

CASE 3382: Application of UNION
OIL CO. for approval of the NORTH
HUAPACHE UNIT AGREEMENT.

ASE No.

3382

Application,
Transcripts,

All Exhibits

ETC.

HANAGAN & HANAGAN
J. P. White Building
Roswell, New Mexico
May 15, 1967

56
AM 8
17 MAY '67

3382

United States Geological Survey
P. O. Box 1857
Roswell, New Mexico

New Mexico State Land Office
State Land Office Bldg.
Santa Fe, New Mexico

New Mexico Oil Conservation Commission
State Land Office Bldg.
Santa Fe, New Mexico

RE: North Huapache Unit
No. 14-08-0001-8755
Eddy County, New Mexico

Dear Sirs:

We enclose herewith executed in counterparts Requests for Termination of the North Huapache Unit. All of the Working Interest owners have signed this request except John Younger, who only owns one 40-acre tract or .089286% of the Unit Area.

Yours very truly,

HANAGAN & HANAGAN

By Robert G. Hanagan
Robert G. Hanagan, Partner

and

By Hugh E. Hanagan
Hugh E. Hanagan, Partner

Enclosure

State of New Mexico



Commissioner of Public Lands

GUYTON B. HAYS
COMMISSIONER



May 19, 1967

P. O. BOX 1148
SANTA FE, NEW MEXICO

Hanagan & Hanagan
P. O. Box 1737
Roswell, New Mexico

Re: North Huapache Unit
Eddy County, New Mexico
TERMINATION

ATTENTION: Mr. Robert G. Hanagan

Gentlemen:

The Commissioner of Public Lands has received by your letter of May 15, 1967, approval by over 75 per centum, on an acreage basis, of the Working Interest Owners to the Termination of the North Huapache Unit, Eddy County, New Mexico, as provided for under Section 20 of the Unit Agreement.

The Commissioner approves this termination and we assume the Effective date to be May 15, 1967, please advise us if this is not correct. Our approval is subject to like approval by the United States Geological Survey and the Oil Conservation Commission.

We are enclosing three (3) Certificates of Termination and also a set of ratifications surplus to our needs.

Very truly yours,

GUYTON B. HAYS
COMMISSIONER OF PUBLIC LANDS

BY:
Ted Bilberry, Director
Oil and Gas Department

GBH/TB/EL/s
encls.

Hanagan & Hanagan
May 19, 1967
Page 2.

cc: United States Geological Survey
Roswell, New Mexico

New Mexico Oil Conservation Commission
Santa Fe, New Mexico

BEFORE THE OIL CONSERVATION COMMISSION
OF THE STATE OF NEW MEXICO

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

CASE No. 3382
Order No. R-3048

APPLICATION OF UNION OIL COMPANY
OF CALIFORNIA FOR APPROVAL OF THE
NORTH HUAPACHE UNIT AGREEMENT,
EDDY COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on March 9, 1966,
at Santa Fe, New Mexico, before Examiner Elvis A. Utz.

NOW, on this 16th day of March, 1966, the Commission, a
quorum being present, having considered the testimony, the record,
and the recommendations of the Examiner, and being fully advised
in the premises,

FINDS:

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

(2) That the applicant, Union Oil Company of California,
seeks approval of the North Huapache Unit Agreement covering
4480 acres, more or less, of State and Federal lands described
as follows:

EDDY COUNTY, NEW MEXICO
TOWNSHIP 22 SOUTH, RANGE 22 EAST, NMPM
Sections 13 and 14: All
Sections 23 and 24: All
Sections 25 and 26: All
Section 36: All

(3) That approval of the proposed unit agreement should
promote the prevention of waste and the protection of correlative
rights within the unit area.

-2-

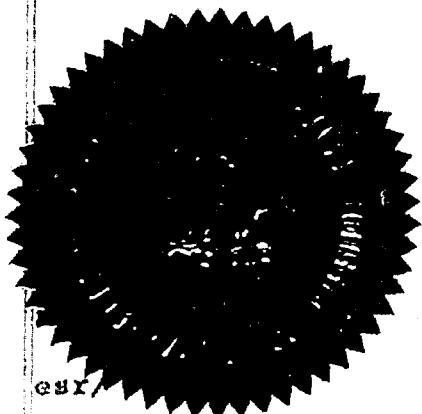
CASE No. 3382

Order No. R-3048

IT IS THEREFORE ORDERED:

- (1) That the North Huapache Unit Agreement is hereby approved.
- (2) That the plan contained in said unit agreement for the development and operation of the unit area is hereby approved in principle as a proper conservation measure; provided, however, that notwithstanding any of the provisions contained in said unit agreement, this approval shall not be considered as waiving or relinquishing, in any manner, any right, duty, or obligation which is now, or may hereafter be, vested in the Commission to supervise and control operations for the exploration and development of any lands committed to the unit and production of oil or gas therefrom.
- (3) That the unit operator shall file with the Commission an executed original or executed counterpart of the unit agreement within 30 days after the effective date thereof; that in the event of subsequent joinder by any party or expansion or contraction of the unit area, the unit operator shall file with the Commission within 30 days thereafter counterparts of the unit agreement reflecting the subscription of those interests having joined or ratified.
- (4) That this order shall become effective upon the approval of said unit agreement by the Commissioner of Public Lands for the State of New Mexico and the Director of the United States Geological Survey; that this order shall terminate ipso facto upon the termination of said unit agreement; and that the last unit operator shall notify the Commission immediately in writing of such termination.
- (5) That jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

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



STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

Jack M. Campbell
JACK M. CAMPBELL, Chairman

Guyton B. Hays
GUYTON B. HAYS, Member

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

State of New Mexico
Oil Conservation Commission



P. O. BOX 2088
SANTA FE

Other _____

BEFORE THE OIL CONSERVATION COMMISSION

STATE OF NEW MEXICO

APPLICATION FOR APPROVAL OF
NORTH HUAPACHE UNIT
EDDY COUNTY, NEW MEXICO

MAIN OFFICE CCC

MAR 7 AM 8 17

Case 3382

New Mexico Oil Conservation Commission
Box 2088
Santa Fe, New Mexico

Comes Union Oil Company of California, acting by and through the undersigned attorneys, Hinkle, Bondurant & Christy, of Roswell, New Mexico and files herewith three copies of the proposed Unit Agreement for the Development and Operation of the North Huapache Unit Area, Eddy County, New Mexico, and hereby makes application for approval of said Unit Agreement as provided by law and the rules and regulations of the New Mexico Oil Conservation Commission, and in support thereof shows:

1. That the proposed unit area covered by said Unit Agreement embraces 4480 acres situated in Eddy County, New Mexico, more particularly described as follows:

Township 22 South, Range 22 East, N.M.P.M.

Section 13 - All	Section 25 - All
Section 14 - All	Section 26 - All
Section 23 - All	Section 36 - All
Section 24 - All	

containing 4480 acres, more or less

That of the above described lands 3,520 acres, or 78.571%, are Federal lands and 960 acres, or 21.429%, are lands of the State of New Mexico.

2. That applicant is informed and believes and upon such information and belief states that the proposed unit area covers all, or substantially all, of the geological structure or geophysical anomaly involved and that in the event of a discovery of oil or gas

thereon said unit agreement will permit the producing area to be developed and operated in the interest of conservation and the prevention of waste of unitized substances.

3. It is contemplated that applicant will be the operator of the unit area and it is proposed to drill a test well pursuant to the terms of said unit agreement on the unit area to a depth sufficient to test the Cisco Canyon formation, but not to exceed a depth of 8,200 feet.

4. Applicant believes that in the event oil or gas in paying quantities is discovered on the lands within the unit area, the pool or field can be developed more economically and efficiently under the terms of said unit agreement to the end that the maximum recovery of unitized substances will be obtained and that said agreement is in the interest of conservation and the prevention of waste as contemplated by the New Mexico Oil Conservation Commission, statutes and regulations.

5. That upon an order being entered by the Oil Conservation Commission approving said unit agreement and after approval thereof by the Commissioner of Public Lands, an approved copy of said unit agreement will be filed with the New Mexico Oil Conservation Commission.

WHEREFORE, the undersigned applicant respectfully requests that a hearing be held before an examiner on the matter of the approval of said unit agreement, and upon said hearing the same be approved by the New Mexico Oil Conservation Commission as being in the interest of conservation and prevention of waste.

HINKLE, BONDURANT & CHRISTY

Clarence E. Hinkle
Attorneys for Applicant

Box 10

Roswell, New Mexico

UNION OIL COMPANY OF CALIFORNIA

By

Clarence E. Hinkle
Attorney

Case 3382

Heard 8-9-66

Rec. 3-9-66

1. Grant. Union of Cal. the approval
of their H. Huapacho unit agree-
ment.

Thurs 10/1/66

CLARENCE E. HINKLE
W. E. BONDURANT, JR.
S. B. CHRISTY IV
LEWIS C. COX, JR.
PAUL W. CATON, JR.
CONRAD E. COFFIELD
HAROLD L. HENSLEY, JR.
MICHAEL R. WALLER

LAW OFFICES
HINKLE, BONDURANT & CHRISTY
HINKLE BUILDING
ROSWELL, NEW MEXICO

OF COUNSEL: HIRAM M. DOW
TELEPHONE 622-6510
AREA CODE 505
POST OFFICE BOX 10

March 4, 1966

Oil Conservation Commission
Box 2088
Santa Fe, New Mexico

Re: Examiner's hearing March 9
Case No. 3382

Gentlemen:

We enclose 3 copies of Application of Union Oil Company of California for approval of the North Huapache Unit, which is set for hearing as indicated above. We also enclose 3 copies of the form of unit agreement which is to be used.

Yours sincerely,

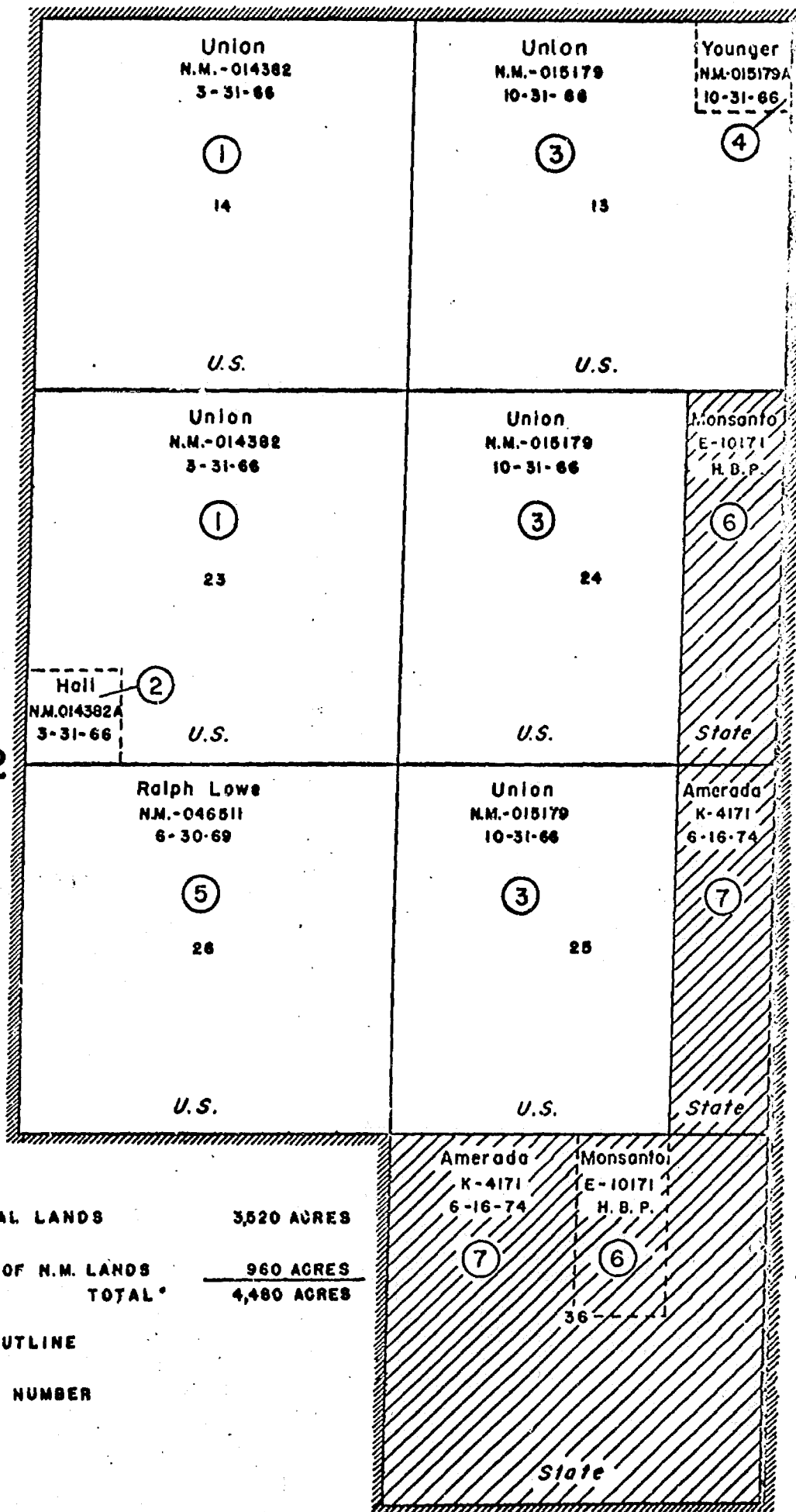
HINKLE, BONDURANT & CHRISTY

By Clarence E. Hinkle
CS.

CEH:cs
Enc.
cc: Union Oil Company of California

R. 22 E.

T.
22
S.



FEDERAL LANDS 3,520 ACRES
 STATE OF N.M. LANDS 960 ACRES
 TOTAL 4,480 ACRES
 UNIT OUTLINE
 TRACT NUMBER

NORTH HUAPACHE UNIT

EDDY COUNTY, NEW MEXICO

EXHIBIT "A"

BEFORE EXAMINER UTZ

OIL CONSERVATION COMMISSION

EXHIBIT NO. 1

CASE NO. 3281

BEFORE THE OIL CONSERVATION COMMISSION

STATE OF NEW MEXICO

APPLICATION FOR APPROVAL OF
NORTH HUAPACHE UNIT
EDDY COUNTY, NEW MEXICO

MAR 7 AM 8:17

Case 3382

New Mexico Oil Conservation Commission
Box 2088
Santa Fe, New Mexico

Comes Union Oil Company of California, acting by and through the undersigned attorneys, Hinkle, Bondurant & Christy, of Roswell, New Mexico and files herewith three copies of the proposed Unit Agreement for the Development and Operation of the North Huapache Unit Area, Eddy County, New Mexico, and hereby makes application for approval of said Unit Agreement as provided by law and the rules and regulations of the New Mexico Oil Conservation Commission, and in support thereof shows:

1. That the proposed unit area covered by said Unit Agreement embraces 4480 acres situated in Eddy County, New Mexico, more particularly described as follows:

Township 22 South, Range 22 East, N.M.P.M.

Section 13 - All	Section 25 - All
Section 14 - All	Section 26 - All
Section 23 - All	Section 36 - All
Section 24 - All	

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2. That applicant is informed and believes and upon such information and belief states that the proposed unit area covers all, or substantially all, of the geological structure or geophysical anomaly involved and that in the event of a discovery of oil or gas

thereon said unit agreement will permit the producing area to be developed and operated in the interest of conservation and the prevention of waste of unitized substances.

3. It is contemplated that applicant will be the operator of the unit area and it is proposed to drill a test well pursuant to the terms of said unit agreement on the unit area to a depth sufficient to test the Cisco Canyon formation, but not to exceed a depth of 8,200 feet.

4. Applicant believes that in the event oil or gas in paying quantities is discovered on the lands within the unit area, the pool or field can be developed more economically and efficiently under the terms of said unit agreement to the end that the maximum recovery of unitized substances will be obtained and that said agreement is in the interest of conservation and the prevention of waste as contemplated by the New Mexico Oil Conservation Commission, statutes and regulations.

5. That upon an order being entered by the Oil Conservation Commission approving said unit agreement and after approval thereof by the Commissioner of Public Lands, an approved copy of said unit agreement will be filed with the New Mexico Oil Conservation Commission.

WHEREFORE, the undersigned applicant respectfully requests that a hearing be held before an examiner on the matter of the approval of said unit agreement, and upon said hearing the same be approved by the New Mexico Oil Conservation Commission as being in the interest of conservation and prevention of waste.

HINKLE, BONDURANT & CHRISTY

Clarence E. Hinkle
Attorneys for Applicant
Box 10
Roswell, New Mexico

UNION OIL COMPANY OF CALIFORNIA

By Clarence E. Hinkle
Attorney

BEFORE THE OIL CONSERVATION COMMISSION

STATE OF NEW MEXICO

APPLICATION FOR APPROVAL OF
NORTH HUAPACHE UNIT
EDDY COUNTY, NEW MEXICO

CA 3382

New Mexico Oil Conservation Commission
Box 2088
Santa Fe, New Mexico

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Section 13 - All	Section 25 - All
Section 14 - All	Section 26 - All
Section 23 - All	Section 36 - All
Section 24 - All	

containing 4480 acres, more or less

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4. Applicant believes that in the event oil or gas in paying quantities is discovered on the lands within the unit area, the pool or field can be developed more economically and efficiently under the terms of said unit agreement to the end that the maximum recovery of unitized substances will be obtained and that said agreement is in the interest of conservation and the prevention of waste as contemplated by the New Mexico Oil Conservation Commission, statutes and regulations.

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HINKLE, BONDURANT & CHRISTY

Clarence E. Hinkle
Attorneys for Applicant
Box 10
Roswell, New Mexico

UNION OIL COMPANY OF CALIFORNIA

By Clarence E. Hinkle
Attorney

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TERMINATION OF UNIT AGREEMENT FOR THE DEVELOPMENT
AND OPERATION OF THE NORTH HUAPACHE UNIT, EDDY COUNTY, NEW MEXICO
No. 14-08-001-8755

KNOW ALL MEN BY THESE PRESENTS:

That the undersigned, being the owners of more than seventy-five percent (75%) on an acreage basis of the working interests in and to oil and gas leasehold interests committed to the Unit Agreement for the development and operation of the North Huapache Unit, Eddy County, New Mexico, dated February 21, 1966, heretofore approved by the New Mexico Oil Conservation Commission, the Commissioner of Public Lands of the State of New Mexico and the Director of the United States Geological Survey, do hereby agree to terminate said agreement in accordance with Section 20 thereof, subject to the approval of the said Commissioner of Public Lands and Director of the United States Geological Survey.

This instrument may be executed in counterparts, no one of which need be executed by all parties.

IN WITNESS WHEREOF, this instrument is executed by the undersigned parties hereto as of the respective dates set opposite their signatures.

HANAGAN & HANAGAN
Unit Operator and
Working Interest Owner

DATED: _____ 1967

By Robert G. Hanagan
Robert G. Hanagan, Partner

and

DATED: _____ 1967

By Hugh E. Hanagan
Hugh E. Hanagan, Partner

WORKING INTEREST OWNERS

UNION OIL COMPANY OF CALIFORNIA *JAH*

DATED: April 28 1967

By John Hansen
John Hansen
Attorney-in-Fact
619 West Texas
Midland, Texas

AMERADA PETROLEUM CORPORATION

DATED: _____ 1967

By _____
ADDRESS _____

ATTEST:

Secretary

MONSANTO COMPANY

DATED: _____ 1967

By _____
ADDRESS _____

ATTEST:

Secretary

ADDRESS _____

Ora R. Hall, Jr.

ADDRESS _____

John W. Young

ADDRESS _____

Erma Lowe, widow of Ralph Lowe,
deceased

ADDRESS _____

Independent Executors and Trustees
under the Last Will and Testament of
Ralph Lowe, deceased

STATE OF Texas)

COUNTY OF Midland)

ss:

The foregoing instrument was acknowledged before me this
28 day of April 1967, by John Hansen,
of Union Oil Company of California, a California corporation, on behalf of
said Corporation.

Elma H. Sloan ELMA H. SLOAN
NOTARY PUBLIC

MY COMMISSION EXPIRES:

June 1, 1967

STATE OF _____)

COUNTY OF _____)

ss:

The foregoing instrument was acknowledged before me this
____ day of _____ 1967, by _____,
of Amerada Petroleum Corporation, a _____ Corporation,
on behalf of said Corporation.

NOTARY PUBLIC

MY COMMISSION EXPIRES:

STATE OF _____)
COUNTY OF _____) ss:

The foregoing instrument was acknowledged before me this _____ day of _____, 1967, by Erma Lowe, Robert M. Turpin, Charles L. Morgan, Jr., H. L. Landua, V. H. Van Horn, Jr., James L. Morris, Fred G. Goodman and Dee H. Rose, Independent Executors and Trustees under the Last Will and Testament of Ralph Lowe, deceased.

MY COMMISSION EXPIRES:

NOTARY PUBLIC

STATE OF New Mexico)
COUNTY OF Chavez) ss:

The foregoing instrument was acknowledged before me this 16th day of May, 1967, by Robert G. Hanagan and Hugh E. Hanagan, d/b/a HANAGAN & HANAGAN, a Partnership.

MY COMMISSION EXPIRES:

Mar 6. 1971

Shirley Echo Heathers
NOTARY PUBLIC

OFFICE
JAN 17 AM 8 56
10

TERMINATION OF UNIT AGREEMENT FOR THE DEVELOPMENT
AND OPERATION OF THE NORTH HUAPACHE UNIT, EDDY COUNTY, NEW MEXICO
No. 14-08-001-8755

KNOW ALL MEN BY THESE PRESENTS:

That the undersigned, being the owners of more than seventy-five (75) per cent on an acreage basis of the working interests in and to oil and gas leasehold interests committed to the Unit Agreement for the development and operation of the North Huapache Unit, Eddy County, New Mexico, dated February 21, 1966, heretofore approved by the New Mexico Oil Conservation Commission, the Commissioner of Public Lands of the State of New Mexico and the Director of the United States Geological Survey, do hereby agree to terminate said agreement in accordance with Section 20 thereof, subject to the approval of the said Commissioner of Public Lands and Director of the United States Geological Survey.

This instrument may be executed in counterparts, no one of which need be executed by all parties.

IN WITNESS WHEREOF, this instrument is executed by the undersigned parties hereto as of the respective dates set opposite their signatures.

UNION OIL COMPANY OF CALIFORNIA
Unit Operator

DATED: _____ 1967 BY _____
John Hansen
Attorney-in-Fact
619 West Texas Avenue
Midland, Texas

ATTEST: _____
Secretary

Unit Operator and Working Interest Owner

WORKING INTEREST OWNERS

ATTEST: AMERADA PETROLEUM CORPORATION

Secretary BY _____
ADDRESS _____

DATE: _____

ATTEST: MONSANTO COMPANY

Secretary BY _____
President
ADDRESS _____

Box 1754
ADDRESS Roswell NM 88201
G. L. Peter

ADDRESS _____

ADDRESS _____

ADDRESS _____

Ora R. Hall, Jr.
Ora R. Hall, Jr.

John F. Younger

Erma Lowe, widow of Ralph Lowe,
deceased

Independent Executors and Trustees
under the Last Will and Testament of
Ralph Lowe, deceased

STATE OF _____)
COUNTY OF _____) ss:

The foregoing instrument was acknowledged before me this
_____ day of _____ 1967, by _____
of Union Oil Company of California, a California corporation, on behalf of
said Corporation.

NOTARY PUBLIC

MY COMMISSION EXPIRES:

STATE OF _____)
COUNTY OF _____) ss:

The foregoing instrument was acknowledged before me this
_____ day of _____ 1967, by _____
of Amerada Petroleum Corporation, a _____ Corporation,
on behalf of said Corporation.

NOTARY PUBLIC

MY COMMISSION EXPIRES:

17 AUG 57

TERMINATION OF UNIT AGREEMENT FOR THE DEVELOPMENT
AND OPERATION OF THE NORTH HUAPACHE UNIT, EDDY COUNTY, NEW MEXICO
No. 14-08-001-8755

KNOW ALL MEN BY THESE PRESENTS:

That the undersigned, being the owners of more than seventy-five (75) per cent on an acreage basis of the working interests in and to oil and gas leasehold interests committed to the Unit Agreement for the development and operation of the North Huapache Unit, Eddy County, New Mexico, dated February 21, 1966, heretofore approved by the New Mexico Oil Conservation Commission, the Commissioner of Public Lands of the State of New Mexico and the Director of the United States Geological Survey, do hereby agree to terminate said agreement in accordance with Section 20 thereof, subject to the approval of the said Commissioner of Public Lands and Director of the United States Geological Survey.

This instrument may be executed in counterparts, no one of which need be executed by all parties.

IN WITNESS WHEREOF, this instrument is executed by the undersigned parties hereto as of the respective dates set opposite their signatures.

UNION OIL COMPANY OF CALIFORNIA
Unit Operator

DATED: _____ 1967

BY _____

John Hansen
Attorney-in-Fact
619 West Texas Avenue
Midland, Texas

ATTEST:

Secretary

Unit Operator and Working Interest Owner

WORKING INTEREST OWNERS

ATTEST:

AMERADA PETROLEUM CORPORATION

BY _____

ADDRESS _____

Secretary

DATE: _____

ATTEST:

MONSANTO COMPANY

BY _____

President

ADDRESS _____

Secretary

10
ADDRESS _____

Ora R. Hall, Jr.

ADDRESS _____

John F. Younger

ADDRESS P. O. Box 832
Midland, Texas 79701

Erma Lowe
Erma Lowe, widow of Ralph Lowe,
deceased

Erma Lowe
Erma Lowe

Robert M. Turpin
Robert M. Turpin

Charles L. Morgan, Jr.
Charles L. Morgan, Jr.

H. L. Landua
H. L. Landua

V. H. Van Horn, Jr.
V. H. Van Horn, Jr.

James L. Morris
James L. Morris

Fred G. Goodman
Fred G. Goodman

Dee H. Rose
Dee H. Rose

Independent Executors and Trustees
under the Last Will and Testament
of Ralph Lowe, deceased

STATE OF _____)
COUNTY OF _____) ss:

The foregoing instrument was acknowledged before me this
_____ day of _____ 1967, by _____
of Amerada Petroleum Corporation, a _____ Corporation,
on behalf of said Corporation.

NOTARY PUBLIC

MY COMMISSION EXPIRES:

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STATE OF _____)
COUNTY OF _____) SS:

The foregoing instrument was acknowledged before me this _____ day of _____ 1967, by _____ of Monsanto Company, a Delaware Corporation, on behalf of said Corporation.

NOTARY PUBLIC

MY COMMISSION EXPIRES: _____

STATE OF _____)
COUNTY OF _____) SS:

The foregoing instrument was acknowledged before me this _____ day of _____ 1967, by Ora R. Hall, Jr. and Edna Ione Hall, his wife.

NOTARY PUBLIC

MY COMMISSION EXPIRES: _____

STATE OF _____)
COUNTY OF _____) SS:

The foregoing instrument was acknowledged before me this _____ day of _____ 1967, by John F. Younger.

NOTARY PUBLIC

MY COMMISSION EXPIRES: _____

STATE OF Texas)
COUNTY OF Midland) SS:

The foregoing instrument was acknowledged before me this 24th day of April 1967, by ERMA LOWE, widow of Ralph Lowe, deceased.

Joyce R. Leach
NOTARY PUBLIC

MY COMMISSION EXPIRES: _____

JOYCE R. LEACH - Notary Public
In and For Midland County, Texas
My Commission Expires June 1, 1967

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STATE OF Texas }
COUNTY OF Midland } SS:

The foregoing instrument was acknowledged before me this
24th day of April 1967, by Erina Lowe, Robert M. Turpin, Charles
L. Morgan, Jr., H. L. Landua, V. H. Van Horn, Jr., James L. Morris, Fred
G. Goodman and Dee H Rose, Independent Executors and Trustees under the
Last Will and Testament of Ralph Lowe, deceased.

Joyce R. Leach
NOTARY PUBLIC

MY COMMISSION EXPIRES:

JOYCE R. LEACH - Notary Public
In and For Midland County, Texas
My Commission Expires June 1, 1967

TERMINATION OF UNIT AGREEMENT FOR THE DEVELOPMENT
AND OPERATION OF THE NORTH HUAPACHE UNIT, EDDY COUNTY, NEW MEXICO
No. 14-08-0001-8755

KNOW ALL MEN BY THESE PRESENTS:

That the undersigned, being the owners of more than seventy-five (75) per cent on an acreage basis of the working interests in and to oil and gas leasehold interests committed to the Unit Agreement for the development and operation of the North Huapache Unit, Eddy County, New Mexico, dated February 21, 1966, heretofore approved by the New Mexico Oil Conservation Commission, the Commissioner of Public Lands of the State of New Mexico and the Director of the United States Geological Survey, do hereby agree to terminate said agreement in accordance with Section 20 thereof, subject to the approval of the said Commissioner of Public Lands and Director of the United States Geological Survey.

This instrument may be executed in counterparts, no one of which need be executed by all parties.

IN WITNESS WHEREOF, this instrument is executed by the undersigned parties hereto as of the respective dates set opposite their signatures.

UNION OIL COMPANY OF CALIFORNIA
Unit Operator

DATED: _____ 1967 BY _____
John Hansen
Attorney-in-Fact
619 West Texas Avenue
Midland, Texas

ATTEST: _____
Secretary

Unit Operator and Working Interest Owner

WORKING INTEREST OWNERS

ATTEST:

Secretary

D. TS:

ATTEST:

Secretary

AMERADA PETROLEUM CORPORATION

BY

ADDRESS

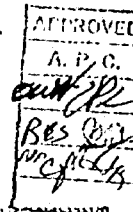
Tulsa, Oklahoma 74102
P.O. Box 2040

MONSANTO COMPANY

BY

President

ADDRESS _____



ADDRESS _____

Ora R. Hall, Jr.

ADDRESS _____

John F. Younger

ADDRESS _____

Erma Lowe, widow of Ralph Lowe,
deceased

ADDRESS _____

Independent Executors and Trustees
under the Last Will and Testament of
Ralph Lowe, deceased

STATE OF _____)
COUNTY OF _____) ss:

The foregoing instrument was acknowledged before me this
_____ day of _____ 1967, by _____,
of Union Oil Company of California, a California corporation, on behalf of
said Corporation.

NOTARY PUBLIC

MY COMMISSION EXPIRES:

STATE OF Oklahoma)
COUNTY OF Tulsa) ss:

8th day of May 1967, by JOHN P. HAMMOND, Sr. Vice President,
of Amerada Petroleum Corporation, a Delaware Corporation,
on behalf of said Corporation.

Lucille F. Carman
NOTARY PUBLIC

MY COMMISSION EXPIRES:

4-30-70

TERMINATION OF UNIT AGREEMENT FOR THE DEVELOPMENT
AND OPERATION OF THE NORTH HUAPACHE UNIT, EDDY COUNTY, NEW MEXICO
No. 14-08-0001-8755

KNOW ALL MEN BY THESE PRESENTS:

That the undersigned, being the owners of more than seventy-five (75) per cent on an acreage basis of the working interests in and to oil and gas leasehold interests committed to the Unit Agreement for the development and operation of the North Huapache Unit, Eddy County, New Mexico, dated February 21, 1966, heretofore approved by the New Mexico Oil Conservation Commission, the Commissioner of Public Lands of the State of New Mexico and the Director of the United States Geological Survey, do hereby agree to terminate said agreement in accordance with Section 20 thereof, subject to the approval of the said Commissioner of Public Lands and Director of the United States Geological Survey.

This instrument may be executed in counterparts, no one of which need be executed by all parties.

IN WITNESS WHEREOF, this instrument is executed by the undersigned parties hereto as of the respective dates set opposite their signatures.

UNION OIL COMPANY OF CALIFORNIA
Unit Operator

DATED: _____ 1967

BY _____

John Hansen
Attorney-in-Fact
619 West Texas Avenue
Midland, Texas

ATTEST:

Secretary

Unit Operator and Working Interest Owner

WORKING INTEREST OWNERS

ATTEST:

Secretary

D. T. E.:

ATTEST:

Secretary

AMERADA PETROLEUM CORPORATION

BY _____

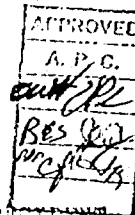
ADDRESS Tulsa, Oklahoma 74102
P.O. Box 2040

MONSANTO COMPANY

BY _____

President

ADDRESS _____



ADDRESS _____

Ora R. Hall, Jr.

ADDRESS _____

John F. Younger

ADDRESS _____

Erma Lowe, widow of Ralph Lowe,
deceased

ADDRESS _____

Independent Executors and Trustees
under the Last Will and Testament of
Ralph Lowe, deceased

STATE OF _____)

COUNTY OF _____)

ss:

The foregoing instrument was acknowledged before me this
_____ day of _____ 1967, by _____
of Union Oil Company of California, a California corporation, on behalf of
said Corporation.

NOTARY PUBLIC

MY COMMISSION EXPIRES:

STATE OF Oklahoma)

COUNTY OF Tulsa)

ss:

8th day of May 1967, by JOHN P. HAMMOND, Sr. Vice President,
of Amerada Petroleum Corporation, a Delaware Corporation,
on behalf of said Corporation.

Leicester F. Careman
NOTARY PUBLIC

MY COMMISSION EXPIRES:

4-30-70

TERMINATION OF UNIT AGREEMENT FOR THE DEVELOPMENT
AND OPERATION OF THE NORTH HUAPACHE UNIT, EDDY COUNTY, NEW MEXICO
No. 14-08-001-8755

KNOW ALL MEN BY THESE PRESENTS:

That the undersigned, being the owners of more than seventy-five (75) per cent on an acreage basis of the working interests in and to oil and gas leasehold interests committed to the Unit Agreement for the development and operation of the North Huapache Unit, Eddy County, New Mexico, dated February 21, 1966, heretofore approved by the New Mexico Oil Conservation Commission, the Commissioner of Public Lands of the State of New Mexico and the Director of the United States Geological Survey, do hereby agree to terminate said agreement in accordance with Section 20 thereof, subject to the approval of the said Commissioner of Public Lands and Director of the United States Geological Survey.

This instrument may be executed in counterparts, no one of which need be executed by all parties.

IN WITNESS WHEREOF, this instrument is executed by the undersigned parties hereto as of the respective dates set opposite their signatures.

UNION OIL COMPANY OF CALIFORNIA
Unit Operator

DATED: _____ 1967

BY _____

John Hansen
Attorney-in-Fact
619 West Texas Avenue
Midland, Texas

ATTEST:

Secretary

Unit Operator and Working Interest Owner

WORKING INTEREST OWNERS

ATTEST:

AMERADA PETROLEUM CORPORATION

Secretary

BY _____

ADDRESS _____

DATE: _____

[Signature]

MONSANTO COMPANY

BY _____

Attorney-in-Fact
ADDRESS _____

STATE OF Missouri)
COUNTY OF St. Louis) SS:

The foregoing instrument was acknowledged before me this
28th day of April 1967, by Franklin M. Hall
Attorney-in-Fact of Monsanto Company, a Delaware Corporation, on behalf
of said Corporation.

Notary Public
NOTARY PUBLIC

MY COMMISSION EXPIRES:

JUNE 1, 1967

STATE OF _____)
COUNTY OF _____) SS:

The foregoing instrument was acknowledged before me this
_____ day of _____ 1967, by Ora R. Hall, Jr. and Edna Ione
Hall, his wife.

NOTARY PUBLIC

MY COMMISSION EXPIRES:

STATE OF _____)
COUNTY OF _____) SS:

The foregoing instrument was acknowledged before me this
____ day of _____ 1967, by John F. Younger.

NOTARY PUBLIC

MY COMMISSION EXPIRES:

STATE OF _____)
COUNTY OF _____) SS:

The foregoing instrument was acknowledged before me this
____ day of _____ 1967, by ERMA LOWE, widow of Ralph Lowe, deceased.

NOTARY PUBLIC

MY COMMISSION EXPIRES:

1702

UNIT AGREEMENT
NORTH HUAPACHE UNIT AREA
EDDY COUNTY, NEW MEXICO

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UNIT AGREEMENT
FOR THE DEVELOPMENT AND OPERATION OF THE
NORTH HUAPACHE UNIT AREA
EDDY COUNTY, NEW MEXICO

NO. _____

THIS AGREEMENT made and entered into as of the _____ day of _____ 1966, by and between the parties subscribing, ratifying or consenting hereto, and herein referred to as the "parties hereto".

W I T N E S S E T H:

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

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

WHEREAS, the Commissioner of Public Lands of the State of New Mexico is authorized by an Act of the Legislature (Sec. 7-11-39 N.M. Statutes 1953 Annotated) to consent to or approve this agreement on behalf of the State of New Mexico, insofar as it covers and includes lands and mineral interests of the State of New Mexico; and

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

WHEREAS, the parties hereto hold sufficient interests in the North Huapache Unit Area covering the land hereinafter described to give reasonably effective control of operations therein; and

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

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

1. ENABLING ACT AND REGULATIONS: The Mineral Leasing Act of February 25, 1920, as amended, supra, and all valid pertinent regulations, including operating and unit plan regulations, heretofore issued thereunder or valid, pertinent, and reasonable regulations hereafter issued thereunder are accepted and made a part of this agreement as to Federal lands, provided such regulations are not inconsistent with the terms of this agreement; and as to State of New Mexico and privately owned lands, the oil and gas operating regulations in effect as of the effective date hereof governing drilling and producing operations, not inconsistent with the terms hereof or the laws of the State of New Mexico are hereby accepted and made a part of this agreement.

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

<u>Township 22 South, Range 22 East, N.M.P.M.</u>	
Section 13 - All	Section 25 - All
Section 14 - All	Section 26 - All
Section 23 - All	Section 36 - All
Section 24 - All	

containing 4480 acres, more or less

Exhibit "A" attached hereto is a map showing the unit area and the boundaries and identity of tracts and leases in said area to the extent known to the Unit Operator. Exhibit "B" attached hereto is a schedule showing to the extent known to the Unit Operator the acreage, percentage and kind of ownership of oil and gas interests in all land in the unit area. However, nothing herein or in said schedule or map shall be construed as a representation by any party hereto as to the ownership of any interest other than such interest or interests as are shown in said map or schedule as owned by such party. Exhibits "A" and "B" shall be revised by the Unit Operator whenever changes in the unit area render such revision necessary, or when requested by the Oil and Gas Supervisor, hereinafter referred to as "Supervisor", or when requested by the Commissioner of Public Lands of the State of New Mexico, hereinafter referred to as "Commissioner", and not less than seven copies of the revised exhibits shall be filed with the Supervisor, and two copies thereof shall be filed with the Commissioner and one copy with the New Mexico Oil Conservation Commission, hereinafter referred to as "Commission".

The above described unit area shall, when practicable, be expanded to include therein any additional tract or tracts regarded as reasonably necessary or advisable for the purposes of this agreement, or shall be contracted to exclude lands not within any participating area whenever such expansion or contraction is necessary or advisable to conform with the purposes of this agreement. Such expansion or contraction shall be effected in the following manner:

(a) Unit Operator, on its own motion or on demands of the Director of the Geological Survey, hereinafter referred to as "Director", or on demand of the Commissioner, but only after preliminary

concurrence by the Director and the Commissioner, shall prepare a notice of proposed expansion or contraction describing the contemplated changes in the boundaries of the unit area, the reasons therefor, and the proposed effective date thereof, preferably the first day of a month subsequent to the date of notice.

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

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

(d) After due consideration of all pertinent information, the expansion or contraction shall, upon approval by the Director, the Commissioner and the Commission, become effective as of the date prescribed in the notice thereof.

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

effective date of the first initial participating area established under this unit agreement, shall be eliminated automatically from this agreement, effective as of the first day thereafter, and such lands shall no longer be a part of the unit area and shall no longer be subject to this agreement, unless at the expiration of said five-year period diligent drilling operations are in progress on unitized lands not entitled to participation, in which event all such lands shall remain subject hereto for so long as such drilling operations are continued diligently, with not more than 90 days' time elapsing between the completion of one such well and the commencement of the next such well, except that the time allowed between such wells shall not expire earlier than 30 days after the expiration of any period of time during which drilling operations are prevented by a matter beyond the reasonable control of Unit Operator as set forth in the section hereof entitled "Unavoidable Delay"; provided that all legal subdivisions of lands not in a participating area and not entitled to become participating under the applicable provisions of this agreement within 10 years after said first day of the month following the effective date of said first initial participating area shall be eliminated as above specified. Determination of creditable "Unavoidable Delay" time shall be made by Unit Operator and subject to approval of the Director and the Commissioner. The Unit Operator shall, within 90 days after the effective date of any elimination hereunder, describe the area so eliminated to the satisfaction of the Director and the Commissioner and promptly notify all parties in interest.

If conditions warrant extension of the 10 year period specified in this subsection 2(e), a single extension of not to exceed 2 years may be accomplished by consent of the owners of 90 percent of

the current unitized working interests and 60 percent of the current unitized basic royalty interests (exclusive of the basic royalty interest of the United States) on a total non-participating acreage basis, respectively, with approval of the Director and Commissioner, provided such extension application is submitted to the Director and Commissioner not later than 60 days prior to the expiration of said 10-year period.

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

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

4. UNIT OPERATOR: Union Oil Company of California, with offices at Roswell, New Mexico, is hereby designated as Unit Operator and by signature hereto as Unit Operator commits to this agreement all interests in unitized substances vested in it and agrees and consents to accept the duties and obligations of Unit Operator for the discovery, development and production of unitized substances as herein provided. Whenever reference is made herein to the Unit Operator, such reference means the Unit Operator acting in that capacity and not as owner of an interest in unitized substances, and the term "working Interest owner" when used herein shall include or refer to Unit Operator as the owner of a working interest when such an interest is owned by it.

5. RESIGNATION OR REMOVAL OF UNIT OPERATOR: Unit Operator shall have the right to resign at any time prior to the establishment of a participating area or areas hereunder, but such resignation shall not become effective so as to release Unit Operator from the duties and obligations of Unit Operator and terminate Unit Operator's rights as such for a period of six months after notice of intention to resign has been served by Unit Operator on all working interest owners and the Director, the Commissioner and Commission and until all wells then drilled hereunder are placed in a satisfactory condition for suspension or abandonment whichever is required by the Supervisor as to Federal lands and by the Commission as to State and privately owned lands unless a new unit operator shall have been selected and approved and shall have taken over and assumed the duties and obligations of Unit Operator prior to the expiration of said period.

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

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

The Unit Operator may, upon default or failure in the performance of its duties or obligations hereunder, be subject to removal

by the same percentage vote of the owners of working interests determined in like manner as herein provided for the selection of a new Unit Operator. Such removal shall be effective upon notice thereof to the Director and the Commissioner.

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

6. SUCCESSOR UNIT OPERATOR: Whenever the Unit Operator shall tender his or its resignation as Unit Operator or shall be removed as hereinabove provided, or a change of Unit Operator is negotiated by working interest owners, the owners of the working interests in the participating area or areas according to their respective acreage interests in such participating area or areas, or until a participating area shall have been established, the owners of the working interests according to their respective acreage interests in all unitized land, shall by majority vote select a successor Unit Operator. Provided, That, if a majority but less than 75 percent of the working interests qualified to vote are owned by one party to this agreement, a concurring vote of one or more additional working

interest owner shall be required to select a new operator. Such selection shall not become effective until:

(a) the Unit Operator so selected shall accept in writing the duties and responsibilities of Unit Operator, and

(b) the selection shall have been filed with the Supervisor and approved by the Commissioner. If no successor Unit Operator is selected and qualified as herein provided, the Director and Commissioner at their election may declare this unit agreement terminated.

7. ACCOUNTING PROVISIONS AND UNIT OPERATING AGREEMENT: If the Unit Operator is not the sole owner of working interests, costs and expenses incurred by Unit Operator in conducting unit operations hereunder shall be paid and apportioned among and borne by the owners of working interests all in accordance with the agreement or agreements entered into by and between the Unit Operator and the owners of working interests, whether one or more, separately or collectively. Any agreement or agreements entered into between the working interest owners and the Unit Operator as provided in this section, whether one or more, are herein referred to as the "unit operating agreement". Such unit operating agreement shall also provide the manner in which the working interest owners shall be entitled to receive their respective proportionate and allocated share of the benefits accruing hereto in conformity with their underlying operating agreements, leases or other independent contracts, and such other rights and obligations as between Unit Operator and the working interest owners as may be agreed upon by Unit Operator and the working interest owners; however, no such unit operating agreement shall be deemed either to modify any of the terms and conditions of this unit agreement or to relieve the Unit Operator of any right or obligation established under this unit

agreement, and in case of any inconsistency or conflict between the unit agreement and the unit operating agreement, this unit agreement shall prevail. Three (3) true copies of any unit operating agreement executed pursuant to this section should be filed with the Supervisor and one (1) true copy with the Commissioner, prior to approval of this unit agreement by the Director.

8. RIGHTS AND OBLIGATIONS OF UNIT OPERATOR: Except as otherwise specifically provided herein, the exclusive right, privilege and duty of exercising any and all rights of the parties hereto which are necessary or convenient for prospecting for, producing, storing, allocating, and distributing the unitized substances are hereby delegated to and shall be exercised by the Unit Operator as herein provided. Acceptable evidence of title to said rights shall be deposited with said Unit Operator and, together with this agreement, shall constitute and define the rights, privileges and obligations of Unit Operator. Nothing herein, however, shall be construed to transfer title to any land or to any lease or operating agreement, it being understood that under this agreement the Unit Operator, in its capacity as Unit Operator, shall exercise the rights of possession and use vested in the parties hereto only for the purposes herein specified.

9. DRILLING TO DISCOVERY: Within six months after the effective date hereof, the Unit Operator shall begin to drill an adequate test well at a location approved by the Supervisor, if on Federal land, or by the Commissioner if on State land, unless on such effective date a well is being drilled conformably with the terms hereof, and thereafter continue such drilling diligently until the Cisco Canyon formation has been tested or until at a lesser depth unitized substances shall be discovered which can be produced in

paying quantities (to-wit: quantities sufficient to repay the costs of drilling and producing operations, with a reasonable profit) or the Unit Operator shall at any time establish, to the satisfaction of the Supervisor if located on Federal lands, or the Commissioner if located on State lands, that further drilling of said well would be unwarranted or impracticable, provided, however, that Unit Operator shall not in any event be required to drill said well to a depth in excess of 8,200 feet. Until the discovery of a deposit of unitized substances capable of being produced in paying quantities, the Unit Operator shall continue drilling diligently, one well at a time, allowing not more than six months between the completion of one well and the beginning of the next well, until a well capable of producing unitized substances in paying quantities is completed to the satisfaction of the Supervisor, if on Federal lands, or the Commissioner, if on State lands, or until it is reasonably proved that the unitized land is incapable of producing unitized substances in paying quantities in the formations drilled hereunder. Nothing in this section shall be deemed to limit the right of the Unit Operator to resign as provided in Section 5 hereof, or as requiring Unit Operator to commence or continue any drilling during the period pending such resignation becoming effective in order to comply with the requirements of this section. The Director and Commissioner may modify the drilling requirements of this section by granting reasonable extensions of time when, in their opinion, such action is warranted.

Upon failure to comply with the drilling provisions of this section, the Director and Commissioner may, after reasonable notice to the Unit Operator and each working interest owner, lessee and lessor at their last known addresses, declare this unit agreement terminated.

10. PLAN OF FURTHER DEVELOPMENT AND OPERATION: Within six months after completion of a well capable of producing unitized substances in paying quantities, the Unit Operator shall submit for the approval of the Supervisor and the Commissioner an acceptable plan of development and operation for the unitized land which, when approved by the Supervisor and the Commissioner, shall constitute the further drilling and operating obligations of the Unit Operator under this agreement for the period specified therein. Thereafter, from time to time before the expiration of any existing plan, the Unit Operator shall submit for the approval of the Supervisor and the Commissioner a plan for an additional specified period for the development and operation of the unitized land.

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

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

(b) to the extent practicable, specify the operating practices regarded as necessary and advisable for proper conservation of natural resources.

Separate plans may be submitted for separate productive zones, subject to the approval of the Supervisor and the Commissioner.

Plans shall be modified or supplemented when necessary to meet changed conditions or to protect the interests of all parties to this agreement. Reasonable diligence shall be exercised in complying with the obligations of the approved plan of development. The Supervisor and Commissioner are authorized to grant a reasonable extension of the six month period herein prescribed for submission of an initial plan of development where such action is justified because of unusual conditions or circumstances. After completion hereunder of a well capable of producing unitized substances in paying quantities, no further wells, except such as may be necessary to afford protection against operations not under this agreement or such as may be specifically approved by the Supervisor and the Commissioner shall be drilled except in accordance with a plan of development approved as herein provided.

11. PARTICIPATION AFTER DISCOVERY: Upon completion of a well capable of producing unitized substances in paying quantities, the Unit Operator shall, within the month of such completion, if practicable, or as soon thereafter as required by the Supervisor or the Commissioner submit for approval by the Director and the Commissioner a schedule, based on subdivisions of the public land survey or aliquot parts thereof, of all unitized land then regarded as reasonably proved to be productive of unitized substances in paying quantities; all lands in said schedule on approval of the Director and the Commissioner to constitute a participating area, effective as of the date of completion of such well or the effective date of the unit agreement, whichever is later. The acreages of both Federal and non-Federal lands shall be based upon appropriate computations from the courses and distances shown on the last approved public land survey as of the effective date

of the initial participating area. Said schedule shall also set forth the percentage of unitized substances to be allocated as herein provided to each unitized tract in the participating area so established, and shall govern the allocation of production from and after the date the participating area becomes effective. A separate participating area shall be established in like manner for each separate pool or deposit of unitized substances or for any group thereof produced as a single pool or zone, and any two or more participating areas so established may be combined into one with the consent of the owners of all working interests in the lands within the participating areas so to be combined, on approval of the Director and the Commissioner. The participating area or areas so established shall be revised from time to time, subject to like approval, whenever such action appears proper as a result of further drilling operations or otherwise, to include additional land then regarded as reasonably proved to be productive in paying quantities, or to exclude land then regarded as reasonably proved not to be productive in paying quantities and the percentage of allocation shall also be revised accordingly. The effective date of any revision shall be the first of the month in which is obtained the knowledge or information on which such revision is predicated, provided, however, that a more appropriate effective date may be used if justified by the Unit Operator and approved by the Director and the Commissioner. No land shall be excluded from a participating area on account of depletion of the unitized substances.

It is the intent of this section that a participating area shall represent the area known or reasonably estimated to be productive in paying quantities, but, regardless of any revision of the participating area, nothing herein contained shall be construed as

requiring any retroactive adjustment for production obtained prior to the effective date of the revision of the participating area.

In the absence of agreement at any time between the Unit Operator and the Director and the Commissioner as to the proper definition or redefinition of a participating area, or until a participating area has, or areas have, been established as provided herein, the portion of all payments affected thereby may be impounded in a manner mutually acceptable to the owners of working interests, except royalties due the United States and the State of New Mexico, which shall be determined by the Supervisor for Federal lands and the Commissioner for State lands and the amount thereof deposited, as directed by the Supervisor and the Commissioner respectively, to be held as unearned money until a participating area is finally approved and then applied as earned or returned in accordance with a determination of the sum due as Federal and State royalty on the basis of such approved participating area.

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

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

participating area from which initially produced as constituted at the time of such final production.

13. DEVELOPMENT OR OPERATION OF NON-PARTICIPATING LAND OR FORMATIONS: Any party hereto owning or controlling the working interest in any unitized land having thereon a regular well location may with the approval of the Supervisor as to Federal land and the Commission as to State or privately owned land, at such party's sole risk, cost and expense, drill a well to test any formation for which a participating area has been established if such location is not within said participating area, unless within 90 days of receipt of notice from said party of his intention to drill the well the Unit Operator elects and commences to drill such a well in like manner as other wells are drilled by the Unit Operator under this agreement.

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

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

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

If gas obtained from lands not subject to this agreement is introduced into any participating area hereunder for use in repressuring, stimulation of production, or increasing ultimate recovery, which shall be in conformity with a plan first approved by the Supervisor and the Commissioner, a like amount of gas, after settlement as herein provided for any gas transferred from any other participating area and with due allowance for loss or depletion from any cause, may be withdrawn from the formation into which the gas was introduced, royalty free as to dry gas, but not as to the products extracted therefrom; provided that such withdrawal shall be at such time as may be provided in the plan of operations or as may otherwise be consented to by the Supervisor and the Commissioner as conforming to good petroleum engineering

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

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

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

15. RENTAL SETTLEMENT: Rental or minimum royalties due on leases committed hereto shall be paid by working interest owners responsible therefor under existing contracts, laws and regulations, provided that nothing herein contained shall operate to relieve the lessees of any land from their respective lease obligations for the payment of any rental or minimum royalty in lieu thereof due under their leases. Rental or minimum royalty for lands of the United States subject to this agreement shall be paid at the rate specified in the respective leases from the United States unless such rental or minimum royalty is waived, suspended or reduced by law or by approval of the Secretary or his duly authorized representative.

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

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

16. CONSERVATION: Operations hereunder and production of unitized substances shall be conducted to provide for the most economical and efficient recovery of said substances without waste, as defined by or pursuant to state or Federal law or regulations.

17. DRAINAGE: The Unit Operator shall take appropriate and adequate measures to prevent drainage of unitized substances from unitized land by wells on land not subject to this agreement, or with prior consent of the Director and the Commissioner, pursuant to applicable regulations pay a fair and reasonable compensatory royalty, as determined by the Supervisor as to Federal lands and by the Commissioner as to State lands.

18. LEASES AND CONTRACTS CONFORMED AND EXTENDED: The terms, conditions and provisions of all leases, subleases, and other contracts relating to exploration, drilling, development or operations for oil or gas on lands committed to this agreement are hereby expressly modified and amended to the extent necessary to make the same conform to the provisions hereof, but otherwise to remain in full force and effect; and the parties hereto hereby consent that the Secretary, as to Federal

leases, and the Commissioner, as to State leases, shall and each by his approval hereof, or by the approval hereof by his duly authorized representative, does hereby establish, alter, change, or revoke the drilling, producing, rental, minimum royalty and royalty requirements of Federal and State leases committed hereto and the regulations in respect thereto to conform said requirements to the provisions of this agreement, and, without limiting the generality of the foregoing, all leases, subleases and contracts are particularly modified in accordance with the following:

(a) The development and operation of lands subject to this agreement under the terms hereof shall be deemed full performance of all obligations for development and operation with respect to each and every part or separately owned tract subject to this agreement, regardless of whether there is any development of any particular part or tract of the unit area, notwithstanding anything to the contrary in any lease, operating agreement or other contract by and between the parties hereto, or their respective predecessors in interest, or any of them.

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

(c) Suspension of drilling or producing operations on all unitized lands pursuant to direction or consent of the Secretary and the Commissioner, or their duly authorized representatives, shall be deemed to constitute such suspension pursuant to such direction or consent as to each and every tract of unitized land.

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

(e) Any Federal lease for a fixed term of twenty (20) years or any renewal thereof or any part of such lease which is made subject to this agreement shall continue in force beyond the term provided therein until the termination hereof. Any other Federal lease committed hereto shall continue in force beyond the term so provided therein or by law as to the land committed so long as such lease remains subject hereto, provided that production is had in paying quantities under this unit agreement prior to the expiration date of the term of such lease, or in the event actual drilling operations are commenced on unitized land, in accordance with the provisions of this agreement, prior to the end of the primary term of such lease and are being diligently prosecuted at that time, such lease shall be extended for two years and so long thereafter as oil or gas is produced in paying quantities in accordance with the provisions of the Mineral Leasing Act Revision of 1960.

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

and effect for and during the term of the underlying lease as such term is herein extended.

(g) Any lease embracing lands of the State of New Mexico which is made subject to this agreement, shall continue in force beyond the term provided therein as to the lands committed hereto until the termination hereof, subject to the provisions of subsection (e) of Section 2.

(h) The segregation of any Federal lease committed to this agreement is governed by the following provisions in the fourth paragraph of Sec. 17(j) of the Mineral Leasing Act, as amended by the Act of September 2, 1960 (74 Stat. 781-784): "Any (Federal) lease heretofore or hereafter committed to any such (unit) plan embracing lands that are in part within and in part outside of the area covered by any such plan shall be segregated into separate leases as to the lands committed and the lands not committed as of the effective date of unitization: Provided, however, That any such lease as to the non-unitized portion shall continue in force and effect for the term thereof but for not less than two years from the date of such segregation and so long thereafter as oil or gas is produced in paying quantities".

(i) Any lease embracing lands of the State of New Mexico having only a portion of its lands committed hereto, shall be segregated as to the portion committed and the portion not committed, and the provisions of such lease shall apply separately to such segregated portions commencing as of the effective date hereof; provided, however, notwithstanding any of the provisions of this agreement to the contrary any lease embracing lands of the State of New Mexico having only a portion of its lands committed hereto shall continue in full force

and effect beyond the term provided therein as to all lands embraced in such lease, if oil or gas is discovered and is capable of being produced in paying quantities from some part of the lands embraced in such lease, at the expiration of the secondary term of such lease; or if, at the expiration of the secondary term, the lessee or the Unit Operator is then engaged in bona fide drilling or reworking operations on some part of the lands embraced in such lease, the same, as to all lands embraced therein, shall remain in full force and effect so long as such operations are being diligently prosecuted, and if they result in the production of oil or gas, said lease shall continue in full force and effect as to all of the lands embraced therein, so long thereafter as oil or gas in paying quantities is being produced from any portion of said lands.

19. COVENANTS RUN WITH LAND: The covenants herein shall be construed to be covenants running with the land with respect to the interest of the parties hereto and their successors in interest until this agreement terminates, and any grant, transfer, or conveyance of interest in land or leases subject hereto shall be and hereby is conditioned upon the assumption of all privileges and obligations hereunder by the grantee, transferee or other successor in interest. No assignment or transfer of any working interest, royalty, or other interest subject hereto shall be binding upon the Unit Operator until the first day of the calendar month after Unit Operator is furnished with the original, photostatic or certified copy of the instrument of transfer.

20. EFFECTIVE DATE AND TERM: This agreement shall become effective upon approval by the Director and the Commissioner or their duly authorized representatives as of the date of approval by the

Director and shall terminate five (5) years from said effective date unless:

(a) such date of expiration is extended by the Director and the Commissioner, or

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

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

(d) it is terminated as heretofore provided in this agreement.

This agreement may be terminated at any time by not less than 75 per centum, on an acreage basis, of the owners of working interests signatory hereto, with the approval of the Director and Commissioner; notice of any such approval to be given by the Unit Operator to all parties hereto.

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

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

22. CONFLICT OF SUPERVISION: Neither the Unit Operator nor the working interest owners nor any of them shall be subject to

any forfeiture, termination or expiration of any rights hereunder or under any leases or contracts subject hereto, or to any penalty or liability on account of delay or failure in whole or in part to comply with any applicable provision thereof to the extent that the Unit Operator, working interest owners or any of them are hindered, delayed, or prevented from complying therewith by reason of failure of the Unit Operator to obtain in the exercise of due diligence, the concurrence of proper representatives of the United States and proper representatives of the State of New Mexico in and about any matters or things concerning which it is required herein that such concurrence be obtained. The parties hereto, including the Commission, agree that all powers and authority vested in the Commission in and by any provisions of this agreement 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.

23. APPEARANCES: Unit Operator shall, after notice to other parties affected, have the right to appear for and on behalf of any and all interests affected hereby before the Department of the Interior, the Commissioner of Public Lands of the State of New Mexico and the New Mexico Oil Conservation Commission and to appeal from orders issued under the regulations of said Department, the Commission or Commissioner, or to apply for relief from any of said regulations or in any proceedings relative to operations before the Department of the Interior, the Commissioner, or Commission, or any other legally constituted authority; provided, however, that any other interested party shall also have the right at his own expense to be heard in any such proceedings.

24. NOTICES: All notices, demands or statements required hereunder to be given or rendered to the parties hereto shall be deemed fully given if given in writing and personally delivered to the party or sent by postpaid registered or certified mail, addressed to such party or parties at their respective addresses set forth in connection with the signatures hereto or to the ratification or consent hereof or to such other address as any such party may have furnished in writing to party sending the notice, demand or statement.

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

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

27. NONDISCRIMINATION: In connection with the performance of work under this agreement, the operator agrees to comply with all

of the provisions of Section 202 (1) to (7), inclusive, of Executive Order 11246, as amended (30 F.R. 12319) which are hereby incorporated by reference in this agreement.

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

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

29. NON-JOINDER AND SUBSEQUENT JOINDER: If the owner of any substantial interest in a tract within the unit area fails or refuses to subscribe or consent to this agreement, the owner of the working interest in that tract may withdraw said tract from this agreement by written notice to the Director, the Commissioner, and the Unit Operator prior to the approval of this agreement by the Director and Commissioner. Any oil or gas interests in lands within

the unit area not committed hereto prior to submission of this agreement for final approval may thereafter be committed hereto by the owner or owners thereof subscribing or consenting to this agreement and, if the interest is a working interest, by the owner of such interest also subscribing to the unit operating agreement. After operations are commenced hereunder, the right of subsequent joinder, as provided in this section, by a working interest owner is subject to such requirements or approvals, if any, pertaining to such joinder as may be provided for in the unit operating agreement. After final approval hereof joinder by a non-working interest owner must be consented to in writing by the working interest owners committed hereto and responsible for the payment of any benefits that may accrue hereunder in behalf of such non-working interests. Joinder by an owner of a non-working interest, at any time, must be accompanied by appropriate joinder by the owner of the corresponding working interest in order for the interest to be regarded as committed hereto. Joinder to the unit agreement by a working interest owner, at any time, must be accompanied by appropriate joinder to the unit operating agreement, if more than one committed working interest owner is involved, in order for the interest to be regarded as committed to this unit agreement. Except as may otherwise herein be provided, subsequent joinders to this agreement shall be effective as of the first day of the month following the filing with the Supervisor and the Commissioner of duly executed counterparts of all or any papers necessary to establish effective commitment of any tract to this agreement unless objection to such joinder is duly made within 60 days by the Director and the Commissioner; provided, however, that as to State lands all subsequent joinders must be approved by the Commissioner.

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

31. NO PARTNERSHIP: It is expressly agreed that the relationship of the parties hereto is that of independent contractors and nothing in this agreement contained, express or implied, nor any operations conducted hereunder shall create or be deemed to have created a partnership or association between the parties hereto or any of them.

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

ATTEST:

UNION OIL COMPANY OF CALIFORNIA

Secretary

By _____

Date: _____

Address: _____

UNIT OPERATOR AND WORKING INTEREST
OWNER

WORKING INTEREST OWNERS

ATTEST:

AMERADA PETROLEUM CORPORATION

Secretary

By _____

Date: _____

Address: _____

ATTEST:

MONSANTO COMPANY

Secretary
Date: _____

By _____
President
Address: _____

Date: _____
Address: _____

Ora R. Hall, Jr.

Date: _____
Address: _____

John F. Younger

Date: _____
Address: _____

Erma Lowe, widow of Ralph Lowe, deceased

Date: _____
Address: _____

Independent Executors and Trustees
under the Last Will and Testament of
Ralph Lowe, deceased

STATE OF _____)
COUNTY OF _____) : ss

The foregoing instrument was acknowledged before me this _____
day of _____ 1966 by _____,
_____ of Union Oil Company of California, a California
corporation, on behalf of said corporation.

My Commission Expires: _____

Notary Public

STATE OF _____)
: ss
COUNTY OF _____)

The foregoing instrument was acknowledged before me this _____
day of _____ 1966 by _____,
_____ of Amerada Petroleum Corporation, a _____
corporation, on behalf of said corporation.

My Commission Expires: _____

Notary Public

STATE OF _____)
: ss
COUNTY OF _____)

The foregoing instrument was acknowledged before me this _____
day of _____ 1966 by _____,
_____ of Monsanto Company, a Delaware corporation, on
behalf of said corporation.

My Commission Expires: _____

Notary Public

STATE OF _____)
: ss
COUNTY OF _____)

The foregoing instrument was acknowledged before me this _____
day of _____ 1966 by Ora R. Hall, Jr. and Edna Ione Hall, his
wife.

My Commission Expires: _____

Notary Public

STATE OF _____)
: ss
COUNTY OF _____)

The foregoing instrument was acknowledged before me this _____
day of _____ 1966 by John F. Younger

My Commission Expires: _____

Notary Public

STATE OF _____)
 : ss
COUNTY OF _____)

The foregoing instrument was acknowledged before me this _____
day of _____ 1966 by Erma Lowe, widow of Ralph Lowe, deceased.

My Commission Expires: _____

Notary Public

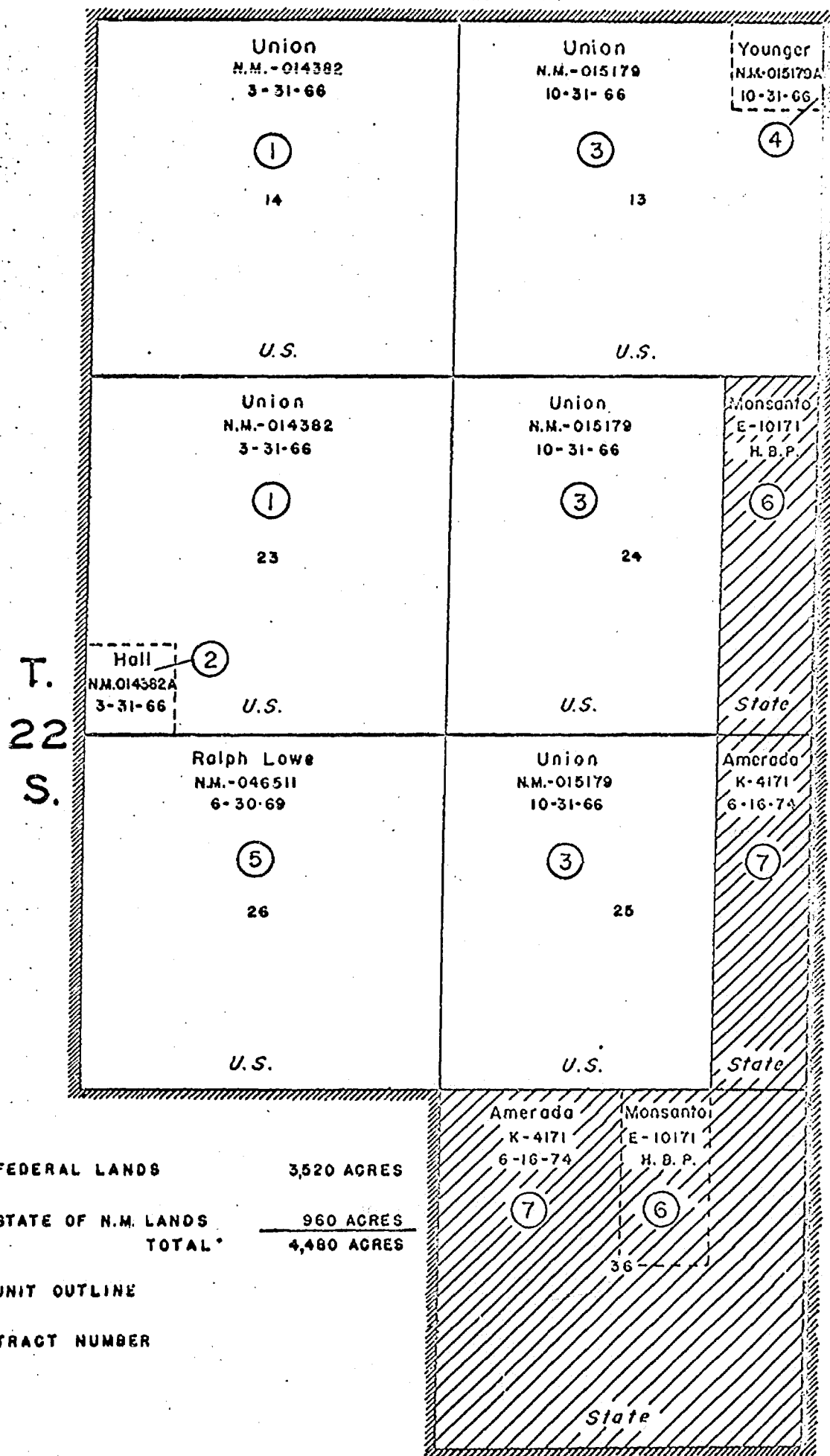
STATE OF _____)
 : ss
COUNTY OF _____)

The foregoing instrument was acknowledged before me this _____
day of _____ 1966 by Erma Lowe, Robert M. Turpin, Charles L.
Morgan, Jr., H. L. Landua, V. H. Van Horn, Jr., James L. Morris, Fred
G. Goodman and Dee H. Rose, Independent Executors and Trustees under the
Last Will and Testament of Ralph Lowe, deceased.

My Commission Expires: _____

Notary Public

R. 22 E.



NORTH HUAPACHE UNIT
EDDY COUNTY, NEW MEXICO
EXHIBIT "A"

EXHIBIT "B" - NORTH HUAPACHE UNIT AREA - EDDY COUNTY, NEW MEXICO

Page 1

Tract No.	Description of Land	No. of Acres	Lease No. & Expiration Date of Lease	Basic Royalty & Percentage	Lessee of Record	Overriding Royalty or Production Payments	Working Interest Owners and Percentage
<u>FEDERAL LANDS:</u>							
T. 22 S., R. 22 E:							
1.	Sec. 14 - All						
	Sec. 23 - N $\frac{1}{2}$, N $\frac{1}{2}$ S $\frac{1}{2}$, SE $\frac{1}{4}$ SW $\frac{1}{4}$, S $\frac{1}{2}$ SE $\frac{1}{4}$	1240	NM 014382 3/31/66	U.S. 12 $\frac{1}{2}$ %	Union Oil Company of California	Robert J. Leonard - 1/3 of 1-7/10% Patrick J. Leonard - 1/3 of 1-7/10% Timothy T. Leonard - 1/3 of 1-7/10% Robert G. Hanagan - 3/10 of 1% Jo Anna Light - 1%	Union Oil Company of California - All
2.	Sec. 23 - SW $\frac{1}{4}$ SW $\frac{1}{4}$	40	NM 014382-A 3/31/66	U.S. 12 $\frac{1}{2}$ %	Ora R. Hall, Jr.	Robert J. Leonard - 1/3 of 1-7/10% Patrick J. Leonard - 1/3 of 1-7/10% Timothy T. Leonard - 1/3 of 1-7/10% Robert G. Hanagan - 3/10 of 1% Jo Anna Light - 1%	Ora R. Hall, Jr. - All
3.	Sec. 13 - W $\frac{1}{2}$, W $\frac{1}{2}$ E $\frac{1}{2}$, SE $\frac{1}{4}$ NE $\frac{1}{4}$, E $\frac{1}{2}$ SE $\frac{1}{4}$	1560	NM 015179 10/31/66	U.S. 12 $\frac{1}{2}$ %	Union Oil Company of California	Neil H. Wills - 15/36 of \$500 p/a. out of 3% Robert G. Hanagan - 6/36 of \$500 p/a out of 3% Robert J. Leonard - 5/36 of \$500 p/a out of 3% Patrick J. Leonard - 5/36 of \$500 p/a out of 3% Timothy T. Leonard - 5/36 of \$500 p/a out of 3%	Union Oil Company of California - All

UNIT AGREEMENT
NORTH HUAPACHE UNIT AREA
EDDY COUNTY, NEW MEXICO

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UNIT AGREEMENT
FOR THE DEVELOPMENT AND OPERATION OF THE
NORTH HUAPACHE UNIT AREA
EDDY COUNTY, NEW MEXICO

NO. _____

THIS AGREEMENT made and entered into as of the _____ day of _____ 1966, by and between the parties subscribing, ratifying or consenting hereto, and herein referred to as the "parties hereto".

W I T N E S S E T H:

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

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

WHEREAS, the Commissioner of Public Lands of the State of New Mexico is authorized by an Act of the Legislature (Sec. 7-11-39 N.M. Statutes 1953 Annotated) to consent to or approve this agreement on behalf of the State of New Mexico, insofar as it covers and includes lands and mineral interests of the State of New Mexico; and

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

WHEREAS, the parties hereto hold sufficient interests in the North Huapache Unit Area covering the land hereinafter described to give reasonably effective control of operations therein; and

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

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

1. ENABLING ACT AND REGULATIONS: The Mineral Leasing Act of February 25, 1920, as amended, supra, and all valid pertinent regulations, including operating and unit plan regulations, heretofore issued thereunder or valid, pertinent, and reasonable regulations hereafter issued thereunder are accepted and made a part of this agreement as to Federal lands, provided such regulations are not inconsistent with the terms of this agreement; and as to State of New Mexico and privately owned lands, the oil and gas operating regulations in effect as of the effective date hereof governing drilling and producing operations, not inconsistent with the terms hereof or the laws of the State of New Mexico are hereby accepted and made a part of this agreement.

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

<u>Township 22 South, Range 22 East, N.M.P.M.</u>	
Section 13 - All	Section 25 - All
Section 14 - All	Section 26 - All
Section 23 - All	Section 36 - All
Section 24 - All	
containing 4480 acres, more or less	

Exhibit "A" attached hereto is a map showing the unit area and the boundaries and identity of tracts and leases in said area to the extent known to the Unit Operator. Exhibit "B" attached hereto is a schedule showing to the extent known to the Unit Operator the acreage, percentage and kind of ownership of oil and gas interests in all land in the unit area. However, nothing herein or in said schedule or map shall be construed as a representation by any party hereto as to the ownership of any interest other than such interest or interests as are shown in said map or schedule as owned by such party. Exhibits "A" and "B" shall be revised by the Unit Operator whenever changes in the unit area render such revision necessary, or when requested by the Oil and Gas Supervisor, hereinafter referred to as "Supervisor", or when requested by the Commissioner of Public Lands of the State of New Mexico, hereinafter referred to as "Commissioner", and not less than seven copies of the revised exhibits shall be filed with the Supervisor, and two copies thereof shall be filed with the Commissioner and one copy with the New Mexico Oil Conservation Commission, hereinafter referred to as "Commission".

The above described unit area shall, when practicable, be expanded to include therein any additional tract or tracts regarded as reasonably necessary or advisable for the purposes of this agreement, or shall be contracted to exclude lands not within any participating area whenever such expansion or contraction is necessary or advisable to conform with the purposes of this agreement. Such expansion or contraction shall be effected in the following manner:

(a) Unit Operator, on its own motion or on demands of the Director of the Geological Survey, hereinafter referred to as "Director", or on demand of the Commissioner, but only after preliminary

concurrence by the Director and the Commissioner, shall prepare a notice of proposed expansion or contraction describing the contemplated changes in the boundaries of the unit area, the reasons therefor, and the proposed effective date thereof, preferably the first day of a month subsequent to the date of notice.

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

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

(d) After due consideration of all pertinent information, the expansion or contraction shall, upon approval by the Director, the Commissioner and the Commission, become effective as of the date prescribed in the notice thereof.

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

effective date of the first initial participating area established under this unit agreement, shall be eliminated automatically from this agreement, effective as of the first day thereafter, and such lands shall no longer be a part of the unit area and shall no longer be subject to this agreement, unless at the expiration of said five-year period diligent drilling operations are in progress on unitized lands not entitled to participation, in which event all such lands shall remain subject hereto for so long as such drilling operations are continued diligently, with not more than 90 days' time elapsing between the completion of one such well and the commencement of the next such well, except that the time allowed between such wells shall not expire earlier than 30 days after the expiration of any period of time during which drilling operations are prevented by a matter beyond the reasonable control of Unit Operator as set forth in the section hereof entitled "Unavoidable Delay"; provided that all legal subdivisions of lands not in a participating area and not entitled to become participating under the applicable provisions of this agreement within 10 years after said first day of the month following the effective date of said first initial participating area shall be eliminated as above specified. Determination of creditable "Unavoidable Delay" time shall be made by Unit Operator and subject to approval of the Director and the Commissioner. The Unit Operator shall, within 90 days after the effective date of any elimination hereunder, describe the area so eliminated to the satisfaction of the Director and the Commissioner and promptly notify all parties in interest.

If conditions warrant extension of the 10 year period specified in this subsection 2(e), a single extension of not to exceed 2 years may be accomplished by consent of the owners of 90 percent of

the current unitized working interests and 60 percent of the current unitized basic royalty interests (exclusive of the basic royalty interest of the United States) on a total non-participating acreage basis, respectively, with approval of the Director and Commissioner, provided such extension application is submitted to the Director and Commissioner not later than 60 days prior to the expiration of said 10-year period.

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

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

4. UNIT OPERATOR: Union Oil Company of California, with offices at Roswell, New Mexico, is hereby designated as Unit Operator and by signature hereto as Unit Operator commits to this agreement all interests in unitized substances vested in it and agrees and consents to accept the duties and obligations of Unit Operator for the discovery, development and production of unitized substances as herein provided. Whenever reference is made herein to the Unit Operator, such reference means the Unit Operator acting in that capacity and not as owner of an interest in unitized substances, and the term "working Interest owner" when used herein shall include or refer to Unit Operator as the owner of a working interest when such an interest is owned by it.

5. RESIGNATION OR REMOVAL OF UNIT OPERATOR: Unit Operator shall have the right to resign at any time prior to the establishment of a participating area or areas hereunder, but such resignation shall not become effective so as to release Unit Operator from the duties and obligations of Unit Operator and terminate Unit Operator's rights as such for a period of six months after notice of intention to resign has been served by Unit Operator on all working interest owners and the Director, the Commissioner and Commission and until all wells then drilled hereunder are placed in a satisfactory condition for suspension or abandonment whichever is required by the Supervisor as to Federal lands and by the Commission as to State and privately owned lands unless a new unit operator shall have been selected and approved and shall have taken over and assumed the duties and obligations of Unit Operator prior to the expiration of said period.

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

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

The Unit Operator may, upon default or failure in the performance of its duties or obligations hereunder, be subject to removal

by the same percentage vote of the owners of working interests determined in like manner as herein provided for the selection of a new Unit Operator. Such removal shall be effective upon notice thereof to the Director and the Commissioner.

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

6. SUCCESSOR UNIT OPERATOR: Whenever the Unit Operator shall tender his or its resignation as Unit Operator or shall be removed as hereinabove provided, or a change of Unit Operator is negotiated by working interest owners, the owners of the working interests in the participating area or areas according to their respective acreage interests in such participating area or areas, or until a participating area shall have been established, the owners of the working interests according to their respective acreage interests in all unitized land, shall by majority vote select a successor Unit Operator. Provided, That, if a majority but less than 75 percent of the working interests qualified to vote are owned by one party to this agreement, a concurring vote of one or more additional working

interest owner shall be required to select a new operator. Such selection shall not become effective until:

(a) the Unit Operator so selected shall accept in writing the duties and responsibilities of Unit Operator, and

(b) the selection shall have been filed with the Supervisor and approved by the Commissioner. If no successor Unit Operator is selected and qualified as herein provided, the Director and Commissioner at their election may declare this unit agreement terminated.

7. ACCOUNTING PROVISIONS AND UNIT OPERATING AGREEMENT: If the Unit Operator is not the sole owner of working interests, costs and expenses incurred by Unit Operator in conducting unit operations hereunder shall be paid and apportioned among and borne by the owners of working interests all in accordance with the agreement or agreements entered into by and between the Unit Operator and the owners of working interests, whether one or more, separately or collectively. Any agreement or agreements entered into between the working interest owners and the Unit Operator as provided in this section, whether one or more, are herein referred to as the "unit operating agreement". Such unit operating agreement shall also provide the manner in which the working interest owners shall be entitled to receive their respective proportionate and allocated share of the benefits accruing hereto in conformity with their underlying operating agreements, leases or other independent contracts, and such other rights and obligations as between Unit Operator and the working interest owners as may be agreed upon by Unit Operator and the working interest owners; however, no such unit operating agreement shall be deemed either to modify any of the terms and conditions of this unit agreement or to relieve the Unit Operator of any right or obligation established under this unit

agreement, and in case of any inconsistency or conflict between the unit agreement and the unit operating agreement, this unit agreement shall prevail. Three (3) true copies of any unit operating agreement executed pursuant to this section should be filed with the Supervisor and one (1) true copy with the Commissioner, prior to approval of this unit agreement by the Director.

8. RIGHTS AND OBLIGATIONS OF UNIT OPERATOR: Except as otherwise specifically provided herein, the exclusive right, privilege and duty of exercising any and all rights of the parties hereto which are necessary or convenient for prospecting for, producing, storing, allocating, and distributing the unitized substances are hereby delegated to and shall be exercised by the Unit Operator as herein provided. Acceptable evidence of title to said rights shall be deposited with said Unit Operator and, together with this agreement, shall constitute and define the rights, privileges and obligations of Unit Operator. Nothing herein, however, shall be construed to transfer title to any land or to any lease or operating agreement, it being understood that under this agreement the Unit Operator, in its capacity as Unit Operator, shall exercise the rights of possession and use vested in the parties hereto only for the purposes herein specified.

9. DRILLING TO DISCOVERY: Within six months after the effective date hereof, the Unit Operator shall begin to drill an adequate test well at a location approved by the Supervisor, if on Federal land, or by the Commissioner if on State land, unless on such effective date a well is being drilled conformably with the terms hereof, and thereafter continue such drilling diligently until the Cisco Canyon formation has been tested or until at a lesser depth unitized substances shall be discovered which can be produced in

paying quantities (to-wit: quantities sufficient to repay the costs of drilling and producing operations, with a reasonable profit) or the Unit Operator shall at any time establish, to the satisfaction of the Supervisor if located on Federal lands, or the Commissioner if located on State lands, that further drilling of said well would be unwarranted or impracticable, provided, however, that Unit Operator shall not in any event be required to drill said well to a depth in excess of 8,200 feet. Until the discovery of a deposit of unitized substances capable of being produced in paying quantities, the Unit Operator shall continue drilling diligently, one well at a time, allowing not more than six months between the completion of one well and the beginning of the next well, until a well capable of producing unitized substances in paying quantities is completed to the satisfaction of the Supervisor, if on Federal lands, or the Commissioner, if on State lands, or until it is reasonably proved that the unitized land is incapable of producing unitized substances in paying quantities in the formations drilled hereunder. Nothing in this section shall be deemed to limit the right of the Unit Operator to resign as provided in Section 5 hereof, or as requiring Unit Operator to commence or continue any drilling during the period pending such resignation becoming effective in order to comply with the requirements of this section. The Director and Commissioner may modify the drilling requirements of this section by granting reasonable extensions of time when, in their opinion, such action is warranted.

Upon failure to comply with the drilling provisions of this section, the Director and Commissioner may, after reasonable notice to the Unit Operator and each working interest owner, lessee and lessor at their last known addresses, declare this unit agreement terminated.

10. PLAN OF FURTHER DEVELOPMENT AND OPERATION: Within six months after completion of a well capable of producing unitized substances in paying quantities, the Unit Operator shall submit for the approval of the Supervisor and the Commissioner an acceptable plan of development and operation for the unitized land which, when approved by the Supervisor and the Commissioner, shall constitute the further drilling and operating obligations of the Unit Operator under this agreement for the period specified therein. Thereafter, from time to time before the expiration of any existing plan, the Unit Operator shall submit for the approval of the Supervisor and the Commissioner a plan for an additional specified period for the development and operation of the unitized land.

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

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

(b) to the extent practicable, specify the operating practices regarded as necessary and advisable for proper conservation of natural resources.

Separate plans may be submitted for separate productive zones, subject to the approval of the Supervisor and the Commissioner.

Plans shall be modified or supplemented when necessary to meet changed conditions or to protect the interests of all parties to this agreement. Reasonable diligence shall be exercised in complying with the obligations of the approved plan of development. The Supervisor and Commissioner are authorized to grant a reasonable extension of the six month period herein prescribed for submission of an initial plan of development where such action is justified because of unusual conditions or circumstances. After completion hereunder of a well capable of producing unitized substances in paying quantities, no further wells, except such as may be necessary to afford protection against operations not under this agreement or such as may be specifically approved by the Supervisor and the Commissioner shall be drilled except in accordance with a plan of development approved as herein provided.

11. PARTICIPATION AFTER DISCOVERY: Upon completion of a well capable of producing unitized substances in paying quantities, the Unit Operator shall, within the month of such completion, if practicable, or as soon thereafter as required by the Supervisor or the Commissioner submit for approval by the Director and the Commissioner a schedule, based on subdivisions of the public land survey or aliquot parts thereof, of all unitized land then regarded as reasonably proved to be productive of unitized substances in paying quantities; all lands in said schedule on approval of the Director and the Commissioner to constitute a participating area, effective as of the date of completion of such well or the effective date of the unit agreement, whichever is later. The acreages of both Federal and non-Federal lands shall be based upon appropriate computations from the courses and distances shown on the last approved public land survey as of the effective date

of the initial participating area. Said schedule shall also set forth the percentage of unitized substances to be allocated as herein provided to each unitized tract in the participating area so established, and shall govern the allocation of production from and after the date the participating area becomes effective. A separate participating area shall be established in like manner for each separate pool or deposit of unitized substances or for any group thereof produced as a single pool or zone, and any two or more participating areas so established may be combined into one with the consent of the owners of all working interests in the lands within the participating areas so to be combined, on approval of the Director and the Commissioner. The participating area or areas so established shall be revised from time to time, subject to like approval, whenever such action appears proper as a result of further drilling operations or otherwise, to include additional land then regarded as reasonably proved to be productive in paying quantities, or to exclude land then regarded as reasonably proved not to be productive in paying quantities and the percentage of allocation shall also be revised accordingly. The effective date of any revision shall be the first of the month in which is obtained the knowledge or information on which such revision is predicated, provided, however, that a more appropriate effective date may be used if justified by the Unit Operator and approved by the Director and the Commissioner. No land shall be excluded from a participating area on account of depletion of the unitized substances.

It is the intent of this section that a participating area shall represent the area known or reasonably estimated to be productive in paying quantities, but, regardless of any revision of the participating area, nothing herein contained shall be construed as

requiring any retroactive adjustment for production obtained prior to the effective date of the revision of the participating area.

In the absence of agreement at any time between the Unit Operator and the Director and the Commissioner as to the proper definition or redefinition of a participating area, or until a participating area has, or areas have, been established as provided herein, the portion of all payments affected thereby may be impounded in a manner mutually acceptable to the owners of working interests, except royalties due the United States and the State of New Mexico, which shall be determined by the Supervisor for Federal lands and the Commissioner for State lands and the amount thereof deposited, as directed by the Supervisor and the Commissioner respectively, to be held as unearned money until a participating area is finally approved and then applied as earned or returned in accordance with a determination of the sum due as Federal and State royalty on the basis of such approved participating area.

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

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

participating area from which initially produced as constituted at the time of such final production.

13. DEVELOPMENT OR OPERATION OF NON-PARTICIPATING LAND OR FORMATIONS: Any party hereto owning or controlling the working interest in any unitized land having thereon a regular well location may with the approval of the Supervisor as to Federal land and the Commission as to State or privately owned land, at such party's sole risk, cost and expense, drill a well to test any formation for which a participating area has been established if such location is not within said participating area, unless within 90 days of receipt of notice from said party of his intention to drill the well the Unit Operator elects and commences to drill such a well in like manner as other wells are drilled by the Unit Operator under this agreement.

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

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

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

If gas obtained from lands not subject to this agreement is introduced into any participating area hereunder for use in repressuring, stimulation of production, or increasing ultimate recovery, which shall be in conformity with a plan first approved by the Supervisor and the Commissioner, a like amount of gas, after settlement as herein provided for any gas transferred from any other participating area and with due allowance for loss or depletion from any cause, may be withdrawn from the formation into which the gas was introduced, royalty free as to dry gas, but not as to the products extracted therefrom; provided that such withdrawal shall be at such time as may be provided in the plan of operations or as may otherwise be consented to by the Supervisor and the Commissioner as conforming to good petroleum engineering

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

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

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

15. RENTAL SETTLEMENT: Rental or minimum royalties due on leases committed hereto shall be paid by working interest owners responsible therefor under existing contracts, laws and regulations, provided that nothing herein contained shall operate to relieve the lessees of any land from their respective lease obligations for the payment of any rental or minimum royalty in lieu thereof due under their leases. Rental or minimum royalty for lands of the United States subject to this agreement shall be paid at the rate specified in the respective leases from the United States unless such rental or minimum royalty is waived, suspended or reduced by law or by approval of the Secretary or his duly authorized representative.

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

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

16. CONSERVATION: Operations hereunder and production of unitized substances shall be conducted to provide for the most economical and efficient recovery of said substances without waste, as defined by or pursuant to state or Federal law or regulations.

17. DRAINAGE: The Unit Operator shall take appropriate and adequate measures to prevent drainage of unitized substances from unitized land by wells on land not subject to this agreement, or with prior consent of the Director and the Commissioner, pursuant to applicable regulations pay a fair and reasonable compensatory royalty, as determined by the Supervisor as to Federal lands and by the Commissioner as to State lands.

18. LEASES AND CONTRACTS CONFORMED AND EXTENDED: The terms, conditions and provisions of all leases, subleases, and other contracts relating to exploration, drilling, development or operations for oil or gas on lands committed to this agreement are hereby expressly modified and amended to the extent necessary to make the same conform to the provisions hereof, but otherwise to remain in full force and effect; and the parties hereto hereby consent that the Secretary, as to Federal

leases, and the Commissioner, as to State leases, shall and each by his approval hereof, or by the approval hereof by his duly authorized representative, does hereby establish, alter, change, or revoke the drilling, producing, rental, minimum royalty and royalty requirements of Federal and State leases committed hereto and the regulations in respect thereto to conform said requirements to the provisions of this agreement, and, without limiting the generality of the foregoing, all leases, subleases and contracts are particularly modified in accordance with the following:

(a) The development and operation of lands subject to this agreement under the terms hereof shall be deemed full performance of all obligations for development and operation with respect to each and every part or separately owned tract subject to this agreement, regardless of whether there is any development of any particular part or tract of the unit area, notwithstanding anything to the contrary in any lease, operating agreement or other contract by and between the parties hereto, or their respective predecessors in interest, or any of them.

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

(c) Suspension of drilling or producing operations on all unitized lands pursuant to direction or consent of the Secretary and the Commissioner, or their duly authorized representatives, shall be deemed to constitute such suspension pursuant to such direction or consent as to each and every tract of unitized land.

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

(e) Any Federal lease for a fixed term of twenty (20) years or any renewal thereof or any part of such lease which is made subject to this agreement shall continue in force beyond the term provided therein until the termination hereof. Any other Federal lease committed hereto shall continue in force beyond the term so provided therein or by law as to the land committed so long as such lease remains subject hereto, provided that production is had in paying quantities under this unit agreement prior to the expiration date of the term of such lease, or in the event actual drilling operations are commenced on unitized land, in accordance with the provisions of this agreement, prior to the end of the primary term of such lease and are being diligently prosecuted at that time, such lease shall be extended for two years and so long thereafter as oil or gas is produced in paying quantities in accordance with the provisions of the Mineral Leasing Act Revision of 1960.

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

and effect for and during the term of the underlying lease as such term is herein extended.

(g) Any lease embracing lands of the State of New Mexico which is made subject to this agreement, shall continue in force beyond the term provided therein as to the lands committed hereto until the termination hereof, subject to the provisions of subsection (e) of Section 2.

(h) The segregation of any Federal lease committed to this agreement is governed by the following provisions in the fourth paragraph of Sec. 17(j) of the Mineral Leasing Act, as amended by the Act of September 2, 1960 (74 Stat. 781-784): "Any (Federal) lease heretofore or hereafter committed to any such (unit) plan embracing lands that are in part within and in part outside of the area covered by any such plan shall be segregated into separate leases as to the lands committed and the lands not committed as of the effective date of unitization: Provided, however, That any such lease as to the non-unitized portion shall continue in force and effect for the term thereof but for not less than two years from the date of such segregation and so long thereafter as oil or gas is produced in paying quantities".

(i) Any lease embracing lands of the State of New Mexico having only a portion of its lands committed hereto, shall be segregated as to the portion committed and the portion not committed, and the provisions of such lease shall apply separately to such segregated portions commencing as of the effective date hereof; provided, however, notwithstanding any of the provisions of this agreement to the contrary any lease embracing lands of the State of New Mexico having only a portion of its lands committed hereto shall continue in full force

and effect beyond the term provided therein as to all lands embraced in such lease, if oil or gas is discovered and is capable of being produced in paying quantities from some part of the lands embraced in such lease, at the expiration of the secondary term of such lease; or if, at the expiration of the secondary term, the lessee or the Unit Operator is then engaged in bona fide drilling or reworking operations on some part of the lands embraced in such lease, the same, as to all lands embraced therein, shall remain in full force and effect so long as such operations are being diligently prosecuted, and if they result in the production of oil or gas, said lease shall continue in full force and effect as to all of the lands embraced therein, so long thereafter as oil or gas in paying quantities is being produced from any portion of said lands.

19. COVENANTS RUN WITH LAND: The covenants herein shall be construed to be covenants running with the land with respect to the interest of the parties hereto and their successors in interest until this agreement terminates, and any grant, transfer, or conveyance of interest in land or leases subject hereto shall be and hereby is conditioned upon the assumption of all privileges and obligations hereunder by the grantee, transferee or other successor in interest. No assignment or transfer of any working interest, royalty, or other interest subject hereto shall be binding upon the Unit Operator until the first day of the calendar month after Unit Operator is furnished with the original, photostatic or certified copy of the instrument of transfer.

20. EFFECTIVE DATE AND TERM: This agreement shall become effective upon approval by the Director and the Commissioner or their duly authorized representatives as of the date of approval by the

Director and shall terminate five (5) years from said effective date unless:

(a) such date of expiration is extended by the Director and the Commissioner, or

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

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

(d) it is terminated as heretofore provided in this agreement.

This agreement may be terminated at any time by not less than 75 per centum, on an acreage basis, of the owners of working interests signatory hereto, with the approval of the Director and Commissioner; notice of any such approval to be given by the Unit Operator to all parties hereto.

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

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

22. CONFLICT OF SUPERVISION: Neither the Unit Operator nor the working interest owners nor any of them shall be subject to

any forfeiture, termination or expiration of any rights hereunder or under any leases or contracts subject hereto, or to any penalty or liability on account of delay or failure in whole or in part to comply with any applicable provision thereof to the extent that the Unit Operator, working interest owners or any of them are hindered, delayed, or prevented from complying therewith by reason of failure of the Unit Operator to obtain in the exercise of due diligence, the concurrence of proper representatives of the United States and proper representatives of the State of New Mexico in and about any matters or things concerning which it is required herein that such concurrence be obtained. The parties hereto, including the Commission, agree that all powers and authority vested in the Commission in and by any provisions of this agreement 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.

23. APPEARANCES: Unit Operator shall, after notice to other parties affected, have the right to appear for and on behalf of any and all interests affected hereby before the Department of the Interior, the Commissioner of Public Lands of the State of New Mexico and the New Mexico Oil Conservation Commission and to appeal from orders issued under the regulations of said Department, the Commission or Commissioner, or to apply for relief from any of said regulations or in any proceedings relative to operations before the Department of the Interior, the Commissioner, or Commission, or any other legally constituted authority; provided, however, that any other interested party shall also have the right at his own expense to be heard in any such proceedings.

24. NOTICES: All notices, demands or statements required hereunder to be given or rendered to the parties hereto shall be deemed fully given if given in writing and personally delivered to the party or sent by postpaid registered or certified mail, addressed to such party or parties at their respective addresses set forth in connection with the signatures hereto or to the ratification or consent hereof or to such other address as any such party may have furnished in writing to party sending the notice, demand or statement.

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

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

27. NONDISCRIMINATION: In connection with the performance of work under this agreement, the operator agrees to comply with all

of the provisions of Section 202 (1) to (7), inclusive, of Executive Order 11246, as amended (30 F.R. 12319) which are hereby incorporated by reference in this agreement.

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

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

29. NON-JOINDER AND SUBSEQUENT JOINDER: If the owner of any substantial interest in a tract within the unit area fails or refuses to subscribe or consent to this agreement, the owner of the working interest in that tract may withdraw said tract from this agreement by written notice to the Director, the Commissioner, and the Unit Operator prior to the approval of this agreement by the Director and Commissioner. Any oil or gas interests in lands within

the unit area not committed hereto prior to submission of this agreement for final approval may thereafter be committed hereto by the owner or owners thereof subscribing or consenting to this agreement and, if the interest is a working interest, by the owner of such interest also subscribing to the unit operating agreement. After operations are commenced hereunder, the right of subsequent joinder, as provided in this section, by a working interest owner is subject to such requirements or approvals, if any, pertaining to such joinder as may be provided for in the unit operating agreement. After final approval hereof joinder by a non-working interest owner must be consented to in writing by the working interest owners committed hereto and responsible for the payment of any benefits that may accrue hereunder in behalf of such non-working interests. Joinder by an owner of a non-working interest, at any time, must be accompanied by appropriate joinder by the owner of the corresponding working interest in order for the interest to be regarded as committed hereto. Joinder to the unit agreement by a working interest owner, at any time, must be accompanied by appropriate joinder to the unit operating agreement, if more than one committed working interest owner is involved, in order for the interest to be regarded as committed to this unit agreement. Except as may otherwise herein be provided, subsequent joinders to this agreement shall be effective as of the first day of the month following the filing with the Supervisor and the Commissioner of duly executed counterparts of all or any papers necessary to establish effective commitment of any tract to this agreement unless objection to such joinder is duly made within 60 days by the Director and the Commissioner; provided, however, that as to State lands all subsequent joinders must be approved by the Commissioner.

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

31. NO PARTNERSHIP: It is expressly agreed that the relationship of the parties hereto is that of independent contractors and nothing in this agreement contained, express or implied, nor any operations conducted hereunder shall create or be deemed to have created a partnership or association between the parties hereto or any of them.

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

ATTEST:

UNION OIL COMPANY OF CALIFORNIA

Secretary

By _____

Date: _____

Address: _____

UNIT OPERATOR AND WORKING INTEREST
OWNER

WORKING INTEREST OWNERS

ATTEST:

AMERADA PETROLEUM CORPORATION

Secretary

By _____

Date: _____

Address: _____

ATTEST:

MONSANTO COMPANY

Secretary
Date: _____

By _____
President
Address: _____

Date: _____
Address: _____

Ora R. Hall, Jr.

Date: _____
Address: _____

John F. Younger

Date: _____
Address: _____

Erma Lowe, widow of Ralph Lowe, deceased

Date: _____
Address: _____

Independent Executors and Trustees
under the Last Will and Testament of
Ralph Lowe, deceased

STATE OF _____)
: ss
COUNTY OF _____)

The foregoing instrument was acknowledged before me this _____
day of _____ 1966 by _____,
_____ of Union Oil Company of California, a California
corporation, on behalf of said corporation.

My Commission Expires: _____

Notary Public

STATE OF _____)
 : ss
COUNTY OF _____)

The foregoing instrument was acknowledged before me this _____
day of _____ 1966 by _____,
_____ of Amerada Petroleum Corporation, a _____
corporation, on behalf of said corporation.

My Commission Expires: _____

Notary Public

STATE OF _____)
 : ss
COUNTY OF _____)

The foregoing instrument was acknowledged before me this _____
day of _____ 1966 by _____,
_____ of Monsanto Company, a Delaware corporation, on
behalf of said corporation.

My Commission Expires: _____

Notary Public

STATE OF _____)
 : ss
COUNTY OF _____)

The foregoing instrument was acknowledged before me this _____
day of _____ 1966 by Ora R. Hall, Jr. and Edna Ione Hall, his
wife.

My Commission Expires: _____

Notary Public

STATE OF _____)
 : ss
COUNTY OF _____)

The foregoing instrument was acknowledged before me this _____
day of _____ 1966 by John F. Younger

My Commission Expires: _____

Notary Public

STATE OF _____)
 : ss
COUNTY OF _____)

The foregoing instrument was acknowledged before me this _____
day of _____ 1966 by Erma Lowe, widow of Ralph Lowe, deceased.

My Commission Expires: _____

Notary Public

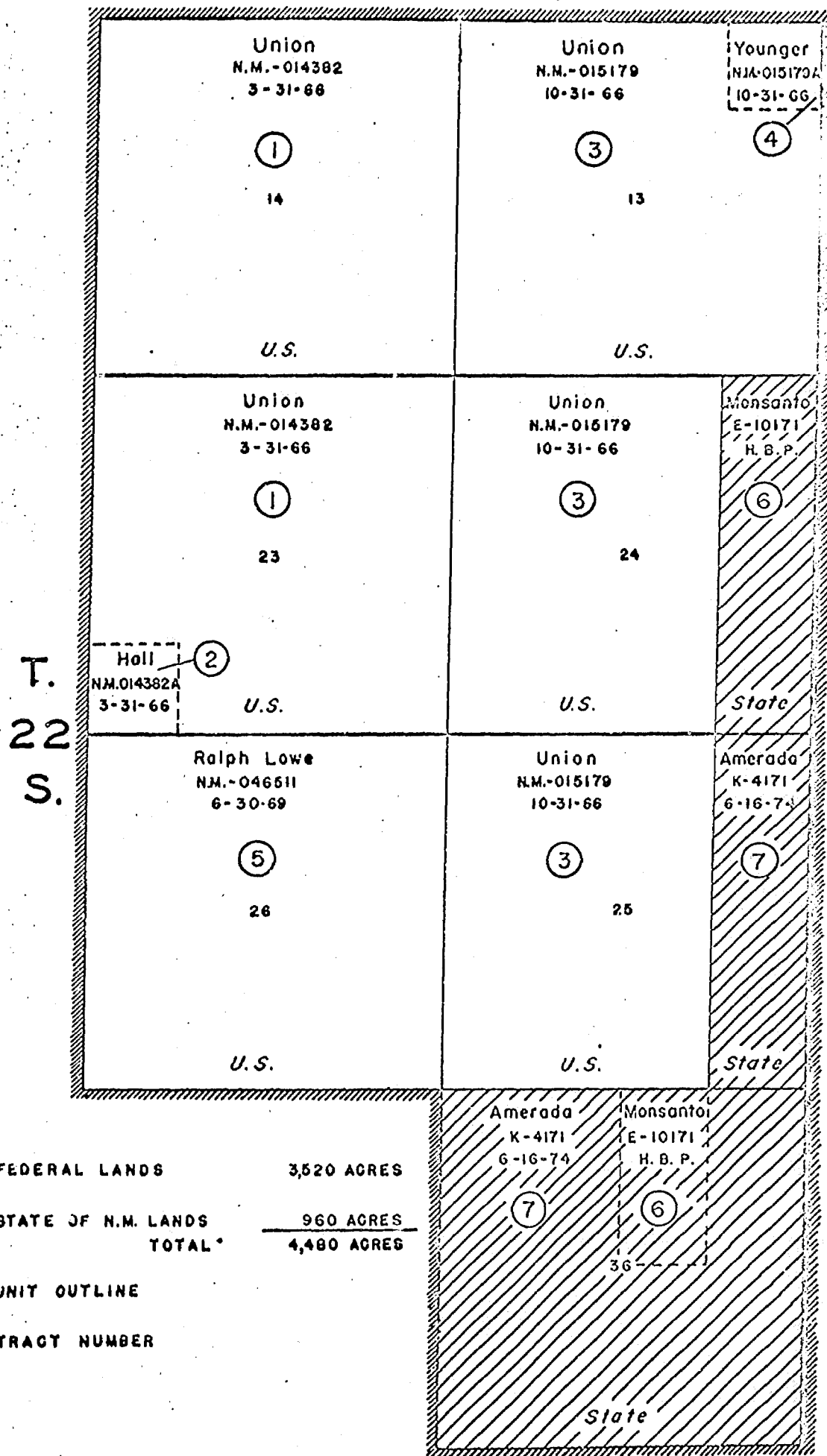
STATE OF _____)
 : ss
COUNTY OF _____)

The foregoing instrument was acknowledged before me this _____
day of _____ 1966 by Erma Lowe, Robert M. Turpin, Charles L.
Morgan, Jr., H. L. Landua, V. H. Van Horn, Jr., James L. Morris, Fred
G. Goodman and Dee H. Rose, Independent Executors and Trustees under the
Last Will and Testament of Ralph Lowe, deceased.

My Commission Expires: _____

Notary Public

R. 22 E.



NORTH HUAPACHE UNIT
EDDY COUNTY, NEW MEXICO
EXHIBIT "A"

EXHIBIT "B" - NORTH HUAPACHE UNIT AREA - EDDY COUNTY, NEW MEXICO

Page 1

Tract No.	Description of Land	No. of Acres	Lease No. & Expiration Date of Lease	Basic Royalty & Percentage	Lessee of Record	Overriding Royalty or Production Payments	Working Interest Owners and Percentage
<u>FEDERAL LANDS:</u>							
<u>T. 22 S., R. 22 E:</u>							
1.	Sec. 14 - All				Union Oil Company of California	Robert J. Leonard - 1/3 of 1-7/10% Patrick J. Leonard - 1/3 of 1-7/10% Timothy T. Leonard - 1/3 of 1-7/10% Robert G. Hanagan - 3/10 of 1%	Union Oil Company of California - All
	Sec. 23 - N $\frac{1}{2}$, N $\frac{1}{2}$ S $\frac{1}{2}$, SE $\frac{1}{4}$ SW $\frac{1}{4}$, S $\frac{1}{2}$ SE $\frac{1}{4}$	1240	NM 014382 3/31/66	U.S. 12 $\frac{1}{2}$ %			
2.	Sec. 23 - SW $\frac{1}{4}$ SW $\frac{1}{4}$	40	NM 014382-A 3/31/66	U.S. 12 $\frac{1}{2}$ %	Ora R. Hall, Jr.	Robert J. Leonard - 1/3 of 1-7/10% Patrick J. Leonard - 1/3 of 1-7/10% Timothy T. Leonard - 1/3 of 1-7/10% Robert G. Hanagan - 3/10 of 1% Jo Anna Light - 1%	Ora R. Hall, Jr. - All
3.	Sec. 13 - W $\frac{1}{2}$, W $\frac{1}{2}$ E $\frac{1}{2}$, SE $\frac{1}{4}$ NE $\frac{1}{4}$, E $\frac{1}{2}$ SE $\frac{1}{4}$ Sec. 24 - W $\frac{1}{2}$, W $\frac{1}{2}$ E $\frac{1}{2}$ Sec. 25 - W $\frac{1}{2}$, W $\frac{1}{2}$ E $\frac{1}{2}$	1560	NM 015179 10/31/66	U.S. 12 $\frac{1}{2}$ %	Union Oil Company of California	Neil H. Wills - 15/36 of \$500 p/a. out of 3% Robert G. Hanagan - 6/36 of \$500 p/a out of 3% Robert J. Leonard - 5/36 of \$500 p/a out of 3% Patrick J. Leonard - 5/36 of \$500 p/a out of 3% Timothy T. Leonard - 5/36 of \$500 p/a out of 3%	Union Oil Company of California - All

Age 2

1111

DRAFT
JMD/esr

BEFORE THE OIL CONSERVATION COMMISSION
OF THE STATE OF NEW MEXICO

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

CASE No. 3382

Order No. R-3408
2046

APPLICATION OF UNION OIL COMPANY OF CALIFORNIA
FOR APPROVAL OF THE NORTH HUAPACHE
UNIT AGREEMENT, EDDY, COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 o'clock a.m. on
March 9, 1966, at Santa Fe, New Mexico, before Examiner
Elvis A. Utz.

NOW, on this day of March, 1966, the Commission,
a quorum being present, having considered the testimony, the record,
and the recommendations of the Examiner, and being fully advised
in the premises,

FINDS:

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

(2) That the applicant, Union Oil Company of California,
seeks approval of the North Huapache Unit Agreement
covering 4480 acres, more or less, of State and
Federal lands
~~and~~
described as follows:

✓
EDDY COUNTY, NEW MEXICO
TOWNSHIP 22 SOUTH, RANGE 22 EAST, NMPM
Sections 13: All
~~Section 14: All~~
Sections 23: All
~~Section 24: All~~
Sections 25: All
~~Section 26: All~~
Section 36: All

(3) That approval of the proposed unit agreement should promote the prevention of waste and the protection of correlative rights within the unit area.

IT IS THEREFORE ORDERED:

(1) That the North Huapache Unit Agreement is hereby approved.

(2) That the plan contained in said unit agreement for the development and operation of the unit area is hereby approved in principle as a proper conservation measure; provided, however, that notwithstanding any of the provisions contained in said unit agreement, this approval shall not be considered as waiving or relinquishing, in any manner, any right, duty, or obligation which is now, or may hereafter be, vested in the Commission to supervise and control operations for the exploration and development of any lands committed to the unit and production of oil or gas therefrom.

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

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

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

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

Docket No. 7-66

DOCKET: EXAMINER HEARING - WEDNESDAY - MARCH 9, 1966

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

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

CASE 3381: Application of Tenneco Oil Company for an exception to Rule 15, Order No. R-2397, Lea County, New Mexico. Applicant, in the above-styled cause, seeks an exception to Rule 15, Order No. R-2397, special rules for the Double-X Delaware Pool, for its U. S. Smelting USA Well No. 2, located in Unit E of Section 22, Township 24 South, Range 32 East, Lea County, New Mexico, to permit said well to make up overproduction of gas at a lesser rate than complete shut in, in order that gas may be used from said to gas-lift another well on the same lease.

CASE 3382: Application of Union Oil Company of California for a unit agreement, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval of the North Hapache Unit Area comprising 4480 acres, more or less, of Federal and State lands in Township 22 South, Range 22 East, Eddy County, New Mexico.

CASE 3204: (Reopened)
In the matter of Case No. 3204 being reopened pursuant to the provisions of Order No. R-2872, which order established 80-acre spacing units for the Morton-Lower Wolfcamp Pool, Lea County, New Mexico, for a period of one year. All interested parties may appear and show cause why said pool should not be developed on 40-acre spacing units.

CASE 3206: (Reopened)
In the matter of Case No. 3206 being reopened pursuant to the provisions of Order No. R-2874, which order established 160 acre spacing for the High Plains-Pennsylvanian Pool, Lea County, New Mexico, for a period of one year. All interested parties may appear and show cause why said pool should not be developed on 80-acre or 40-acre spacing units.

104 1000 to 1000

Union City, N.J.

4480 acres

7th State Route

T 22 S R 2 E

DOCKET MAILED

Date 2-25-66
To Hille R

dearnley-meier reporting service, inc.

SPECIALIZING IN: DEPOSITIONS, HEARINGS, STATEMENTS, EXPERT TESTIMONY, DAILY COPY, CONVENTIONS

1120 SIMMS BLDG. • P. O. BOX 1092 • PHONE 243-6591 • ALBUQUERQUE, NEW MEXICO



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

March 9, 1966

EXAMINER HEARING

IN THE MATTER OF:

Application of Union Oil Company of
California for a unit agreement, Eddy
County, New Mexico.

Case No. 3382

BEFORE:

Elvis A. Utz, Gas Engineer

TRANSCRIPT OF HEARING

MR. DURRETT: Application of Union Oil Company of California for a unit agreement, Eddy County, New Mexico.

MR. HINKLE: Clarence Hinkle appearing on behalf of Union Oil Company; we have one witness, Arthur Lewis, we would like to have him sworn, please.

(Witness sworn.)

(Whereupon, Applicant's Exhibits 1, 2 & 3 marked for identification.)

MR. UTZ: Any other appearances?

ARTHUR V. LEWIS, JR., a witness, having been first duly sworn, was examined and testified as follows:

DIRECT EXAMINATION

BY MR. HINKLE:

Q State your name, please?

A Arthur V. Lewis, Jr.

Q By whom are you employed, and in what capacity?

A Union Oil Company of California; District Geologist.

Q Have you ever testified before the Oil Conservation Commission?

A I have not.

Q Are you a graduate petroleum engineer?

A I'm a graduate geologist, William's College, 1948.

Q How long have you been employed by Union Oil Company?

A Union Oil Company, 17 and a half years.



Q How much of the time that you have been with Union have your duties covered New Mexico or part of New Mexico?

A I worked in New Mexico for over three years.

Q You're familiar with operations in Southeastern New Mexico?

A Yes, sir.

Q Have you made a study of the North Huapache Unit Area in New Mexico?

A Yes, I have.

Q Are you familiar with the application of Union Oil in this case?

A Yes, I am.

Q Mr. Lewis, refer to your Exhibit "A", Exhibit 1, and explain what it shows?

A This shows an outline of the proposed North Huapache Unit setting forth lands that are Federal Lands, and the lands that are State Lands. 78.57 percent of the land is Federal; 21.43 percent of the land is State.

Q Generally, in the region where is this area located with reference, say, to Carlsbad?

A Southwestern Eddy County, New Mexico, 23 or 24 miles West of the City of Carlsbad. The Indian Basin is on the 24 miles East of the area.

Q Is this area suitable and proper for unitization?



A Yes.

Q Has an area been tentatively approved by the State Land Office?

A Yes, it has.

Q Now, refer to Exhibit Number 2 and explain what this shows?

A This is a subsurface structural contour map of the Cisco Formation of the upper Pennsylvanian Age, contour interval of 100 feet. It shows in orange the area of the North Huapache Unit, it shows a portion of the Indian Basin gas field in the Northeastern part of the map. The data points were derived by combination of mechanical logs and it was identified as the top of the Cisco, and these points were identified as subsea datums. Paralleling and in front of the Huapache Flexure one of the ridges has an enclosure that has been proven by well control and in the Indian Basin Field starting around Section 4589, 22,835 feet, based on limited well control that is present in the area. Superimposed on this map is a green outline which is an aeromagnetic anomaly interpreted by the California office covering both the area of the Indian Basin gas field and North Huapache Unit. The shaded blue outline on the North and Southbound direction limits the probable extent of porosity in the Cisco Canyon Reef which is productive of the Indian Basin gas field. All the data was prepared by me with the

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 1213 FIRST NATIONAL BANK EAST • PHONE 256-1294 • ALBUQUERQUE, NEW MEXICO

exception of the aeromagnetic anomaly.

Q Does Exhibit 1 show all the wells that have been drilled in this area?

A Yes, sir, the wells are identified by code in the lower left corner of the map as to those wells which produce from the Cisco Canyon. One well produces from the Bend Formation, Section 622 South, 23 East, and the wells that produce from the Morrow are circled in darker pencil.

Q Do you have this information that has been drawn from your subsurface interpretations and information obtained from these wells?

A Yes, sir.

Q In your opinion does the unit area cover all or substantially all of the geological feet or anomaly which you have indicated?

A Yes, sir.

Q And in the event of the production the unit would give you effective control of the unit area of the old pool?

A Yes.

Q Does Union propose to drill a test well on the unit area?

A We propose to drill a well located in the Northeast Quarter of Section 23, Township 22 South, Range 23 East. The location is 1980 from the North and East, but if surface

conditions won't permit this well 1980 from the East and 1980 from the North--

Q How deep will this be drilled?

A 1800 feet, Cisco Canyon test.

Q What will this well penetrate over in the Cisco Canyon?

A The other potential formation is the Wolfcamp. This well was completed as a gas well that was plugged before we obtained any commercial products from it.

Q Is there anything else that you would like to bring out with respect to this exhibit?

A The line of cross section indicated on the map extends from Inman's Number 1 Cawley Draw Well across to the North Huapache Unit in Section 122 South, 23 East, and this cross section, our Exhibit 3.

Q Refer to Exhibit 3 and explain what it shows.

A Exhibit 3 is a structural cross section drawn from Inman's Number 1 Cawley Draw Unit on the left-hand end on the West of the Huapache Unit and on the right-hand side to the Southeast. Only the formations from the lower part of the Wolfcamp to the upper part of the Chester are included on the cross section. As I said it's a structural cross section. The formations in the area are identified by name; Wolfcamp, Cisco, Canyon, Strawn, Bend, Morrow and Chester. Within the

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PAGE 7

Cisco Canyon Formation I have colored in blue the probable extent of the Dolomite phases of the Cisco Canyon which is expected to produce. The configuration of the Dolomite buildup was obtained in the Indian Basin gas field and projected to the west.

Q You believe that to be a reasonable interpretation from the wells and all the data that's available?

A Yes, I do.

Q Are you familiar with the unit agreement which has been filed with the application in this case?

A Yes, sir.

Q Is this the same form of unit agreement or substantially the same form which has generally been used where State and Federal Lands are involved?

A Yes, it is.

Q Who is the unit operator?

A Union Oil Company of California.

Q Does the unit produce the initial test wells that you have already testified to?

A Yes, sir.

Q In your opinion if this unit is approved and the well results in the discovery of unitized substances will the unit agreement be in the interest of conservation?

A Yes.

Q Will the unit agreement promulgate easy recovery of the substance?



A Yes.

MR. HINKLE: We would like to offer Exhibits 1, 2 and 3.

(Whereupon, Applicant's Exhibits 1, 2 and 3 marked for identification.)

MR. UTZ: Without objection they will be entered.

(Whereupon, Applicant's Exhibits 1, 2 and 3 admitted into evidence.)

MR. HINKLE: That's all I believe we have.

CROSS-EXAMINATION

BY MR. UTZ:

Q Mr. Lewis, I noticed on your cross section that you use the Bend Morrow nomenclature as synonymous, however on Exhibit 2 you show nomenclature for a Bend nomenclature for the Morrow.

A The reason I did this, the exhibit was prepared for company use and Oil Conservation Commission use and I can't satisfactorily divide the exact dividing point between the Bend and the Morrow, it's a matter of conjecture. The basal that's producing in the wells is identified as Morrow Producer Humbles' 10, Huapache and others. It's a sandstone base Morrow and we know it's Morrow. The wells producing in Section 622 South, 23 East are in the zone that we know as Bend or Atoka, but we don't know for sure where the point is

dividing these two formations. While we can identify the zones that produce we can't draw a positive line on the cross section that would tell for sure where it is.

Q I presume the Commission was as confused as anybody as to what to call these zones, therefore we call them upper Pennsylvanian.

A Yes, sir.

Q Actually the Morrow Bend would be synonymous with the lower Bend?

A Yes, sir, in our conventional useage the upper is the Cisco Canyon and the lower is the Strawn Bend and Morrow.

MR. UTZ: Other questions? The witness may be excused. The Commission will take the case under advisement and call Case 3204.

I N D E X

WITNESS	PAGE
ARTHUR V. LEWIS	
Direct Examination by Mr. Hinkle	2
Cross-Examination by Mr. Utz	8

E X H I B I T S

<u>NUMBER</u>	<u>MARKED FOR IDENTIFICATION</u>	<u>OFFERED</u>	<u>ADMITTED</u>
Applt's. 1	2	8	8
Applt's. 2	2	8	8
Applt's. 3	2	8	8

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

March 9, 1966

EXAMINER HEARING

IN THE MATTER OF:

Application of Union Oil Company of
California for a unit agreement, Eddy
County, New Mexico.

Case No. 3382

BEFORE:

Elvis A. Utz, Gas Engineer

TRANSCRIPT OF HEARING

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(Witness sworn.)

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A Yes, sir.

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A The other potential formation is the Wolfcamp. This well was completed as a gas well that was plugged before we obtained any commercial products from it.

Q Is there anything else that you would like to bring out with respect to this exhibit?

A The line of cross section indicated on the map extends from Inman's Number 1 Cawley Draw Well across to the North Huapache Unit in Section 122 South, 23 East, and this cross section, our Exhibit 3.

Q Refer to Exhibit 3 and explain what it shows.

A Exhibit 3 is a structural cross section drawn from Inman's Number 1 Cawley Draw Unit on the left-hand end on the West of the Huapache Unit and on the right-hand side to the Southeast. Only the formations from the lower part of the Wolfcamp to the upper part of the Chester are included on the cross section. As I said it's a structural cross section. The formations in the area are identified by name; Wolfcamp, Cisco, Canyon, Strawn, Bend, Morrow and Chester. Within the

Cisco Canyon Formation I have colored in blue the probable extent of the Dolomite phases of the Cisco Canyon which is expected to produce. The configuration of the Dolomite buildup was obtained in the Indian Basin gas field and projected to the west.

Q You believe that to be a reasonable interpretation from the wells and all the data that's available?

A Yes, I do.

Q Are you familiar with the unit agreement which has been filed with the application in this case?

A Yes, sir.

Q Is this the same form of unit agreement or substantially the same form which has generally been used where State and Federal Lands are involved?

A Yes, it is.

Q Who is the unit operator?

A Union Oil Company of California.

Q Does the unit produce the initial test wells that you have already testified to?

A Yes, sir.

Q In your opinion if this unit is approved and the well results in the discovery of unitized substances will the unit agreement be in the interest of conservation?

A Yes.

Q Will the unit agreement promulgate easy recovery of the substance?

A Yes.

MR. HINKLE: We would like to offer Exhibits 1, 2 and 3.

(Whereupon, Applicant's Exhibits 1, 2 and 3 marked for identification.)

MR. UTZ: Without objection they will be entered.

(Whereupon, Applicant's Exhibits 1, 2 and 3 admitted into evidence.)

MR. HINKLE: That's all I believe we have.

CROSS-EXAMINATION

BY MR. UTZ:

Q Mr. Lewis, I noticed on your cross section that you use the Bend Morrow nomenclature as synonymous, however on Exhibit 2 you show nomenclature for a Bend nomenclature for the Morrow.

A The reason I did this, the exhibit was prepared for company use and Oil Conservation Commission use and I can't satisfactorily divide the exact dividing point between the Bend and the Morrow, it's a matter of conjecture. The basal that's producing in the wells is identified as Morrow Producer Humbles' 10, Huapache and others. It's a sandstone base Morrow and we know it's Morrow. The wells producing in Section 622 South, 23 East are in the zone that we know as Bend or Atoka, but we don't know for sure where the point is

dividing these two formations. While we can identify the zones that produce we can't draw a positive line on the cross section that would tell for sure where it is.

Q I presume the Commission was as confused as anybody as to what to call these zones, therefore we call them upper Pennsylvanian.

A Yes, sir.

Q Actually the Morrow Bend would be synonymous with the lower Bend?

A Yes, sir, in our conventional useage the upper is the Cisco Canyon and the lower is the Strawn Bend and Morrow.

MR. UTZ: Other questions? The witness may be excused. The Commission will take the case under advisement and call Case 3204.

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<u>NUMBER</u>	<u>MARKED FOR IDENTIFICATION</u>	<u>OFFERED</u>	<u>ADMITTED</u>
Applt's. 1	2	8	8
Applt's. 2	2	8	8
Applt's. 3	2	8	8

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STATE OF NEW MEXICO)
COUNTY OF BERNALILLO) ss

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

Witness my Hand and Seal this 1st day of April, 1966.

Bobby J. Davis
NOTARY PUBLIC

My Commission Expires:

March 13, 1969.

I do hereby certify that the foregoing is
a true and correct copy of the proceedings in
Case No. 3382
held at Mar. 9, 1966.

Notary Public for the State of New Mexico
New Mexico Oil Conservation Commission