljamar pool the S½ sec. 13, all of secs. 24 and 25, T. 17 S., R. 31 E. Delete from Empire pool the SE¼ sec. 19, T. 17 S., R. 28 E., and add to Red Lake pool the SE¼ sec. 19, and NE¼ sec. 30, T. 17 S., R. 28 E. Delete from definition of Skaggs pool all of sec. 23, T. 20 S., R. 37 E., and make the following pool definition: All sec. 23, T. 20 S., R. 37 E., to be known as the Penoco pool, to include oil and gas production from the Pennsylvanian formation found in the Skaggs R-23 well No. 2, SW¼ NE¼ sec. 23 at depths of 7700 to 7725 feet through casing perforations. Delete the word "Yeso" from the name Brinkard-Yeso Pool. Delete the word "Ellenburger" from the name Dublin-Ellenburger pool. Appropriate provision and procedure wherein the Oil Conservation Commission may in its discretion adopt in executive session changes of pool boundaries and designation of new pools upon the recommendation of the New Mexico Nomenclature Committee.

CASE 71.

In the matter of the application of Gulf Oil Corporation
for an order fixing an appropriate limiting gas-oil ratio
for the Drinkard-Yeso Pool and any extensions thereof.

Given under the seal of said Commission at Santa Fe, New Mexico,
on November 21, 1945.

OIL CONSERVATION COMMISSION

BY: .

R. R. Spurrier
R. R. SPURRIER, SECRETARY

SEAL

WIL CONSERVATION COMMISSIO
SANTA FE, NEW MEXICO

November 21, 1945

Honorable Clarence E. Hinkle
Hervey, Dow, Hill & Hinkle
Roswell, New Mexico

Re: Case 67 - Rocky Arroyo Unit Agreement

Dear Clarence:

The Commission has set the above captioned case,
with others, to be heard December 8 at 10 A.M., at
Santa Fe.

Please indicate that you have received this notice.

Kindest personal regards.

Very truly yours,

Chief Clerk & Legal Adviser

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IL CONSERVATION COMMISSIO
SANTA FE, NEW MEXICO

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November 21, 1945

Honorable Glenn Staley
Proration Office
Hobbs, New Mexico

Dear Glenn:

Attached please find notice of hearing on December 8
at 10 A.M., as to the several cases mentioned in said
notice.

Please indicate that you have received this notice.

Kindest personal regards.

Very truly yours,

Chief Clerk & Legal Adviser

CBL:MS

IL CONSERVATION COMMISSIC
SANTA FE, NEW MEXICO

November 21, 1945

The Santa Fe New Mexican
Santa Fe, New Mexico

Re: Notice for Publication
Cases 67, 68, 69, 70 and 71

Gentlemen:

Please publish the enclosed notice once, immediately.
Please proof read the notice carefully and send a copy
of the paper carrying such notice.

UPON COMPLETION OF THE PUBLICATION, PLEASE SEND PUBLISHER'S
AFFIDAVIT.

For payment please submit statement in duplicate accompanied
by voucher executed in duplicate. The vouchers must be
signed by a notary in the space provided on the back of
the voucher. The necessary blanks are enclosed.

Very truly yours,

Chief Clerk & Legal Adviser

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LAW OFFICES
HERVEY, DOW, HILL & HINKLE
ROSWELL, NEW MEXICO

November 7, 1945

J. M. HERVEY
HIRAM M. DOW
CURTIS HILL
CLARENCE E. HINKLE

W. E. BONDURANT, JR.

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

Re: Rocky Arroyo Unit
Agreement

Dear Carl:

We hand you herewith three copies of the proposed Rocky Arroyo Unit Agreement, together with three copies of the application of the Potash Company of America, the operator designated in the unit agreement, requesting that the same be approved by the New Mexico Oil Conservation Commission.

As stated in the application the unit agreement has been executed by a substantial number of owners of the oil and gas leases embracing lands within the unit area and it is expected that the unit agreement will be filed for the approval of the Secretary the early part of next week. Since the form of the unit agreement has been heretofore approved by the U. S. Geological Survey and by the Commissioner of Public Lands, we do not anticipate that there will be any considerable delay in obtaining the approval of the unit agreement, and it is hoped that the agreement will be approved by both the Secretary and the Commissioner of public lands by the latter part of this month.

We would like for the commission to set a date during the last week of this month, preferably the last few days in the month, for a hearing on the application, and for you to go ahead and give the required notice by publication.

Yours sincerely,

HERVEY, DOW, HILL & HINKLE

BY 

CEH/mds
Encs

JOSEF T. SKINNER
ATTORNEY AT LAW
PRINCETON, ILLINOIS

September 19, 1945.

New Mexico Oil Conservation Commission,
Sante Fe, New Mexico.

Gentlemen:-

According to your records you will find that Mr. Harley Lorensen, of Route 2, Sheffield, Illinois, is the owner of an oil and gas lease issued by the Commissioner of Public Lands of New Mexico, covering the SE $\frac{1}{4}$ NE $\frac{1}{4}$ and SW $\frac{1}{4}$ SE $\frac{1}{4}$ Sect. 36, Twp. 21 S. R. 23 E. N.M.P.M. Eddy County, New Mexico.

The Potash Company of America has forwarded to him for execution a unit agreement for the development and operation of the Rocky Arroyo Unit Area in Eddy County, New Mexico.

Mr. Lorensen has asked me to advise him whether or not to execute this agreement. I feel incompetent to advise him as I know nothing about oil leases, nor these unit agreements.

Will you please give me what information you can so I can advise him as to the advisability of entering into such an agreement. If you are not able to give me such information, I will appreciate it very much if you will inform me how I can get such information. Of course it would be advisable for me to know something about the responsibility of the Potash Company of America. Any information you can give me will be greatly appreciated.

Respectfully yours,

JTS:RR

Josef T. Skinner

Answered 9-21-45 informally.

OIL CONSERVATION COMMISSION
SANTA FE, NEW MEXICO

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October 16, 1945

Honorable Clarence Hinkle
Hervey, Dow, Hill & Hinkle
Roswell, New Mexico

Re: Rocky Arroyo Unit Agreement - Eddy County.

Dear Clarence:

Richfield has filed its petition for approval of its McMillan Unit Agreement, but both the Rocky Arroyo Unit Agreement and the Pure Agreement petitions have not been filed.

It is the Commission's practice to set all pending petitions for hearing at the same time. Please advise if your petition is to be filed soon.

Kindest personal regards.

Very truly yours,

Chief Clerk & Legal Adviser

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OIL CONSERVATION COMMISSION
SANTA FE, NEW MEXICO

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September 13, 1945

Honorable Clarence Hinkle
Hervey, Dow, Hill & Hinkle
Roswell, New Mexico

Re: Rocky Arroyo Unit Agreement- Eddy County

Dear Clarence:

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

CBL:MS

OIL CONSERVATION COMMISSION
SANTA FE, NEW MEXICO

August 9, 1945

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Honorable Clarence Hinkle
Hervey, Dow, Hill & Hinkle
Roswell, New Mexico

Re: Proposed Rocky Arroyo Unit Agreement, Eddy County.

My dear Clarence:

Reference is made to your conversation by phone yesterday in connection with the above captioned proposed unit agreement. I conferred with Mr. George Graham, Attorney for the State Land Office, this morning and am happy to advise that our mutual view as to said proposed unit agreement is as follows:

Refer to Section 10 "Participation After Discovery". In the fifth line following the phrase "the public land survey" is the following phrase which is objected to and should be stricken "or aliquot parts thereof". The reason is because in both the State Land Office and in the Oil Conservation Commission reckonings are made in accordance with the legal subdivisions as described by the U. S. Public Land Surveys, which does not go below a 40-acre tract or lot. The aliquot parts provision would permit further subdivisions of the standard 40-acre tract or lot.

Both Mr. Graham and I, without binding either the Commission or the Commissioner of Public Lands, find that the proposed unit agreement in other respects is unobjectionable and does not change the state's control as provided in the Picacho Unit Agreement.

With kindest personal regards.

Very truly yours,

Chief Clerk & Legal Adviser

CBL:MS
cc George Graham

OIL CONSERVATION COMMISSION
SANTA FE, NEW MEXICO

June 30, 1945

MEMORANDUM TO GOVERNOR DEMPSEY:

Re: Proposed Rocky Arroyo Unit Agreement,
Eddy County.

Submitted herewith for your information is a copy of the above captioned matter together with copy of letter from Clarence Hinkle, Esquire, dated June 21, 1945, which is self-explanatory.

This is the same project the Commission was requested to express its willingness to the Secretary of the Interior to proceed without the inclusion of the small amount of scattered state lands within the project. The Secretary of the Interior desires that the state lands be brought into the agreement or else refusals to join by the state lessees to be shown. Therefore, if and when the state parties have joined or refused to join and the Secretary has approved the proposed form of agreement a hearing before your Commission will be necessary.

Heretofore the Picacho Unit Agreement has been taken as a model. The instant agreement makes several changes but these changes affect the operators and do not seem to make any material change insofar as the Oil Conservation Commission and the Commissioner of Public Lands are concerned.

OIL CONSERVATION COMMISSION

Chief Clerk & Legal Adviser

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OIL CONSERVATION COMMISSION
SANTA FE, NEW MEXICO

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June 30, 1945

MEMORANDUM TO COMMISSIONER OF PUBLIC LANDS FILES:

Re: Proposed Rocky Arroyo Unit Agreement,
Eddy County.

Submitted herewith for your information is a copy of the above captioned matter together with copy of letter from Clarence Hinkle, Esquire, dated June 21, 1945, which is self-explanatory.

This is the same project the Commission was requested to express its willingness to the Secretary of the Interior to proceed without the inclusion of the small amount of scattered state lands within the project. The Secretary of the Interior desires that the state lands be brought into the agreement or else refusals to join by the state lessees to be shown. Therefore, if and when the state parties have joined or refused to join and the Secretary has approved the proposed form of agreement a hearing before your Commission will be necessary.

Heretofore the Picacho Unit Agreement has been taken as a model. The instant agreement makes several changes but these changes affect the operators and do not seem to make any material change insofar as the Oil Conservation Commission and the Commissioner of Public Lands are concerned.

OIL CONSERVATION COMMISSION

Chief Clerk & Legal Adviser

OIL CONSERVATION COMMISSION
SANTA FE, NEW MEXICO

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June 30, 1945

Honorable Clarence Hinkle
Hervey, Dow, Hill & Hinkle
Roswell, New Mexico

Re: Rocky Arroyo Unit Agreement, Eddy County.

My dear Clarence:

This is to acknowledge receipt of your letter of June 21 with regard to the changes in the above captioned proposed Unit Agreement, which changes you do not deem material insofar as the Commission is concerned.

A copy of the proposed Unit Agreement is being submitted to Governor Dempsey and Commissioner of Public Lands Miles, together with a copy of your letter.

Very truly yours,

Chief Clerk & Legal Adviser

CBL:MS

J. M. HERVEY
HIRAM M. DOW
CURTIS HILL
CLARENCE E. HINKLE

LAW OFFICES
HERVEY, DOW, HILL & HINKLE
ROSWELL, NEW MEXICO

June 21, 1945

Mr. Carl B. Livingston
New Mexico Oil Conservation Commission
Santa Fe, New Mexico

Dear Carl: Re: Rocky Arroyo Unit Agreement,
 Eddy County

I have your letter of June 16th relative to the proposed form of the above agreement.

I believe that you are unduly alarmed about the changes which were made. If you will check the agreement carefully I believe you will find that the changes are in sections which have to do solely with the rights of the working interest owners and that so far as the state and federal interests are concerned and their rights to supervision, etc., they are exactly the same as in the Picacho Unit Agreement. I agree with you that it was desirable to work out a form which would be satisfactory to both the state and the Department of the Interior; however, I do not believe that it is the desire of the Commission, the Commissioner, or the Secretary of the Interior to dictate to the owners of the lease rights matters which affect their personal interests. That has always been the attitude of the Department of the Interior and I feel sure that the Commissioner and the Commission will want to take the same stand. In the past the U.S.G.S. has taken the position that they are not concerned with the agreement so far as the rights of the working interest owners are concerned, and that the only thing that must meet their approval is the provisions which have to do with matters of the supervision and compliance with regulations, etc. The form which was forwarded to you has been submitted to the U.S.G.S. in Washington for approval and as soon as we hear from that office I shall be glad to advise you their attitude concerning the matter.

Yours sincerely,

HERVEY, DOW, HILL & HINKLE

By 

CEH:LF

WILDERNESS CONSERVATION COMMISSION
SANTA FE, NEW MEXICO

June 16, 1945

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Honorable Clarence Hinkle
Hervey, Dow, Hill & Hinkle
Roswell, New Mexico

Re: Rocky Arroyo Unit Agreement - Eddy County

My dear Clarence:

This is to acknowledge receipt of the proposed unit agreement noted in the caption, submitted in your letter of June 13.

In a preliminary, quick examination of the agreement I fear that this agreement is a pronounced departure from the Picacho Unit Agreement.

The situation is simply this: The Commission, the Commissioner of Public Lands and the Secretary of the Interior consumed over ten years in the endeavor to reach a mutually acceptable agreement that was finally accomplished last year in the form of the Picacho Unit Agreement. Both the Commission and the Commissioner of Public Lands fully understand what is acceptable to them when the Picacho Unit Agreement Form is followed, but a distinct departure from that form may or may not be acceptable to those two departments. At any rate a wide variation from the Picacho Unit Agreement form tends to slow up the passing upon the changed form. The underlying idea of selecting the Picacho Unit Agreement for study was for the express purpose of working out a form that would be acceptable so as not to make it necessary for all departments concerned to make a new detailed study. While the changes in the proposed agreement may not be material, why should the agreement be revised when so much time and study has already been consumed in reaching the Picacho Unit Agreement form that was understood to be mutually acceptable?

With kindest personal regards.

Very truly yours,

Chief Clerk & Legal Adviser

CBL:MS
cc George Graham

CARBON

LAW OFFICES
HERVEY, DOW, HILL & HINKLE
ROSWELL, NEW MEXICO

I. M. HERVEY
HIRSH M. DOW
CURTIS HILL
CLARENCE E. HINKLE
W. E. BONDURANT, JR.

June 13, 1945

Honorable John E. Miles
Commissioner of Public Lands
State House
Santa Fe, New Mexico

Dear Sir:

Re: Rocky Arroyo Unit Agreement,
Eddy County, N. M.

We hand you herewith two copies of proposed form for use in connection with the Rocky Arroyo Unit Agreement, Eddy County, New Mexico. We enclose for your information copy of our letter today to Mr. Carl Livingston of the Oil Conservation Commission from which you can see the matters which have transpired heretofore.

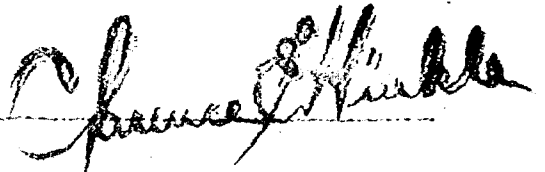
As stated in the letter to Mr. Livingston, the Washington office of the U.S.G.S. has required that a substantial portion of the state oil and gas leases within the unit area be committed to the same. The form of the proposed unit agreement is substantially the same form as used in the Picacho Unit Agreement which has been heretofore approved by the Commissioner of Public Lands and the Oil Conservation Commission and we would like to have your informal approval of the form before it is finally executed for formal approval. If you have any objections to the form we should like to be advised of the same as quickly as possible.

With kindest regards, we are,

Yours very truly,

HERVEY, DOW, HILL & HINKLE

By



CCB:LF
cc-Mr. Carl Livingston
Oil Conservation Commission
Santa Fe, New Mexico

J. M. HERVEY
HIRAM M. DOW
CURTIS HILL
CLARENCE E. HINKLE

LAW OFFICES
HERVEY, DOW, HILL & HINKLE
ROSWELL, NEW MEXICO

June 13, 1945

Mr. Carl Livingston, Attorney
Oil Conservation Commission
Santa Fe, New Mexico

Dear Carl:

Re: Rocky Arroyo Unit Agreement -
Eddy County, N. M.

You will recall that you very kindly obtained for us a letter from the Commission to the Secretary of the Interior stating that so far as the Oil Conservation Commission was concerned it would not be necessary to commit any state lands to the proposed Rocky Arroyo Unit Agreement.

The Washington office of the U.S.G.S. has required as a condition to the approval of the agreement that a substantial portion of the state oil and gas leases involved be committed to the unit agreement. Consequently we have redrafted the agreement along the lines of the Picacho Unit Agreement which has heretofore been approved by the Oil Conservation Commission and hand you herewith three copies of the same. This agreement is complete except for Exhibit "A" which is the plat which will be attached to the agreement when executed showing the unit area, together with the ownership of the land and leases in the area. You will find that in all of the sections which mention the Secretary, Commissioner and Commission that they conform closely to the provisions of the Picacho agreement. There are a few changes in other paragraphs of the agreement to conform to the U.S.G.S. model form as revised; however, as we see it these are not material as far as the Commissioner and Commission are concerned.

Copies of the proposed form are being submitted for approval of the U.S.G.S. in Washington, and in the meantime we should like for you to consider the form of agreement with the Commissioner of Public Lands and give us an informal expression as soon as possible as to whether there are any objections to the form from the standpoint of either the Commissioner or the Oil Conservation Commission. In other words, we are endeavoring to have the form approved by all parties concerned before it is finally

Page 2

executed and submitted for formal approval and your cooperation toward this end will be greatly appreciated.

Yours truly,

HERVEY, DOW, HILL & HINKLE

By 

CEH:LF

cc-Commissioner of Public Lands
State House
Santa Fe, New Mexico

Messrs. Lewis & Grant
First National Bank Building
Denver, Colorado

Mr. E. C. Finney
3536 Edmunds Street, N.W.
Washington 7, D. C.

The Potash Company of America
Carlsbad, New Mexico

Mr. Neil H. Wills
Carlsbad, New Mexico

LEGAL ADVERTISEMENT

NOTICE FOR PUBLICATION

STATE OF NEW MEXICO

Oil Conservation Commission
The Oil Conservation Commission as provided by law hereby gives notice of the following hearing to be held at Santa Fe, New Mexico, at 10 A. M., December 8, 1945:

Case 67

In the matter of the application of the Potash Company of America for an order of approval of Rocky Arroyo Unit Agreement whose unit area covers 23,040.29 acres situated in Townships 30, 30½, 21 and 22 South, Ranges 23 and 24 East, Eddy County, New Mexico.

Case 68

In the matter of the application of Richfield Oil Corporation 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.

Case 69

In the matter of the application of oil operators in Eddy County by Chuck Aston for an order to designate the 1800'-2000' producing horizon in the following described tracts, located in the Premier Field Eddy County, New Mexico, as the Seven Rivers Pool of the Premier Field and that this aforementioned pool have defined pool status in all matters concerning allowable, etc: S½ Sec. 22, S½ Sec. 23, W¼ Sec. 25, all sections 26 and 27, T. 17S, R. 30E. All oil produced from the Seven Rivers formation to be measured in separate tanks so that pipeline runs can be properly recorded and reported. The major producing zones in the Premier Field are Zones 5 and 6 of the Grayburg formation and encountered at depths from 3100 to 3300'.

Case 70

In the matter of the application of the New Mexico Nomenclature Committee for an order revising Order 588 defining fields in these respects: To designate all so-called "fields" defined in said order and in all supplements issued thereunder as "pools". Delete from definition of Grayburg-Jackson pool all of secs. 13, 24 and 25, T. 17 S., R. 31 E., and add to definition of Maljamar pool the S½ sec. 13, all of secs. 24 and 25, T. 17 S., R. 31 E. Delete from Empire pool the SE¼ sec. 19, T. 17 S., R. 28 E., and add to Red Lake pool the SE¼ sec. 19, and NE¼ sec. 30, T. 17 S., R. 28 E. Delete from definition of Skaggs pool all of sec. 23, T. 20 S., R. 37 E., and make the following pool definition: All sec. 23, T. 20 S., R. 37 E., to be known as the Penoco pool, to include oil and gas production from the Pennsylvania formation found in the Skaggs B-23 well No. 2, SW¼ NW¼ sec. 23 at depths of 7700 to 7725 feet through casing perforations. Delete the word "Yeso" from the name "Linkard-Yeso Pool. Delete the word " from the name Dub-

S BILL

time at \$ 8.32

times, \$

Tax \$

\$

Affidavit of Publication

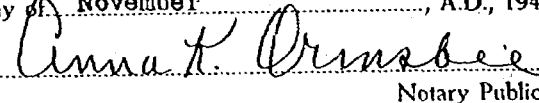
State of New Mexico, }
County of Santa Fe } ss.

I, C. B. Floyd, being first duly sworn, declare and say that I am the (Business Manager) (~~Editor~~) of the Santa Fe New Mexican, a daily newspaper, published in the English Language, and having a general circulation in the City and County of Santa Fe, State of New Mexico, and being a newspaper duly qualified to publish legal notices and advertisements under the provisions of Chapter 167 of the Session Laws of 1937; that the publication, a copy which is hereto attached, was published in said paper ~~once each week~~ for 1 time ~~consecutive weeks, and on the same day of each week~~ in the regular issue of the paper during the time of publication, and that the notice was published in the newspaper proper, and not in any supplement, ~~once each week~~ for 1 time ~~weeks consecutively, the first publication being on the~~ 23rd day of November, 1945, and the last publication on the day of , 19 ; that payment for said advertisement has been (duly made), or (assessed as court costs); that the undersigned has personal knowledge of the matters and things set forth in this affidavit.


Manager

Subscribed and sworn to before me this 26th

day of November, A.D., 1945


Notary Public

My Commission expires

June 14, 1949

STATE LAND OFFICE
Santa Fe, New Mexico

November 23, 1935

Potash Company of America
Carlsbad, New Mexico

Attention of Mr. G. P. Cooper

Re: Termination of Rocky
Arroyo Unit Agreement,
Rocky County, New Mexico

Gentlemen:

Effective under the conditions herein below
stated, the undersigned Commissioner of Public Lands
hereby approves Potash Company of America's (Unit
Operator) application to terminate the Rocky Arroyo
Unit Agreement.

The conditions:

- (1) Like approval being formally secured from
the proper authorities of the Department of Interior.
- (2) That photostatic copies of the approved
plugging orders as evidence of proper plugging and for
satisfaction for State Land Office.

Very truly yours,

John E. Miller
JOHN E. MILLER
Commissioner of Public Lands

ILLEGIBLE

NEIL H. WILLS

P. O. BOX 529

CARLSBAD, N. M.

July 23, 1948



Case 67

Graham

New Mexico Oil Conservation Commission
Santa Fe, New Mexico

Gentlemen:

Enclosed herewith, please find one executed copy of "Consent to Dissolution of Unit Agreement For The Development and Operation of the Rocky Arroyo Unit Area, Eddy County, New Mexico."

Very truly yours,

Neil H. Wills

Neil H. Wills

Page 67

UNITED STATES OF AMERICA
DEPARTMENT OF THE INTERIOR
UNITED STATES GEOLOGICAL SURVEY

CONSENT TO DISSOLUTION OF UNIT AGREEMENT
FOR THE DEVELOPMENT AND OPERATION OF THE
ROCKY ARROYO UNIT AREA, EDDY COUNTY,
NEW MEXICO

I. SEC. 432

KNOW ALL MEN BY THESE PRESENTS:

WHEREAS, as of September 13, 1945, a certain agreement was made and entered into for the development and operation of the Rocky Arroyo Unit Area, Eddy County, New Mexico, designated as I. Sec. No. 432, embracing the following described lands, to-wit:

E $\frac{1}{2}$ NW $\frac{1}{4}$, NE $\frac{1}{4}$, and S $\frac{1}{2}$ Section 33, All of Sections 34 and 35, Township 20 South, Range 24 East, All of fractional Sections 33, 34, 35 and 36, Township 20 $\frac{1}{2}$ South, Range 23 East, All of Sections 1, 2, 3, 4, 9, 10, 11, 12, 13, 14, 15, 16, 21, 22, 23, 24, 25, 26, 27, 28, 33, 34, 35 and 36, Township 21 South, Range 23 East, All of Sections 1, 2, 3, NE $\frac{1}{4}$ and NE $\frac{1}{2}$ SE $\frac{1}{4}$, S $\frac{1}{2}$ SE $\frac{1}{4}$ Section 4, E $\frac{1}{2}$ Section 9, All Sections 10 and 11, SW $\frac{1}{4}$ SW $\frac{1}{4}$ and NE $\frac{1}{2}$ SW $\frac{1}{4}$ and NW $\frac{1}{4}$ Section 12, Township 22 South, Range 23 East, N.M.P.M., Eddy County, New Mexico;

and

WHEREAS, said unit agreement was approved by the New Mexico Oil Conservation Commission on December 10, 1945, and by the Commissioner of Public Lands of the State of New Mexico, on December 12, 1945, and by the Secretary of the Interior on January 28, 1946; and

WHEREAS, the Potash Company of America, a Colorado Corporation with offices at Carlsbad, New Mexico, was designated as Unit Operator under the terms of said agreement and, as such operator, commenced the drilling of a test well for oil and gas

located in the center of the ~~SE1/4~~ Section 22, Township 21 South, Range 23 East, N.M.P.M., on or about the 28th day of April, 1946, and caused said well to be drilled to a depth of 4,007 feet, but that said well failed to encounter oil or gas in paying quantities and was abandoned on December 5, 1946; and

WHEREAS, said unit agreement provides that the same "may be terminated at any time by consent of the owners of 75%, on an acreage basis, of the owners of working interests signatory" thereto with the approval of the Secretary of the Interior; and

WHEREAS, the undersigned parties, being the owners of more than 75% of the working interests, on an acreage basis, of the oil and gas leases committed to said unit agreement, are desirous of terminating the same as provided by the terms of said agreement:

NOW, THEREFORE, the undersigned parties hereby consent to the dissolution and termination of the agreement for the development and operation of the Rocky Arroyo Unit Area, Eddy County, New Mexico, hereinabove referred to, and hereby agree, subject to the approval of the Secretary of the Interior, to the termination of said agreement and hereby request that this consent and termination be approved by the Secretary of the Interior.

IN WITNESS WHEREOF this instrument is executed on this the 19th day of July, 1948.

POTASH COMPANY OF AMERICA

By

G. F. Coops

ATTEST:

J. L. Dunn
Act. Secretary

Unit Operator and co-owner of
Operating Agreements covering
Federal Leases.

-0-

Neil H. Wills

Neil H. Wills
Co-Operator under Operating Agreements
covering Federal Leases.

-0-

George D. Riggs

George D. Riggs
Co-Operator under Operating Agreements
covering Federal Leases.

-0-

Dora W. Payne
Dora W. Payne

Record Owner of Oil and Gas Lease
Las Cruces Serial No. 061741

-0-

Ray Hobbs
Ray Hobbs

Record Owner of Oil and Gas Lease
Las Cruces Serial No. 061764

-0-

George D. Riggs
George D. Riggs

Record Owner of Oil and Gas Lease
Las Cruces Serial No. 061744

-0-

Neil H. Wills
Neil H. Wills

Record Owner of Oil and Gas Lease
Las Cruces Serial No. 061746

-0-

Edith Riggs
Edith Riggs

Record Owner of Oil and Gas Lease
Las Cruces Serial No. 061745

-0-

Mary E. Wills
Mary E. Wills

Record Owner of Oil and Gas Lease
Las Cruces Serial No. 061743

-0-

Mrs. Estelle G. Woods
Mrs. Estelle G. Woods

Record Owner of Oil and Gas Lease
Las Cruces Serial No. 061663

-0-

Louise Wertheim
Louise Wertheim

Record Owner of Oil and Gas Lease
Las Cruces Serial No. 061747

-0-

Thomas A. Brown
Thomas A. Brown

Record Owner of Oil and Gas Lease
Las Cruces Serial No. 061766

BEFORE THE OIL CONSERVATION COMMISSION

SANTA FE, NEW MEXICO

CASE NO. 67

IN THE MATTER OF THE APPLICATION OF THE POTASH
COMPANY OF AMERICA FOR AN ORDER OF APPROVAL OF
ROCKY ARROYO UNIT AGREEMENT WHOSE UNIT AREA
COVERS 23,040.29 ACRES SITUATED IN TOWNSHIPS
20, 20½, 21 AND 22 SOUTH, RANGES 23 and 24 EAST,
EDDY COUNTY, NEW MEXICO.

Pursuant to notice by the Commission, duly made and published
setting December 8, 1945 at 10 o'clock A. M., for hearing in the
above entitled matter, said hearing was convened on said day, at
said hour, in the New Mexican Room of the La Fonda, Santa Fe, New
Mexico, the Commission sitting as follows:

HON. JOHN E. MILES, State Land Commissioner, Member
HON. R. R. SPURRIER, State Geologist, Secretary
HON. CARL B. LIVINGSTON, Chief Clerk & Legal Adviser

R E G I S T E R

<u>NAME</u>	<u>COMPANY</u>	<u>ADDRESS</u>
Glenn Staley	Lea County Operators	Hobbs, N. M.
Clarence Hinkle	Potash Company of America, Atty.	Roswell, N.M.
Geo. D. Riggs	Geologist	Carlsbad, N.M.
George W. Selinger	Skelly Oil Company	Tulsa, Okla.
E. J. Gallagher	Gulf Oil Corporation	Hobbs, N. M.
Paul C. Evans	Gulf Oil Corporation	Hobbs, N. M.
Harry A. Aurand	Potash Company of America	Carlsbad, N.M.
M. W. Phelan	Richfield Oil Corporation	Los Angeles,
George K. Gibson	Richfield Oil Corporation	Midland, Texas
Thomas F. Rico	Richfield Oil Corporation	Los Angeles
T. P. Ellsworth	Richfield Oil Corporation	Bakersfield, Cal.
Lewis Finch, Jr.	Stanolind Oil & Gas Company	Ft. Worth, Tex.
J. O. Seth, Atty	Stanolind Oil & Gas Company	Santa Fe, N.M.
John M. Kelly	Geologist	Roswell, N.M.
C. S. Rose	Repollo Oil Company	Midland, Texas
G. H. Gray	Repollo Oil Company	Midland, Texas
Robert A. Pierce	Potash Company of America	Carlsbad, N.M.
L. W. Lodwick	Independent	Roswell, N. M.
Roy O. Yarbrough	Oil Conservation Commission	Hobbs, N. M.
Foster Morrell	U. S. Geological Survey	Roswell, N. M.
Chuck Aston	Consulting Geologist	Artesia, N. M.
Robert L. Bates	State Bureau of Mines & Mineral Resources	Socorro, N. M.

"NOTICE FOR PUBLICATION
STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

The Oil Conservation Commission as provided by law hereby
gives notice of the following hearing to be held at Santa Fe,

New Mexico, at 10 o'clock A. M., December 8, 1945:

CASE NO. 67.

IN THE MATTER OF THE APPLICATION OF THE POTASH
COMPANY OF AMERICA FOR AN ORDER OF APPROVAL OF
ROCKY ARROYO UNIT AGREEMENT WHOSE UNIT AREA
COVERS 23,040.29 ACRES SITUATED IN TOWNSHIPS
20, 20½, 21 AND 22 SOUTH, RANGES 23 and 24 EAST,
EDDY COUNTY, NEW MEXICO.

Given under the seal of said Commission at Santa Fe, New
Mexico, on November 21, 1945.

OIL CONSERVATION COMMISSION

BY: (SGD) R. R. SPURRIER

R. R. SPURRIER, SECRETARY.

SEAL"

P R O C E E D I N G S

MR. CLARENCE HINKLE (Attorney for Potash Company of America)

Application has been made by the Potash Company of America for the approval of unit agreement development of Rocky Arroyo, in Eddy County, New Mexico. Copies of unit agreement are filed with the Commission. The form of the agreement in so far as it relates acts to be performed by the Commission, Secretary of Interior and Commissioner of Public Lands, substantially the same as a unit agreement the Commission heretofore approved, known as the Picacho Unit Agreement. The proposed unit area covers approximately 23,000 acres of which 2126.76 are Federal lands, 2619.71 acres State lands, and 298.82 acres patented lands. The area stated is in Townships 20S, 21½, 21, and 22 South, Ranges 23 and 24 East, Eddy County. The unit agreement is believed to be the area that covers the entire structure, it is believed in the event oil or gas in commercial quantities is discovered, it should be conserved under the terms of the agreement, the Potash Company of America agrees within 6 months from the effective date of agreement to begin operations in drilling their test well, to a depth of 4,000 feet unless the oil or gas in commercial quantities is found at a lesser depth.

(After being duly sworn, Mr. George D. Riggs testified as follows)

MR. HINKLE: Your name George D. Riggs?

MR. RIGGS: Yes, sir.

MR. HINKLE: Resident of Carlsbad?

MR. RIGGS: Yes, sir.

MR. HINKLE: What is your profession?

MR. RIGGS: Petroleum Geologist.

MR. HINKLE: Are you a graduate of any college?

MR. RIGGS: Graduate of Colorado School of Mines.

MR. HINKLE: What year?

MR. RIGGS: 1926.

MR. HINKLE: Give to the Commission a brief resume of your professional career.

MR. RIGGS: Since 1926 I have been employed by major oil companies as consulting geologist the entire time.

MR. HINKLE: Have you ever performed any magnetometer work?

MR. RIGGS: I have been engaged in magnetometer work since 1939.

MR. HINKLE: In what areas has your work been?

MR. RIGGS: West Texas and Eastern New Mexico.

MR. HINKLE: The entire eastern and southeastern?

MR. RIGGS: Mostly Southeastern.

MR. HINKLE: Have you made a magnetic survey of the area known as Rocky Arroyo situated in Townships 20, 20½, 21 and 22 South Ranges 23 and 24 East, Eddy County, New Mexico?

MR. RIGGS: I made the survey in 1943.

MR. HINKLE: I hand you herewith plat and ask you to explain to the Commission what it reflects.

MR. RIGGS: This map shows the result of the magnetic survey of the area and it is contoured in 10 gamma interval, covers the unit for that and it shows the magnetic economy, and these contours represent lines of equal magnetic intensity,

MR. HINKLE: What does the red boundary line indicate?

MR. RIGGS: The outline of the unit area.

MR. HINKLE: In your opinion would the contours shown on this map fairly represent the structural condition in that area?

MR. RIGGS: Yes they would. The area includes all acreage in the contour.

MR. HINKLE: Are you familiar with the unit agreement?

MR. RIGGS: Yes, I have read it.

MR. HINKLE: State whether or not in your opinion if it is approved it would improve the conservation of oil and gas in this area.

MR. RIGGS: I think it would in that entire structure.

MR. HINKLE: Does the unit area in your opinion cover substantially all the structure?

MR. RIGGS: Yes it does. Includes all of it. The contour goes well down on the plan.

(After being duly sworn, Mr. Harry A. Aurand testified as follows:)

MR. HINKLE: Your name Harry Aurand?

MR. AURAND: It is.

MR. HINKLE: Where do you reside?

MR. AURAND: Denver, Colorado.

MR. HINKLE: What is your profession?

MR. AURAND: Petroleum geologist and geophysicist.

MR. HINKLE: Are you a graduate geologist?

MR. AURAND: I am.

MR. HINKLE: What school?

MR. AURAND: University of Colorado.

MR. HINKLE: Give the Commission a brief resume of your professional career.

MR. AURAND: Started with working for Colorado Geological Survey after I graduated in 1912. After the last war it was confined entirely to petroleum geology in the Rocky Mountain Area. In 1926 I was, in addition to my geological

duties, placed in charge of all geophysics. Went back to school studied for a year, and have had a considerable part of my work - has been involved in geology and as geophysicist since that time.

MR. HINKLE: Have you performed a good deal of work in New Mexico?

MR. AURAND: In years gone by.

MR. HINKLE: In the entire state?

MR. AURAND: In the Northwestern and Eastern part.

MR. HINKLE: Have you done any work in Southwestern New Mexico?

MR. AURAND: I have.

MR. HINKLE: In Eddy County?

MR. AURAND: Yes.

MR. HINKLE: Have you been consulting geologist for the Potash Company of America:

MR. AURAND: I have.

MR. HINKLE: Recently?

MR. AURAND: The last three years.

MR. HINKLE: Have you had occasion to go over the Rocky Arroyo Unit area in Eddy County?

MR. AURAND: I went over certain work with Mr. Riggs in the field.

MR. HINKLE: Mr. Aurand I hand you herewith the Potash Company of America's Exhibit "A", and ask you whether you are familiar with this map?

MR. AURAND: I am.

MR. HINKLE: State whether or not in your opinion the map correctly reflects the magnetic condition shown by the survey of Mr. George Riggs.

MR. AURAND: It does.

MR. HINKLE: Do the contours as shown on the map reflect the structural condition existing in that area?

MR. AURAND: I believe they do.

MR. HINKLE: The red boundary line is the outline of the unit area, state whether or not in your opinion the unit covers all the structure involved.

MR. AURAND: I believe it does.

MR. HINKLE: Mr. Aurand, are you familiar with the Rocky Arroyo Unit Agreement?

MR. AURAND: Yes, I am.

MR. HINKLE: State whether or not in your opinion the unit would be effective in oil-gas commercial quantities to control the area in which the unit area is located.

MR. AURAND: I believe it would.

MR. HINKLE: Would it be in the interest of conservation?

MR. AURAND: It would.

MR. HINKLE: That is all.

MR. JOHN KELLY: Mr. Hinkle, in Section 12 of the agreement, which is entitled "For the Development and operation of the Rocky Arroyo Unit Area" - Development or Operation on Non-Participating Land, would it be agreeable to the Potash Company of America to have the approved land for development as it produces set as a hearing before the Commission?

MR. HINKLE: I believe so, I believe that would be the proper construction of it.

COMMISSIONER MILES: Under Section 12, after production is obtained, a plan of development and operation must be set up. Some operators have not joined the unit agreement and I would like to have the approved well location set up at an approved hearing rather than executive meeting of the Commission.

MR. HINKLE: I believe you are referring to the wrong section, another section which provides for the selection of the participating area for submitting of land for development of the participating area.

Section 9, I believe, Plan of Further Development and Operation. Under that after 60 days after completion a plan is submitted by the operator for approval of the Supervisor, the Commissioner of Public Lands and the Oil Conservation Commission. If that plan is acceptable the unit goes ahead with the development as outlined. That plan can be changed from time to time as conditions change. Probably only approved for a year or two at the time. Probably be changed so as to reflect the true condition of production. I think that is what you have in mind.

MR. KELLY: That is on participating area, I have in mind the known participating area. Any operation in the near participating area will be prohibited.

MR. HINKLE: Naturally the unit operator is going to develop the participating area first, after that is fully developed and drilling is justified it will be expanded so that at all times it will include what is reasonably known or proven by the drilling. It will include lands first in the known participating area. Under Section 12, anybody dissatisfied with the development would have a right, in the event the unit operator refused to do so, to drill a well of his own accord. If the well proved to be suitable for the participating area the operator would have to reimburse the person that drilled the well to the extent of 150%.

MR. KELLY: It will have to be drilled under regular well location, established unit or plan of development.

MR. HINKLE: That means the 40 acres.

MR. KELLY: If it means 40 acres that is satisfactory to us, we have no objections to this agreement as drawn.

MR. SPURRIER: In consideration of the testimony offered, and the evidence presented here at this hearing, the Commission does approve this case.

C E R T I F I C A T E

I, Vastie Fowler, Reporter for the Oil Conservation Commission, hereby certify that I took down the statements made at the hearing held before the Commission on December 8, 1945, in the matter of the application of the Potash Company of America for an order of approval of Rocky Arroyo Unit Agreement whose unit area covers 23,040.29 acres situated in townships 20, 20½, 21 and 22 South, ranges 23 and 24 east, Eddy County, New Mexico, Case No. 67, and that the foregoing transcript constitutes, to the best of my knowledge and belief, a true and correct copy of all the oral statements and exhibits presented before the Commission.

Vastie Fowler
Vastie Fowler, Reporter

I-Sec.No.432

UNIT AGREEMENT

FOR THE DEVELOPMENT AND OPERATION OF THE ROCKY ARROYO UNIT AREA
EDDY COUNTY STATE OF NEW MEXICO

I. Sec. No. _____

This agreement, entered into, as of the 13th day of September, 1945, by and between the parties subscribing or consenting hereto,

W-I-T-N-E-S-S-E-T-H:

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

WHEREAS, it is the purpose of the parties hereto to conserve natural resources, prevent avoidable waste, and secure other benefits obtainable through development and operation of the unit area subject to this agreement under and pursuant to the provisions of sections 17, 27, and 32 of the Act of Congress approved February 25, 1920, entitled "An Act to promote the mining of coal, phosphate, oil, oil shale, gas and sodium on the public domain, "41 Stat. 443, 448, 450, as amended or supplemented by the acts of March 4, 1931, 46 Stat. 1523, and August 21, 1935, 49 Stat. 676; 30 U.S.C. 226, 184 and 189;

WHEREAS, the Commissioner of Public Lands of the State of New Mexico is authorized by an Act of the Legislature (Chap. 88, Laws 1943) 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 (Chap. 72, Laws 1935) to approve this agreement and the conservation provisions hereof;

NOW, THEREFORE, for and in consideration of the premises and the promises hereinafter contained, the parties subscribing hereto and the parties consenting hereto agree as follows:

ENABLING ACT 1. The act of February 25, 1920, supra, as
 AND
REGULATIONS amended, and all pertinent regulations heretofore and all pertinent and reasonable regulations hereafter issued thereunder, and not inconsistent with the provisions hereof, including operating regulations, are accepted and made a part of this agreement. Likewise, the Act of the Legislature of the State of New Mexico (Chap. 88, Laws 1943) and the Act of the Legislature of the State of New Mexico (Chap. 72, Laws 1935) and all pertinent regulations issued under the latter Act are hereby accepted and made part of this agreement.

DEFINITIONS 2. For all purposes of this agreement,
 certain terms used herein are defined
as follows:

(a) "Secretary" shall mean the Secretary of the Interior of the United States and those persons or agencies duly authorized to act for and in his behalf.

(b) "Supervisor" shall mean the Oil and Gas Supervisor of the United States Geological Survey and those persons or agencies duly authorized to act for and in his behalf.

(c) "Commissioner" shall mean the Commissioner of Public Lands of the State of New Mexico.

(d) "Commission" shall mean the Oil Conservation Commission of the State of New Mexico and those persons duly authorized to act for and in its behalf.

UNIT AREA

3. The following described lands are hereby designated and recognized as constituting the unit area:

E $\frac{1}{2}$ NW $\frac{1}{4}$, NE $\frac{1}{4}$, and S $\frac{1}{2}$ Section 33, All of Sections 34 and 35, Township 20 South, Range 24 East, All of fractional Sections 33, 34, 35 and 36, Township 20 $\frac{1}{2}$ South, Range 23 East. All of Sections 1, 2, 3, 4, 9, 10, 11, 12, 13, 14, 15, 16, 21, 22, 23, 24, 25, 26, 27, 28, 33, 34, 35, and 36, Township 21 South, Range 23 East, All of Sections 1, 2, 3, N $\frac{1}{2}$ and N $\frac{1}{2}$ S $\frac{1}{2}$, S $\frac{1}{2}$ SE $\frac{1}{4}$ Section 4, E $\frac{1}{2}$ Section 9, All of Sections 10 and 11, SW $\frac{1}{4}$ SW $\frac{1}{4}$ and N $\frac{1}{2}$ SW $\frac{1}{4}$ and NW $\frac{1}{4}$ Section 12, Township 22 South, Range 23 East, N.M.P.M., Eddy County, New Mexico.

The Unit Operator, with the consent of a majority in interest of the Working Interest Owners, and subject to the approval of the Secretary, the Commissioner and the Commission, may enlarge the unit area to include other lands believed to be commercially productive of the unitized substances, or shall, subject to approval of the Secretary, the Commissioner and the Commission, diminish the unit area to exclude lands not in any participating area hereunder believed to be barren of the unitized substances.

Exhibit "A" attached hereto is a map on which is outlined the herein established Unit Area, together with the ownership of the land and leases in said Area. Exhibit "B" attached hereto is a schedule showing the nature and extent of ownership of oil and gas rights in all land in the Unit Area to which this unit agreement will become applicable by signature hereto, or to a counterpart hereof by the owners of such rights, and hereinafter referred to as "unitized lands". Said exhibits shall be revised by the Unit Operator whenever any change in the Unit Area or ownership of rights render such change necessary, and the revised exhibits shall be filed with the record of this agreement.

UNITIZED
SUBSTANCES

4. All oil, gas, natural gasoline, and associated fluid hydrocarbons producible from land subject to this agreement, in any and all sands or horizons, are unitized under the terms of this agreement and hereinafter are called "unitized substances".

UNIT OPERATOR 5. The Potash Company of America, a Colorado Corporation with offices at Carlsbad, New Mexico, is hereby designated as Unit Operator and by signature hereto commits to this agreement all interests in unitized substances vested in it as set forth in the schedule attached hereto marked Exhibit B and agrees and consents to accept the duties and obligations of Unit Operator to conduct and manage the operation of said unit area for the discovery and development of unitized substances as herein provided. Herein whenever reference is made to the Unit Operator, such reference is understood to mean the unit operator acting in that capacity and not as an owner of interests in unitized substances, and whenever reference is made to an owner of unitized substances, such a reference shall be understood to include any interests in unitized substances owned by the Unit Operator.

The Unit Operator shall have the right to resign at any time provided that any well drilled hereunder is placed in a satisfactory condition for suspension, or is satisfactorily abandoned under the Federal Oil and Gas Operating Regulations, if on Federal land, and under the laws of the State of New Mexico, and the rules and regulations of the Commission, if on state or patented land, but no Unit Operator shall be relieved from the duties and obligations of Unit Operator for a period of three (3) months after notice of intention to relinquish such duties and obligations has been served by him on all other parties hereto and the Secretary and the Commissioner, unless a new Unit Operator shall have been selected and approved and shall have taken over and assumed the duties and obligations of the Unit Operator prior to the date on

which relinquishment by or removal of Unit Operator becomes effective. The parties hereto or a duly qualified new Unit Operator may purchase at its then depreciated market value all or any part of the equipment, material, and appurtenances in or upon the land subject to this agreement, owned by the retiring Unit Operator, in its capacity as such operator, or make other arrangements satisfactory to the retiring Unit Operator for the use thereof, provided that no such equipment, material, or appurtenances so selected for purchase shall be removed prior to the effective date of Unit Operator's retirement. Any equipment, material, and appurtenances not so purchased or arranged for as to the use thereof within said time limit and not necessary for the preservation of wells may be removed by the retiring Unit Operator at any time within six (6) months after his relinquishment or removal becomes effective, but if not so removed shall become the joint property of the owners of working interest rights in land then subject to this agreement. The termination of any rights as Unit Operator under this agreement shall not of itself terminate any right, title, or interest which the Unit Operator may then have in the unitized substances, but the Unit Operator shall have the right and option in connection with its resignation to reassign or retransfer to its several predecessors in interest all of its interest in the lands and leases severally acquired from them, together with its working interest in the unitized substances, and upon such delivery be discharged from any future liability as a working interest owner hereunder; said reassignments to be effective as to said transferee thereupon, subject, however, to the approval of the Secretary as to transfers of interest in lands of the United States and subject, however, to the approval of the Commissioner as to interests in lands of the State of New Mexico.

SUCCESSOR
UNIT
OPERATOR

6. Whenever the Unit Operator shall discontinue or relinquish his rights as Unit Operator or shall fail to fulfill his duties and obligations as Unit Operator under this agreement, the owners of the Majority of the unitized working interests in the participating area on an acreage basis, or the owners of working interests according to their total acreage interest in the unit area until a participating area shall have been established, shall select a new Unit Operator, provided that if the majority of the working interests rights which are at any time qualified to vote in selecting a new Unit Operator are owned by one party to this agreement then a vote of at least two owners of working interests qualified to vote shall be required to select a new operator. Such selections shall not become effective until (a) a Unit Operator so selected shall agree and consent in writing to accept the duties and responsibilities of Unit Operator, and (b) the selection shall have been approved by the Secretary and the Commissioner. In the absence of the selection of an acceptable Unit Operator by the working interest owners within (6) months after notice by Unit Operator of intention to relinquish its rights as Unit Operator, this unit agreement shall automatically terminate.

The Unit Operator shall be subject to removal by the Working Interest Owners in the same manner as herein provided for the selection of a new Unit Operator.

RIGHTS AND
OBLIGATIONS
OF
UNIT OPERATOR

7. Except as hereinafter specified, the exclusive right, privilege and duty of exercising any and all rights of the parties

signatory hereto which are necessary or convenient for prospecting for, producing, storing, and disposing of the unitized substances are hereby vested in the Unit Operator and shall be exercised by said Unit Operator as provided in this agreement. Acceptable evidence of title to said rights shall be deposited with said Unit Operator and, together with this agreement, shall constitute and define said Unit Operator's rights, privileges, and obligations in the premises; provided, that nothing herein shall be construed to transfer title to any land, or to any operating agreement or leases, it being understood that under and pursuant to 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 and exclusively for the purposes herein specified. The Unit Operator shall pay all costs and expenses of operations with respect to the unitized land, and no part thereof shall be charged to the royalty owners. The matter of allocation and handling such costs and expenses is left to private arrangement between the Unit Operator and the other working interest owners. The Unit Operator shall render to the owners of unitized interests entitled thereto an account of the operations on unitized lands during the previous calendar month, shall pay in value or deliver to each party entitled thereto a proportionate and allocated share of the products produced hereunder, and account for all costs and benefits of operations under this agreement in conformity with operating agreements, leases or other independent contracts between the Unit Operator and the parties hereto either collectively or independently.

The development and operation of land subject to this agreement under the terms hereof shall be deemed full performance by Unit Operator of all obligations for such 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 any of them.

DRILLING
TO
DISCOVERY

8. Within six (6) months from the effective date of this agreement, Unit Operator shall begin operations in the unit area to drill an adequate test well at a location upon the Unit Area to be approved by the Supervisor, if such location is upon lands of the United States, and if upon State lands or patented lands, such location shall be approved by the Commission, and having commenced such operations shall continue such drilling diligently until said well shall have been drilled to a depth not less than 4000 feet unless oil or gas which can be produced in paying quantities is encountered in said well at a lesser depth or unless, at a lesser depth, an igneous or metamorphic formation or some other condition or formation is encountered which would render further drilling inadvisable or impracticable. If said first well, drilled as aforesaid, fails to encounter the unitized substances, Unit Operator or his successor shall thereupon commence within six (6) months after the completion of the former well, and drill, one at a time, additional wells until a productive well is

completed to the satisfaction of the Supervisor and Commissioner, or until it is reasonably proved that the unitized land is incapable of producing the unitized substances; provided that the Secretary and Commissioner may grant extension of time for the commencement of any such well; and provided further that nothing herein contained shall preclude any Operator from effectively resigning as provided in Section 5 hereof before any obligation to commence a second or subsequent well accrues hereunder, and be relieved of the obligation to commence such well. Upon failure to comply with the drilling requirements of this section the Secretary may, after reasonable notice, declare this unit agreement terminated.

PLAN OF FURTHER DEVELOPMENT AND OPERATION

9. Within sixty (60) days from completion of a well capable of producing the unitized substances as aforesaid, Unit Operator shall submit for the approval of the Supervisor, the Commissioner, and the Commission an acceptable plan of development for the Unit Area, which plan or a subsequent modification thereof, when so approved shall constitute the further drilling and operation obligations of Unit Operator. Reasonable diligence shall be exercised by the Unit Operator in complying with the drilling and producing obligations of the approved plan of development and said plan shall, subject to like approval be modified or supplemented in whole or in part from time to time as may be required to meet changed conditions or to protect the interests of all parties to this agreement and the further obligations of the Unit Operator shall be conformed thereto; provided that in no event shall the operator under any such plan, or otherwise, be under any obligation to drill any well to any formation that does not afford a fair possibility for encountering the unitized substances in paying quantities. Well drilling operations including well completions, producing practices and well abandonments, shall be in accordance with the Plan of Development and Operation. All operations thereunder shall be subject to the approval of the Supervisor as to wells on federal land and by the Commission for wells on state and private land.

During any period when it shall appear that an acceptable plan of development cannot be adopted because of the inability of the Supervisor, the Commissioner and the Commission to agree upon the terms thereof, the Unit Operator may, in accordance with the applicable regulations referred to in Section 1 hereof, proceed with reasonable diligence to drill other wells to determine the limits of production and to develop the productive portion of the unit area, and may and shall operate all productive wells in conformity with good operating practices, and the conservation principles of this agreement.

PARTICIPATION
AFTER
DISCOVERY

10. Upon completion of a productive well as aforesaid, Unit Operator shall submit for the approval of the Secretary, the Commissioner and the Commission a schedule of lands based on subdivisions of the public land survey, including all subdivisions one-half or more of the acreage of which is then regarded as reasonably proved to be productive of unitized substances in paying quantities; all land in said schedule, when approved, to constitute a participating area effective as of the date of first production. Said schedule shall set forth the percentage acreage interest of each owner of rights in the participating area thereby established. Such percentage acreage interest shall govern the allocation of production from and after the date the participating area becomes effective. With the approval of the Secretary, Commissioner and the Commission, a separate participating area may be established for any separate deposit of unitized substances or for any group of such deposits. The participating area or areas so established shall be enlarged

from time to time in like manner and subject to like approval whenever such action appears proper as a result of further drilling operations to include additional land then regarded as reasonably proved to be productive in paying quantities, and a new schedule of percentage acreage interests conformable thereto shall thereupon be fixed. The effective date of any such enlargement shall be the first of the month next following the month in which the well is completed which demonstrates the propriety of the enlargement, and any unitized substances theretofore produced from such well shall be allocated to the lease on which the well is drilled. A well shall be deemed completed when equipped and successfully tested for production, all of which shall be done diligently. No land once included in a participating area shall be excluded from such participating area on account of depletion of the unitized substances therefrom, or for any cause save loss of title. It is the intent of this Section that a participating area shall at all times represent as nearly as possible the area known or reasonably estimated to be productive in paying quantities; but, regardless of any increase in the participating area, nothing herein contained shall be construed as requiring any retroactive apportionment of any sums accrued or paid for production obtained prior to the effective date of increase of the participating area.

Until a participating area or areas has or have been established as herein-provided, or in the absence of agreement at any time between the Unit Operator, the Secretary, the Commissioner, and the Commission as to the proper boundaries of a participating area, the portion of all payments affected by such absence of agreement, except the royalties due the United States and the State of New Mexico, may be impounded in a mutually acceptable bank.

ALLOCATION OF
PRODUCTION --
ROYALTIES

11. Except as provided in Section 12, all unitized substances produced under this agreement, except any part thereof used for production and development purposes thereunder, or unavoidably lost, shall be deemed to be produced equally on an acreage basis from the several tracts of land of the participating area, and for the purpose of determining any benefits that accrue on an acreage basis as a result of operations under this agreement, each such tract shall have allocated to it such percentage of said production as its area bears to the said participating area. Unitized substances produced from any participating area and used in conformity with good operating practice under an approved plan of operation for repressuring or cycling in any participating area shall be free from any royalty charge. If Unit Operator introduces gas obtained from sources other than the unitized substances into any participating area hereunder for use in repressuring, stimulation of production or increasing ultimate recovery in conformity with a plan first approved by the Supervisor, the Commissioner and the Commission, a like amount of gas, with due allowance for loss or shrinkage thereof from any cause, may be drawn 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 operation or as may otherwise be consented to by the Supervisor, the Commissioner and the Commission, as conforming to good petroleum engineering practice, and provided further that such right of withdrawal shall terminate on the termination of the unit.

Except as otherwise herein provided, royalties shall be paid or delivered as provided by existing leases or contracts,

at the lease or contract rate upon the unitized substances allocated to the lease or tract. Settlement shall be made on or before the 20th day of each month for the unitized substances produced during the preceding calendar month. Such royalties shall be paid by the party operating the wells, but nothing herein shall operate to relieve the lessees, or any of them, of their obligation to pay rentals and royalties under the terms of their respective leases.

The right is hereby secured to the United States and the State of New Mexico under existing or future laws and regulations to elect to take their respective royalty shares in kind or value.

DEVELOPMENT
OR OPERATION
ON NON-PARTICI-
PATING LAND

12. Any party hereto other than Unit Operator owning or controlling a majority of the working interest rights in any unitized tract included in the non-participating area having thereon a regular well location in accordance with a well-spacing pattern established under an approved plan of development and operation may drill a well at such location at his own expense, unless within 90 days of receipt of notice from said party of his intention to drill the well Unit Operator elects and commences to drill such well in like manner as other wells are drilled by Unit Operator under this agreement.

If such well is not drilled by Unit Operator and results in production such that the land upon which it is situated may properly be included in a participating area, the party paying the cost of drilling such well shall be reimbursed one hundred fifty percent (150%) of the average cost of drilling similar producing wells in the unitized area, and the well

shall be operated pursuant to the terms of this agreement all as though the well had been drilled by the Unit Operator.

If any well drilled by Unit Operator or by an owner of working interest rights as provided in this section obtains production insufficient to justify inclusion in a participating area of the land on which said well is situated, said owner of working interests at his election, within 30 days of determination of such insufficiency, shall be wholly responsible for and may operate and produce the well at his sole expense and for his sole benefit. If such well was drilled by Unit Operator, said owner of working interests shall pay the Unit Operator a fair salvage-value price for the casing and other equipment left in the well.

Wells drilled at the sole expense of any party other than Unit Operator or produced at his sole expense and for his sole benefit shall be subject to the drilling and producing requirements of this agreement the same as though drilled or produced by Unit Operator; and royalties in amount or value of production from any such well as well as rental charges, if any, shall be paid as specified in the lease affected, unless otherwise authorized in writing by the lessor.

RENTAL AND
ROYALTY
PAYMENTS

13. The Unit Operator, on behalf of the respective lessees, shall pay, or at the election of the Secretary of the Interior as to Federal leases and at the election of the Commissioner as to State leases shall deliver in kind, all royalties and shall pay all rentals due the United States and the State of New Mexico respectively, on account of operations by Unit Operator on unitized land and shall distribute the cost

thereof to the appropriate parties conformably with their respective rental and royalty obligations; provided, that nothing herein contained shall operate to relieve the lessees, or any of them, of their obligation to pay rentals and royalties under the terms of their respective leases.

On request of any party, Unit Operator at its election shall pay other royalties on his behalf in accordance with a schedule furnished by him and charge the cost thereof to his account; provided, that Unit Operator shall incur thereby no responsibility to any royalty owner, but such responsibility shall be and remain an obligation of the parties requesting payment thereof.

GOVERNMENT
ROYALTIES
AND RENTALS

14. Royalty due the United States on account of unitized Federal land shall be computed as provided in the operating regulations and paid as to all unitized substances on the basis of the amounts thereof allocated to such land as provided herein at the rates specified in the respective Federal leases; provided, that, for leases on which the royalty rate depends on the daily average production per well, said average production for any participating area shall be determined in accordance with the operating regulations as though all the unitized land within the same participating area were a single consolidated lease, and provided that during the period of the national emergency declared by the President May 27, 1941, Proclamation No. 2487, 55 Stat. 1647, upon a determination by the Secretary of the Interior that a new oil or gas field or deposit has been discovered by virtue of a well or wells drilled under this agreement, the royalty on production from such new field or

deposit allocated to Federal land subject to this agreement at the time of such discovery shall, during the 10-year period following the date of such discovery, be paid in value or delivered in kind at a flat rate of 12½ per centum unless a lower rate is prescribed in the lease.

Rental for land of the United States subject to this agreement at the rates specified in the respective Federal leases shall be paid, suspended, or reduced as determined by the Secretary of the Interior, pursuant to applicable law and regulations.

CONSERVATION 15. Operations and production of unitized substances shall be conducted so as to provide for the most economical and efficient recovery of said substances to the end that maximum yield may be obtained without waste, as defined by or pursuant to State or Federal law or regulation; and shall be limited to such production as can be put to beneficial use with adequate realization of fuel and other values.

DRAINAGE 16. 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 the approval of the Secretary as to federal interests and of the Commissioner as to state interests, and at the election of the Unit Operator as to private interests, pay a fair and reasonable compensatory royalty, as determined by the Supervisor as to federal interests, and the Commissioner as to state interests subject to this agreement and by agreement between the Unit Operator and royalty owners, as to private interests.

LEASES AND CON-
TRACTS CONFORMED
TO AGREEMENT

17. The parties hereto or consenting hereto holding interests in leases embracing unitized land of the United States or of the State of New Mexico consent that the Secretary and Commissioner, respectively, may, and said Secretary and Commissioner, by their approval of this agreement, do hereby establish, alter, change or revoke the drilling, producing, and royalty requirements of such leases and the regulations in respect thereto, to conform said requirements to the provisions of this agreement, but otherwise the terms and conditions of said leases shall remain in full force and effect.

Owners and lessors of privately owned lands or of interests therein, including royalty interests, and including their heirs, executors, administrators, successors and assigns, by subscribing or consenting to this agreement, in person or by attorney in fact, do hereby severally agree that the respective leases covering their several lands or interests therein, may be and remain in force and effect for the respective primary terms therein stated, and so long thereafter as oil or gas may be produced therefrom in quantities sufficient to justify the cost of production; and also in the event that any of the land embraced in any such lease is during the primary term of such lease included within a participating area duly selected and approved under this unit plan of development, so that each owner becomes entitled to a share in the proceeds of production from the participating area, payable at the respective lease rates on the production allocated on an acreage basis to the portion of the lease within the participating area, then each such lease is hereby extended, without

further delay rental obligation, as to the land embraced therein which is so included in such participating area, for the full term of this unit plan as herein stated.

The Secretary, Commissioner and, except as otherwise provided in the preceding paragraph of this Section, all parties hereto further determine, agree and consent that during the effective life of this agreement, drilling and producing operations performed by the Unit Operator upon any unitized land will be accepted and deemed to be operations under and for the benefit of all unitized leases subject hereto; that no such lease shall be deemed to expire by reason of failure to produce wells situated on land therein embraced; that if a discovery of a valuable deposit of unitized substances is made anywhere on the unitized land, each such lease in effect on or after the date of such discovery shall be deemed to continue in force and effect as to land in the unit area, as long as unitized substances are produced anywhere on unitized land in paying quantity; that prior to such discovery of unitized substances anywhere on unitized land, the expiration date of each unitized lease embracing lands of the United States shall be the date prescribed in such lease subject to such preferential right to a new lease as may be authorized by law; and the suspension of all operations and production on the unitized land pursuant to direction or consent of said Secretary and Commissioner shall be deemed to constitute such suspension pursuant to such direction or consent with respect to each such lease, and that no lease shall expire on account of such suspension, as to land in the unit area.

The parties hereto or consenting hereto, holding interests in leases subject to this agreement embracing

lands other than those of the United States or of the State of New Mexico or holding interests in any other agreements that involve oil and gas rights in lands in the Unit Area, consent and agree, to the extent of their respective interests, that all such leases and agreements shall conform to the provisions of this agreement.

COVENANTS
RUN
WITH LAND

18. The covenants herein run with the land until this agreement terminates, and any grant, transfer or lease 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, lessee, or other successor in interest and as to federal land, shall be subject to approval by the Secretary, and as to lands of the State of New Mexico, shall be subject to the approval of the Commissioner. No transfer of any interest in and to any of the unitized lands or affecting the production therefrom shall be binding upon the Unit Operator until the first day of the next calendar month after the Unit Operator has been furnished with an original, photostatic or certified copy of the instrument of transfer.

EFFECTIVE
DATE
AND TERM

19. This agreement shall become effective on the first day of the calendar month next following approval by the Secretary of the Interior and the Commissioner, provided however that nothing herein shall be construed to waive or limit the right of the Commission to approve this agreement pursuant to applicable state law. Except as otherwise provided as to private leases by the second paragraph of Section 17 hereof, this agreement shall terminate on December 31, 1949, unless (1) such date of

expiration is extended by the Secretary and the Commissioner; or (2) a valuable discovery of unitized substances has been made on unitized land, in which case the agreement shall remain in effect as long as unitized substances can be produced from the unitized land in paying quantities; or (3) it is reasonably determined at an earlier date that the unitized land is incapable of commercial production of unitized substances, and, with approval of the Secretary and the Commissioner, notice of termination is given by Unit Operator to all parties in interest at their last known address; or (4) it is terminated as provided in sections 6 or 8 hereof; provided that this agreement may be terminated at any time by consent of the owners of 75 per centum, on an acreage basis, of the owners of working interests signatory hereto with the approval of the Secretary and the Commissioner.

RATE OF PROSPECT- .20. All production and the disposal
ING, DEVELOPMENT,
AND PRODUCTION thereof, shall be in conformity
with allocations, allotments and quotas made or fixed by
the Commission under any State Statute; provided however
that the Secretary is vested with authority pursuant to
the amendatory acts of Congress of March 4, 1931, and
August 21, 1935, supra, to alter or modify from time to
time in his discretion the rate of prospecting and develop-
ment, and, within the limits made or fixed by the Commission
to modify the quantity and rate of production under this
agreement, 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; provided further that no such alteration or modification shall be effective as to any lands of the State of New Mexico as to the rate of prospecting and development in the absence of the specific written approval thereof by the Commissioner and as to any lands of the State of New Mexico or privately owned lands subject to this agreement as to the quantity and rate of production in the absence of specific written approval thereof by the Commission.

UNAVOIDABLE
DELAY

21. All obligations under this agreement requiring Unit Operator to commence or continue drilling or to operate on or produce oil or gas from any of the lands covered by this agreement shall be suspended while, but only as long as, the Unit Operator is prevented from complying with such obligations, in whole or in part, by strikes, lockouts, 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 the matters herein enumerated or not.

CONFLICT
OF
SUPERVISION

22. 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 for delay or failure in whole or in part to comply therewith to the extent that said Unit Operator, Working Interest Owners or any of them are hindered, delayed, or prevented from complying therewith

by reason of failure of Unit Operator to obtain the joint consent of the representatives of the United States and the representatives of the State of New Mexico in and about any matter or thing concerning which it is required herein that such joint consent be obtained. The parties hereto and consenting hereto, including the Commission agree that all powers and authority vested in the Commission in and by any provisions of this contract are vested in the 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.

NON-DISCRIMINATION

23. The Unit Operator expressly agrees that in any and all operations conducted hereunder, it shall not discriminate against any employee or applicant for employment because of race, creed, color, or national origin and shall require an identical provision to be included in all subcontracts.

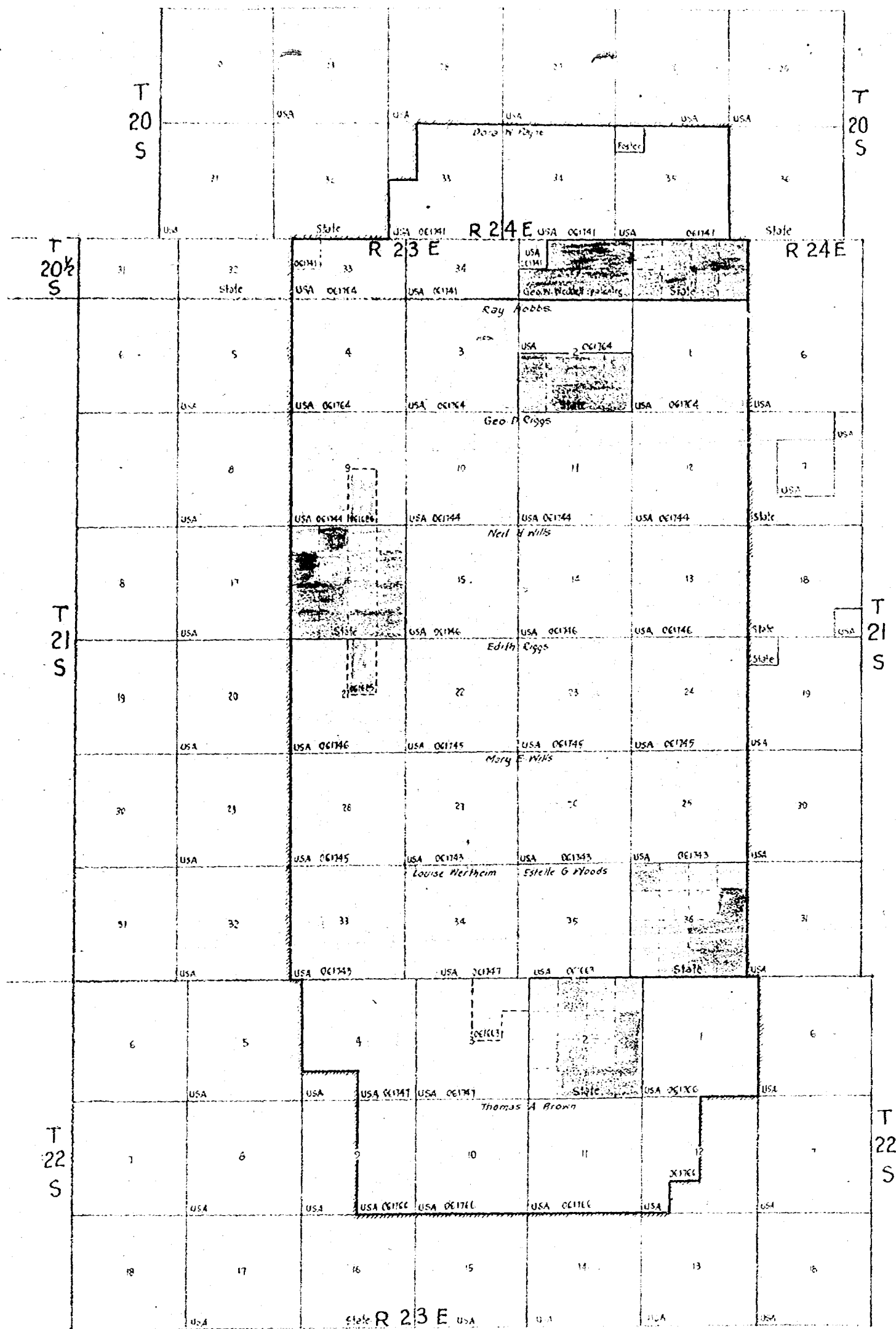
SUBSEQUENT JOINDER

24. Any person owning rights in the unitized substances within the unit area who does not commit such rights hereto prior to the effective date hereof, may thereafter become parties hereto by subscribing this agreement, and if such parties are working interest owners they shall also subscribe the operating contract and comply with all terms and conditions therein set forth.

COUNTERPARTS

25. 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.

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



CLASS	ACRES	%
Federal	20,121.76	87.34
State	2,619.71	11.37
Patented	298.82	1.29

ROCKY ARROYO UNIT

Eddy County, N. M.
June 1915

Scale: 1 mile
EXHIBIT "A"

UNIT AREA		Non Committed
Committed		
	Federal	
	State	
	Patented	

EXHIBIT "B"

Rocky Arroyo Unit Agreement, Eddy County,
New Mexico

Schedule Showing the Nature and Extent of Ownership
of oil and gas Rights in All Lands in the Unit Area

FEDERAL LANDS

<u>Description</u>	<u>No. of Acres</u>	<u>Las Cruces Serial No.</u>	<u>Ownership of Application or Oil and Gas Lease</u>
T-20S, R-24E. Section 33 E $\frac{1}{2}$ NW $\frac{1}{4}$, NE $\frac{1}{4}$, S $\frac{1}{2}$	560	061741	Dora W. Payne
Section 34 All	640	061741	Dora W. Payne
Section 35 NE $\frac{1}{4}$ NW $\frac{1}{4}$, S $\frac{1}{2}$ NW $\frac{1}{4}$, NE $\frac{1}{4}$ S $\frac{1}{2}$	600	061741	Dora W. Payne
T-20 $\frac{1}{2}$ S, R-23E Section 33 Lot 4	45.27	061741	Dora W. Payne
Balance of Fractional Section 33	296.37	061764	Ray Hobbs
Section 34 All a fractional Section	3 343.42	061741	Dora W. Payne
Section 35 Lot 4	46.10	061741	Dora W. Payne
T-21S, R-23E Section 1 All	639.48	061764	Ray Hobbs
Section 2 N $\frac{1}{2}$	320.28	061764	Ray Hobbs
Section 3 All	640.56	061764	Ray Hobbs
Section 4 All	641.04	061764	Ray Hobbs
Section 9 N $\frac{1}{2}$, SW $\frac{1}{4}$, E $\frac{1}{2}$ SE $\frac{1}{4}$	560	061744	George D. Riggs
W $\frac{1}{2}$ SE $\frac{1}{4}$	80	061686	James F. Warden
Section 10 All	640	061744	George D. Riggs

<u>Description</u> <u>T-21S., R-23E (Cont.)</u>	<u>No. of</u> <u>Acres</u>	<u>Las Cruces</u> <u>Serial No.</u>	<u>Ownership of Application</u> <u>or Oil and Gas Lease</u>
Section 11 All	640	061744	George D. Riggs
Section 12 All	640	061744	George D. Riggs
Section 13 All	640	061746	Neil H. Wills
Section 14	640	061746	Neil H. Wills
Section 15	640	061746	Neil H. Wills
Section 21 W $\frac{1}{2}$, E $\frac{1}{2}$ NE $\frac{1}{4}$, SE $\frac{1}{4}$	560	061746	Neil H. Wills
W $\frac{1}{2}$ NE $\frac{1}{4}$	80	061685	Smith, et al
Section 22 All	640	061745	Edith Riggs
Section 23 All	640	061745	Edith Riggs
Section 24 All	640	061745	Edith Riggs
Section 25 All	640	061743	Mary E. Wills
Section 26 All	640	061743	Mary E. Wills
Section 27 All	640	061743	Mary E. Wills
Section 28 All	640	061745	Edith Riggs
Section 33 All	640	061743	Mary E. Wills
Section 34 All	640	061747	Louise Wertheim
Section 35 All	640	061663	Estelle G. Woods
<u>T-22S., R.23E</u>			
Section 1 All	673.32	061766	Thomas A. Brown
Section 3 N $\frac{1}{2}$ NE $\frac{1}{4}$, SW $\frac{1}{4}$ NE $\frac{1}{4}$	138.19	061663	Estelle G. Woods
NW $\frac{1}{4}$, SE $\frac{1}{4}$ NE $\frac{1}{4}$, S $\frac{1}{2}$	538.97	061747	Louise Wertheim

<u>Description</u>	<u>No. of Acres</u>	<u>Las Cruces Serial No.</u>	<u>Ownership of Application or Oil and Gas Lease</u>
<u>T-22S, R-23E (Cont.)</u>			
Section 4 N $\frac{1}{2}$, N $\frac{1}{2}$ S $\frac{1}{2}$, S $\frac{1}{2}$ SE $\frac{1}{4}$	598.76	061747	Louise Wertheim
Section 9 E $\frac{1}{2}$	320	061766	Thomas A. Brown
Section 10 All	640	061766	Thomas A. Brown
Section 11 All	640	061766	Thomas A. Brown
Section 12 NW $\frac{1}{4}$, N $\frac{1}{2}$ SW $\frac{1}{4}$, SW $\frac{1}{4}$ SW $\frac{1}{4}$	280	061766	Thomas A. Brown

STATE LANDS

<u>Description</u>	<u>No. of Acres</u>	<u>State Lease No. and Exp. Date</u>	<u>Oil and Gas Lease Ownership</u>
<u>T-20$\frac{1}{2}$S, R.23E</u>			
Section 36 NW $\frac{1}{4}$ SW $\frac{1}{4}$	46.39	B-10255-11 Exp. 4-26-53	Atkins S. Hopkins Cambridge, Mass.
NE $\frac{1}{4}$ SW $\frac{1}{4}$	46.36	B-9093-1 Exp. 4-15-51	Maurice Schwartz El Paso, Texas
SW $\frac{1}{4}$ SW $\frac{1}{4}$	40	E-487 Exp. 8-10-55	Potash Co. of America Carlsbad, New Mexico
SE $\frac{1}{4}$ SW $\frac{1}{4}$	40	B-10061-5 Exp. 2-9-53	Alex Lunvall Cascade, Idaho
Lots 1 & 2	92.6 ⁵ ₄	E-487 Exp. 8-10-55	Potash Co. of America
SW $\frac{1}{4}$ SE $\frac{1}{4}$	40	B-10898-1 Exp. 1-7-54	W. W. Simon Superior, Arizona
SE $\frac{1}{4}$ SE $\frac{1}{4}$	40	B-10061-2 Exp. 2-9-53	John P. Basner Pontiac, Mich.
<u>T-21S, R-23E.</u>			
Section 2 NW $\frac{1}{4}$ SW $\frac{1}{4}$	40	B-8462-1 Exp. 1-5-50	Addie P. Reynolds Los Angeles, Calif.
NE $\frac{1}{4}$ SW $\frac{1}{4}$	40	B-8890-17 Exp. 11-25-50	W. L. Tedford Little Rock, Ark.
SW $\frac{1}{4}$ SW $\frac{1}{4}$	40	B-8225-4 Exp. 6-22-49	Olive F. Smith Holly Hill, Fla.
SE $\frac{1}{4}$ SW $\frac{1}{4}$, SE $\frac{1}{4}$ SE $\frac{1}{4}$	80	B-11554-Orig. Exp. 10-10-54	J. S. Harris Oklahoma City, Okla.

<u>Description</u>	<u>No. of Acres</u>	<u>State Lease No. and Exp. Date</u>	<u>Oil and Gas Lease Ownership</u>
T-21S, R-23E. (Cont.)			
Section 2			
NW $\frac{1}{4}$ SE $\frac{1}{4}$	40	B-8851-19 Exp. 10-22-50	W. L. Tedford Little Rock, Ark.
NE $\frac{1}{4}$ SE $\frac{1}{4}$	40	B-9425-28 Exp. 12-4-51	J. T. Boswell & S. J. Dooley, Kewanee, Ill.
SW $\frac{1}{4}$ SE $\frac{1}{4}$	40	E-487 Exp. 8-10-55	Potash Co. of America Carlsbad, New Mexico
Section 16			
NW $\frac{1}{4}$ NW $\frac{1}{4}$, NE $\frac{1}{4}$ NE $\frac{1}{4}$	80	B-10730-24 Exp. 10-15-53	M. C. Parrish, Jr. Artesia, New Mexico
NE $\frac{1}{4}$ NW $\frac{1}{4}$	40	B-10404-9 Exp. 6-22-53	Charles Curren Gonzales, Calif.
SW $\frac{1}{4}$ NW $\frac{1}{4}$, SW $\frac{1}{4}$ SW $\frac{1}{4}$	80	B-9141-1 Exp. 5-14-51	L. E. Stokes El Paso, Texas
SE $\frac{1}{4}$ NW $\frac{1}{4}$, NW $\frac{1}{4}$ SE $\frac{1}{4}$	80	B-10806-25 Exp. 11-15-53	A. B. Nicholson St. Louis, Mo.
NW $\frac{1}{4}$ NE $\frac{1}{4}$	40	B-8021-11 Exp. 2-15-49	Roy F. Wyatt Esparto, Calif.
SW $\frac{1}{4}$ NE $\frac{1}{4}$	40	B-10806-29 Exp. 11-15-53	Edward B. Hobart Greenfield, Mass.
SE $\frac{1}{4}$ NE $\frac{1}{4}$	40	B-10806-30 Exp. 11-15-53	J. R. West Kansas City, Kansas
N $\frac{1}{2}$ SW $\frac{1}{4}$	80	E-487 Exp. 8-10-55	Potash Co. of America
SE $\frac{1}{4}$ SW $\frac{1}{4}$	40	B-8852-2 Exp. 10-23-50	Leo Konsen El Paso, Texas
NE $\frac{1}{4}$ SE $\frac{1}{4}$, SW $\frac{1}{4}$ SE $\frac{1}{4}$ SE $\frac{1}{4}$ SE $\frac{1}{4}$	120	B-8978-1 Exp. 2-8-51	Maurice Schwartz El Paso, Texas
Section 36			
NW $\frac{1}{4}$ NW $\frac{1}{4}$	40	E-487 Exp. 8-10-55	Potash Co. of America Carlsbad, New Mexico
NE $\frac{1}{4}$ NW $\frac{1}{4}$	40	B-9663-20 Exp. 5-27-52	M. C. Parrish, Jr. Artesia, New Mexico
SW $\frac{1}{4}$ NW $\frac{1}{4}$	40	B-9377-14 Exp. 11-7-51	Joseph M. Ribas Syracuse, N.Y.
SE $\frac{1}{4}$ NW $\frac{1}{4}$	40	B-10730-24 Exp. 10-15-53	M. C. Parrish, Jr. Artesia, New Mexico
NW $\frac{1}{4}$ NE $\frac{1}{4}$	40	B-9542-Orig. Exp. 2-20-52	J. E. Farrell Ft. Worth, Texas

<u>Description</u>	<u>No. of Acres</u>	<u>State Lease No. and Exp. Date</u>	<u>Oil and Gas Lease Ownership</u>
<u>T-21S, R-23E. (Cont.)</u>			
Section 36			
NE $\frac{1}{4}$ NE $\frac{1}{4}$	40	B-10191-12 Exp. 3-31-53	M. C. Parrish, Jr. Artesia, New Mexico
SW $\frac{1}{4}$ NE $\frac{1}{4}$	40	B-11117-2 Exp. 3-4-54	Flora C. Hotchkis Los Angeles, Calif.
SE $\frac{1}{4}$ NE $\frac{1}{4}$, SW $\frac{1}{4}$ SE $\frac{1}{4}$	80	B-10899-4 Exp. 1-7-54	Harley Lorenson Sheffield, Ill.
N $\frac{1}{2}$ SW $\frac{1}{4}$	80	B-9663-11 Exp. 5-27-52	Grace Hoxsey Davenport, Iowa
S $\frac{1}{2}$ SW $\frac{1}{4}$	80	B-9663-11 Exp. 5-27-52	Grace Hoxsey Davenport, Iowa
NW $\frac{1}{4}$ SE $\frac{1}{4}$	40	B-8978-1 Exp. 2-8-51	Maurice Schwartz El Paso, Texas
NE $\frac{1}{4}$ SE $\frac{1}{4}$	40	E-487 Exp. 8-10-55	Potash Co. of America Carlsbad, New Mexico
SE $\frac{1}{4}$ SE $\frac{1}{4}$	40	B-9983-Orig. Exp. 12-29-52	Roy G. Barton Hobbs, New Mexico
<u>T-22S, R-23E</u>			
Section 2			
NW $\frac{1}{4}$ NW $\frac{1}{4}$	48.82	B-8515-20 Exp. 2-7-50	John Z. Broek Holland, Mich.
NE $\frac{1}{4}$ NW $\frac{1}{4}$	48.69 ⁵	B-8515-21 Exp. 2-7-50	Abbie Lenock Chicago, Ill.
S $\frac{1}{2}$ NW $\frac{1}{4}$	80	B-9413-12 Exp. 11-18-51	J. W. Struthers Colorado Springs, Colo.
NW $\frac{1}{4}$ NE $\frac{1}{4}$	48.49	B-8515-35 Exp. 2-7-50	Norma Weiss Los Angeles, Calif.
NE $\frac{1}{4}$ NE $\frac{1}{4}$	48.32	B-8515-34 Exp. 2-7-50	J. C. Litton Los Angeles, Calif.
SW $\frac{1}{4}$ NE $\frac{1}{4}$	40	B-9373-9 Exp. 10-30-51	J. T. Boswell & S. J. Dooley Kewanee, Ill.
SE $\frac{1}{4}$ NE $\frac{1}{4}$	40	B-8515-18 Exp. 2-7-50	Gertrude B. Markin Brecksville, Ohio
NW $\frac{1}{4}$ SW $\frac{1}{4}$	40	B-10895-5 Exp. 1-7-54	Charles S. Sejnoha Chicago, Ill.
NE $\frac{1}{4}$ SW $\frac{1}{4}$, SE $\frac{1}{4}$ SW $\frac{1}{4}$ SW $\frac{1}{4}$ SE $\frac{1}{4}$	120	B-9413-11 Exp. 11-18-51	Dr. W. B. Wise Sheffield, Ill.

<u>Description</u>	<u>No. of Acres</u>	<u>State Lease No. and Exp. Date</u>	<u>Oil and Gas Lease Ownership</u>
T-22S, R-23E. Section 2			
SW $\frac{1}{4}$ SW $\frac{1}{4}$	40	B-10044-2 Exp. 1-18-53	Robert E. McKee El Paso, Texas
NW $\frac{1}{4}$ SE $\frac{1}{4}$	40	B-8515-7 Exp. 2-7-50	Sophie K. & Henrietta B. Schenck, New Brunswick, N.J.
NE $\frac{1}{4}$ SE $\frac{1}{4}$	40	B-9425-14 Exp. 12-4-51	E. E. Bowman Alhambra, Calif.
SE $\frac{1}{4}$ SE $\frac{1}{4}$	40	B-9425-17 Exp. 12-4-51	Herman Flender Superior, Arizona

PRIVATELY OWNED LANDS

<u>Description</u>	<u>No. of Acres</u>	<u>Ownership</u>
T-20 $\frac{1}{2}$ S, R-23E. Section 35		
all except Lot 4	298.82	Uncertain, not leased.
Total	23,040. ⁸ ₁₆ acres	

(unsigned)
20S. 24E. Sec. 35. NW $\frac{1}{4}$ NW $\frac{1}{4}$ 40 acres

Sept. 13, 1945
Date

Sept 13 1945
Date

Sept 14, 1945
Date

Sept 14 1945
Date

Sept. 15, 1945
Date

Sept 15. 1945
Date

Sept - 17-1945
Date

Date

Date

Date

Date

Date

Estelle G. Woods.

Thomas A. Brewer

Maple Brewer

Herl H. Wills

Mary E. Wills

George D. Riggs

Edith Riggs

Louise Werthman

Agnes W. Payne

Bernice E. Payne

Ray Hobbs

Ida May Hobbs

STATE OF New Mexico
COUNTY OF Eddy

On this 15th day of September, 1945, before me personally appeared Neil H. Wills, Mary E. Wills, George D. Riggs, Edith Riggs, Dora W. Payne and Bernie E. Payne, 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.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal the day and year in this certificate above written.

Louise Wertheim
Notary Public

My commission expires

April 1, 1949

STATE OF NEW MEXICO
COUNTY OF Eddy

On this 15 day of September, 1945, before me personally appeared Louise Wertheim, to me known to be the person described in and who executed the foregoing instrument, and acknowledged that she executed the same as her free act and deed.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal the day and year in this certificate above written.

Norma T. Pover
Notary Public

My commission expires:

Aug 22, 1949

STATE OF New Mexico
COUNTY OF Eddy

On this 17th day of September, 1945, before me personally appeared Ray Hobbs and his wife Ida Mae Hobbs 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.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal the day and year in this certificate above written.

Louise Wertheim
Notary Public

My commission expires:

April 1, 1949

STATE OF New Mexico)
COUNTY OF Eddy)

On this 13 day of Sept., 1945, before me personally appeared Estelle H. Woods to me known to be the person described in and who executed the foregoing instrument, and acknowledged that She executed the same as her free act and deed.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal the day and year in this certificate above written.

My commission expires
June 29 - 1947

Elsie G. Gorman
Notary Public

STATE OF New Mexico)
COUNTY OF Chavez)

On this 13 day of September, 1945, before me personally appeared Thomas A. Brown & Mabelle Brown to me known to be the person described in and who executed the foregoing instrument, and acknowledged that they executed the same as them free act and deed.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal the day and year in this certificate above written.

My commission expires:
August 20, 1949

Mary D. Shera
Notary Public

STATE OF _____)
COUNTY OF _____)

On this _____ day of _____, 194____, before me personally appeared _____ to me known to be the person described in and who executed the foregoing instrument, and acknowledged that _____ he _____ executed the same as _____ free act and deed.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal the day and year in this certificate above written.

My commission expires: _____

Notary Public

ATTEST:

POTASH COMPANY OF AMERICA,

R. Austin

Assistant Secretary.

By

G. F. Coope

President.

New Mexico

STATE OF ~~COLORADO~~)

~~CITY AND~~ : SS.

COUNTY OF ~~DENVER~~)

Eddy

On this 15th day of November, 1945, before me appeared G. F. COOPE to me personally known, who, being by me duly sworn did say that he is the President of POTASH COMPANY OF AMERICA, a Colorado corporation, and that the seal affixed to said instrument is the corporate seal of said corporation, and that said instrument was signed and sealed on behalf of said corporation by authority of its Board of Directors, and said G. F. Coope acknowledged said instrument to be the free act and deed of said corporation.

Michael H. Lumpelt

WITNESS my hand and notarial seal this 15th day of November, 1945.

My commission expires March 30, 1947

Michael H. Lumpelt

Notary Public.

Sept 18 1945
Date

Sept 19 1945
Date

Oct. 25-1945
Date

Date

Date

Date

Date

Date

Date

Date

Date

Date

Leo Moman

Kirk Baker

Maxim Schwartz

STATE OF Texas)
COUNTY OF El Paso)

On this 18th day of Sept, 1945, before me
personally appeared Lee Monahan
to me known to be the person
described in and who executed the foregoing instrument, and
acknowledged that he executed the same as his
free act and deed.

IN WITNESS WHEREOF, I have hereunto set my hand and
affixed my official seal the day and year in this certificate
above written.

My commission expires
June 1 1947

W. E. Rutz
Notary Public

STATE OF Texas)
COUNTY OF El Paso)

On this 19th day of Sept, 1945, before me
personally appeared D. R. Stokes
to me known to be the person
described in and who executed the foregoing instrument, and
acknowledged that he executed the same as his
free act and deed.

IN WITNESS WHEREOF, I have hereunto set my hand and
affixed my official seal the day and year in this certificate
above written.

L. H. Marshall

STATE OF Texas)

COUNTY OF El Paso)

On this 18th day of Sept, 1945, before me personally appeared Joe Monahan

to me known to be the person described in and who executed the foregoing instrument, and acknowledged that he executed the same as his free act and deed.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal the day and year in this certificate above written.

My commission expires

June 1, 1947

W. E. Lutz
Notary Public

STATE OF Texas)

COUNTY OF El Paso)

On this 19th day of Sept, 1945, before me personally appeared D. K. Stokes

to me known to be the person described in and who executed the foregoing instrument, and acknowledged that he executed the same as his free act and deed.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal the day and year in this certificate above written.

My commission expires:

May 31, 1947

Sallie Moore
Notary Public

STATE OF Texas)

COUNTY OF El Paso)

On this 25 day of Sept, 1945, before me personally appeared Maurice Schwanitz

to me known to be the person described in and who executed the foregoing instrument, and acknowledged that he executed the same as his free act and deed.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal the day and year in this certificate above written.

My commission expires:

Oct 1, 1947

H. Potash
Notary Public

STATE OF _____

COUNTY OF _____

On this _____ day of _____, 194____, before me personally appeared _____

_____ to me known to be the person described in and who executed the foregoing instrument, and acknowledged that _____ he _____ executed the same as his _____ free act and deed.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal the day and year in this certificate above written.

Notary Public

My commission expires:

October 8 - 1945
Date

Date

Date

Date

Date

Date

Date

Date

Date

Date

Date

Date

E. A. B...

STATE OF California)
COUNTY OF Los Angeles)

On this 8th day of October, 1945, before me
personally appeared E. E. Bowman

to me known to be the person
described in and who executed the foregoing instrument, and
acknowledged that he executed the same as his
free act and deed.

IN WITNESS WHEREOF, I have hereunto set my hand and
affixed my official seal the day and year in this certificate
above written.

V. C. Jones

My commission expires

10/28/49

Notary Public

STATE OF _____)
COUNTY OF _____)

On this _____ day of _____, 194____, before me
personally appeared _____

to me known to be the person
described in and who executed the foregoing instrument, and
acknowledged that he executed the same as _____
free act and deed.

IN WITNESS WHEREOF, I have hereunto set my hand and
affixed my official seal the day and year in this certificate
above written.

My commission expires:

Notary Public

STATE OF _____)
COUNTY OF _____)

On this _____ day of _____, 194____, before me
personally appeared _____

to me known to be the person
described in and who executed the foregoing instrument, and
acknowledged that he executed the same as _____
free act and deed.

IN WITNESS WHEREOF, I have hereunto set my hand and
affixed my official seal the day and year in this certificate
above written.

My commission expires:

Notary Public

Date _____

Date _____

Date _____

Date

Date _____

Date

Date _____

Date _____

Date _____

Date

Charles Curren
Gonzales Cal

STATE OF California)
COUNTY OF Monterey)

On this 8th day of October, 1945, before me
personally appeared Charles Curren (Curren)
to me known to be the person
described in and who executed the foregoing instrument, and
acknowledged that he executed the same as his
free act and deed.

IN WITNESS WHEREOF, I have hereunto set my hand and
affixed my official seal the day and year in this certificate
above written.

My commission expires
August 1, 1946

Ron E. Lazier
Notary Public

STATE OF _____)
COUNTY OF _____)

On this _____ day of _____, 194____, before me
personally appeared _____
to me known to be the person
described in and who executed the foregoing instrument, and
acknowledged that he executed the same as _____
free act and deed.

IN WITNESS WHEREOF, I have hereunto set my hand and
affixed my official seal the day and year in this certificate
above written.

My commission expires: _____

Notary Public

STATE OF _____)
COUNTY OF _____)

On this _____ day of _____, 194____, before me
personally appeared _____
to me known to be the person
described in and who executed the foregoing instrument, and
acknowledged that he executed the same as _____
free act and deed.

IN WITNESS WHEREOF, I have hereunto set my hand and
affixed my official seal the day and year in this certificate
above written.

My commission expires: _____

Notary Public

OCT. 9 1945
Date

P. Lamm
(2. 1. 3)

Date

Date

Date

Date

Date

Date

Date

Date

Date

Date

Date

Handwriting practice lines (18 lines) on the right side of the page.

STATE OF Oklahoma
COUNTY OF Oklahoma

On this 9 day of October, 1945, before me personally appeared J. S. HARRIS to me known to be the person described in and who executed the foregoing instrument, and acknowledged that he executed the same as his free act and deed.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal the day and year in this certificate above written.

Paul Bagby
Notary Public

My commission expires
March 25, 1945

STATE OF _____
COUNTY OF _____

On this _____ day of _____, 194____, before me personally appeared _____ to me known to be the person described in and who executed the foregoing instrument, and acknowledged that he executed the same as _____ free act and deed.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal the day and year in this certificate above written.

My commission expires:

Notary Public

STATE OF _____
COUNTY OF _____

On this _____ day of _____, 194____, before me personally appeared _____ to me known to be the person described in and who executed the foregoing instrument, and acknowledged that he executed the same as _____ free act and deed.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal the day and year in this certificate above written.

My commission expires:

Notary Public

Oct. 2nd, 1945

Date

abbie Lenoock

1855 So. Kedzie Ave., Chicago,
Illinois

Date

Date

Date

Date

Date

Date

Date

Date

Date

Date

Date

STATE OF Illinois)
COUNTY OF Cook)

On this 2nd day of October, 1945; before me
personally appeared Abbie L. Lenz
to me known to be the person
described in and who executed the foregoing instrument, and
acknowledged that she executed the same as
free act and deed.

IN WITNESS WHEREOF, I have hereunto set my hand and
affixed my official seal the day and year in this certificate
above written.

My commission expires
May 15-1947.

Notary Public

JOHN H. EHARDT
Notary Public,
Cook County, Ill.
My Commission Expires
May 15, 1947.

STATE OF _____)
COUNTY OF _____)

On this _____ day of _____, 194____, before me
personally appeared _____
to me known to be the person
described in and who executed the foregoing instrument, and
acknowledged that _____ he _____ executed the same as _____
free act and deed.

IN WITNESS WHEREOF, I have hereunto set my hand and
affixed my official seal the day and year in this certificate
above written.

My commission expires: _____

Notary Public

STATE OF _____)
COUNTY OF _____)

On this _____ day of _____, 194____, before me
personally appeared _____
to me known to be the person
described in and who executed the foregoing instrument, and
acknowledged that _____ he _____ executed the same as _____
free act and deed.

IN WITNESS WHEREOF, I have hereunto set my hand and
affixed my official seal the day and year in this certificate
above written.

My commission expires: _____

Notary Public

October 16, 1945
Date

Date

Date

Date

Date

Date

Date

Date

Date

Date

Date

Date

Harley Lorenson
Wilma Lorenson

Blank lined area for writing.

STATE OF Illinois)
COUNTY OF Bureau)

On this 16th day of October, 1945, before me
personally appeared Harley Foreman and Walter Foreman
his wife to me known to be the person
described in and who executed the foregoing instrument, and
acknowledged that they executed the same as their
free act and deed.

IN WITNESS WHEREOF, I have hereunto set my hand and
affixed my official seal the day and year in this certificate
above written.

My commission expires

Jan 27, 1946.

Ruth Robinson
Notary Public

STATE OF _____)
COUNTY OF _____)

On this _____ day of _____, 194____, before me
personally appeared _____
_____ to me known to be the person
described in and who executed the foregoing instrument, and
acknowledged that _____ he _____ executed the same as _____
free act and deed.

IN WITNESS WHEREOF, I have hereunto set my hand and
affixed my official seal the day and year in this certificate
above written.

My commission expires:

Notary Public

STATE OF _____)
COUNTY OF _____)

On this _____ day of _____, 194____, before me
personally appeared _____
_____ to me known to be the person
described in and who executed the foregoing instrument, and
acknowledged that _____ he _____ executed the same as _____
free act and deed.

IN WITNESS WHEREOF, I have hereunto set my hand and
affixed my official seal the day and year in this certificate
above written

My commission expires:

Notary Public

Date _____

Date _____

Date _____

Date _____

Date _____

Date _____

Date _____

[illegible]

STATE OF Ohio
COUNTY OF Cuyahoga

On this 5th day of October, 1945, before me personally appeared Gertrude B. Markin described in and who executed the foregoing instrument, and acknowledged that she executed the same as her free act and deed.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal the day and year in this certificate above written.

J. M. Cook
Notary Public

My commission expires

J. M. COOK, Notary Public
My Commission Expires March 9, 1946

STATE OF _____
COUNTY OF _____

On this _____ day of _____, 194____, before me personally appeared _____ described in and who executed the foregoing instrument, and acknowledged that _____ he _____ executed the same as _____ free act and deed.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal the day and year in this certificate above written.

Notary Public

My commission expires:

STATE OF _____
COUNTY OF _____

On this _____ day of _____, 194____, before me personally appeared _____ described in and who executed the foregoing instrument, and acknowledged that _____ he _____ executed the same as _____ free act and deed.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal the day and year in this certificate above written.

Notary Public

My commission expires:

Oct 15th 1945
Date

Addie Porter Reynolds
Los Angeles.

Date

Date

Date

Date

Date

Date

Date

Date

Date

Date

Date

STATE OF California

COUNTY OF Los Angeles

On this 16th day of Oct, 1945, before me personally appeared Edith Porter Reynolds to me known to be the person described in and who executed the foregoing instrument, and acknowledged that she executed the same as her free act and deed.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal the day and year in this certificate above written.

My commission expires May 31 - 1948

Ruth N. Gitter
Notary Public

STATE OF _____)
COUNTY OF _____)

On this _____ day of _____, 194____, before me personally appeared _____ to me known to be the person described in and who executed the foregoing instrument, and acknowledged that _____ he _____ executed the same as _____ free act and deed.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal the day and year in this certificate above written.

My commission expires: _____ Notary Public

STATE OF _____)
COUNTY OF _____)

On this _____ day of _____, 194____, before me personally appeared _____ to me known to be the person described in and who executed the foregoing instrument, and acknowledged that _____ he _____ executed the same as _____ free act and deed.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal the day and year in this certificate above written.

My commission expires: _____ Notary Public

9/25/45
Date

10-3-45
Date

OCT 1 1945
Date

Date

Date

Date

Date

Date

Date

Date

Date

Date

W. W. Simon

Herman F. Clevor

Ray G. Barton

STATE OF Arizona
COUNTY OF Pinal

On this 25 day of September, 1945, before me personally appeared W. W. Simon to me known to be the person described in and who executed the foregoing instrument, and acknowledged that he executed the same as his free act and deed.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal the day and year in this certificate above written.

My commission expires
May 8 1948

Grace J. O'Donnell
Notary Public

STATE OF Arizona
COUNTY OF Pinal

On this 5 day of October, 1945, before me personally appeared Hermosillo to me known to be the person described in and who executed the foregoing instrument, and acknowledged that he executed the same as his free act and deed.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal the day and year in this certificate above written.

My commission expires:
May 8 1948

Grace J. O'Donnell
Notary Public

STATE OF New Mexico
COUNTY OF Lea

On this 10th day of October, 1945, before me personally appeared Roy L. Barton to me known to be the person described in and who executed the foregoing instrument, and acknowledged that he executed the same as his free act and deed.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal the day and year in this certificate above written.

My commission expires:
12-20-47

Alvin L. Childers
Notary Public

Date _____

Date

Date _____

Date _____

Date

Date _____

Date _____

Date _____

Date _____

Dat e

Date _____

Date _____

St. Louis Board of Public Utilities
Kansas City Kansas

STATE OF Kansas)

COUNTY OF Wyandotte)

On this 16th day of October, 1945, before me personally appeared J. R. West to me known to be the person described in and who executed the foregoing instrument, and acknowledged that he executed the same as free act and deed.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal the day and year in this certificate above written.

My commission expires
My Commission Expires June 24, 1946

C. C. Van Bostick
Notary Public

STATE OF _____)

COUNTY OF _____)

On this _____ day of _____, 194____, before me personally appeared _____ to me known to be the person described in and who executed the foregoing instrument, and acknowledged that he executed the same as _____ free act and deed.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal the day and year in this certificate above written.

My commission expires: _____

Notary Public

STATE OF _____)

COUNTY OF _____)

On this _____ day of _____, 194____, before me personally appeared _____ to me known to be the person described in and who executed the foregoing instrument, and acknowledged that he executed the same as _____ free act and deed.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal the day and year in this certificate above written.

My commission expires: _____

Notary Public

Nov 7 - 45
Date

Date

Date

Date

Date

Date

Date

Date

Date

Date

Date

Date

Dr W B Wise

STATE OF Illinois
COUNTY OF Bureau

On this 7 day of November, 1945, before me
personally appeared _____

_____ to me known to be the person
described in and who executed the foregoing instrument, and
acknowledged that _____ he _____ executed the same as his
free act and deed.

IN WITNESS WHEREOF, I have hereunto set my hand and
affixed my official seal the day and year in this certificate
above written.

[Signature]
Notary Public

My commission expires
Mar. 17, 1946

STATE OF _____
COUNTY OF _____

On this _____ day of _____, 194____, before me
personally appeared _____

_____ to me known to be the person
described in and who executed the foregoing instrument, and
acknowledged that _____ he _____ executed the same as _____
free act and deed.

IN WITNESS WHEREOF, I have hereunto set my hand and
affixed my official seal the day and year in this certificate
above written.

My commission expires:

Notary Public

STATE OF _____
COUNTY OF _____

On this _____ day of _____, 194____, before me
personally appeared _____

_____ to me known to be the person
described in and who executed the foregoing instrument, and
acknowledged that _____ he _____ executed the same as _____
free act and deed.

IN WITNESS WHEREOF, I have hereunto set my hand and
affixed my official seal the day and year in this certificate
above written.

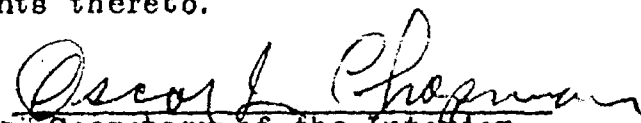
My commission expires:

Notary Public

APPROVAL - CERTIFICATION - DETERMINATION

Pursuant to the Statutory authority in the Secretary of the Interior, under the act approved March 4, 1931, 46 Stat. 1523, and the act approved August 21, 1935, 49 Stat. 674, amending the act approved February 25, 1920, 41 Stat. 437; 30 U. S. C. 226, 184 and 189, in order to secure the proper protection of the public interest, I, OSCAR L. CHAPMAN ^{Assistant} Secretary of the Interior, this 28th day of January, 1946 hereby take the following action:

- A. Approve the attached agreement for the development and operation of the Rooky Arroyo Unit Area.
- B. Determine and certify that the plan of development and operation contemplated in said agreement is for the purpose of more properly conserving oil or gas resources of said unit area and is necessary or advisable in the public interest.
- C. Certify that each and every lease heretofore or hereafter issued for lands of the United States subject to, or which may hereafter become subject to, said agreement shall be excepted in determining holdings or control under the provisions of any section of the Act of Congress approved February 25, 1920, and amendments thereto.


Assistant Secretary of the Interior

CONSERVATION BRANCH

CERTIFICATE OF APPROVAL BY COMMISSIONER OF
PUBLIC LANDS, STATE OF NEW MEXICO, OF UNIT
AGREEMENT FOR DEVELOPMENT AND OPERATION OF
ROCKY ARROYO UNIT AREA, EDDY COUNTY, NEW
MEXICO

There having been presented to the undersigned Commissioner of Public Lands of the State of New Mexico for examination, an agreement for the development and operation of the Rocky Arroyo Unit Area, Eddy County, New Mexico, dated September 13, 1945, in which the Potash Company of America is designated as Operator and which has been executed by various parties owning and holding oil and gas leases embracing lands within the unit area 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 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 interest of the State;

d. That the agreement provides for the unit operation of the field, for the allocation of production, and the sharing of proceeds from a part of the area covered by the agreement on an acreage basis as specified in the 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 Rocky Arroyo Unit Agreement, and subject to all the provisions of the aforesaid Chapter 88 of the Laws of the State of New Mexico, 1943.

Executed this 12th day of December, 1945.

John E. Miles
Commissioner of Public Lands of
the State of New Mexico

UNIT AGREEMENT

FOR THE DEVELOPMENT AND OPERATION OF THE ROCKY ARROYO UNIT AREA
EDDY COUNTY STATE OF NEW MEXICO

I. Sec. No. _____

This agreement, entered into, as of the _____ day of _____, 194_, by and between the parties subscribing or consenting hereto,

W-I-T-N-E-S-S-E-T-H:

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

WHEREAS, it is the purpose of the parties hereto to conserve natural resources, prevent avoidable waste, and secure other benefits obtainable through development and operation of the unit area subject to this agreement under and pursuant to the provisions of sections 17, 27, and 32 of the Act of Congress approved February 25, 1920, entitled "An Act to promote the mining of coal, phosphate, oil, oil shale, gas and sodium on the public domain, "41 Stat. 443, 448, 450, as amended or supplemented by the acts of March 4, 1931, 46 Stat. 1523, and August 21, 1935, 49 Stat. 676; 30 U.S.C. 226, 184 and 189;

WHEREAS, the Commissioner of Public Lands of the State of New Mexico is authorized by an Act of the Legislature (Chap. 88, Laws 1943) 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 (Chap. 72, Laws 1935) to approve this agreement and the conservation provisions hereof;

NOW, THEREFORE, for and in consideration of the premises and the promises hereinafter contained, the parties subscribing hereto and the parties consenting hereto agree as follows:

ENABLING ACT 1. The act of February 25, 1920, supra, as
AND
REGULATIONS amended, and all pertinent regulations heretofore and all pertinent and reasonable regulations hereafter issued thereunder, and not inconsistent with the provisions hereof, including operating regulations, are accepted and made a part of this agreement. Likewise, the Act of the Legislature of the State of New Mexico (Chap. 88, Laws 1943) and the Act of the Legislature of the State of New Mexico (Chap. 72, Laws 1935) and all pertinent regulations issued under the latter Act are hereby accepted and made part of this agreement.

DEFINITIONS 2. For all purposes of this agreement,
certain terms used herein are defined
as follows:

(a) "Secretary" shall mean the Secretary of the Interior of the United States and those persons or agencies duly authorized to act for and in his behalf.

(b) "Supervisor" shall mean the Oil and Gas Supervisor of the United States Geological Survey and those persons or agencies duly authorized to act for and in his behalf.

(c) "Commissioner" shall mean the Commissioner of Public Lands of the State of New Mexico.

(d) "Commission" shall mean the Oil Conservation Commission of the State of New Mexico and those persons duly authorized to act for and in its behalf.

UNIT AREA

3. The following described lands are hereby designated and recognized as constituting the unit area:

E $\frac{1}{2}$ NW $\frac{1}{4}$, NE $\frac{1}{4}$, and S $\frac{1}{2}$ Section 33, All of Sections 34 and 35, Township 20 South, Range 24 East, All of fractional Sections 33, 34, 35 and 36, Township 20 $\frac{1}{2}$ South, Range 23 East. All of Sections 1, 2, 3, 4, 9, 10, 11, 12, 13, 14, 15, 16, 21, 22, 23, 24, 25, 26, 27, 28, 33, 34, 35, and 36, Township 21 South, Range 23 East, All of Sections 1, 2, 3, N $\frac{1}{2}$ and N $\frac{1}{2}$ S $\frac{1}{2}$, S $\frac{1}{2}$ SE $\frac{1}{4}$ Section 4, E $\frac{1}{2}$ Section 9, All of Sections 10 and 11, SW $\frac{1}{4}$ SW $\frac{1}{4}$ and N $\frac{1}{2}$ SW $\frac{1}{4}$ and NW $\frac{1}{4}$ Section 12, Township 22 South, Range 23 East, N.M.P.M., Eddy County, New Mexico.

The Unit Operator, with the consent of a majority in interest of the Working Interest Owners, and subject to the approval of the Secretary, the Commissioner and the Commission, may enlarge the unit area to include other lands believed to be commercially productive of the unitized substances, or shall, subject to approval of the Secretary, the Commissioner and the Commission, diminish the unit area to exclude lands not in any participating area hereunder believed to be barren of the unitized substances.

Exhibit "A" attached hereto is a map on which is outlined the herein established Unit Area, together with the ownership of the land and leases in said Area. Exhibit "B" attached hereto is a schedule showing the nature and extent of ownership of oil and gas rights in all land in the Unit Area to which this unit agreement will become applicable by signature hereto, or to a counterpart hereof by the owners of such rights, and hereinafter referred to as "unitized lands". Said exhibits shall be revised by the Unit Operator whenever any change in the Unit Area or ownership of rights render such change necessary, and the revised exhibits shall be filed with the record of this agreement.

UNITIZED
SUBSTANCES

4. All oil, gas, natural gasoline, and associated fluid hydrocarbons producible from land subject to this agreement, in any and all sands or horizons, are unitized under the terms of this agreement and hereinafter are called "unitized substances".

UNIT OPERATOR 5. The Potash Company of America, a Colorado Corporation with offices at Carlsbad, New Mexico, is hereby designated as Unit Operator and by signature hereto commits to this agreement all interests in unitized substances vested in it as set forth in the schedule attached hereto marked Exhibit B and agrees and consents to accept the duties and obligations of Unit Operator to conduct and manage the operation of said unit area for the discovery and development of unitized substances as herein provided. Herein whenever reference is made to the Unit Operator, such reference is understood to mean the unit operator acting in that capacity and not as an owner of interests in unitized substances, and whenever reference is made to an owner of unitized substances, such a reference shall be understood to include any interests in unitized substances owned by the Unit Operator.

The Unit Operator shall have the right to resign at any time provided that any well drilled hereunder is placed in a satisfactory condition for suspension, or is satisfactorily abandoned under the Federal Oil and Gas Operating Regulations, if on Federal land, and under the laws of the State of New Mexico, and the rules and regulations of the Commission, if on state or patented land, but no Unit Operator shall be relieved from the duties and obligations of Unit Operator for a period of three (3) months after notice of intention to relinquish such duties and obligations has been served by him on all other parties hereto and the Secretary and the Commissioner, unless a new Unit Operator shall have been selected and approved and shall have taken over and assumed the duties and obligations of the Unit Operator prior to the date on

which relinquishment by or removal of Unit Operator becomes effective. The parties hereto or a duly qualified new Unit Operator may purchase at its then depreciated market value all or any part of the equipment, material, and appurtenances in or upon the land subject to this agreement, owned by the retiring Unit Operator, in its capacity as such operator, or make other arrangements satisfactory to the retiring Unit Operator for the use thereof, provided that no such equipment, material, or appurtenances so selected for purchase shall be removed prior to the effective date of Unit Operator's retirement. Any equipment, material, and appurtenances not so purchased or arranged for as to the use thereof within said time limit and not necessary for the preservation of wells may be removed by the retiring Unit Operator at any time within six (6) months after his relinquishment or removal becomes effective, but if not so removed shall become the joint property of the owners of working interest rights in land then subject to this agreement. The termination of any rights as Unit Operator under this agreement shall not of itself terminate any right, title, or interest which the Unit Operator may then have in the unitized substances, but the Unit Operator shall have the right and option in connection with its resignation to reassign or retransfer to its several predecessors in interest all of its interest in the lands and leases severally acquired from them, together with its working interest in the unitized substances, and upon such delivery be discharged from any future liability as a working interest owner hereunder; said reassignments to be effective as to said transferee thereupon, subject, however, to the approval of the Secretary as to transfers of interest in lands of the United States and subject, however, to the approval of the Commissioner as to interests in lands of the State of New Mexico.

SUCCESSOR
UNIT
OPERATOR

6. Whenever the Unit Operator shall discontinue or relinquish his rights as Unit Operator or shall fail to fulfill his duties and obligations as Unit Operator under this agreement, the owners of the Majority of the unitized working interests in the participating area on an acreage basis, or the owners of working interests according to their total acreage interest in the unit area until a participating area shall have been established, shall select a new Unit Operator, provided that if the majority of the working interests rights which are at any time qualified to vote in selecting a new Unit Operator are owned by one party to this agreement then a vote of at least two owners of working interests qualified to vote shall be required to select a new operator. Such selections shall not become effective until (a) a Unit Operator so selected shall agree and consent in writing to accept the duties and responsibilities of Unit Operator, and (b) the selection shall have been approved by the Secretary and the Commissioner. In the absence of the selection of an acceptable Unit Operator by the working interest owners within (6) months after notice by Unit Operator of intention to relinquish its rights as Unit Operator, this unit agreement shall automatically terminate.

The Unit Operator shall be subject to removal by the Working Interest Owners in the same manner as herein provided for the selection of a new Unit Operator.

RIGHTS AND
OBLIGATIONS
OF
UNIT OPERATOR

7. Except as hereinafter specified, the exclusive right, privilege and duty of exercising any and all rights of the parties

signatory hereto which are necessary or convenient for prospecting for, producing, storing, and disposing of the unitized substances are hereby vested in the Unit Operator and shall be exercised by said Unit Operator as provided in this agreement. Acceptable evidence of title to said rights shall be deposited with said Unit Operator and, together with this agreement, shall constitute and define said Unit Operator's rights, privileges, and obligations in the premises; provided, that nothing herein shall be construed to transfer title to any land, or to any operating agreement or leases, it being understood that under and pursuant to 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 and exclusively for the purposes herein specified. The Unit Operator shall pay all costs and expenses of operations with respect to the unitized land, and no part thereof shall be charged to the royalty owners. The matter of allocation and handling such costs and expenses is left to private arrangement between the Unit Operator and the other working interest owners. The Unit Operator shall render to the owners of unitized interests entitled thereto an account of the operations on unitized lands during the previous calendar month, shall pay in value or deliver to each party entitled thereto a proportionate and allocated share of the products produced hereunder, and account for all costs and benefits of operations under this agreement in conformity with operating agreements, leases or other independent contracts between the Unit Operator and the parties hereto either collectively or independently.

The development and operation of land subject to this agreement under the terms hereof shall be deemed full performance by Unit Operator of all obligations for such 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 any of them.

DRILLING
TO
DISCOVERY

8. Within six (6) months from the effective date of this agreement, Unit Operator shall begin operations in the unit area to drill an adequate test well at a location upon the Unit Area to be approved by the Supervisor, if such location is upon lands of the United States, and if upon State lands or patented lands, such location shall be approved by the Commission, and having commenced such operations shall continue such drilling diligently until said well shall have been drilled to a depth not less than 4000 feet unless oil or gas which can be produced in paying quantities is encountered in said well at a lesser depth or unless, at a lesser depth, an igneous or metamorphic formation or some other condition or formation is encountered which would render further drilling inadvisable or impracticable. If said first well, drilled as aforesaid, fails to encounter the unitized substances, Unit Operator or his successor shall thereupon commence within six (6) months after the completion of the former well, and drill, one at a time, additional wells until a productive well is

completed to the satisfaction of the Supervisor and Commissioner, or until it is reasonably proved that the unitized land is incapable of producing the unitized substances; provided that the Secretary and Commissioner may grant extension of time for the commencement of any such well; and provided further that nothing herein contained shall preclude any Operator from effectively resigning as provided in Section 5 hereof before any obligation to commence a second or subsequent well accrues hereunder, and be relieved of the obligation to commence such well. Upon failure to comply with the drilling requirements of this section the Secretary may, after reasonable notice, declare this unit agreement terminated.

PLAN OF FURTHER
DEVELOPMENT AND
OPERATION

9. Within sixty (60) days from completion of a well capable of producing the unitized substances as aforesaid, Unit Operator shall submit for the approval of the Supervisor, the Commissioner, and the Commission an acceptable plan of development for the Unit Area, which plan or a subsequent modification thereof, when so approved shall constitute the further drilling and operation obligations of Unit Operator. Reasonable diligence shall be exercised by the Unit Operator in complying with the drilling and producing obligations of the approved plan of development and said plan shall, subject to like approval be modified or supplemented in whole or in part from time to time as may be required to meet changed conditions or to protect the interests of all parties to this agreement and the further obligations of the Unit Operator shall be conformed thereto; provided that in no event shall the operator under any such plan, or otherwise, be under any obligation to drill any well to any formation that does not afford a fair possibility for encountering the unitized substances in paying quantities. Well drilling operations including well completions, producing practices and well abandonments, shall be in accordance with the Plan of Development and Operation. All operations thereunder shall be subject to the approval of the Supervisor as to wells on federal land and by the Commission for wells on state and private land.

During any period when it shall appear that an acceptable plan of development cannot be adopted because of the inability of the Supervisor, the Commissioner and the Commission to agree upon the terms thereof, the Unit Operator may, in accordance with the applicable regulations referred to in Section 1 hereof, proceed with reasonable diligence to drill other wells to determine the limits of production and to develop the productive portion of the unit area, and may and shall operate all productive wells in conformity with good operating practices, and the conservation principles of this agreement.

**PARTICIPATION
AFTER
DISCOVERY**

10. Upon completion of a productive well as aforesaid, Unit Operator shall submit for the approval of the Secretary, the Commissioner and the Commission a schedule of lands based on subdivisions of the public land survey, including all subdivisions one-half or more of the acreage of which is then regarded as reasonably proved to be productive of unitized substances in paying quantities; all land in said schedule, when approved, to constitute a participating area effective as of the date of first production. Said schedule shall set forth the percentage acreage interest of each owner of rights in the participating area thereby established. Such percentage acreage interest shall govern the allocation of production from and after the date the participating area becomes effective. With the approval of the Secretary, Commissioner and the Commission, a separate participating area may be established for any separate deposit of unitized substances or for any group of such deposits. The participating area or areas so established shall be enlarged

from time to time in like manner and subject to like approval whenever such action appears proper as a result of further drilling operations to include additional land then regarded as reasonably proved to be productive in paying quantities, and a new schedule of percentage acreage interests conformable thereto shall thereupon be fixed. The effective date of any such enlargement shall be the first of the month next following the month in which the well is completed which demonstrates the propriety of the enlargement, and any unitized substances theretofore produced from such well shall be allocated to the lease on which the well is drilled. A well shall be deemed completed when equipped and successfully tested for production, all of which shall be done diligently. No land once included in a participating area shall be excluded from such participating area on account of depletion of the unitized substances therefrom, or for any cause save loss of title. It is the intent of this Section that a participating area shall at all times represent as nearly as possible the area known or reasonably estimated to be productive in paying quantities; but, regardless of any increase in the participating area, nothing herein contained shall be construed as requiring any retroactive apportionment of any sums accrued or paid for production obtained prior to the effective date of increase of the participating area.

Until a participating area or areas has or have been established as herein-provided, or in the absence of agreement at any time between the Unit Operator, the Secretary, the Commissioner, and the Commission as to the proper boundaries of a participating area, the portion of all payments affected by such absence of agreement, except the royalties due the United States and the State of New Mexico, may be impounded in a mutually acceptable bank.

ALLOCATION OF
PRODUCTION --
ROYALTIES

11. Except as provided in Section 12, all unitized substances produced under this agreement, except any part thereof used for production and development purposes thereunder, or unavoidably lost, shall be deemed to be produced equally on an acreage basis from the several tracts of land of the participating area, and for the purpose of determining any benefits that accrue on an acreage basis as a result of operations under this agreement, each such tract shall have allocated to it such percentage of said production as its area bears to the said participating area. Unitized substances produced from any participating area and used in conformity with good operating practice under an approved plan of operation for repressuring or cycling in any participating area shall be free from any royalty charge. If Unit Operator introduces gas obtained from sources other than the unitized substances into any participating area hereunder for use in repressuring, stimulation of production or increasing ultimate recovery in conformity with a plan first approved by the Supervisor, the Commissioner and the Commission, a like amount of gas, with due allowance for loss or shrinkage thereof from any cause, may be drawn 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 operation or as may otherwise be consented to by the Supervisor, the Commissioner and the Commission, as conforming to good petroleum engineering practice, and provided further that such right of withdrawal shall terminate on the termination of the unit.

Except as otherwise herein provided, royalties shall be paid or delivered as provided by existing leases or contracts,

at the lease or contract rate upon the unitized substances allocated to the lease or tract. Settlement shall be made on or before the 20th day of each month for the unitized substances produced during the preceding calendar month. Such royalties shall be paid by the party operating the wells, but nothing herein shall operate to relieve the lessees, or any of them, of their obligation to pay rentals and royalties under the terms of their respective leases.

The right is hereby secured to the United States and the State of New Mexico under existing or future laws and regulations to elect to take their respective royalty shares in kind or value.

DEVELOPMENT
OR OPERATION
ON NON-PARTICI-
PATING LAND

12. Any party hereto other than Unit Operator owning or controlling a majority of the working interest rights in any unitized tract included in the non-participating area having thereon a regular well location in accordance with a well-spacing pattern established under an approved plan of development and operation may drill a well at such location at his own expense, unless within 90 days of receipt of notice from said party of his intention to drill the well Unit Operator elects and commences to drill such well in like manner as other wells are drilled by Unit Operator under this agreement.

If such well is not drilled by Unit Operator and results in production such that the land upon which it is situated may properly be included in a participating area, the party paying the cost of drilling such well shall be reimbursed one hundred fifty percent (150%) of the average cost of drilling similar producing wells in the unitized area, and the well

shall be operated pursuant to the terms of this agreement all as though the well had been drilled by the Unit Operator.

If any well drilled by Unit Operator or by an owner of working interest rights as provided in this section obtains production insufficient to justify inclusion in a participating area of the land on which said well is situated, said owner of working interests at his election, within 30 days of determination of such insufficiency, shall be wholly responsible for and may operate and produce the well at his sole expense and for his sole benefit. If such well was drilled by Unit Operator, said owner of working interests shall pay the Unit Operator a fair salvage-value price for the casing and other equipment left in the well.

Wells drilled at the sole expense of any party other than Unit Operator or produced at his sole expense and for his sole benefit shall be subject to the drilling and producing requirements of this agreement the same as though drilled or produced by Unit Operator; and royalties in amount or value of production from any such well as well as rental charges, if any, shall be paid as specified in the lease affected, unless otherwise authorized in writing by the lessor.

RENTAL AND
ROYALTY
PAYMENTS

13. The Unit Operator, on behalf of the respective lessees, shall pay, or at the election of the Secretary of the Interior as to Federal leases and at the election of the Commissioner as to State leases shall deliver in kind, all royalties and shall pay all rentals due the United States and the State of New Mexico respectively, on account of operations by Unit Operator on unitized land and shall distribute the cost

thereof to the appropriate parties conformably with their respective rental and royalty obligations; provided, that nothing herein contained shall operate to relieve the lessees, or any of them, of their obligation to pay rentals and royalties under the terms of their respective leases.

On request of any party, Unit Operator at its election shall pay other royalties on his behalf in accordance with a schedule furnished by him and charge the cost thereof to his account; provided, that Unit Operator shall incur thereby no responsibility to any royalty owner, but such responsibility shall be and remain an obligation of the parties requesting payment thereof.

GOVERNMENT
ROYALTIES
AND RENTALS

14. Royalty due the United States on account of unitized Federal land shall be computed as provided in the operating regulations and paid as to all unitized substances on the basis of the amounts thereof allocated to such land as provided herein at the rates specified in the respective Federal leases; provided, that, for leases on which the royalty rate depends on the daily average production per well, said average production for any participating area shall be determined in accordance with the operating regulations as though all the unitized land within the same participating area were a single consolidated lease, and provided that during the period of the national emergency declared by the President May 27, 1941, Proclamation No. 2487, 55 Stat. 1647, upon a determination by the Secretary of the Interior that a new oil or gas field or deposit has been discovered by virtue of a well or wells drilled under this agreement, the royalty on production from such new field or

deposit allocated to Federal land subject to this agreement at the time of such discovery shall, during the 10-year period following the date of such discovery, be paid in value or delivered in kind at a flat rate of $12\frac{1}{2}$ per centum unless a lower rate is prescribed in the lease.

Rental for land of the United States subject to this agreement at the rates specified in the respective Federal leases shall be paid, suspended, or reduced as determined by the Secretary of the Interior, pursuant to applicable law and regulations.

CONSERVATION 15. Operations and production of unitized substances shall be conducted so as to provide for the most economical and efficient recovery of said substances to the end that maximum yield may be obtained without waste, as defined by or pursuant to State or Federal law or regulation; and shall be limited to such production as can be put to beneficial use with adequate realization of fuel and other values.

DRAINAGE 16. 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 the approval of the Secretary as to federal interests and of the Commissioner as to state interests, and at the election of the Unit Operator as to private interests, pay a fair and reasonable compensatory royalty, as determined by the Supervisor as to federal interests, and the Commissioner as to state interests subject to this agreement and by agreement between the Unit Operator and royalty owners, as to private interests.

LEASES AND CON-
TRACTS CONFORMED
TO AGREEMENT

17. The parties hereto or consenting hereto holding interests in leases embracing unitized land of the United States or of the State of New Mexico consent that the Secretary and Commissioner, respectively, may, and said Secretary and Commissioner, by their approval of this agreement, do hereby establish, alter, change or revoke the drilling, producing, and royalty requirements of such leases and the regulations in respect thereto, to conform said requirements to the provisions of this agreement, but otherwise the terms and conditions of said leases shall remain in full force and effect.

Owners and lessors of privately owned lands or of interests therein, including royalty interests, and including their heirs, executors, administrators, successors and assigns, by subscribing or consenting to this agreement, in person or by attorney in fact, do hereby severally agree that the respective leases covering their several lands or interests therein, may be and remain in force and effect for the respective primary terms therein stated, and so long thereafter as oil or gas may be produced therefrom in quantities sufficient to justify the cost of production; and also in the event that any of the land embraced in any such lease is during the primary term of such lease included within a participating area duly selected and approved under this unit plan of development, so that each owner becomes entitled to a share in the proceeds of production from the participating area, payable at the respective lease rates on the production allocated on an acreage basis to the portion of the lease within the participating area, then each such lease is hereby extended, without

further delay rental obligation, as to the land embraced therein which is so included in such participating area, for the full term of this unit plan as herein stated.

The Secretary, Commissioner and, except as otherwise provided in the preceding paragraph of this Section, all parties hereto further determine, agree and consent that during the effective life of this agreement, drilling and producing operations performed by the Unit Operator upon any unitized land will be accepted and deemed to be operations under and for the benefit of all unitized leases subject hereto; that no such lease shall be deemed to expire by reason of failure to produce wells situated on land therein embraced; that if a discovery of a valuable deposit of unitized substances is made anywhere on the unitized land, each such lease in effect on or after the date of such discovery shall be deemed to continue in force and effect as to land in the unit area, as long as unitized substances are produced anywhere on unitized land in paying quantity; that prior to such discovery of unitized substances anywhere on unitized land, the expiration date of each unitized lease embracing lands of the United States shall be the date prescribed in such lease subject to such preferential right to a new lease as may be authorized by law; and the suspension of all operations and production on the unitized land pursuant to direction or consent of said Secretary and Commissioner shall be deemed to constitute such suspension pursuant to such direction or consent with respect to each such lease, and that no lease shall expire on account of such suspension, as to land in the unit area.

The parties hereto or consenting hereto, holding interests in leases subject to this agreement embracing

lands other than those of the United States or of the State of New Mexico or holding interests in any other agreements that involve oil and gas rights in lands in the Unit Area, consent and agree, to the extent of their respective interests, that all such leases and agreements shall conform to the provisions of this agreement.

COVENANTS
RUN
WITH LAND

18. The covenants herein run with the land until this agreement terminates, and any grant, transfer or lease 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, lessee, or other successor in interest and as to federal land, shall be subject to approval by the Secretary, and as to lands of the State of New Mexico, shall be subject to the approval of the Commissioner. No transfer of any interest in and to any of the unitized lands or affecting the production therefrom shall be binding upon the Unit Operator until the first day of the next calendar month after the Unit Operator has been furnished with an original, photostatic or certified copy of the instrument of transfer.

EFFECTIVE
DATE
AND TERM

19. This agreement shall become effective on the first day of the calendar month next following approval by the Secretary of the Interior and the Commissioner, provided however that nothing herein shall be construed to waive or limit the right of the Commission to approve this agreement pursuant to applicable state law. Except as otherwise provided as to private leases by the second paragraph of Section 17 hereof, this agreement shall terminate on December 31, 1949, unless (1) such date of

expiration is extended by the Secretary and the Commissioner;
or (2) a valuable discovery of unitized substances has
been made on unitized land, in which case the agreement
shall remain in effect as long as unitized substances can
be produced from the unitized land in paying quantities;
or (3) it is reasonably determined at an earlier date that
the unitized land is incapable of commercial production
of unitized substances, and, with approval of the Secretary
and the Commissioner, notice of termination is given by
Unit Operator to all parties in interest at their last
known address; or (4) it is terminated as provided in
sections 6 or 8 hereof; provided that this agreement may
be terminated at any time by consent of the owners of 75
per centum, on an acreage basis, of the owners of working
interests signatory hereto with the approval of the Secretary
and the Commissioner.

RATE OF PROSPECT- ,20. All production and the disposal
ING, DEVELOPMENT,
AND PRODUCTION thereof, shall be in conformity
with allocations, allotments and quotas made or fixed by
the Commission under any State Statute; provided however
that the Secretary is vested with authority pursuant to
the amendatory acts of Congress of March 4, 1931, and
August 21, 1935, supra, to alter or modify from time to
time in his discretion the rate of prospecting and develop-
ment, and, within the limits made or fixed by the Commission
to modify the quantity and rate of production under this
agreement, 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; provided further that no such alteration or modification shall be effective as to any lands of the State of New Mexico as to the rate of prospecting and development in the absence of the specific written approval thereof by the Commissioner and as to any lands of the State of New Mexico or privately owned lands subject to this agreement as to the quantity and rate of production in the absence of specific written approval thereof by the Commission.

UNAVOIDABLE
DELAY

21. All obligations under this agreement requiring Unit Operator to commence or continue drilling or to operate on or produce oil or gas from any of the lands covered by this agreement shall be suspended while, but only as long as, the Unit Operator is prevented from complying with such obligations, in whole or in part, by strikes, lockouts, 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 the matters herein enumerated or not.

CONFLICT
OF
SUPERVISION

22. 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 for delay or failure in whole or in part to comply therewith to the extent that said Unit Operator, Working Interest Owners or any of them are hindered, delayed, or prevented from complying therewith

by reason of failure of Unit Operator to obtain the joint consent of the representatives of the United States and the representatives of the State of New Mexico in and about any matter or thing concerning which it is required herein that such joint consent be obtained. The parties hereto and consenting hereto, including the Commission agree that all powers and authority vested in the Commission in and by any provisions of this contract are vested in the 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.

NON-DISCRIMINATION

23. The Unit Operator expressly agrees that in any and all operations conducted hereunder, it shall not discriminate against any employee or applicant for employment because of race, creed, color, or national origin and shall require an identical provision to be included in all subcontracts.

SUBSEQUENT JOINDER

24. Any person owning rights in the unitized substances within the unit area who does not commit such rights hereto prior to the effective date hereof, may thereafter become parties hereto by subscribing this agreement, and if such parties are working interest owners they shall also subscribe the operating contract and comply with all terms and conditions therein set forth.

COUNTERPARTS

25. 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.

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

Date	
Date	
Date	
Date	
Date	
Date	
Date	
Date	
Date	
Date	
Date	
Date	

APPROVAL - CERTIFICATION - DETERMINATION

Pursuant to the Statutory authority in the Secretary of the Interior, under the act approved March 4, 1931, 46 Stat. 1523, and the act approved August 21, 1935, 49 Stat. 674, amending the act approved February 25, 1920, 41 Stat. 437; 30 U. S. C. 226, 184 and 189, in order to secure the proper protection of the public interest, I, _____, Secretary of the Interior, this ____ day of _____, 19__, hereby take the following action:

- A. Approve the attached agreement for the development and operation of the Rocky Arroyo Unit Area.
- B. Determine and certify that the plan of development and operation contemplated in said agreement is for the purpose of more properly conserving oil or gas resources of said unit area and is necessary or advisable in the public interest.
- C. Certify that each and every lease heretofore or hereafter issued for lands of the United States subject to, or which may hereafter become subject to, said agreement shall be excepted in determining holdings or control under the provisions of any section of the Act of Congress approved February 25, 1920, and amendments thereto.

Secretary of the Interior

STATE OF _____)
COUNTY OF _____)

On this _____ day of _____, 194____, before me personally appeared _____ to me known to be the person described in and who executed the foregoing instrument, and acknowledged that _____ he _____ executed the same as _____ free act and deed.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal the day and year in this certificate above written.

My commission expires _____

Notary Public

STATE OF _____)
COUNTY OF _____)

On this _____ day of _____, 194____, before me personally appeared _____ to me known to be the person described in and who executed the foregoing instrument, and acknowledged that _____ he _____ executed the same as _____ free act and deed.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal the day and year in this certificate above written.

My commission expires: _____

Notary Public

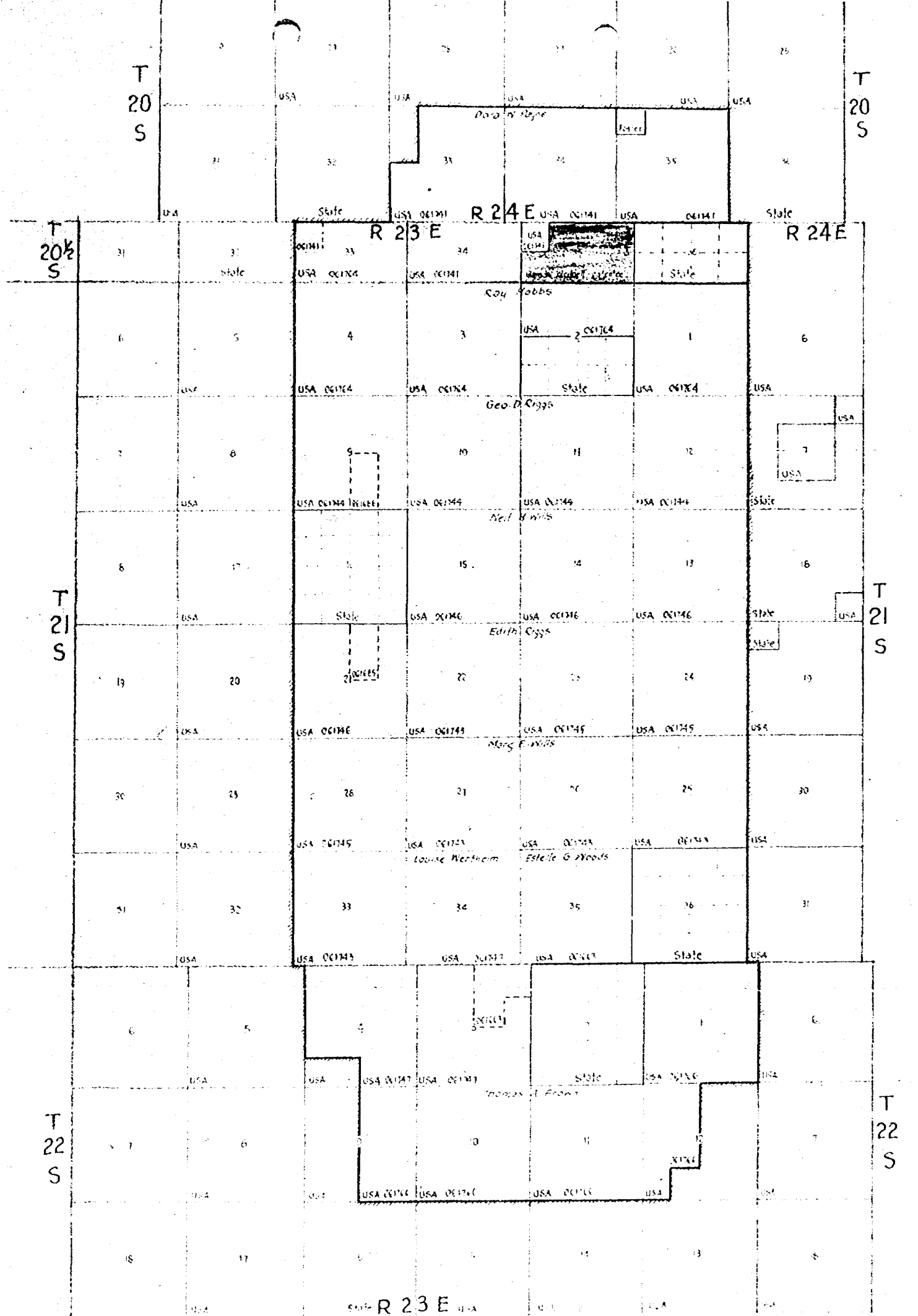
STATE OF _____)
COUNTY OF _____)

On this _____ day of _____, 194____, before me personally appeared _____ to me known to be the person described in and who executed the foregoing instrument, and acknowledged that _____ he _____ executed the same as _____ free act and deed.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal the day and year in this certificate above written.

My commission expires: _____

Notary Public



CLASS	ACRES	%
Federal	20,121.76	87.34
State	2,649.71	11.37
Patented	298.82	1.29

ROCKY ARROYO DATA

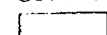
53d County, N. M.
June 1, 1916

1 inch = 1 mile
LEGEND "A"

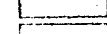
UNIT AREA

Committed

Non
Committed



Federal



State



Patented

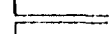
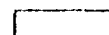


EXHIBIT "B"

Rocky Arroyo Unit Agreement, Eddy County,
New Mexico

Schedule Showing the Nature and Extent of Ownership
of oil and gas Rights in All Lands in the Unit Area

FEDERAL LANDS

<u>Description</u>	<u>No. of Acres</u>	<u>Las Cruces Serial No.</u>	<u>Ownership of Application or Oil and Gas Lease</u>
<u>T-20S, R-24E.</u>			
Section 33			
E $\frac{1}{2}$ NW $\frac{1}{4}$, NE $\frac{1}{4}$, S $\frac{1}{2}$	560	061741	Dora W. Payne
Section 34			
All	640	061741	Dora W. Payne
Section 35			
NE $\frac{1}{4}$ NW $\frac{1}{4}$, S $\frac{1}{2}$ NW $\frac{1}{4}$, NE $\frac{1}{4}$ S $\frac{1}{2}$	600	061741	Dora W. Payne
<u>T-20$\frac{1}{2}$S, R-23E</u>			
Section 33			
Lot 4	45.27	061741	Dora W. Payne
Balance of Fractional Section 33	296.37	061764	Ray Hobbs
Section 34			
All a fractional Section	343.42	061741	Dora W. Payne
Section 35			
Lot 4	46.10	061741	Dora W. Payne
<u>T-21S, R-23E</u>			
Section 1			
All	639.48	061764	Ray Hobbs
Section 2			
N $\frac{1}{2}$	320.28	061764	Ray Hobbs
Section 3			
All	640.56	061764	Ray Hobbs
Section 4			
All	641.04	061764	Ray Hobbs
Section 9			
N $\frac{1}{2}$, SW $\frac{1}{4}$, E $\frac{1}{2}$ SE $\frac{1}{4}$	560	061744	George D. Riggs
W $\frac{1}{2}$ SE $\frac{1}{4}$	80	061686	James F. Warden
Section 10			
All	640	061744	George D. Riggs

<u>Description</u>	<u>No. of Acres</u>	<u>Las Cruces Serial No.</u>	<u>Ownership of Application or Oil and Gas Lease</u>
<u>T-21S, R-23E (Cont.)</u>			
Section 11 All	640	061744	George D. Riggs
Section 12 All	640	061744	George D. Riggs
Section 13 All	640	061746	Neil H. Wills
Section 14	640	061746	Neil H. Wills
Section 15	640	061746	Neil H. Wills
Section 21 W $\frac{1}{2}$, E $\frac{1}{2}$ NE $\frac{1}{4}$, SE $\frac{1}{4}$	560	061746	Neil H. Wills
W $\frac{1}{2}$ NE $\frac{1}{4}$	80	061685	Smith, et al
Section 22 All	640	061745	Edith Riggs
Section 23 All	640	061745	Edith Riggs
Section 24 All	640	061745	Edith Riggs
Section 25 All	640	061743	Mary E. Wills
Section 26 All	640	061743	Mary E. Wills
Section 27 All	640	061743	Mary E. Wills
Section 28 All	640	061745	Edith Riggs
Section 33 All	640	061743	Mary E. Wills
Section 34 All	640	061747	Louise Wertheim
Section 35 All	640	061663	Estelle G. Woods
<u>T-22S., R.23E</u>			
Section 1 All	673.32	061766	Thomas A. Brown
Section 3 N $\frac{1}{2}$ NE $\frac{1}{4}$, SW $\frac{1}{4}$ NE $\frac{1}{4}$	138.19	061663	Estelle G. Woods
NW $\frac{1}{4}$, SE $\frac{1}{4}$ NE $\frac{1}{4}$, S $\frac{1}{2}$	538.97	061747	Louise Wertheim

<u>Description</u>	<u>No. of Acres</u>	<u>Las Cruces Serial No.</u>	<u>Ownership of Application or Oil and Gas Lease</u>
<u>T-22S, R-23E (Cont.)</u>			
Section 4 N $\frac{1}{2}$, N $\frac{1}{2}$ S $\frac{1}{2}$, S $\frac{1}{2}$ SE $\frac{1}{4}$	598.76	061747	Louise Wertheim
Section 9 E $\frac{1}{2}$	320	061766	Thomas A. Brown
Section 10 All	640	061766	Thomas A. Brown
Section 11 All	640	061766	Thomas A. Brown
Section 12 NW $\frac{1}{4}$, N $\frac{1}{2}$ SW $\frac{1}{4}$, SW $\frac{1}{4}$ SW $\frac{1}{4}$	280	061766	Thomas A. Brown

STATE LANDS

<u>Description</u>	<u>No. of Acres</u>	<u>State Lease No. and Exp. Date</u>	<u>Oil and Gas Lease Ownership</u>
<u>T-20$\frac{1}{2}$S, R.23E</u>			
Section 36 NW $\frac{1}{4}$ SW $\frac{1}{4}$	46.39	B-10255-11 Exp. 4-26-53	Atkins S. Hopkins Cambridge, Mass.
NE $\frac{1}{4}$ SW $\frac{1}{4}$	46.36	B-9093-1 Exp. 4-15-51	Maurice Schwartz El Paso, Texas
SW $\frac{1}{4}$ SW $\frac{1}{4}$	40	E-487 Exp. 8-10-55	Potash Co. of America Carlsbad, New Mexico
SE $\frac{1}{4}$ SW $\frac{1}{4}$	40	B-10061-5 Exp. 2-9-53	Alex Lunvall Cascade, Idaho
Lots 1 & 2	92.64	E-487 Exp. 8-10-55	Potash Co. of America
SW $\frac{1}{4}$ SE $\frac{1}{4}$	40	B-10898-1 Exp. 1-7-54	W. W. Simon Superior, Arizona
SE $\frac{1}{4}$ SE $\frac{1}{4}$	40	B-10061-2 Exp. 2-9-53	John P. Basner Pontiac, Mich.
<u>T-21S, R-23E.</u>			
Section 2 NW $\frac{1}{4}$ SW $\frac{1}{4}$	40	B-8462-1 Exp. 1-5-50	Addie P. Reynolds Los Angeles, Calif.
NE $\frac{1}{4}$ SW $\frac{1}{4}$	40	B-8890-17 Exp. 11-25-50	W. L. Tedford Little Rock, Ark.
SW $\frac{1}{4}$ SW $\frac{1}{4}$	40	B-8225-4 Exp. 6-22-49	Olive F. Smith Holly Hill, Fla.
SE $\frac{1}{4}$ SW $\frac{1}{4}$, SE $\frac{1}{4}$ SE $\frac{1}{4}$	80	B-11554-Orig. Exp. 10-10-54	J. S. Harris Oklahoma City, Okla.

<u>Description</u>	<u>No. of Acres</u>	<u>State Lease No. and Exp. Date</u>	<u>Oil and Gas Lease Ownership</u>
<u>T-21S, R-23E. (Cont.)</u>			
<u>Section 2</u>			
NW $\frac{1}{4}$ SE $\frac{1}{4}$	40	B-8851-19 Exp. 10-22-50	W. L. Tedford Little Rock, Ark.
NE $\frac{1}{4}$ SE $\frac{1}{4}$	40	B-9425-28 Exp. 12-4-51	J. T. Boswell & S. J. Dooley, Kewanee, Ill.
SW $\frac{1}{4}$ SE $\frac{1}{4}$	40	E-487 Exp. 8-10-55	Potash Co. of America Carlsbad, New Mexico
<u>Section 16</u>			
NW $\frac{1}{4}$ NW $\frac{1}{4}$, NE $\frac{1}{4}$ NE $\frac{1}{4}$	80	B-10730-24 Exp. 10-15-53	M. C. Parrish, Jr. Artesia, New Mexico
NE $\frac{1}{4}$ NW $\frac{1}{4}$	40	B-10404-9 Exp. 6-22-53	Charles Curren Gonzales, Calif.
SW $\frac{1}{4}$ NW $\frac{1}{4}$, SW $\frac{1}{4}$ SW $\frac{1}{4}$	80	B-9141-1 Exp. 5-14-51	L. E. Stokes El Paso, Texas
SE $\frac{1}{4}$ NW $\frac{1}{4}$, NW $\frac{1}{4}$ SE $\frac{1}{4}$	80	B-10806-25 Exp. 11-15-53	A. B. Nicholson St. Louis, Mo.
NW $\frac{1}{4}$ NE $\frac{1}{4}$	40	B-8021-11 Exp. 2-15-49	Roy F. Wyatt Esparto, Calif.
SW $\frac{1}{4}$ NE $\frac{1}{4}$	40	B-10806-29 Exp. 11-15-53	Edward B. Hobart Greenfield, Mass.
SE $\frac{1}{4}$ NE $\frac{1}{4}$	40	B-10806-30 Exp. 11-15-53	J. R. West Kansas City, Kansas
N $\frac{1}{2}$ SW $\frac{1}{4}$	80	E-487 Exp. 8-10-55	Potash Co. of America
SE $\frac{1}{4}$ SW $\frac{1}{4}$	40	B-8852-2 Exp. 10-23-50	Leo Konsen El Paso, Texas
NE $\frac{1}{4}$ SE $\frac{1}{4}$, SW $\frac{1}{4}$ SE $\frac{1}{4}$ SE $\frac{1}{4}$ SE $\frac{1}{4}$	120	B-8978-1 Exp. 2-8-51	Maurice Schwartz El Paso, Texas
<u>Section 36</u>			
NW $\frac{1}{4}$ NW $\frac{1}{4}$	40	E-487 Exp. 8-10-55	Potash Co. of America Carlsbad, New Mexico
NE $\frac{1}{4}$ NW $\frac{1}{4}$	40	B-9663-20 Exp. 5-27-52	M. C. Parrish, Jr. Artesia, New Mexico
SW $\frac{1}{4}$ NW $\frac{1}{4}$	40	B-9377-14 Exp. 11-7-51	Joseph M. Ribas Syracuse, N.Y.
SE $\frac{1}{4}$ NW $\frac{1}{4}$	40	B-10730-24 Exp. 10-15-53	M. C. Parrish, Jr. Artesia, New Mexico
NW $\frac{1}{4}$ NE $\frac{1}{4}$	40	B-9542-Orig. Exp. 2-20-52	J. E. Farrell Ft. Worth, Texas

<u>Description</u>	<u>No. of Acres</u>	<u>State Lease No. and Exp. Date</u>	<u>Oil and Gas Lease Ownership</u>
<u>T-21S, R-23E. (Cont.)</u>			
Section 36			
NE $\frac{1}{4}$ NE $\frac{1}{4}$	40	B-10191-12 Exp. 3-31-53	M. C. Parrish, Jr. Artesia, New Mexico
SW $\frac{1}{4}$ NE $\frac{1}{4}$	40	B-11117-2 Exp. 3-4-54	Flora C. Hotchkis Los Angeles, Calif.
SE $\frac{1}{4}$ NE $\frac{1}{4}$, SW $\frac{1}{4}$ SE $\frac{1}{4}$	80	B-10899-4 Exp. 1-7-54	Harley Lorenson Sheffield, Ill.
N $\frac{1}{2}$ SW $\frac{1}{4}$	80	B-9663-11 Exp. 5-27-52	Grace Hoxsey Davenport, Iowa
S $\frac{1}{2}$ SW $\frac{1}{4}$	80	B-9663-11 Exp. 5-27-52	Grace Hoxsey Davenport, Iowa
NW $\frac{1}{4}$ SE $\frac{1}{4}$	40	B-8978-1 Exp. 2-8-51	Maurice Schwartz El Paso, Texas
NE $\frac{1}{4}$ SE $\frac{1}{4}$	40	E-487 Exp. 8-10-55	Potash Co. of America Carlsbad, New Mexico
SE $\frac{1}{4}$ SE $\frac{1}{4}$	40	B-9983-Orig. Exp. 12-29-52	Roy G. Barton Hobbs, New Mexico
<u>T-22S, R-23E</u>			
Section 2			
NW $\frac{1}{4}$ NW $\frac{1}{4}$	48.82	B-8515-20 Exp. 2-7-50	John Z. Broek Holland, Mich.
NE $\frac{1}{4}$ NW $\frac{1}{4}$	48.69	B-8515-21 Exp. 2-7-50	Abbie Lenock Chicago, Ill.
S $\frac{1}{2}$ NW $\frac{1}{4}$	80	B-9413-12 Exp. 11-18-51	J. W. Struthers Colorado Springs, Colo.
NW $\frac{1}{4}$ NE $\frac{1}{4}$	48.49	B-8515-35 Exp. 2-7-50	Norma Weiss Los Angeles, Calif.
NE $\frac{1}{4}$ NE $\frac{1}{4}$	48.32	B-8515-34 Exp. 2-7-50	J. C. Litton Los Angeles, Calif.
SW $\frac{1}{4}$ NE $\frac{1}{4}$	40	B-9373-9 Exp. 10-30-51	J. T. Boswell & S. J. Dooley Kewanee, Ill.
SE $\frac{1}{4}$ NE $\frac{1}{4}$	40	B-8515-18 Exp. 2-7-50	Gertrude B. Markin Brecksville, Ohio
NW $\frac{1}{4}$ SW $\frac{1}{4}$	40	B-10895-5 Exp. 1-7-54	Charles S. Sejnoha Chicago, Ill.
NE $\frac{1}{4}$ SW $\frac{1}{4}$, SE $\frac{1}{4}$ SW $\frac{1}{4}$ SW $\frac{1}{4}$ SE $\frac{1}{4}$	120	B-9413-11 Exp. 11-18-51	Dr. W. B. Wise Sheffield, Ill.

<u>Description</u>	<u>No. of Acres</u>	<u>State Lease No. and Exp. Date</u>	<u>Oil and Gas Lease Ownership</u>
T-22S, R-23E. Section 2			
SW $\frac{1}{4}$ SW $\frac{1}{4}$	40	B-10044-2 Exp. 1-18-53	Robert E. McKee El Paso, Texas
NW $\frac{1}{4}$ SE $\frac{1}{4}$	40	B-8515-7 Exp. 2-7-50	Sophie K. & Henrietta B. Schenck, New Brunswick, N.J.
NE $\frac{1}{4}$ SE $\frac{1}{4}$	40	B-9425-14 Exp. 12-4-51	E. E. Bowman Alhambra, Calif.
SE $\frac{1}{4}$ SE $\frac{1}{4}$	40	B-9425-17 Exp. 12-4-51	Herman Flender Superior, Arizona

PRIVATELY OWNED LANDS

<u>Description</u>	<u>No. of Acres</u>	<u>Ownership</u>
T-20 $\frac{1}{2}$ S, R-23E. Section 35		
all except Lot 4	298.82	Uncertain, not leased.
Total	23,040.29 acres	

NEW MEXICO OIL CONSERVATION COMMISSION
SANTA FE, NEW MEXICO

APPLICATION FOR APPROVAL OF ROCKY ARROYO
UNIT AGREEMENT, EDDY COUNTY, NEW MEXICO.

New Mexico Oil Conservation Commission
Santa Fe
New Mexico

Comes the undersigned, the Potash Company of America, and files herewith three copies of a unit agreement for the development and operation of the Rocky Arroyo Unit Area, Eddy County, New Mexico, and hereby makes application for the approval of said agreement by the New Mexico Oil Conservation Commission, and in support thereof shows:

1. That the unit area designated in said agreement "covers 23,040.29 acres situated in Townships 20, 20½, 21 and 22 South, Ranges 23 and 24 East, Eddy County, New Mexico," of which 21,121.76 acres or 87.34% is land of the United States, 2,619.71 acres or 11.37% is land of the State of New Mexico, and 298.82 acres or 1.29% is patented or privately owned land.

That said agreement has been executed by a substantial number of the owners of oil and gas leases embracing the lands included in said unit area.

2. That the area described in said unit agreement has heretofore been designated by the Director of the United States Geological Survey as one suitable and proper for unitization, and all of the lands embraced therein are believed to be situated upon the same geological structure.

3. That said agreement has heretofore been approved as to form thereof by the United States Geological Survey and the Commissioner of Public Lands of the State of New Mexico, and after an opportunity has been given for all of the owners of oil and gas leases embracing lands of the State of New Mexico which are within the unit area, to join in the agreement, the same will be promptly submitted for the approval of the Secretary of the Interior and the Commissioner of Public Lands of the State of New Mexico, and it is anticipated that such approval will be obtained by the time a hearing is had on this application.

4. That the undersigned is designated as the Unit Operator in said agreement, and the Unit Operator is given authority under the terms of said agreement to carry on operations necessary for the exploration and development of the unit area for oil and gas, subject to the regulations of the Secretary of the Interior and the Commissioner of Public Lands of the State of New Mexico, and the New Mexico Oil Conservation Commission; that under the terms of the agreement a well is to be commenced at a location upon some part of the lands embraced in the unit area within six months of the effective date of the agreement and drilled with due diligence to a depth of not less than 4,000 feet, unless oil or gas is found at a lesser depth, or unless at a lesser depth, an igneous or metamorphic formation or some other condition or formation is encountered which would render further drilling inadvisable or impracticable.

5. All operations carried on pursuant to the unit agreement are to be conducted so as to provide for the most economical and efficient recovery of oil and gas to the end

that the maximum yield may be obtained from the field or area if oil or gas should be discovered in paying quantities, and the production is to be limited to such production as can be put to beneficial use with adequate realization of fuel and other values and it is believed that such agreement will be in the interest of conservation of oil and gas and the prevention of waste as contemplated by the oil conservation statutes of the State of New Mexico.

WHEREFORE, the undersigned applicant respectfully requests that a public hearing be held on the matter of the approval of said unit agreement as provided by the statutes of the State of New Mexico and the regulations of the New Mexico Oil Conservation Commission, and that upon said hearing said unit agreement be approved by the New Mexico Oil Conservation Commission.

Respectfully submitted,
POTASH COMPANY OF AMERICA

By

G. I. Coops

ATTEST:

A. Davis
Asst. Secretary