

CASE 3560: Application of PHILLIPS
for approval of the HAT MESA UNIT
AGREEMENT, LEA COUNTY, N. M.

CASE No.
3560

Application,
TRANSCRIPTS,
SMALL Exhibits
ETC.

Jim K



PHILLIPS PETROLEUM COMPANY

MIDLAND, TEXAS 79701
BOX 791 PERMIAN BUILDING

EXPLORATION AND PRODUCTION DEPARTMENT

April 30, 1969

MAIL ROOM

May 2 AM 8 19

T

3560

State of New Mexico Oil Conservation Commission
State Land Office Building
Santa Fe, New Mexico 87501

Attention: Mr. A. L. Porter, Jr.

Re: G.P. 15014, Hat Mesa Unit
Lea County, New Mexico
Case #3560, Order R-3224

Gentlemen:

As stipulated in the captioned Order Number, you are hereby advised that the Hat Mesa Unit Agreement is terminated effective May 1, 1969.

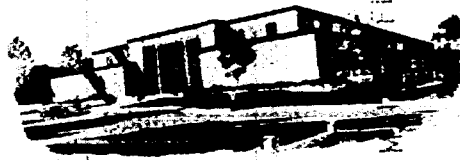
Such termination has been approved by the U.S.G.S. and by the Commissioner of Public Lands of the State of New Mexico.

Yours very truly,

S. A. Rever
S. A. Rever

SAR/mrf

State of New Mexico



Commissioner of Public Lands



May 5, 1967

GUYTON B. HAYS
COMMISSIONER

P. O. BOX 1148
SANTA FE, NEW MEXICO

Phillips Petroleum Company
P. O. Box 791
Midland, Texas, 79701

Re: Hat Mesa Unit
Lee County, New Mexico

ATTENTION: Mr. Fred Forward

Gentlemen:

The Commissioner of Public Lands has this date approved the Hat Mesa Unit, Lee County, New Mexico, subject to like approval by the United States Geological Survey.

We are handing to Mr. Don Wolfenbarger, five Certificates of Approval of the Unit Agreement, also Official Receipt No. 1 6287 in the amount of Eighty-five (\$85.00) Dollars which covers the filing fee.

Please furnish us a copy of Certificate of Determination by the United States Geological Survey.

Very truly yours,

GUYTON B. HAYS
COMMISSIONER OF PUBLIC LANDS

MY:
Ted Bilberry, Director
Oil and Gas Department

GHH/TS/EL/s
encls.

cc: United States Geological Survey
Roswell, New Mexico (ltr. only)

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. 3560
Order No. R-3224

APPLICATION OF PHILLIPS PETROLEUM
COMPANY FOR APPROVAL OF THE HAT MESA
UNIT AGREEMENT, LEA COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on April 26, 1967,
at Santa Fe, New Mexico, before Examiner Elvis A. Utz.

NOW, on this 3rd day of May, 1967, 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, Phillips Petroleum Company, seeks
approval of the Hat Mesa Unit Agreement covering 7874.03 acres,
more or less, of State and Federal lands described as follows:

LEA COUNTY, NEW MEXICO

TOWNSHIP 21 SOUTH, RANGE 32 EAST, NMPM

Section 1: Lots 11, 12, 13, 14, and S/2
Section 2: Lots 9 through 16 and S/2
Section 3: SE/4
Section 10: E/2
Sections 11, 12, and 13: All
Section 14: N/2 and SE/4
Section 24: N/2

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CASE No. 3560

Order No. R-3224

TOWNSHIP 21 SOUTH, RANGE 33 EAST, NMPM

Section 6: Lot 18 and SE/4 SW/4

Section 7: Lots 1, 2, 3, 4, E/2 W/2,
and E/2

Section 8: All

Section 9: W/2

Section 16: W/2

Section 17: All

Section 18: Lots 1, 2, 3, 4, E/2 W/2,
and E/2

Section 19: Lots 1, 2, E/2 NW/4, and
NE/4

(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 Hat Mesa 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

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CASE No. 3560
Order No. R-3224

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


DAVID F. CARGO, Chairman


GUYTON B. HAYS, Member


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

CSR/

Case 3560

Heard 4-25-67

Rec: 4-27-67

1. ^{Grant} ~~Appraisal~~ of Phillips Hat ~~unit~~
Mass unit.

Thistle

HAT MESA UNIT
Lea County, New Mexico

INTRODUCTION

The following geological report is submitted in conjunction with an application for approval of Unit Agreement for the development and operation of the proposed Hat Mesa Unit. The unit area covers a prominent northwest-southeast trending closed anticline as mapped by seismograph at the Siluro-Devonian level. The best possibilities for production are believed to be from Siluro-Devonian, Pennsylvanian and Leonard sediments. However, all formations are to be unitized.

LOCATION

The proposed unit is approximately 30 miles southwest of the town of Hobbs, New Mexico, and the approximate geographic center of the unit is near the southwest corner of Section 7, T-21S, R-33E. Hat Mesa is a prominent topographic feature located within the proposed unit, approximately one mile south of the drill site. The following described acreage will be included within the geographic confines of the proposed Hat Mesa Unit:

Township 21 South, Range 32 East

Section 1: Lots 11, 12, 13, 14 and S/2
Section 2: Lots 9, 10, 11, 12, 13, 14, 15, 16 and S/2
Section 3: SE/4
Section 10: E/2
Section 11: All
Section 12: All
Section 13: All
Section 14: N/2 and SE/4
Section 24: N/2

Township 21 South, Range 33 East

Section 6: Lot 18 and SE/4 SW/4
Section 7: Lots 1, 2, 3, 4, E/2 W/2, E/2
Section 8: All
Section 9: W/2
Section 16: W/2
Section 17: All
Section 18: Lots 1, 2, 3, 4, E/2 W/2, E/2
Section 19: Lots 1, 2, E/2 NW/4, NE/4,

and containing 7,874.03 acres, more or less.

The above described land consists of 4,631.69 acres of federal lands and 3,242.34 acres of state lands.

Opp. Core 3560
Ex. #3

STRATIGRAPHY

The general subsurface stratigraphy of the unit area can be described from the section logged by the Phillips Petroleum Company Etz Federal #1 well in Section 1, T-21S, R-32E, just outside the north boundary of the proposed unit. From surface at 3,734.5 feet above sea level to total depth at 16,396 feet, this well encountered the following section:

Triassic System:

From surface to 1,220', predominantly redbed lithology of the Dockum Group.

Permian System:

11,495' of sediments of the Ochoa, Guadalupe, Leonard and Wolfcamp series.

The Ochoa consists of 1,890' of redbeds and evaporites in the Dewey Lake, Rustler and Salado formations.

The Guadalupe aggregates 5,620' of sediments including 2,540' of interbedded sandstones and dolomites and massive dolomites of the Tansill, Yates and Capitan Reef formations and 3,080' of sandstone, shale and interbedded carbonates of the Delaware Mountain Group.

The Leonard (Bone Spring formation) includes 2,508' of predominantly thick-bedded limestones with interbedded sandstones and shales (several carbonates and sandstones within the Bone Spring are considered important objectives in the proposed well).

The Wolfcamp consists of 1,477' of interbedded shale and limestone with a massive sandstone unit at the top of the series.

Pennsylvanian System:

1,815' of sediments representing the Strawn, Bend and Morrow series.

The Strawn lithology here is interbedded organic cherty limestone and shales.

The Bend series is predominantly interbedded limestones and shales with some sandstones, especially near the top.

The Morrow consists of approximately 900' of interbedded sandstones, shale and limestone with the sandstones constituting one of the major objectives of the proposed well.

Mississippian System:

1,000' of massive shale and cherty limestone of the Chester, Meramec-Osage, and Kinderhook series and organic shales of the Woodford formation.

Devonian & Silurian Systems:

In the Etz well, 861' of thick-bedded dolomite and limestone assigned to these systems had been penetrated at total depth of 16,396'. Porous dolomite intervals of this section are considered to be very prospective and are the primary objective of the proposed test.

Stratigraphic studies of the area indicate a similarity to conditions at the Lea Pool, 8 miles northeast, and it is anticipated that similar productive possibilities will be present at the proposed unit.

Anticipated formation tops at the proposed well site with estimated well site surface elevation of 3,810' above sea level are:

Rustler	1,510' (+ 2,300')
Salado	1,640' (+ 2,170')
Tansill	3,170' (+ 640')
Yates	3,300' (+ 510')
Capitan	3,600' (+ 210')
Delaware Mountain Group	5,600' (- 1,790')
Cherry Canyon	5,780' (- 1,970')
Brushy Canyon	7,060' (- 3,250')
Bone Spring	8,590' (- 4,780')
Wolfcamp	11,075' (- 7,265')
Strawn	12,555' (- 8,745')
Atoka	12,775' (- 8,965')
Morrow	13,326' (- 9,516')
Barnett	14,170' (- 10,360')
Mississippian ls.	14,390' (- 10,580')
Woodford	14,940' (- 11,130')
Devonian	15,110' (- 11,300')..

STRUCTURE

The proposed unit outline has been designed to cover a prominent northwest-southeast trending, deep seated anticlinal structure as shown on the accompanying geologic structure map. This map shows structure at the Devonian level as defined by reflection seismograph methods. Shallower mapping by seismograph and subsurface methods indicates the structure persists upwards.

At the Devonian level structural and fault closure is in excess of 500 feet and structural advantage to the Phillips Petroleum Company Etz Federal #1 dry hole is over 450 feet. Seismic data indicates a synclinal depression separates this well from the Hat Mesa structure. The seismic record quality is good and the deep-seated structure should be adequately covered by the unit outline. The proposed outline has been drawn slightly outside the lowest closing Devonian contour and the down-to-the-west fault trace which strikes northwest-southeast.

PRODUCTIVE POSSIBILITIES

Although a number of possibilities for commercial oil and gas accumulation are present within the proposed unit area, those considered to have the best possibilities are as follows:

- (1) Siluro-Devonian carbonates which are productive nearby at the Lea and Bell Lake Fields. Estimated depth 15,110'.
- (2) Pennsylvanian Morrow sandstones which are productive nearby at several fields in addition to those mentioned above. Estimated depth 13,326-14,170'.
- (3) Bone Spring carbonates and sandstones which are productive at the Lea and other fields, and which have had excellent shows in a number of nearby wells. Estimated depth 9,575-11,075'.

PROPOSED DEVELOPMENT

If the Hat Mesa Unit is approved, Phillips Petroleum Company, as unit operator, will drill a wildcat well to thoroughly test for oil and gas all formations down to and including the Siluro-Devonian to a depth not to exceed 15,500 feet. The presently recommended location for the test well is 1,980 feet from the north line and 1,980 feet from the east line of Section 11, T-21S, R-32E.

Hat Mesa Unit
Lea County, New Mexico

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It is believed that the State and Federal unitized unit plan of development would be in the best interest of conservation, orderly development, production and secondary recovery of the oil and gas that may be present in the area.

Respectfully submitted

PHILLIPS PETROLEUM COMPANY

Enclosure: Geophysical Structure Map

Docket No. 12-67

DOCKET: EXAMINER HEARING - WEDNESDAY - APRIL 26, 1967

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 3554: Application of Coastal States Gas Producing Company for a unit agreement, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval of the Flying "M" San Andres Unit Area comprising 4080 acres, more or less, of State, Federal and Fee lands in Township 9 South, Range 33 East, Lea County, New Mexico.
- CASE 3555: Application of Coastal States Gas Producing Company for a pressure maintenance expansion, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to expand the pressure maintenance project in its Flying "M" San Andres Unit by the injection of water into the San Andres formation through 8 injection wells located in Sections 15, 16, 17, 20, 22, 28, 29 and 33, Township 9 South, Range 33 East, Lea County, New Mexico. Applicant further seeks the promulgation of special rules for said project, including provision for future expansion.
- CASE 3556: Application of Southland Royalty Company for an unorthodox gas well location, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to drill a proposed Devonian gas test well at an unorthodox gas well location 660 feet from the North and West lines of Section 12, Township 25 South, Range 35 East, Lea County, New Mexico. The well would be dedicated to the N/2 of said Section 12.
- CASE 3557: Application of Gulf Oil Corporation for compulsory pooling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks an order force-pooling all mineral interests in the Inbe-Pennsylvanian Pool underlying the E/2 SW/4 of Section 13, Township 11 South, Range 33 East, Lea County, New Mexico.
- CASE 3558: Application of BTA Oil Producers for an unorthodox oil well location, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to drill its Lowe 671 Ltd. Well No. 1 as an exception to the well location requirements of Order No. R-2929 for the Nonombre-Upper Pennsylvanian Pool and the Nonombre-Lower Pennsylvanian Pool, Lea County, New Mexico. The proposed well would be located 560 feet from the North and West lines of Section 5, Township 14 South, Range 34 East.

- CASE 3559: Application of BTA Oil Producers for special pool rules, Lea County, New Mexico. Applicant, in the above-styled cause, seeks the promulgation of special pool rules for the South Flying "M"-Pennsylvanian Pool, Lea County, New Mexico, including a provision for 80-acre proration units.
- CASE 3560: Application of Phillips Petroleum Company for a unit agreement, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval of the Hat Mesa Unit Area comprising 7874 acres, more or less, of Federal and State lands in Township 21 South, Ranges 32 and 33 East, Lea County, New Mexico.
- CASE 3561: Application of Continental Oil Company for a dual completion, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the dual completion (conventional) of its Meyer B-4 Well No. 19 located in Unit O of Section 4, Township 21 South, Range 36 East, to produce oil from an undesignated Paddock pool and from the Oil Center-Blinebry Pool through parallel strings of tubing.
- CASE 3562: Application of Continental Oil Company for a dual completion, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks approval for the dual completion (conventional) of its Table Mesa Well No. 29 in Unit H of Section 9, Township 27 North, Range 17 West, San Juan County, New Mexico, to produce gas from the Table Mesa-Pennsylvanian "C" Gas Pool and from an undesignated Mississippian gas pool through the casing-tubing annulus and 2-inch tubing, respectively.
- CASE 3563: Application of Skelly Oil Company for an amendment to the Southeast New Mexico Gas Proration Rules and Regulations. Applicant, in the above-styled cause, seeks an amendment to Order No. R-1670, as amended, Rules and Regulations for Pro-rated Gas Pools, Lea, Eddy, Chaves and Roosevelt Counties, New Mexico, to provide an administrative procedure whereby wells ordered shut-in for extended periods to make up accumulated overproduction could be permitted to produce up to 500 MCF each month during such shut-in.
- CASE 3564: Application of Maxwell Oil Company for a unit agreement, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval of its Taylor Unit Area comprising 640 acres, more or less, of federal lands in Sections 12 and 13, Township 18 South, Range 31 East, Eddy County, New Mexico.

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Docket No. 12-67

April 26, 1967 Examiner Hearing

CASE 3565: Application of Jomar Industries, Inc. for a non-standard oil proration unit, several non-standard locations, temporary exception to Rule 307, and capacity allowables, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to drill 64 oil wells at non-standard locations on a non-standard oil proration unit comprising the S/2 NW/4 SE/4 and the N/2 SW/4 SE/4 of Section 30, Township 18 South, Range 38 East, Lea County, New Mexico, for production from the Ogallala formation. Said wells would be drilled to a density of four wells to each 2.5 acres and would be no nearer than 82.5 feet to the outer boundary of the unit and no nearer than 165 feet to another well producing from the same formation. Applicant also seeks a temporary exception to Rule 307 for each well to permit utilization of a vacuum-type drilling unit during the drilling and completion operation. Applicant further seeks authority to produce the wells at capacity even though the aggregate production from said wells exceeds the 40-acre normal unit allowable.

CASE 3566: Application of William A. and Edward R. Hudson for a waterflood expansion, Eddy County, New Mexico. Applicants, in the above-styled cause, seek authority to expand their Puckett Waterflood Project, Maljamar Pool, by the injection of water into the Grayburg-San Andres formations through 10 wells in Sections 24 and 25, Township 17 South, Range 31 East, Eddy County, New Mexico. Applicant further seeks an administrative procedure for future expansion of said project.

ir/

GOVERNOR
DAVID F. CARGO
CHAIRMAN

State of New Mexico
Oil Conservation Commission



LAND COMMISSIONER
GUYTON B. HAYS
MEMBER

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

P. O. BOX 2068
SANTA FE

May 3, 1967

Mr. Jason Kellahin
Kellahin & Fox
Attorneys at Law
Post Office Box 1769
Santa Fe, New Mexico

Re: Case No. 3560
Order No. R-3224
Applicant:
Phillips Petroleum Company

Dear Sir:

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

Very truly yours,

A. L. Porter, Jr.
A. L. PORTER, Jr.
Secretary-Director

ALP/ir

Carbon copy of order also sent to:

Hobbs OCC x

Artesia OCC

Aztec OCC

Other Mr. Ray Graham, State Land Office, Santa Fe, New Mexico

HAT MESA UNIT
Lea County, New Mexico

INTRODUCTION

The following geological report is submitted in conjunction with an application for approval of Unit Agreement for the development and operation of the proposed Hat Mesa Unit. The unit area covers a prominent northwest-southeast trending closed anticline as mapped by seismograph at the Siluro-Devonian level. The best possibilities for production are believed to be from Siluro-Devonian, Pennsylvanian and Leonard sediments. However, all formations are to be unitized.

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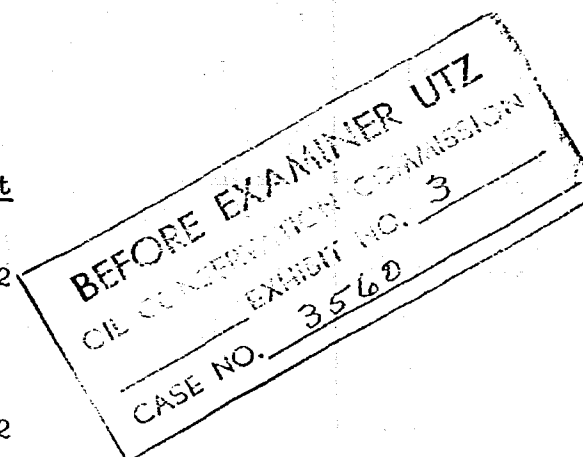
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Hat Mesa Unit
Lea County, New Mexico

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Respectfully submitted

PHILLIPS PETROLEUM COMPANY

Enclosure: Geophysical Structure Map

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UNIT AGREEMENT
FOR THE DEVELOPMENT AND OPERATION
OF THE
HAT MESA UNIT AREA
COUNTY OF LEA
STATE OF NEW MEXICO

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EXHIBITS

Exhibit "A" - Map of Unit Area
Exhibit "B" - Schedule of Ownership in Lands

BEFORE EXAMINER UTZ
OIL CONSERVATION COMMISSION
EXHIBIT NO. <u>1</u>
CASE NO. <u>3560</u>

UNIT AGREEMENT
FOR THE DEVELOPMENT AND OPERATION
OF THE
HAT MESA UNIT AREA
COUNTY OF LEA
STATE OF NEW MEXICO

NO. _____

THIS AGREEMENT, entered into as of the 22nd day of March, 1967
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. Secs. 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, in so far 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 (Art. III, Ch. 65, Vol. 9, part 2,
Statutes 1953 Annotated) to approve this agreement and the conservation
provisions hereof; and

WHEREAS, the parties hereto hold sufficient interests in the Hat
Mesa 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 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:

Township 21 South, Range 32 East, N.M.P.M.

Section 1: Lots 11, 12, 13, 14 and S/2
Section 2: Lots 9, 10, 11, 12, 13, 14,
15, 16 and S/2
Section 3: SE/4
Section 10: E/2
Section 11: All
Section 12: All
Section 13: All
Section 14: N/2 and SE/4
Section 24: N/2

Township 21 South, Range 33 East, N.M.P.M.

Section 6: Lot 18, and SE/4 SW/4
Section 7: Lots 1, 2, 3, 4, E/2 W/2, E/2
Section 8: All
Section 9: W/2
Section 16: W/2
Section 17: All
Section 18: Lots 1, 2, 3, 4, E/2 W/2, E/2
Section 19: Lots 1, 2, E/2 NW/4, NE/4

Containing 7874.03 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 six (6) copies of the revised exhibits shall be filed with the Supervisor, and two (2) copies thereof shall be filed with the Commissioner and one (1) copy with the New Mexico Oil Conservation Commission, hereinafter referred to as "State Commission."

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

(a) Unit Operator, on its own motion or on demand of the Director of the Geological Survey, hereinafter referred to as "Director," or on demand of the 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 State Commission and copies thereof mailed to the last known address of

each working interest owner, lessee, and lessor whose interests are affected, advising that thirty (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 State Commission evidence of mailing of the notice of expansion or contraction and a copy of any objections thereto which have been filed with the Unit Operator, together with an application in sufficient number, for approval of such expansion or contraction and with appropriate joinders.

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

(e) All legal subdivisions of unitized lands (i.e., 40 acres by Government survey or its nearest lot or tract equivalent in instances of irregular surveys; however, unusually large lots or tracts shall be considered in multiples of 40 acres, or the nearest aliquot equivalent thereof, for the purpose of elimination under this subsection), no parts of which are entitled to be in a participating area within five (5) 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 5-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 entitled

"Unavoidable Delay;" provided that all legal subdivisions of lands not in a participating area and not entitled to become participating under the applicable provisions of this agreement within ten (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% of the current unitized working interests and 60% of the current unitized basic royalty interests (exclusive of the basic royalty interests of the United States and the State of New Mexico), on a total-nonparticipating acreage basis, respectively, with approval of the Director and the Commissioner provided such extension application is submitted to the Commissioner and the Director 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. Phillips Petroleum Company, with offices in Midland, Texas, is hereby designated as Unit Operator and by signature hereto as Unit Operator commits to this agreement all interests in unitized substances vested in it and agrees and consents to accept the duties and obligations of Unit Operator for the discovery, development and production of unitized substances as herein provided. Whenever reference is made herein to the Unit Operator, such reference means the Unit Operator acting in that capacity and

not as an owner of interest in unitized substances, and the term "working interest owner" when used herein shall include or refer to Unit Operator as the owner of a working interest when such an interest is owned by it.

5. RESIGNATION OR REMOVAL OF UNIT OPERATOR. Unit Operator shall have the right to resign at any time prior to the establishment of a participating area or areas hereunder, but such resignation shall not become effective so as to release Unit Operator from the duties and obligations of Unit Operator and terminate Unit Operator's rights as such for a period of 6 months after notice of intention to resign has been served by Unit Operator on all working interest owners and the Director, the Commissioner and State Commission and until all wells then drilled hereunder are placed in a satisfactory condition for suspension or abandonment whichever is required by the Supervisor as to Federal lands and by the State Commission as to State lands unless a new Unit Operator shall have been selected and approved and shall have taken over and assumed the duties and obligations of Unit Operator prior to the expiration of said period.

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

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

The Unit Operator may, upon default or failure in the performance of its duties or obligations hereunder, be subject to removal by the same percentage vote of the owners of working interests determined in like manner as herein provided for the selection of a new Unit Operator. Such removal shall be effective upon notice thereof to the Director and the Commissioner.

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

6. SUCCESSOR UNIT OPERATOR. Whenever the Unit Operator shall tender his or its resignation as Unit Operator or shall be removed as hereinabove provided, or a change of Unit Operator is negotiated by working interest owners, the owners of the working interests in the participating area or areas according to their respective acreage interests in such participating area or areas, or, until a participating area shall have been established, the owners of the working interests according to their respective acreage interests in all unitized land, shall by majority vote select a successor Unit Operator: Provided, that, if a majority but less than 75 per cent of the working interests qualified to vote are owned by one party to this agreement, a concurring vote of one or more additional working interest owners shall be required to select a new operator. Such selection shall not become effective until:

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

(b) the selection shall have been filed with the Supervisor and approved by the 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.

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 6 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, or by the State Commission if on privately owned land, if any, unless on such effective date a well is being drilled conformably with the terms hereof, and thereafter continue such drilling diligently until the Devonian Formation has been tested or until at a lesser depth unitized substances shall be discovered which can be produced in paying quantities (to wit: quantities sufficient to repay the costs of drilling, and producing operations, with a reasonable profit) or the Unit Operator shall at any time establish to the satisfaction of the Supervisor if on Federal land, of the Commissioner if on State land, or of the State Commission if on privately owned land, that further drilling of said well would be unwarranted or impracticable, provided, however, that Unit Operator shall not in any event be required to drill said well to a depth in excess of 15,500 feet. Until the discovery of a deposit of unitized substances capable of being produced in paying quantities, the Unit Operator shall continue drilling diligently one well at a time, allowing not more than 6 months between the completion of one well and the beginning of the next well, until a well capable of producing unitized substances in paying quantities is completed to the satisfaction of said Supervisor if it be on Federal land or of the Commissioner if on State land or the State Commission if on privately owned land or until it is reasonably proved that the unitized land is incapable of producing unitized substances in paying quantities in the formations drilled hereunder. Nothing in this section shall be deemed to limit the right of the Unit Operator to resign as provided in Section 5 hereof, or as requiring Unit Operator to commence or continue any drilling during the period pending such resignation becoming effective in order to comply with the requirements of this section. The Director and 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 6 months after completion of a well capable of producing unitized substances in paying quantities, the Unit Operator shall submit for the approval of the 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 and locations of any wells to be drilled and the proposed order and time for such drilling; and

(b) to the extent practicable specify the operating practices regarded as necessary and advisable for 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 6-month period herein prescribed for submission of an initial plan of development where such action is justified because of unusual conditions or circumstances. After completion hereunder of a well capable of producing any unitized substance in paying quantities, no further wells, except such as may be necessary to afford protection against operations not under this agreement or such as may be specifically approved by the Supervisor and the 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 or as soon thereafter as required by the Supervisor or the Commissioner the Unit Operator shall 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 also shall set forth the percentage of unitized substances to be allocated as herein provided to each unitized tract in the participating area so established, and shall govern the allocation of production from and after the date the participating area becomes effective. A separate participating area shall be established in like manner for each separate pool or deposit of unitized substances or for any group thereof produced as a single pool or zone, and any two or more participating areas so established may be combined into one with the consent of the owners of all working interests in the lands within the participating areas so to be combined, on approval of the Director and the 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 State Commission as to privately owned 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 of the Commissioner as to wells drilled

on State land and the State Commission as to wells on privately owned lands, 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 NONPARTICIPATING LAND OR FORMATIONS.

Any party or parties hereto owning or controlling the working interest in any unitised land having thereon a regular well location may with the approval of the Supervisor as to Federal land, the Commissioner as to State land, and the State Commission as to privately owned land, and subject to the non-conflicting provisions of the Unit Operating Agreement, at such party's or parties' sole risk, costs, and expense drill a well at such location on such land to test any formation for which a participating area has not been established or to test any formation for which a participating area has been established if such location is not within said participating area, unless within 90 days of receipt of notice from said party of his intention to drill the well the Unit Operator elects and commences to drill such a well in like manner as other wells are drilled by the Unit Operator under this agreement.

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

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

14. ROYALTY SETTLEMENT. The United States, the State of New Mexico and other royalty owners who, under existing contract, are entitled to take in kind a share of the substances now unitized hereunder produced from any tract, shall hereafter be entitled to the right to take in kind their share of the unitized substances allocated to such tract, and Unit Operator, or in case of the operation of a well by a working interest owner as herein in special cases provided for, such working interest owner, shall make deliveries of such royalty share taken in kind in conformity with the applicable contracts, laws, and regulations. Settlement for royalty interest not taken in kind shall be made by working interest owners responsible 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 in 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 regulation;

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 the State of New Mexico shall be computed and paid on the basis of the amounts allocated to unitized State land as provided herein at the rate specified in the State oil and gas lease.

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

16. CONSERVATION. Operations hereunder and production of unitized substances shall be conducted to provide for the most economical and efficient

recovery of said substances without waste, as defined by or pursuant to State or Federal law or regulation.

17. DRAINAGE. The Unit Operator shall take appropriate and adequate measures to prevent drainage of unitized substances from unitized land by wells or land not subject to this agreement, or, with the 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 leases and the Commissioner as to State leases.

18. LEASES AND CONTRACTS CONFORMED AND EXTENDED. The terms, conditions, and provisions of all leases, subleases, and other contracts relating to exploration, drilling, development, or operation for oil or gas of 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 and State of New Mexico, committed to this agreement, which, by its terms might expire prior to the termination of this agreement, is hereby extended beyond any such 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, and subsection (i) of this Section 18.

(h) The segregation of any Federal lease committed to this agreement is governed by the following provision in the fourth paragraph of Sec. 17 (j) of the Mineral Leasing Act, as amended by the Act of September 2, 1960 (74 Stat. 781-784): "Any (Federal) lease heretofore or hereafter committed to any such (unit) plan embracing lands that are in part within and in part outside of the area covered by any such plan shall be segregated into separate leases as to the 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 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 Secretary and the Commissioner or their duly authorized representatives as of the date of approval by the Secretary 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 state-wide voluntary conservation or allocation program, which is established, recognized, and generally adhered to by the majority of operators in such State, such authority being hereby limited to alteration or modification in the public interest, the purpose thereof and the public interest to be served thereby to be stated in the order of alteration or modification. Without regard to the foregoing, the Director is also hereby vested with authority to alter or modify from time to time 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 State Commission.

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

22. CONFLICT OF SUPERVISION. Neither the Unit Operator nor the working interest owners nor any of them shall be subject to any forfeiture, termination or expiration of any rights hereunder or under any leases or contracts subject hereto, or to any penalty or liability on account of delay or failure in whole or in part to comply with any applicable provision thereof to the extent that the Unit Operator, working interest owners or any of them are hindered, delayed or prevented from complying therewith by reason of failure of the Unit Operator to obtain in the exercise of due diligence, the concurrence of proper representatives of the United States and proper representatives of the State of New Mexico in and about any matters or thing concerning which it is required herein that such concurrence be obtained. The parties hereto, including the State Commission, agree that all powers and authority vested in the State Commission in and by any provisions of this agreement are vested in the State Commission and shall be exercised by it pursuant to the provisions of the laws of the State of New Mexico and subject in any case to appeal or judicial review as may now or hereafter be provided by the laws of the State of New Mexico.

23. APPEARANCES. Unit Operator shall, after notice to other parties affected, have the right to appear for and on behalf of any and all interests affected hereby before the Department of 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 State 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 State Commission or any

other legally constituted authority; provided, however, that any other interested party shall also have the right at his own expense to be heard in any such proceeding.

24. NOTICES. All notices, demands or statements required hereunder to be given or rendered to the parties hereto shall be deemed fully given if given in writing and personally delivered to the party or sent by postpaid registered 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 FR 12319), which are hereby incorporated by reference in this agreement.

28. RECLAMATION LANDS. Nothing in this agreement shall modify the special, Federal-lease stipulations, if any, applicable to lands under the jurisdiction of the Bureau of Reclamation.

29. LOSS OF TITLE. In the event title to any tract of unitized land shall fail and the true owner cannot be induced to join in this unit agreement, such tract shall be automatically regarded as not committed hereto and there shall be such readjustment of future costs and benefits as may be required on account of the loss of such title. In the event of a dispute as to title as to any royalty, working interest, or other interests subject thereto, payment of 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.

30. 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 Commissioner and the Director. Any oil or gas interests in lands within the unit area not committed hereto prior to submission of this agreement for final approval may thereafter be committed hereto by the owner or owners thereof subscribing or consenting to this agreement, and, if the interest is a working interest, by the owner of such interest also subscribing to the unit operating agreement. After operations are commenced hereunder, the right of subsequent joinder, as provided in this section, by a working interest owner

is subject to such requirements or approvals, if any, pertaining to such joinder, as may be provided for in the unit operating agreement. After final approval hereof joinder by a non-working interest owner must be consented to in writing by the working interest owner committed hereto and responsible for the payment of any benefits that may accrue hereunder in behalf of such non-working interest. Joinder by any owner of a non-working interest, at any time, must be accompanied by appropriate joinder by the owner of the corresponding working interest in order for the interest to be regarded as committed hereto. Joinder to the unit agreement by a working interest owner, at any time, must be accompanied by appropriate joinder to the unit operating agreement, if more than one committed working interest owner is involved, in order for the interest to be regarded as committed to this unit agreement. Except as may otherwise herein be provided subsequent joinders to this agreement shall be effective as of the first day of the month following the filing with the Supervisor 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 or the Commissioner, provided, that as to State lands all subsequent joinders must be approved by the Commissioner.

31. PROTECTION OF POTASH DEPOSITS. No wells will be drilled for oil or gas at a location on Federal lands which in the opinion of the Supervisor or at a location on State lands which in the opinion of the Commissioner would result in undue waste of potash deposits or constitute a hazard to or unduly interfere with mining operations being conducted for the extraction of potash deposits.

The drilling or abandonment of any well on unitized land shall be done in accordance with applicable oil and gas operating regulations, including such requirements as to Federal lands as may be prescribed by the Supervisor and as to State lands by the Commissioner, as necessary to prevent the infiltration of oil, gas or water into formations containing potash deposits or into mines or workings being utilized in the extraction of such deposits.

Well records and survey plats that an oil and gas lessee of Federal lands must file pursuant to applicable operating regulations (30 CFR Part 221) shall be available for inspection at the Office of the Supervisor to any party

holding a potash permit or lease on the Federal land on which the well is situated insofar as such records are pertinent to the mining and protection of potash deposits.

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

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

UNIT OPERATOR AND WORKING INTEREST OWNER

Date: _____

PHILLIPS PETROLEUM COMPANY

P. O. Box 791
Midland, Texas 79701

By _____
Attorney-in-Fact

OTHER WORKING INTEREST OWNERS

Date: _____

UNION OIL COMPANY OF CALIFORNIA

By _____

Date: _____

GULF OIL CORPORATION

By _____

Date: _____

RALPH LOWE ESTATE

By _____

Date: _____

UNION PRODUCING COMPANY

By _____

Date: _____

PAN AMERICAN PETROLEUM CORPORATION

By _____

Date: _____

SINCLAIR OIL & GAS COMPANY

By _____

Date: _____

SUPERIOR OIL COMPANY

By _____

THE STATE OF TEXAS Q

COUNTY OF MIDLAND Q

BEFORE ME, the undersigned authority, a Notary Public in and for said County and State, on this day personally appeared FRED FORWARD, Attorney-in-Fact for PHILLIPS PETROLEUM COMPANY, known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that the same was the act of the said PHILLIPS PETROLEUM COMPANY, a corporation, and that he executed the same as the act of such corporation for the purposes and consideration therein expressed, and in the capacity therein stated.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the _____ day of

_____, 1967.

Notary Public in and for Midland County,
Texas.

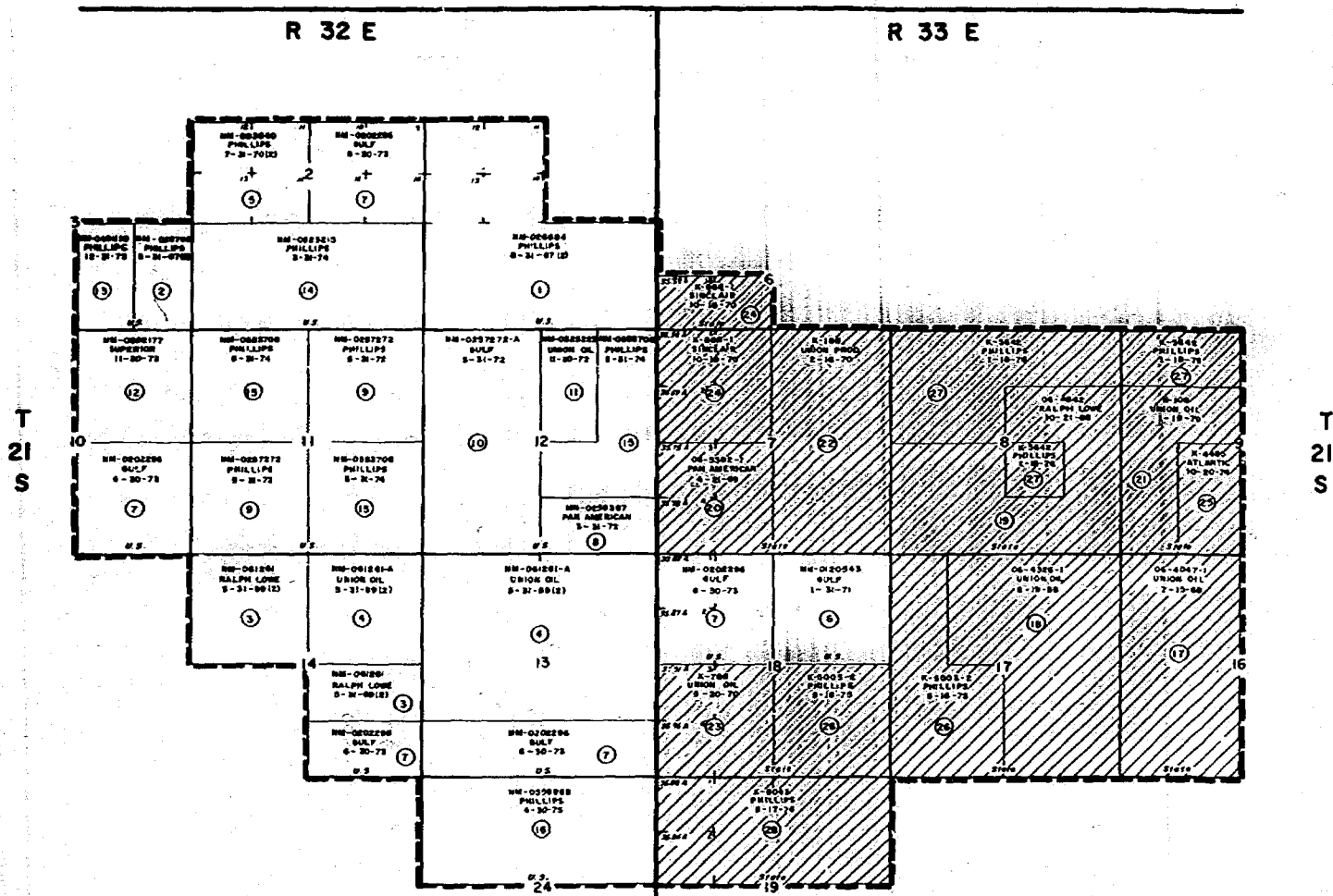


EXHIBIT "B"
SCHEDULE SHOWING ALL LANDS AND OWNERSHIP
WITHIN THE UNIT AREA
HAT MESA UNIT, LEA COUNTY, NEW MEXICO

F E D E R A L L A N D

TRACT NO.	DESCRIPTION OF LAND	ACRES	LEASE NO. & EXP. DATE	BASIC ROYALTY AND PERCENTAGE	LESSEE OF RECORD	OVERRIDING ROYALTY AND PERCENTAGE	WORKING INTEREST AND PERCENTAGE
1.	<u>T-21S, R-32E</u> Sec. 1: Lots 11, 12, 13, 14, S/2	480.00	NM-026684 8-31-67 (2)	U.S.A.: 12-1/2%	Phillips Petroleum Co.	Beard Oil Co.- 2-7/8% Amax Pet. Corp.- 1-1/8% Bruce Anderson- 1-3/4% Vola V. Bunnel- 1/2 of 1%	Phillips Petroleum Co.
2.	<u>T-21S, R-32E</u> Sec. 3: E/2 SE/4	80.00	NM-028705 5-31-67 (2)	U.S.A.: 12-1/2%	Phillips Petroleum Co.	Bryan Bell-Production payment of \$750 per acre out of 5%	Phillips Petroleum Co.
3.	<u>T-21S, R-32E</u> Sec. 14: NW/4, N/2 SE/4	240.00	NM-061261 5-31-69 (2)	U.S.A.: 12-1/2%	Estate of Ralph Lowe, Deceased	None	Estate of Ralph Lowe, Deceased
4.	<u>T-21S, R-32E</u> Sec. 13: N/2, N/2 S/2 Sec. 14: NE/4	640.00	NM-061261-A 5-31-69 (2)	U.S.A.: 12-1/2%	Union Oil of Calif.	Fred Goodman- 1-1/4% Est. of Ralph Lowe- 1-1/4% Vola Horst Bunnel- 2-1/2%	Union Oil of Calif.
5.	<u>T-21S, R-32E</u> Sec. 2: Lots 11, 12, 13, 14	160.00	NM-093840 7-31-70 (2)	U.S.A.: 12-1/2%	Phillips Petroleum Co.	Pubco Pet. Corp.- 12-1/2%	Phillips Petroleum Co.
6.	<u>T-21S, R-33E</u> Sec. 18: NE/4	160.00	NM-0120543 1-31-71	U.S.A.: 12-1/2%	Gulf Oil Corp.	Gerald T. Tresner- 5%	Gulf Oil Corp.

EXHIBIT "B"
SCHEDULE SHOWING ALL LANDS AND OWNERSHIP
WITHIN THE UNIT AREA
HAT MESA UNIT, LEA COUNTY, NEW MEXICO

F E D E R A L L A N D

ACRES	LEASE NO. & EXP. DATE	BASIC ROYALTY AND PERCENTAGE	LESSEE OF RECORD	OVERRIDING ROYALTY AND PERCENTAGE	WORKING INTEREST AND PERCENTAGE	
12, S/2 480.00	NM-026684 8-31-67 (2)	U.S.A.: 12-1/2%	Phillips Petroleum Co.	Beard Oil Co.- 2-7/8% Amax Pet. Corp.- 1-1/8% Bruce Anderson- 1-3/4% Vola V. Bunnel- 1/2 of 1%	Phillips Petroleum	All
80.00	NM-028705 5-31-67 (2)	U.S.A.: 12-1/2%	Phillips Petroleum Co.	Bryan Bell-Production payment of \$750 per acre out of 5%	Phillips Petroleum	All
240.00	NM-061261 5-31-69 (2)	U.S.A.: 12-1/2%	Estate of Ralph Lowe, Deceased	None	Estate of Ralph Lowe, Deceased	All
640.00	NM-061261-A 5-31-69 (2)	U.S.A.: 12-1/2%	Union Oil of Calif.	Fred Goodman- 1-1/4% Est. of Ralph Lowe- 1-1/4% Vola Horst Bunnel- 2-1/2%	Union Oil of Calif.	All
12, 160.00	NM-093840 7-31-70 (2)	U.S.A.: 12-1/2%	Phillips Petroleum Co.	Pubco Pet. Corp.- 12-1/2%	Phillips Petroleum	All
160.00	NM-0120543 1-31-71	U.S.A.: 12-1/2%	Gulf Oil Corp.	Gerald T. Tresner- 5%	Gulf Oil Corp.	All

TRACT NO.	DESCRIPTION OF LAND	ACRES	LEASE NO. & EXP. DATE	BASIC ROYALTY AND PERCENTAGE	LESSEE OF RECORD	OVERRIDING ROYALTY AND PERCENTAGE	WORKING INTEREST AND PERCENTAGE
7.	T-21S, R-32E Sec. 2: Lots 9, 10, 15, 16 Sec. 10: SE/4 Sec. 13: S/2 S/2 Sec. 14: S/2 SE/4 T-21S, R-33E Sec. 18: Lots 1, 2, E/2 NW/4	711.69	NM-0202296 6-30-73	U.S.A.: 12-1/2%	Gulf Oil Corp.	Walter L. Morrison- 5%	Gulf Oil Corp.
8.	T-21S, R-32E Sec. 12: S/2 SE/4	80.00	NM-0239367 3-31-72	U.S.A.: 12-1/2%	Pan American Pet. Corp.	Bertha W. Hendel- 5%	Pan American Pet
9.	T-21S, R-32E Sec. 11: NE/4, SW/4	320.00	NM-0257272 5-31-72	U.S.A.: 12-1/2%	Phillips Petroleum Co.	R. L. Grady- 1-1/4% Amco Oil Corp.- 3-3/4%	Phillips Petrole
10.	T-21S, R-32E Sec. 12: W/2	320.00	NM-0257272-A 5-31-72	U.S.A.: 12-1/2%	Gulf Oil Corp.	E. Jeanne Slaydon- 4%	Gulf Oil Corp.
11.	T-21S, R-32E Sec. 12: W/2 NE/4	80.00	NM-0325223 11-30-72	U.S.A.: 12-1/2%	Union Oil of Calif.	John A. Wyman- 2-1/2% Ted A. Beach- 2-1/2%	Union Oil of Cal
12.	T-21S, R-32E Sec. 10: NE/4	160.00	NM-0362177 11-30-73	U.S.A.: 12-1/2%	Superior Oil Co.	None	Superior Oil Co.
13.	T-21S, R-32E Sec. 3: W/2 SE/4	80.00	NM-0481118 12-31-73	U.S.A.: 12-1/2%	Phillips Petroleum Co.	Curtis R. Inman- 5%	Phillips Petroleu

ACRES	LEASE NO. & EXP. DATE	BASIC ROYALTY AND PERCENTAGE	LESSEE OF RECORD	OVERRIDING ROYALTY AND PERCENTAGE	WORKING INTEREST AND PERCENTAGE	
711.69	NM-0202296 6-30-73	U.S.A.: 12-1/2%	Gulf Oil Corp.	Walter L. Morrison- 5%	Gulf Oil Corp.	All
80.00	NM-0239367 3-31-72	U.S.A.: 12-1/2%	Pan American Pet. Corp.	Bertha W. Hendel- 5%	Pan American Pet. Corp.	All
320.00	NM-0257272 5-31-72	U.S.A.: 12-1/2%	Phillips Petroleum Co.	R. L. Grady- 1-1/4% Amco Oil Corp.- 3-3/4%	Phillips Petroleum	All
320.00	NM-0257272-A 5-31-72	U.S.A.: 12-1/2%	Gulf Oil Corp.	E. Jeanne Slaydon- 4%	Gulf Oil Corp.	All
80.00	NM-0325223 11-30-72	U.S.A.: 12-1/2%	Union Oil of Calif.	John A. Wyman- 2-1/2% Ted A. Beach- 2-1/2%	Union Oil of Calif.	All
160.00	NM-0362177 11-30-73	U.S.A.: 12-1/2%	Superior Oil Co.	None	Superior Oil Co.	All
80.00	NM-0481118 12-31-73	U.S.A.: 12-1/2%	Phillips Petroleum Co.	Curtis R. Inman- 5%	Phillips Petroleum	All

TRACT NO.	DESCRIPTION OF LAND	ACRES	LEASE NO. & EXP. DATE	BASIC ROYALTY AND PERCENTAGE	LESSEE OF RECORD	OVERRIDING ROYALTY AND PERCENTAGE	WORKING INTEREST AND PERCENTAGE
14.	T-21S, R-32E Sec. 2: S/2	320.00	NM-0523215 3-31-74	U.S.A.: 12-1/2%	Phillips Petroleum Co.	Elsie G. Gorman- 5%	Phillips Petroleum Co.
15.	T-21S, R-32E Sec. 11: NW/4, SE/4 Sec. 12: E/2 NE/4, N/2 SE/4	480.00	NM-0553706 5-31-74	U.S.A.: 12-1/2%	Phillips Petroleum Co.	Katherine V. Johnson- 5%	Phillips Petroleum Co.
16.	T-21S, R-32E Sec. 24: N/2	320.00	NM-0556868 4-30-75	U.S.A.: 12-1/2%	Phillips Petroleum Co.	Erma Dee Robley- 2-1/4% Helen I. Fehr- 2-1/4% Robert P. Kunkel- 1/2 of 1%	Phillips Petroleum Co.

TOTAL 16 TRACTS FEDERAL LANDS - 4631.69 ACRES, 58.82235% OF UNIT AREA

ACRES	LEASE NO. & EXP. DATE	BASIC ROYALTY AND PERCENTAGE	LESSEE OF RECORD	OVERRIDING ROYALTY AND PERCENTAGE	WORKING INTEREST AND PERCENTAGE	
320.00	NM-0523215 3-31-74	U.S.A.: 12-1/2%	Phillips Petroleum Co.	Elsie G. Gorman- 5%	Phillips Petroleum	All
480.00	NM-0553706 5-31-74	U.S.A.: 12-1/2%	Phillips Petroleum Co.	Katherine V. Johnson- 5%	Phillips Petroleum	All
320.00	NM-0556868 4-30-75	U.S.A.: 12-1/2%	Phillips Petroleum Co.	Erma Dee Robley- 2-1/4% Helen I. Fehr- 2-1/4% Robert P. Kunkel- 1/2 of 1%	Phillips Petroleum	All

TOTAL 16 TRACTS FEDERAL LANDS - 4631.69 ACRES, 58.82235% OF UNIT AREA

STATE OF NEW MEXICO LANDS

TRACT NO.	DESCRIPTION OF LAND	ACRES	LEASE NO. & EXP. DATE	BASIC ROYALTY AND PERCENTAGE	LESSEE OF RECORD	OVERRIDING ROYALTY AND PERCENTAGE	WORKING INTEREST AND PERCENTAGE
17.	T-21S, R-33E Sec. 16: W/2	320.00	OG-4047-1 7-15-68	State: 12-1/2%	Union Oil of Calif.	None	Union Oil of Calif.
18.	T-21S, R-33E Sec. 17: E/2, E/2 NW/4	400.00	OG-4326-1 8-19-68	State: 12-1/2%	Union Oil of Calif.	None	Union Oil of Calif.
19.	T-21S, R-33E Sec. 8: SW/4, S/2 SE/4, NE/4 SE/4, S/2 NE/4	360.00	OG-4642 10-21-68	State: 12-1/2%	Estate of Ralph Lowe, Deceased	None	Estate of Ralph Lowe, Deceased
20.	T-21S, R-33E Sec. 7: Lots 3, 4, E/2 SW/4	151.51	OG-5382-1 4-21-69	State: 12-1/2%	Pan American Pet. Corp.	M. E. Merritt- 3/8 of 1/16 of 8/8 John K. Funk- 5/8 of 1/16 of 8/8	Pan American Petroleum Corp.
21.	T-21S, R-33E Sec. 9: W/2 SW/4, S/2 NW/4	160.00	K-108 1-19-70	State: 12-1/2%	Union Oil of Calif.	None	Union Oil of Calif.
22.	T-21S, R-33E Sec. 7: E/2	320.00	K-188 2-16-70	State: 12-1/2%	Union Producing Co.	None	Union Producing Co.
23.	T-21S, R-33E Sec. 18: Lots 3, 4, E/2 SW/4	151.87	K-786 5-20-70	State: 12-1/2%	Union Oil of Calif.	None	Union Oil of Calif.

STATE OF NEW MEXICO LANDS

ACRES	LEASE NO. & EXP. DATE	BASIC ROYALTY AND PERCENTAGE	LESSEE OF RECORD	OVERRIDING ROYALTY AND PERCENTAGE	WORKING INTEREST AND PERCENTAGE	
320.00	OG-4047-1 7-15-68	State: 12-1/2%	Union Oil of Calif.	None	Union Oil of Calif.	All
400.00	OG-4326-1 8-19-68	State: 12-1/2%	Union Oil of Calif.	None	Union Oil of Calif.	All
360.00	OG-4642 10-21-68	State: 12-1/2%	Estate of Ralph Lowe, Deceased	None	Estate of Ralph Lowe, Deceased	All
151.51	OG-5382-1 4-21-69	State: 12-1/2%	Pan American Pet. Corp.	M. E. Merritt- 3/8 of 1/16 of 8/8 John K. Funk- 5/8 of 1/16 of 8/8	Pan American Pet. Corp.	All
160.00	K-108 1-19-70	State: 12-1/2%	Union Oil of Calif.	None	Union Oil of Calif.	All
320.00	K-188 2-16-70	State: 12-1/2%	Union Producing Co.	None	Union Producing Co.	All
151.87	K-786 5-20-70	State: 12-1/2%	Union Oil of Calif.	None	Union Oil of Calif.	All

TRACT NO.	DESCRIPTION OF LAND	ACRES	LEASE NO. & EXP. DATE	BASIC ROYALTY AND PERCENTAGE	LESSEE OF RECORD	OVERRIDING ROYALTY AND PERCENTAGE	WORKING INTEREST AND PERCENTAGE
24.	T-21S, R-33E Sec. 6: Lot 18, SE/4 SW/4 Sec. 7: Lots 1, 2, E/2 NW/4	226.92	K-868-1 10-18-70	State: 12-1/2%	Sinclair Oil & Gas Co.	None	Sinclair Oil & Gas Co.
25.	T-21S, R-33E Sec. 9: E/2 SW/4	80.00	K-4485 10-20-74	State: 12-1/2%	Atlantic Richfield	None	Atlantic Richfield
26.	T-21S, R-33E Sec. 17: SW/4, W/2 NW/4 Sec. 18: SE/4	400.00	K-5003-2 5-18-75	State: 12-1/2%	Phillips Petroleum Co.	320 Minerals Ltd.-Production payment of \$750 per acre out of 5%	Phillips Petroleum Co.
27.	T-21S, R-33E Sec. 8: N/2 NE/4, NW/4, NW/4 SE/4 Sec. 9: N/2 NW/4	360.00	K-5642 1-18-76	State: 12-1/2%	Phillips Petroleum Co.	None	Phillips Petroleum Co.
28.	T-21S, R-33E Sec. 19: Lots 1, 2, E/2 NW/4, NE/4	312.04	K-6043 5-17-76	State: 12-1/2%	Phillips Petroleum Co.	None	Phillips Petroleum Co.

TOTAL 12 TRACTS, STATE OF NEW MEXICO LANDS - 3,242.34 ACRES, 41.17765% OF UNIT AREA

RECAPITULATION

FEDERAL LANDS	4,631.69 Acres	58.82235% Unit Area
STATE LANDS	<u>3,242.34 Acres</u>	<u>41.17765% Unit Area</u>
TOTAL LANDS	<u>7,874.03 Acres</u>	<u>100.00000% Unit Area</u>

ACRES	LEASE NO. & EXP. DATE	BASIC ROYALTY AND PERCENTAGE	LESSEE OF RECORD	OVERRIDING ROYALTY AND PERCENTAGE	WORKING INTEREST AND PERCENTAGE	
226.92	K-868-1 10-18-70	State: 12-1/2%	Sinclair Oil & Gas Co.	None	Sinclair Oil & Gas Co.	All
80.00	K-4485 10-20-74	State: 12-1/2%	Atlantic Richfield	None	Atlantic Richfield	All
400.00	K-5003-2 5-18-75	State: 12-1/2%	Phillips Petroleum Co.	320 Minerals Ltd.-Production payment of \$750 per acre out of 5%	Phillips Petroleum	All
360.00	K-5642 1-18-76	State: 12-1/2%	Phillips Petroleum Co.	None	Phillips Petroleum	All
312.04	K-6043 5-17-76	State: 12-1/2%	Phillips Petroleum Co.	None	Phillips Petroleum	All

TOTAL 12 TRACTS, STATE OF NEW MEXICO LANDS - 3,242.34 ACRES, 41.17765% OF UNIT AREA

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BEFORE THE
OIL CONSERVATION COMMISSION OF NEW MEXICO

IN THE MATTER OF THE APPLICATION
OF PHILLIPS PETROLEUM COMPANY FOR
APPROVAL OF HAT MESA UNIT AGREE-
MENT, LEA COUNTY, NEW MEXICO

Case 3560

A P P L I C A T I O N

Comes now the undersigned, PHILLIPS PETROLEUM COMPANY,
with offices at Midland, Texas, and files herewith one copy
of the proposed Unit Agreement for the development and opera-
tion of the Hat Mesa Unit Area, Lea County, New Mexico, and
hereby makes application for the approval of said Unit Agree-
ment as provided by law, and in support thereof states:

1. That the proposed unit area covered by said agree-
ment embraces 7,874.03 acres of land, more or less, more
particularly described as follows:

Township 21 South, Range 32 East
N.M.P.M.

Section 1: Lots 11, 12, 13, 14 and S/2
Section 2: Lots 9, 10, 11, 12, 13, 14,
15, 16 and S/2
Section 3: SE/4
Section 10: E/2
Section 11: All
Section 12: All
Section 13: All
Section 14: N/2 and SE/4
Section 24: N/2

Township 21 South, Range 33 East
N.M.P.M.

Section 6: Lot 18, and SE/4 SW/4
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Section 8: All
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Section 16: W/2
Section 17: All
Section 18: Lots 1, 2, 3, 4, E/2 W/2, E/2
Section 19: Lots 1, 2, E/2 NW/4, NE/4

Containing 7874.03 acres, more or less

2. That of the lands embraced within the proposed unit area, 4,631.69 acres or 58.82% are Federal lands, 3,242.34 acres or 41.18% are lands of the State of New Mexico, and no privately owned lands are within the proposed unit. That said area has heretofore, on January 31, 1967, been designated by the Acting Director of the United States Geological Survey as an area suitable and proper for unitization, a copy of said designation being attached hereto, made a part hereof, and for purposes of identification marked Exhibit "A". That on January 25, 1967, said Unit Agreement was approved as to form and content, following verbal unit project approval by the Commissioner of Public Lands in July 1966, a copy of said approval being attached hereto, made a part hereof, and for purposes of identification marked Exhibit "B".

3. That applicant is informed and believes, and upon such information and belief states, that the proposed unit area contains all or substantially all of the geological feature involved, and that in the event of the discovery of oil or gas thereon, that 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.

4. That Phillips Petroleum Company is designated as the Unit Operator in said Unit Agreement, and as such is given the authority under the terms thereof to carry on all operations necessary for the development and operation of the Unit Area for oil and gas subject to all applicable laws and regulations. That said Unit Agreement provides for the drilling of an initial test well to a depth sufficient to test the Devonian formation, unless unitized substances shall be discovered in paying quantities at a lesser depth, or to such depth as further drilling would not be warranted, but in

any event, to a depth not to exceed 15,500 feet.

5. That said Unit Agreement is substantially the same form as unit agreements heretofore approved by the New Mexico Oil Conservation Commission, and applicant believes that in the event oil or gas in paying quantities is discovered on the lands within the Unit Area, that the field or area can be developed more economically and efficiently under the terms of said Unit Agreement, to the end that the maximum recovery will be obtained of unitized substances, and that said Unit Agreement is in the interest of conservation and prevention of waste as contemplated by the New Mexico Oil Conservation Commission Statutes and regulations.

6. That the N/2 Section 24, T-21S, R-32E and the N/2 Section 19, SE/4 SE/4 Sec. 18, S/2 S/2 Sec. 17 all in T-21S, R-33E, within the proposed unit outline is subject to order No. R-111-A. However, it is believed that no active potash mining is being carried on in or near the proposed unit area, and said Unit Agreement includes a Potash Protection Clause.

7. That upon an order being entered by the New Mexico Oil Conservation Commission approving said Unit Agreement, and after approval thereof the Commissioner of Public Lands of the State of New Mexico, and after approval by the United States Department of Interior, an approved copy 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 approval of said Unit Agreement, and that upon said hearing, the Hat Mesa Unit Agreement be approved by the New Mexico Oil Conservation Commission as being in the interest of conservation and the prevention of waste.

Respectfully submitted,

PHILLIPS PETROLEUM COMPANY

BY Jason W. Kellaher
KELLY & FOX
Post Office Box 1769
Santa Fe, New Mexico



EXHIBIT "A"
UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
WASHINGTON 25, D. C.

IN REPLY REFER TO:

RECEIVED
FEB 3 1967

LAND SECTION
PHILIPS PETROLEUM CO.
MIDLAND, TEXAS

JAN 31 1967

Case 3560

Phillips Petroleum Company
P. O. Box 791
Midland, Texas 79701

Attention: Mr. Fred Forward

Gentlemen:

Your undated application filed on December 19 with the Oil and Gas Supervisor, Roswell, New Mexico, requests the designation of the Hat Mesa unit area embracing 7,874.03 acres, more or less, Lea County, New Mexico, as logically subject to exploration and development under the unitization provisions of the Mineral Leasing Act, as amended.

Pursuant to unit plan regulations of December 22, 1950, 30 CFR 226.3 (1961 reprint), the land requested, as outlined on your plat marked "Exhibit A, Hat Mesa Unit Area, Lea County, New Mexico," is hereby designated as a logical unit area.

The unit agreement submitted for the area designated should provide for the drilling of the initial exploratory well to test the Devonian formations, or to a depth of 15,500 feet. The 1961 reprint of the standard form of unit agreement should be used, modified only by the following changes as proposed by your application:

1. Change item 6(b), line 5, page 7 of the 1961 reprint to read:
"(b) the selection shall have been filed with the Supervisor.
If no successor unit operator is selected and qualified as herein provided, the Director at his election may declare this unit agreement terminated.

2. Replace the "Fair Employment" section of the 1961 reprint with the following:

"Nondiscrimination: In connection with the performance of work under this unit agreement, the operator agrees to comply with all of the provisions of Section 202(1) to (7) inclusive, of Executive Order 11246 (30 F.R. 12319), which are hereby incorporated by reference in this agreement."

3. Insertion of the appropriate language required by the State of New Mexico.

4. Addition of the proposed language for the protection of the potash deposits as a separate section.

5. The addition of a separate section entitled "Conflict of Supervision" is permissible, provided that such section is conformed to the language proposed by your application.

In the absence of any other type of land requiring special provisions or any objection not now apparent, a duly executed agreement identical to the 1961 reprint, modified only as outlined above, will be approved if submitted in approvable status within a reasonable time. However, the right is reserved to deny approval of any executed agreement which, in our opinion, does not have full commitment of sufficient lands to afford effective control of unit operations.

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

As this unit area contains State of New Mexico lands, we are sending a copy of this letter to the Commissioner of Public Lands at Santa Fe. Please contact the State of New Mexico before soliciting joinders, regardless of prior contacts with or clearances from the State.

Sincerely yours,



Acting Director

EXHIBIT "B"

State of New Mexico



Commissioner of Public Lands

GUYTON B. HAYS
COMMISSIONER



January 25, 1967

P. O. BOX 1148
SANTA FE, NEW MEXICO

RECEIVED
JAN 27 1967

Phillips Petroleum Company
P. O. Box 791
Midland, Texas, 79701

PHILLIPS PETROLEUM COMPANY
Midland, Texas
EXPLORATION DIVISION

Re: Hat Mesa Unit
Lea County, New Mexico

Case 3560

ATTENTION: Mr. Fred Forward

Gentlemen:

Pursuant to your letter dated January 20, 1967, and attachments thereto including the proposed form of agreement for the Hat Mesa Unit Area.

I find this agreement follows the required form for a State and Federal Exploratory Unit and includes all the requirements of the Commissioner of Public Lands, therefore, we approve the proposed agreement for the Hat Mesa Unit as to form and content.

Your Mr. Wolfenberger and Mr. Tally met with members of this office and with the Commissioner in July of 1966, and they discussed with us the Hat Mesa Unit Area and the structure map. The Commissioner at that time approved the Unit Project.

If we can be of further assistance please feel free to call us.

Very truly yours,

COMMISSIONER OF PUBLIC LANDS

BY: *Ted Bilberry*
Ted Bilberry, Director
Oil and Gas Department

GRH/MMR/s

MAIN OFFICE
'67 MAR 29 PM 3 40

BEFORE THE
OIL CONSERVATION COMMISSION OF NEW MEXICO

IN THE MATTER OF THE APPLICATION
OF PHILLIPS PETROLEUM COMPANY FOR
APPROVAL OF HAT MESA UNIT AGREE-
MENT, LEA COUNTY, NEW MEXICO

A P P L I C A T I O N

Comes now the undersigned, PHILLIPS PETROLEUM COMPANY,
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1. That the proposed unit area covered by said agree-
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3. That applicant is informed and believes, and upon such information and belief states, that the proposed unit area contains all or substantially all of the geological feature involved, and that in the event of the discovery of oil or gas thereon, that 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.

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5. That said Unit Agreement is substantially the same form as unit agreements heretofore approved by the New Mexico Oil Conservation Commission, and applicant believes that in the event oil or gas in paying quantities is discovered on the lands within the Unit Area, that the field or area can be developed more economically and efficiently under the terms of said Unit Agreement, to the end that the maximum recovery will be obtained of unitized substances, and that said Unit Agreement is in the interest of conservation and prevention of waste as contemplated by the New Mexico Oil Conservation Commission Statutes and regulations.

6. That the N/2 Section 24, T-21S, R-32E and the N/2 Section 19, SE/4 SE/4 Sec. 18, S/2 S/2 Sec. 17 all in T-21S, R-33E, within the proposed unit outline is subject to order No. R-111-A. However, it is believed that no active potash mining is being carried on in or near the proposed unit area, and said Unit Agreement includes a Potash Protection Clause.

7. That upon an order being entered by the New Mexico Oil Conservation Commission approving said Unit Agreement, and after approval thereof the Commissioner of Public Lands of the State of New Mexico, and after approval by the United States Department of Interior, an approved copy 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 approval of said Unit Agreement, and that upon said hearing, the Hat Mesa Unit Agreement be approved by the New Mexico Oil Conservation Commission as being in the interest of conservation and the prevention of waste.

Respectfully submitted,

PHILLIPS PETROLEUM COMPANY

BY Jason W. Kellahin
KELLAHIN & FOX
Post Office Box 1769
Santa Fe, New Mexico

Attorneys for Applicant



EXHIBIT "A"

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
WASHINGTON 25, D. C.

IN REPLY REFER TO:

RECEIVED
FEB 3 1967

LAND SECTION
PHILLIPS PETROLEUM CO.
MIDLAND, TEXAS

JAN 31 1967

Case 3560

Phillips Petroleum Company
P. O. Box 791
Midland, Texas 79701

Attention: Mr. Fred Forward

Gentlemen:

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Pursuant to unit plan regulations of December 22, 1950, 30 CFR 226.3 (1961 reprint), the land requested, as outlined on your plat marked "Exhibit A, Hat Mesa Unit Area, Lea County, New Mexico," is hereby designated as a logical unit area.

The unit agreement submitted for the area designated should provide for the drilling of the initial exploratory well to test the Devonian formations, or to a depth of 15,500 feet. The 1961 reprint of the standard form of unit agreement should be used, modified only by the following changes as proposed by your application:

1. Change item 6(b), line 5, page 7 of the 1961 reprint to read:
"(b) the selection shall have been filed with the Supervisor. If no successor unit operator is selected and qualified as herein provided, the Director at his election may declare this unit agreement terminated.

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"Nondiscrimination: In connection with the performance of work under this unit agreement, the operator agrees to comply with all of the provisions of Section 202(1) to (7) inclusive, of Executive Order 11246 (30 F.R. 12319), which are hereby incorporated by reference in this agreement."

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5. The addition of a separate section entitled "Conflict of Supervision" is permissible, provided that such section is conformed to the language proposed by your application.

In the absence of any other type of land requiring special provisions or any objection not now apparent, a duly executed agreement identical to the 1961 reprint, modified only as outlined above, will be approved if submitted in approvable status within a reasonable time. However, the right is reserved to deny approval of any executed agreement which, in our opinion, does not have full commitment of sufficient lands to afford effective control of unit operations.

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

As this unit area contains State of New Mexico lands, we are sending a copy of this letter to the Commissioner of Public Lands at Santa Fe. Please contact the State of New Mexico before soliciting joinders, regardless of prior contacts with or clearances from the State.

Sincerely yours,



Acting Director

EXHIBIT "B"

State of New Mexico



Commissioner of Public Lands

GUYTON B. HAYS
COMMISSIONER



January 25, 1967

P. O. BOX 1148
SANTA FE, NEW MEXICO

RECEIVED
JAN 27 1967

PHILLIPS PETROLEUM COMPANY
MIDLAND DISTRICT
EXPLORATION DIVISION

Phillips Petroleum Company
P. O. Box 791
Midland, Texas, 79701

Re: Hat Mesa Unit
Lea County, New Mexico

ATTENTION: Mr. Fred Forward

Gentlemen:

Pursuant to your letter dated January 20, 1967, and attachments thereto including the proposed form of agreement for the Hat Mesa Unit Area.

I find this agreement follows the required form for a State and Federal Exploratory Unit and includes all the requirements of the Commissioner of Public Lands, therefore, we approve the proposed agreement for the Hat Mesa Unit as to form and content.

Your Mr. Wolfenberger and Mr. Tally met with members of this office and with the Commissioner in July of 1966, and they discussed with us the Hat Mesa Unit Area and the structure map. The Commissioner at that time approved the Unit Project.

If we can be of further assistance please feel free to call us.

Very truly yours,

COMMISSIONER OF PUBLIC LANDS

BY: *Ted Bilberry*

Ted Bilberry, Director
Oil and Gas Department

GBH/MMR/s

DRAFT

GMH/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:

CF Subj. _____

CASE No. 3560

Order No. R- 3224

APPLICATION OF PHILLIPS PETROLEUM
COMPANY FOR APPROVAL OF THE HAT MESA
UNIT AGREEMENT, LEA COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on April 26, 1967,
at Santa Fe, New Mexico, before Examiner Elvis A. Utz.

NOW, on this 27 day of April, 1967, 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, Phillips Petroleum Company, seeks
approval of the Hat Mesa Unit Agreement covering 7874.03 acres,
more or less, of State and Federal lands described as follows:

LEA COUNTY, NEW MEXICO
TOWNSHIP 21 SOUTH, RANGE 32 EAST, NMPM

Sec 1: Lots 11, 12, 13, 14, and S/2
Sec 2: Lots 9, 10, 11, 12, 13, 14, 15, 16, and S/2
Sec 3: SE/4
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Sec 18: Lots 1, 2, 3, 4, E/2 W/2, and E/2
Sec 19: Lots 1, 2, E/2 NW/4, NE/4

(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 Hat Mesa 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.

MAILED

57 MAR 29 PM 3

BEFORE THE
OIL CONSERVATION COMMISSION OF NEW MEXICO

IN THE MATTER OF THE APPLICATION
OF PHILLIPS PETROLEUM COMPANY FOR
APPROVAL OF HAT MESA UNIT AGREE-
MENT, LEA COUNTY, NEW MEXICO

Case 3560

A P P L I C A T I O N

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Containing 7874.03 acres, more or less

DOCKET MAILED

Date 4-14-67

[Signature]

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Respectfully submitted,

PHILLIPS PETROLEUM COMPANY

BY Jason W. Kellahin
KELLAHIN & FOX
Post Office Box 1769
Santa Fe, New Mexico

Attorneys for Applicant



EXHIBIT "A"

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
WASHINGTON 25, D. C.

IN REPLY REFER TO:

RECEIVED
FEB 3 1967

LAND SECTION
PHILLIPS PETROLEUM CO.
MIDLAND, TEXAS

JAN 31 1967

Case 3560

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Gentlemen:

Your undated application filed on December 19 with the Oil and Gas Supervisor, Roswell, New Mexico, requests the designation of the Hat Mesa unit area embracing 7,874.03 acres, more or less, Lea County, New Mexico, as logically subject to exploration and development under the unitization provisions of the Mineral Leasing Act, as amended.

Pursuant to unit plan regulations of December 22, 1950, 30 CFR 226.3 (1961 reprint), the land requested, as outlined on your plat marked "Exhibit A, Hat Mesa Unit Area, Lea County, New Mexico," is hereby designated as a logical unit area.

The unit agreement submitted for the area designated should provide for the drilling of the initial exploratory well to test the Devonian formations, or to a depth of 15,500 feet. The 1961 reprint of the standard form of unit agreement should be used, modified only by the following changes as proposed by your application:

1. Change item 6(b), line 5, page 7 of the 1961 reprint to read:
"(b) the selection shall have been filed with the Supervisor.
If no successor unit operator is selected and qualified as herein provided, the Director at his election may declare this unit agreement terminated.
2. Replace the "Fair Employment" section of the 1961 reprint with the following:
"Nondiscrimination: In connection with the performance of work under this unit agreement, the operator agrees to comply with all of the provisions of Section 202(1) to (7) inclusive, of Executive Order 11246 (30 F.R. 12319), which are hereby incorporated by reference in this agreement."
3. Insertion of the appropriate language required by the State of New Mexico.

4. Addition of the proposed language for the protection of the potash deposits as a separate section.

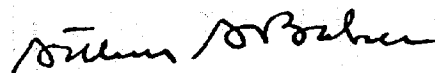
5. The addition of a separate section entitled "Conflict of Supervision" is permissible, provided that such section is conformed to the language proposed by your application.

In the absence of any other type of land requiring special provisions or any objection not now apparent, a duly executed agreement identical to the 1961 reprint, modified only as outlined above, will be approved if submitted in approvable status within a reasonable time. However, the right is reserved to deny approval of any executed agreement which, in our opinion, does not have full commitment of sufficient lands to afford effective control of unit operations.

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

As this unit area contains State of New Mexico lands, we are sending a copy of this letter to the Commissioner of Public Lands at Santa Fe. Please contact the State of New Mexico before soliciting joinders, regardless of prior contacts with or clearances from the State.

Sincerely yours,



Acting Director

EXHIBIT "B"

State of New Mexico



Commissioner of Public Lands

GUYTON B. HAYS
COMMISSIONER



January 25, 1967

P. O. BOX 1148
SANTA FE, NEW MEXICO

RECEIVED
JAN 27 1967

Phillips Petroleum Company
P. O. Box 791
Midland, Texas, 79701

PHILLIPS PETROLEUM COMPANY
MIDLAND DISTRICT
EXPLORATION DIVISION

Re: Hat Mesa Unit
Lea County, New Mexico

ATTENTION: Mr. Fred Forward

Gentlemen:

Pursuant to your letter dated January 20, 1967, and attachments thereto including the proposed form of agreement for the Hat Mesa Unit Area.

I find this agreement follows the required form for a State and Federal Exploratory Unit and includes all the requirements of the Commissioner of Public Lands, therefore, we approve the proposed agreement for the Hat Mesa Unit as to form and content.

Your Mr. Wolfenberger and Mr. Tally met with members of this office and with the Commissioner in July of 1966, and they discussed with us the Hat Mesa Unit Area and the structure map. The Commissioner at that time approved the Unit Project.

If we can be of further assistance please feel free to call us.

Very truly yours,

COMMISSIONER OF PUBLIC LANDS

BY: *Ted Bilberry*

Ted Bilberry, Director
Oil and Gas Department

GBH/MMR/s



PHILLIPS PETROLEUM COMPANY
MIDLAND, TEXAS 79701
BOX 791 PERMIAN BUILDING

EXPLORATION AND PRODUCTION DEPARTMENT
EXPLORATION DIVISION

MAIN OFFICE 600

'67 MAY 24 PM 1 27

3560

May 22, 1967

State of New Mexico
Oil Conservation Commission
State Land Office Building
Santa Fe, New Mexico

Attention: Mr. A. L. Porter, Jr.

Re: Hat Mesa Unit
Lea County, New Mexico
Case No. 3560
Order No. R-3224

Gentlemen:

Attached hereto please find executed original by consent and ratification of the working interest owners and overriding royalty interest owners to the Hat Mesa Unit as specified in paragraph (3) of Order No. R-3224.

We are also enclosing a photo copy of Certification-Determination approval by Robert H. Lyddan, Acting Director of the United States Geological Survey on May 15, 1967, and designating No. 14-08-0001-8853 to the Hat Mesa Unit Agreement.

A copy of the approval of the Commissioner of Public Lands, State of New Mexico, is also included.

All working interest owners have executed the Consent and Ratification to the Unit and Unit Operating Agreement, except Atlantic Richfield (Tract 25 Exhibit A and B) and all overriding royalty interest owners known to us have consented to and ratified the Unit Agreement.

We appreciate your prompt attention to this matter, and if there is anything further we may do, please advise.

Very truly yours,

Don Wolfenbarger
Don Wolfenbarger
Land Section

DW:lg
Encls.



UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
WASHINGTON, D.C. 20242

MAY 16 1967

3560

Phillips Petroleum Company
P. O. Box 791
Midland, Texas 79701

Gentlemen:

On May 15, 1967, Robert H. Lyddan, Acting Director of the Geological Survey, approved the Hat Mesa unit agreement, Lea County, New Mexico, filed by your company as unit operator. This agreement has been designated No. 14-08-0001-8853, and is effective as of the date of approval.

Enclosed is one copy of the approved unit agreement for your records. We request that you furnish the State of New Mexico, and any other interested principal, with whatever evidence of this approval is deemed appropriate.

Sincerely yours,


For the Director

Enclosure



CERTIFICATION—DETERMINATION

14-08-0001 8853

Pursuant to the authority vested in the Secretary of Interior, under the act approved February 25, 1920, 41 Stat. 437, as amended, 30 U. S. C. secs. 181, et seq., and delegated to the Director of the Geological Survey pursuant to Departmental Order No. 2365 of October 8, 1947, I do hereby:

- A. Approve the attached agreement for the development and operation of the Hat Mesa Unit Area, Lea County, New Mexico.
- B. Certify and determine that the unit plan of development and operation contemplated in the attached agreement is necessary and advisable in the public interest for the purpose of more properly conserving the natural resources.
- C. Certify and determine that the drilling, producing, rental, minimum royalty, and royalty requirements of all Federal leases committed to said agreement are hereby established, altered, changed, or revoked to conform with the terms and conditions of this agreement.

MAY 15 1967
Dated _____



ACTING

Director, United States Geological Survey

CERTIFICATE OF APPROVAL

COMMISSIONER OF PUBLIC LANDS, STATE OF NEW MEXICO

HAT MESA UNIT

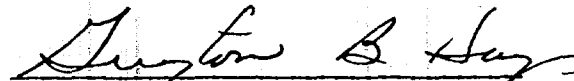
LEA COUNTY, NEW MEXICO

There having been presented to the undersigned Commissioner of Public Lands of the State of New Mexico for examination, the attached Agreement for the development and operation of acreage which is described within the attached Agreement, dated March 22, 1967, which said Agreement has been executed by parties owning and holding oil and gas leases and royalty interests in and under the property described, and upon examination of said Agreement, the Commissioner finds:

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

NOW, THEREFORE, by virtue of the authority conferred upon me under Sections 7-11-39, 7-11-40, 7-11-41, 7-11-47, and 7-11-48, New Mexico Statutes Annotated, 1953 Compilation, I, the undersigned Commissioner of Public Lands of the State of New Mexico, do hereby consent to and approve the said Agreement, however, such consent and approval being limited and restricted to such lands within the Unit Area, which are effectively committed to the Unit Agreement as of this date, and, further, that leases insofar as the lands covered thereby committed to this Unit Agreement shall be and the same are hereby amended to conform with the terms of such Unit Agreement, and said leases shall remain in full force and effect in accordance with the terms and conditions of said Agreement. This approval is subject to all of the provisions and requirements of the afore-said statutes.

IN WITNESS WHEREOF, this Certificate of Approval is executed, with seal affixed, this 3th. day of May, 19 67.


COMMISSIONER OF PUBLIC LANDS
of the State of 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. 3560
Order No. R-3224

APPLICATION OF PHILLIPS PETROLEUM
COMPANY FOR APPROVAL OF THE HAT MESA
UNIT AGREEMENT, LEA COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on April 26, 1967,
at Santa Fe, New Mexico, before Examiner Elvis A. Utz.

NOW, on this 3rd day of May, 1967, 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, Phillips Petroleum Company, seeks
approval of the Hat Mesa Unit Agreement covering 7874.03 acres,
more or less, of State and Federal lands described as follows:

LEA COUNTY, NEW MEXICO

TOWNSHIP 21 SOUTH, RANGE 32 EAST, NMPM

Section 1: Lots 11, 12, 13, 14, and S/2
Section 2: Lots 9 through 16 and S/2
Section 3: SE/4
Section 10: E/2
Sections 11, 12, and 13: All
Section 14: N/2 and SE/4
Section 24: N/2

RECEIVED
MAY 9 1967

U. S. DEPT. OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
ROSWELL, NEW MEXICO

-2-

CASE No. 3560

Order No. R-3224

TOWNSHIP 21 SOUTH, RANGE 33 EAST, NMPM

Section 6: Lot 18 and SE/4 SW/4

Section 7: Lots 1, 2, 3, 4, E/2 W/2,
and E/2

Section 8: All

Section 9: W/2

Section 16: W/2

Section 17: All

Section 18: Lots 1, 2, 3, 4, E/2 W/2,
and E/2

Section 19: Lots 1, 2, E/2 NW/4, and
NE/4

(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 Hat Mesa 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

-3-

CASE No. 3560

Order No. R-3224

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

DAVID F. CARGO, Chairman

Guyton B. Hays
GUYTON B. HAYS, Member

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

S E A L

esr/

UNIT AGREEMENT
FOR THE DEVELOPMENT AND OPERATION
OF THE
HAT MESA UNIT AREA
COUNTY OF LEA
STATE OF NEW MEXICO

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EXHIBITS

Exhibit "A" - Map of Unit Area
Exhibit "B" - Schedule of Ownership in Lands

UNIT AGREEMENT
FOR THE DEVELOPMENT AND OPERATION
OF THE
HAT MESA UNIT AREA
COUNTY OF LEA
STATE OF NEW MEXICO

NO. _____

THIS AGREEMENT, entered into as of the 22nd day of March, 1967
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. Secs. 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, in so far 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 (Art. III, Ch. 65, Vol. 9, part 2,
Statutes 1953 Annotated) to approve this agreement and the conservation
provisions hereof; and

WHEREAS, the parties hereto hold sufficient interests in the Hat
Mesa 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 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:

Township 21 South, Range 32 East, N.M.P.M.

Section 1: Lots 11, 12, 13, 14 and S/2
Section 2: Lots 9, 10, 11, 12, 13, 14,
15, 16 and S/2
Section 3: SE/4
Section 10: E/2
Section 11: All
Section 12: All
Section 13: All
Section 14: N/2 and SE/4
Section 24: N/2

Township 21 South, Range 33 East, N.M.P.M.

Section 6: Lot 18, and SE/4 SW/4
Section 7: Lots 1, 2, 3, 4, E/2 W/2, E/2
Section 8: All
Section 9: W/2
Section 16: W/2
Section 17: All
Section 18: Lots 1, 2, 3, 4, E/2 W/2, E/2
Section 19: Lots 1, 2, E/2 NW/4, NE/4

Containing 7874.03 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 six (6) copies of the revised exhibits shall be filed with the Supervisor, and two (2) copies thereof shall be filed with the Commissioner and one (1) copy with the New Mexico Oil Conservation Commission, hereinafter referred to as "State Commission."

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

(a) Unit Operator, on its own motion or on demand of the Director of the Geological Survey, hereinafter referred to as "Director," or on demand of the 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 State Commission and copies thereof mailed to the last known address of

each working interest owner, lessee, and lessor whose interests are affected, advising that thirty (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 State Commission evidence of mailing of the notice of expansion or contraction and a copy of any objections thereto which have been filed with the Unit Operator, together with an application in sufficient number, for approval of such expansion or contraction and with appropriate joinders.

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

(e) All legal subdivisions of unitized lands (i.e., 40 acres by Government survey or its nearest lot or tract equivalent in instances of irregular surveys; however, unusually large lots or tracts shall be considered in multiples of 40 acres, or the nearest aliquot equivalent thereof, for the purpose of elimination under this subsection), no parts of which are entitled to be in a participating area within five (5) 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 5-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 entitled

"Unavoidable Delay;" provided that all legal subdivisions of lands not in a participating area and not entitled to become participating under the applicable provisions of this agreement within ten (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% of the current unitized working interests and 60% of the current unitized basic royalty interests (exclusive of the basic royalty interests of the United States and the State of New Mexico), on a total-nonparticipating acreage basis, respectively, with approval of the Director and the Commissioner provided such extension application is submitted to the Commissioner and the Director 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. Phillips Petroleum Company, with offices in Midland, Texas, is hereby designated as Unit Operator and by signature hereto as Unit Operator commits to this agreement all interests in unitized substances vested in it and agrees and consents to accept the duties and obligations of Unit Operator for the discovery, development and production of unitized substances as herein provided. Whenever reference is made herein to the Unit Operator, such reference means the Unit Operator acting in that capacity and

not as an owner of interest in unitized substances, and the term "working interest owner" when used herein shall include or refer to Unit Operator as the owner of a working interest when such an interest is owned by it.

5. RESIGNATION OR REMOVAL OF UNIT OPERATOR. Unit Operator shall have the right to resign at any time prior to the establishment of a participating area or areas hereunder, but such resignation shall not become effective so as to release Unit Operator from the duties and obligations of Unit Operator and terminate Unit Operator's rights as such for a period of 6 months after notice of intention to resign has been served by Unit Operator on all working interest owners and the Director, the Commissioner and State Commission and until all wells then drilled hereunder are placed in a satisfactory condition for suspension or abandonment whichever is required by the Supervisor as to Federal lands and by the State Commission as to State lands unless a new Unit Operator shall have been selected and approved and shall have taken over and assumed the duties and obligations of Unit Operator prior to the expiration of said period.

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

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

The Unit Operator may, upon default or failure in the performance of its duties or obligations hereunder, be subject to removal by the same percentage vote of the owners of working interests determined in like manner as herein provided for the selection of a new Unit Operator. Such removal shall be effective upon notice thereof to the Director and the Commissioner.

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

6. SUCCESSOR UNIT OPERATOR. Whenever the Unit Operator shall tender his or its resignation as Unit Operator or shall be removed as hereinabove provided, or a change of Unit Operator is negotiated by working interest owners, the owners of the working interests in the participating area or areas according to their respective acreage interests in such participating area or areas, or, until a participating area shall have been established, the owners of the working interests according to their respective acreage interests in all unitized land, shall by majority vote select a successor Unit Operator: Provided, that, if a majority but less than 75 per cent of the working interests qualified to vote are owned by one party to this agreement, a concurring vote of one or more additional working interest owners shall be required to select a new operator. Such selection shall not become effective until:

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

(b) the selection shall have been filed with the Supervisor and approved by the 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.

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 6 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, or by the State Commission if on privately owned land, if any, unless on such effective date a well is being drilled conformably with the terms hereof, and thereafter continue such drilling diligently until the Devonian formations have been tested or until at a lesser depth unitized substances shall be discovered which can be produced in paying quantities (to wit: quantities sufficient to repay the costs of drilling, and producing operations, with a reasonable profit) or the Unit Operator shall at any time establish to the satisfaction of the Supervisor if on Federal land, of the Commissioner if on State land, or of the State Commission if on privately owned land, that further drilling of said well would be unwarranted or impracticable, provided, however, that Unit Operator shall not in any event be required to drill said well to a depth in excess of 15,500 feet. Until the discovery of a deposit of unitized substances capable of being produced in paying quantities, the Unit Operator shall continue drilling diligently one well at a time, allowing not more than 6 months between the completion of one well and the beginning of the next well, until a well capable of producing unitized substances in paying quantities is completed to the satisfaction of said Supervisor if it be on Federal land or of the Commissioner if on State land or the State Commission if on privately owned land or until it is reasonably proved that the unitized land is incapable of producing unitized substances in paying quantities in the formations drilled hereunder. Nothing in this section shall be deemed to limit the right of the Unit Operator to resign as provided in Section 5 hereof, or as requiring Unit Operator to commence or continue any drilling during the period pending such resignation becoming effective in order to comply with the requirements of this section. The Director and 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 6 months after completion of a well capable of producing unitized substances in paying quantities, the Unit Operator shall submit for the approval of the 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 and locations of any wells to be drilled and the proposed order and time for such drilling; and
- (b) to the extent practicable specify the operating practices regarded as necessary and advisable for 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 6-month period herein prescribed for submission of an initial plan of development where such action is justified because of unusual conditions or circumstances. After completion hereunder of a well capable of producing any unitized substance in paying quantities, no further wells, except such as may be necessary to afford protection against operations not under this agreement or such as may be specifically approved by the Supervisor and the 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 or as soon thereafter as required by the Supervisor or the Commissioner the Unit Operator shall 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 also shall set forth the percentage of unitized substances to be allocated as herein provided to each unitized tract in the participating area so established, and shall govern the allocation of production from and after the date the participating area becomes effective. A separate participating area shall be established in like manner for each separate pool or deposit of unitized substances or for any group thereof produced as a single pool or zone, and any two or more participating areas so established may be combined into one with the consent of the owners of all working interests in the lands within the participating areas so to be combined, on approval of the Director and the 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 State Commission as to privately owned 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 of the Commissioner as to wells drilled

on State land and the State Commission as to wells on privately owned lands, 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 NONPARTICIPATING LAND OR FORMATIONS.

Any party or parties 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, the Commissioner as to State land, and the State Commission as to privately owned land, and subject to the non-conflicting provisions of the Unit Operating Agreement, at such party's or parties' sole risk, costs, and expense drill a well at such location on such land to test any formation for which a participating area has not been established or to test any formation for which a participating area has been established if such location is not within said participating area, unless within 90 days of receipt of notice from said party of his intention to drill the well the Unit Operator elects and commences to drill such a well in like manner as other wells are drilled by the Unit Operator under this agreement.

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

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

14. ROYALTY SETTLEMENT. The United States, the State of New Mexico and other royalty owners who, under existing contract, are entitled to take in kind a share of the substances now unitized hereunder produced from any tract, shall hereafter be entitled to the right to take in kind their share of the unitized substances allocated to such tract, and Unit Operator, or in case of the operation of a well by a working interest owner as herein in special cases provided for, such working interest owner, shall make deliveries of such royalty share taken in kind in conformity with the applicable contracts, laws, and regulations. Settlement for royalty interest not taken in kind shall be made by working interest owners responsible 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 regulation;

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 the State of New Mexico shall be computed and paid on the basis of the amounts allocated to unitized State land as provided herein at the rate specified in the State oil and gas lease.

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

16. CONSERVATION. Operations hereunder and production of unitized substances shall be conducted to provide for the most economical and efficient

recovery of said substances without waste, as defined by or pursuant to State or Federal law or regulation.

17. DRAINAGE. The Unit Operator shall take appropriate and adequate measures to prevent drainage of unitized substances from unitized land by wells or land not subject to this agreement, or, with the 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 leases and the Commissioner as to State leases.

18. LEASES AND CONTRACTS CONFORMED AND EXTENDED. The terms, conditions, and provisions of all leases, subleases, and other contracts relating to exploration, drilling, development, or operation for oil or gas of 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 and State of New Mexico, committed to this agreement, which, by its terms might expire prior to the termination of this agreement, is hereby extended beyond any such 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, and subsection (i) of this Section 18.

(h) The segregation of any Federal lease committed to this agreement is governed by the following provision in the fourth paragraph of Sec. 17 (j) of the Mineral Leasing Act, as amended by the Act of September 2, 1960 (74 Stat. 781-784): "Any (Federal) lease heretofore or hereafter committed to any such (unit) plan embracing lands that are in part within and in part outside of the area covered by any such plan shall be segregated into separate leases as to the 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 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 Secretary and the Commissioner or their duly authorized representatives as of the date of approval by the Secretary 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 state-wide voluntary conservation or allocation program, which is established, recognized, and generally adhered to by the majority of operators in such State, such authority being hereby limited to alteration or modification in the public interest, the purpose thereof and the public interest to be served thereby to be stated in the order of alteration or modification. Without regard to the foregoing, the Director is also hereby vested with authority to alter or modify from time to time 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 State Commission.

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

22. CONFLICT OF SUPERVISION. Neither the Unit Operator nor the working interest owners nor any of them shall be subject to any forfeiture, termination or expiration of any rights hereunder or under any leases or contracts subject hereto, or to any penalty or liability on account of delay or failure in whole or in part to comply with any applicable provision thereof to the extent that the Unit Operator, working interest owners or any of them are hindered, delayed or prevented from complying therewith by reason of failure of the Unit Operator to obtain in the exercise of due diligence, the concurrence of proper representatives of the United States and proper representatives of the State of New Mexico in and about any matters or thing concerning which it is required herein that such concurrence be obtained. The parties hereto, including the State Commission, agree that all powers and authority vested in the State Commission in and by any provisions of this agreement are vested in the State Commission and shall be exercised by it pursuant to the provisions of the laws of the State of New Mexico and subject in any case to appeal or judicial review as may now or hereafter be provided by the laws of the State of New Mexico.

23. APPEARANCES. Unit Operator shall, after notice to other parties affected, have the right to appear for and on behalf of any and all interests affected hereby before the Department of 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 State 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 State Commission or any

other legally constituted authority; provided, however, that any other interested party shall also have the right at his own expense to be heard in any such proceeding.

24. NOTICES. All notices, demands or statements required hereunder to be given or rendered to the parties hereto shall be deemed fully given if given in writing and personally delivered to the party or sent by postpaid registered 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 (30 F.R. 12319), which are hereby incorporated by reference in this agreement.

28. RECLAMATION LANDS. Nothing in this agreement shall modify the special, Federal-lease stipulations, if any, applicable to lands under the jurisdiction of the Bureau of Reclamation.

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

30. 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 Commissioner and the Director. Any oil or gas interests in lands within the unit area not committed hereto prior to submission of this agreement for final approval may thereafter be committed hereto by the owner or owners thereof subscribing or consenting to this agreement, and, if the interest is a working interest, by the owner of such interest also subscribing to the unit operating agreement. After operations are commenced hereunder, the right of subsequent joinder, as provided in this section, by a working interest owner

is subject to such requirements or approvals, if any, pertaining to such joinder, as may be provided for in the unit operating agreement. After final approval hereof joinder by a non-working interest owner must be consented to in writing by the working interest owner committed hereto and responsible for the payment of any benefits that may accrue hereunder in behalf of such non-working interest. Joinder by any owner of a non-working interest, at any time, must be accompanied by appropriate joinder by the owner of the corresponding working interest in order for the interest to be regarded as committed hereto. Joinder to the unit agreement by a working interest owner, at any time, must be accompanied by appropriate joinder to the unit operating agreement, if more than one committed working interest owner is involved, in order for the interest to be regarded as committed to this unit agreement. Except as may otherwise herein be provided subsequent joinders to this agreement shall be effective as of the first day of the month following the filing with the Supervisor 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 or the Commissioner, provided, that as to State lands all subsequent joinders must be approved by the Commissioner.

31. PROTECTION OF POTASH DEPOSITS. No wells will be drilled for oil or gas at a location on Federal lands which in the opinion of the Supervisor or at a location on State lands which in the opinion of the Commissioner would result in undue waste of potash deposits or constitute a hazard to or unduly interfere with mining operations being conducted for the extraction of potash deposits.

The drilling or abandonment of any well on unitized land shall be done in accordance with applicable oil and gas operating regulations, including such requirements as to Federal lands as may be prescribed by the Supervisor and as to State lands by the Commissioner, as necessary to prevent the infiltration of oil, gas or water into formations containing potash deposits or into mines or workings being utilized in the extraction of such deposits.

Well records and survey plats that an oil and gas lessee of Federal lands must file pursuant to applicable operating regulations (30 CFR Part 221) shall be available for inspection at the Office of the Supervisor to any party

holding a potash permit or lease on the Federal land on which the well is situated insofar as such records are pertinent to the mining and protection of potash deposits.

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

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

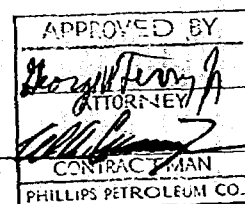
UNIT OPERATOR AND WORKING INTEREST OWNER

Date: March 31, 1967

P. O. Box 791
Midland, Texas 79701

PHILLIPS PETROLEUM COMPANY

By [Signature]
Attorney-in-Fact



OTHER WORKING INTEREST OWNERS

Date: _____

UNION OIL COMPANY OF CALIFORNIA

By _____

Date: _____

GULF OIL CORPORATION

By _____

Date: _____

RALPH LOWE ESTATE

By _____

Date: _____

UNION PRODUCING COMPANY

By _____

Date: _____

PAN AMERICAN PETROLEUM CORPORATION

By _____

Date: _____

SINCLAIR OIL & GAS COMPANY

By _____

Date: _____

SUPERIOR OIL COMPANY

By _____

THE STATE OF TEXAS Ø

COUNTY OF MIDLAND Ø

BEFORE ME, the undersigned authority, a Notary Public in and for said County and State, on this day personally appeared FRED FORWARD, Attorney-in-Fact for PHILLIPS PETROLEUM COMPANY, known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that the same was the act of the said PHILLIPS PETROLEUM COMPANY, a corporation, and that he executed the same as the act of such corporation for the purposes and consideration therein expressed, and in the capacity therein stated.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the 31st day of

March, 1967.

Lorraine A. Galow
Notary Public in and for Midland County,
Texas. *Lorraine A. Galow*

EXHIBIT "B"
SCHEDULE SHOWING ALL LANDS AND OWNERSHIP
WITHIN THE UNIT AREA
HAT MESA UNIT, LEA COUNTY, NEW MEXICO

F E D E R A L L A N D

TRACT NO.	DESCRIPTION OF LAND	ACRES	LEASE NO. & EXP. DATE	BASIC ROYALTY AND PERCENTAGE	LESSEE OF RECORD	OVERRIDING ROYALTY AND PERCENTAGE	WORKING INTEREST AND PERCENTAGE
1.	<u>T-21S, R-32E</u> Sec. 1: Lots 11, 12, 13, 14, S/2	480.00	NM-026684 8-31-67 (2)	U.S.A.: 12-1/2%	Phillips Petroleum Co.	Beard Oil Co.- 2-7/8% Amax Pet. Corp.- 1-1/8% Bruce Anderson- 1-3/4% Vola V. Bunnell- 1/2 of 1%	Phillips Petro
2.	<u>T-21S, R-32E</u> Sec. 3: E/2 SE/4	80.00	NM-028705 5-31-67 (2)	U.S.A.: 12-1/2%	Phillips Petroleum Co.	Bryan Bell-Production payment of \$750 per acre out of 5%	Phillips Petro
3.	<u>T-21S, R-32E</u> Sec. 14: NW/4, N/2 SE/4	240.00	NM-061261 5-31-69 (2)	U.S.A.: 12-1/2%	Estate of Ralph Lowe, Deceased	None	Estate of Ralph Deceased
4.	<u>T-21S, R-32E</u> Sec. 13: N/2, N/2 S/2 Sec. 14: NE/4	640.00	NM-061261-A 5-31-69 (2)	U.S.A.: 12-1/2%	Union Oil of Calif.	Fred Goodman- 1-1/4% Est. of Ralph Lowe- 1-1/4% Vola Horst Bunnell- 2-1/2%	Union Oil of C
5.	<u>T-21S, R-32E</u> Sec. 2: Lots 11, 12, 13, 14	160.00	NM-093840 7-31-70 (2)	U.S.A.: 12-1/2%	Phillips Petroleum Co.	Pubco Pet. Corp.- 12-1/2%	Phillips Petro
6.	<u>T-21S, R-33E</u> Sec. 18: NE/4	160.00	NM-0120543 1-31-71	U.S.A.: 12-1/2%	Gulf Oil Corp.	Gerald T. Tresner- 5%	Gulf Oil Corp.

EXHIBIT "B"
SCHEDULE SHOWING ALL LANDS AND OWNERSHIP
WITHIN THE UNIT AREA
HAT MESA UNIT, LEA COUNTY, NEW MEXICO

F E D E R A L L A N D

ACRES	LEASE NO. & EXP. DATE	BASIC ROYALTY AND PERCENTAGE	LESSEE OF RECORD	OVERRIDING ROYALTY AND PERCENTAGE	WORKING INTEREST AND PERCENTAGE	
12, s/2 480.00	NM-026684 8-31-67 (2)	U.S.A.: 12-1/2%	Phillips Petroleum Co.	Beard Oil Co.- 2-7/8% Amax Pet. Corp.- 1-1/8% Bruce Anderson- 1-3/4% Vola V. Bunnell- 1/2 of 1%	Phillips Petroleum	All
80.00	NM-028705 5-31-67 (2)	U.S.A.: 12-1/2%	Phillips Petroleum Co.	Bryan Bell-Production payment of \$750 per acre out of 5%	Phillips Petroleum	All
240.00	NM-061261 5-31-69 (2)	U.S.A.: 12-1/2%	Estate of Ralph Lowe, Deceased	None	Estate of Ralph Lowe, Deceased	All
640.00	NM-061261-A 5-31-69 (2)	U.S.A.: 12-1/2%	Union Oil of Calif.	Fred Goodman- 1-1/4% Est. of Ralph Lowe- 1-1/4% Vola Horst Bunnell- 2-1/2%	Union Oil of Calif.	All
12, 160.00	NM-093840 7-31-70 (2)	U.S.A.: 12-1/2%	Phillips Petroleum Co.	Pubco Pet. Corp.- 12-1/2%	Phillips Petroleum	All
160.00	NM-0120543 1-31-71	U.S.A.: 12-1/2%	Gulf Oil Corp.	Gerald T. Tresner- 5%	Gulf Oil Corp.	All

TRACT NO.	DESCRIPTION OF LAND	ACRES	LEASE NO. & EXP. DATE	BASIC ROYALTY AND PERCENTAGE	LESSEE OF RECORD	OVERRIDING ROYALTY AND PERCENTAGE	WORKING INTEREST AND PERCENT
7.	T-21S, R-32E Sec. 2: Lots 9, 10, 15, 16 Sec. 10: SE/4 Sec. 13: S/2 S/2 Sec. 14: S/2 SE/4 T-21S, R-33E Sec. 18: Lots 1, 2, E/2 NW/4	711.69	NM-0202296 6-30-73	U.S.A.: 12-1/2%	Gulf Oil Corp.	Walter L. Morrison- 5%	Gulf Oil Corp.
8.	T-21S, R-32E Sec. 12: S/2 SE/4	80.00	NM-0239367 3-31-72	U.S.A.: 12-1/2%	Pan American Pet. Corp.	Bertha W. Hendel- 5%	Pan American
9.	T-21S, R-32E Sec. 11: NE/4, SW/4	320.00	NM-0257272 5-31-72	U.S.A.: 12-1/2%	Phillips Petroleum Co.	R. L. Grady- 1-1/4% Amco Oil Corp.- 3-3/4%	Phillips Pet
10.	T-21S, R-32E Sec. 12: W/2	320.00	NM-0257272-A 5-31-72	U.S.A.: 12-1/2%	Gulf Oil Corp.	E. Jeanne Slaydon- 4%	Gulf Oil Corp
11.	T-21S, R-32E Sec. 12: W/2 NE/4	80.00	NM-0325223 11-30-72	U.S.A.: 12-1/2%	Union Oil of Calif.	John A. Wyman- 2-1/2% Ted A. Beach- 2-1/2%	Union Oil of
12.	T-21S, R-32E Sec. 10: NE/4	160.00	NM-0362177 11-30-73	U.S.A.: 12-1/2%	Superior Oil Co.	None	Superior Oil
13.	T-21S, R-32E Sec. 3: W/2 SE/4	80.00	NM-0481118 12-31-73	U.S.A.: 12-1/2%	Phillips Petroleum Co.	Curtis R. Inman- 5%	Phillips Petr

ACRES	LEASE NO. & EXP. DATE	BASIC ROYALTY AND PERCENTAGE	LESSEE OF RECORD	OVERRIDING ROYALTY AND PERCENTAGE	WORKING INTEREST AND PERCENTAGE	
711.69	NM-0202296 6-30-73	U.S.A.: 12-1/2%	Gulf Oil Corp.	Walter L. Morrison- 5%	Gulf Oil Corp.	All
80.00	NM-0239367 3-31-72	U.S.A.: 12-1/2%	Pan American Pet. Corp.	Bertha W. Hendel- 5%	Pan American Pet. Corp.	All
320.00	NM-0257272 5-31-72	U.S.A.: 12-1/2%	Phillips Petroleum Co.	R. L. Grady- 1-1/4% Amco Oil Corp.- 3-3/4%	Phillips Petroleum	All
320.00	NM-0257272-A 5-31-72	U.S.A.: 12-1/2%	Gulf Oil Corp.	E. Jeanne Slaydon- 4%	Gulf Oil Corp.	All
80.00	NM-0325223 11-30-72	U.S.A.: 12-1/2%	Union Oil of Calif.	John A. Wyman- 2-1/2% Ted A. Beach- 2-1/2%	Union Oil of Calif.	All
160.00	NM-0362177 11-30-73	U.S.A.: 12-1/2%	Superior Oil Co.	None	Superior Oil Co.	All
80.00	NM-0481118 12-31-73	U.S.A.: 12-1/2%	Phillips Petroleum Co.	Curtis R. Inman- 5%	Phillips Petroleum	All

TRACT NO.	DESCRIPTION OF LAND	ACRES	LEASE NO. & EXP. DATE	BASIC ROYALTY AND PERCENTAGE	LESSEE OF RECORD	OVERRIDING ROYALTY AND PERCENTAGE	WORKING INTEREST AND PERCENTAGE
14.	<u>T-21S, R-32E</u> Sec. 2: S/2	320.00	NM-0523215 3-31-74	U.S.A.: 12-1/2%	Phillips Petroleum Co.	Elsie G. Gorman- 5%	Phillips Petroleum Co.
15.	<u>T-21S, R-32E</u> Sec. 11: NW/4, SE/4 Sec. 12: E/2 NE/4, N/2 SE/4	480.00	NM-0553706 5-31-74	U.S.A.: 12-1/2%	Phillips Petroleum Co.	Katherine V. Johnson- 5%	Phillips Petroleum Co.
16.	<u>T-21S, R-32E</u> Sec. 24: N/2	320.00	NM-0556868 4-30-75	U.S.A.: 12-1/2%	Phillips Petroleum Co.	Erma Dee Robley- 2-1/4% Helen I. Fehr- 2-1/4% Robert P. Kunkel- 1/2 of 1%	Phillips Petroleum Co.

TOTAL 16 TRACTS FEDERAL LANDS - 4631.69 ACRES, 58.82235% OF UNIT AREA

ACRES	LEASE NO. & EXP. DATE	BASIC ROYALTY AND PERCENTAGE	LESSEE OF RECORD	OVERRIDING ROYALTY AND PERCENTAGE	WORKING INTEREST AND PERCENTAGE	
320.00	NM-0523215 3-31-74	U.S.A.: 12-1/2%	Phillips Petroleum Co.	Elsie G. Gorman- 5%	Phillips Petroleum	All
480.00	NM-0553706 5-31-74	U.S.A.: 12-1/2%	Phillips Petroleum Co.	Katherine V. Johnson- 5%	Phillips Petroleum	All
320.00	NM-0556868 4-30-75	U.S.A.: 12-1/2%	Phillips Petroleum Co.	Erma Dee Robley- 2-1/4% Helen I. Fehr- 2-1/4% Robert P. Kunkel- 1/2 of 1%	Phillips Petroleum	All

TOTAL 16 TRACTS FEDERAL LANDS - 4631.69 ACRES, 58.82235% OF UNIT AREA

PA

STATE OF NEW MEXICO LANDS

TRACT NO.	DESCRIPTION OF LAND	ACRES	LEASE NO. & EXP. DATE	BASIC ROYALTY AND PERCENTAGE	LESSEE OF RECORD	OVERRIDING ROYALTY AND PERCENTAGE	WORKING INTEREST AND PERCENTAGE
17.	<u>T-21S, R-33E</u> Sec. 16: W/2	320.00	OG-4047-1 7-15-68	State: 12-1/2%	Union Oil of Calif.	None	Union Oil of
18.	<u>T-21S, R-33E</u> Sec. 17: E/2, E/2 NW/4	400.00	OG-4326-1 8-19-68	State: 12-1/2%	Union Oil of Calif.	None	Union Oil of
19.	<u>T-21S, R-33E</u> Sec. 8: SW/4, S/2 SE/4, NE/4 SE/4, S/2 NE/4	360.00	OG-4642 10-21-68	State: 12-1/2%	Estate of Ralph Lowe, Deceased	None	Estate of Ralph Lowe, Deceased
20.	<u>T-21S, R-33E</u> Sec. 7: Lots 3, 4, E/2 SW/4	151.51	OG-5382-1 4-21-69	State: 12-1/2%	Pan American Pet. Corp.	M. E. Merritt- 3/8 of 1/16 of 8/8 John K. Funk- 5/8 of 1/16 of 8/8	Pan American
21.	<u>T-21S, R-33E</u> Sec. 9: W/2 SW/4, S/2 NW/4	160.00	K-108 1-19-70	State: 12-1/2%	Union Oil of Calif.	None	Union Oil of
22.	<u>T-21S, R-33E</u> Sec. 7: E/2	320.00	K-188 2-16-70	State: 12-1/2%	Union Producing Co.	None	Union Producing
23.	<u>T-21S, R-33E</u> Sec. 18: Lots 3, 4, E/2 SW/4	151.87	K-786 5-20-70	State: 12-1/2%	Union Oil of Calif.	None	Union Oil of

STATE OF NEW MEXICO LANDS

CRES	LEASE NO. & EXP. DATE	BASIC ROYALTY AND PERCENTAGE	LESSEE OF RECORD	OVERRIDING ROYALTY AND PERCENTAGE	WORKING INTEREST AND PERCENTAGE
20.00	OG-4047-1 7-15-68	State: 12-1/2%	Union Oil of Calif.	None	Union Oil of Calif. All
00.00	OG-4326-1 8-19-68	State: 12-1/2%	Union Oil of Calif.	None	Union Oil of Calif. All
50.00	OG-4642 10-21-68	State: 12-1/2%	Estate of Ralph Lowe, Deceased	None	Estate of Ralph Lowe, Deceased All
1.51	OG-5382-1 4-21-69	State: 12-1/2%	Pan American Pet. Corp.	M. E. Merritt- 3/8 of 1/16 of 8/8 John K. Funk- 5/8 of 1/16 of 8/8	Pan American Pet. Corp. All
0.00	K-108 1-19-70	State: 12-1/2%	Union Oil of Calif.	None	Union Oil of Calif. All
0.00	K-188 2-16-70	State: 12-1/2%	Union Producing Co.	None	Union Producing Co. All
1.67	K-786 5-20-70	State: 12-1/2%	Union Oil of Calif.	None	Union Oil of Calif. All

TRACT NO.	DESCRIPTION OF LAND	ACRES	LEASE NO. & EXP. DATE	BASIC ROYALTY AND PERCENTAGE	LESSEE OF RECORD	OVERRIDING ROYALTY AND PERCENTAGE	WORKING INTEREST AND PERCENTAGE
24.	T-21S, R-33E Sec. 6: Lot 18, SE/4 SW/4 Sec. 7: Lots 1, 2, E/2 NW/4	226.92	K-868-1 10-18-70	State: 12-1/2%	Sinclair Oil & Gas Co.	None	Sinclair Oil &
25.	T-21S, R-33E Sec. 9: E/2 SW/4	80.00	K-4485 10-20-74	State: 12-1/2%	Atlantic Richfield	None	Atlantic Richf
26.	T-21S, R-33E Sec. 17: SW/4, W/2 NW/4 Sec. 18: SE/4	400.00	K-5003-2 5-18-75	State: 12-1/2%	Phillips Petroleum Co.	320 Minerals Ltd.-Production payment of \$750 per acre out of 5%	Phillips Petro.
27.	T-21S, R-33E Sec. 8: N/2 NE/4, NW/4, NW/4 SE/4 Sec. 9: N/2 NW/4	360.00	K-5642 1-18-76	State: 12-1/2%	Phillips Petroleum Co.	None	Phillips Petro.
28.	T-21S, R-33E Sec. 19: Lots 1, 2, E/2 NW/4, NE/4	312.04	K-6043 5-17-76	State: 12-1/2%	Phillips Petroleum Co.	None	Phillips Petro.

TOTAL 12 TRACTS, STATE OF NEW MEXICO LANDS - 3,242.34 ACRES, 41.17765% OF UNIT AREA

RECAPITULATION

FEDERAL LANDS	4,631.69 Acres	58.82235% Unit Area
STATE LANDS	3,242.34 Acres	41.17765% Unit Area
TOTAL LANDS	<u>7,874.03 Acres</u>	<u>100.00000% Unit Area</u>

ACRES	LEASE NO. & EXP. DATE	BASIC ROYALTY AND PERCENTAGE	LESSEE OF RECORD	OVERRIDING ROYALTY AND PERCENTAGE	WORKING INTEREST AND PERCENTAGE
226.92	K-868-1 10-18-70	State: 12-1/2%	Sinclair Oil & Gas Co.	None	Sinclair Oil & Gas Co. All
80.00	K-4485 10-20-74	State: 12-1/2%	Atlantic Richfield	None	Atlantic Richfield All
400.00	K-5003-2 5-18-75	State: 12-1/2%	Phillips Petroleum Co.	320 Minerals Ltd.-Production payment of \$750 per acre out of 5%	Phillips Petroleum All
360.00	K-5642 1-18-76	State: 12-1/2%	Phillips Petroleum Co.	None	Phillips Petroleum All
12.04	K-6043 5-17-76	State: 12-1/2%	Phillips Petroleum Co.	None	Phillips Petroleum All

TOTAL 12 TRACTS, STATE OF NEW MEXICO LANDS - 3,242.34 ACRES, 41.17765% OF UNIT AREA

RECAPITULATION

FEDERAL LANDS	4,631.69 Acres	58.82235% Unit Area
STATE LANDS	3,242.34 Acres	41.17765% Unit Area
TOTAL LANDS	7,874.03 Acres	100.00000% Unit Area

CONSENT AND RATIFICATION
HAT MESA UNIT AND UNIT OPERATING AGREEMENT
EMBRACING LANDS IN LEA COUNTY, NEW MEXICO

The undersigned hereby acknowledges receipt of a copy of the Unit Agreement for the Development and Operation of the Hat Mesa Unit Area embracing lands situated in Lea County, New Mexico and also a copy of the Unit Operating Agreement for said unit area, both of which are dated March 22, 1967 and further acknowledges that the undersigned is familiar with the terms and conditions thereof. The undersigned, being the owner of certain leasehold or other interests in the lands or minerals embraced in said unit area as set forth on the schedule attached to said Unit Agreement as Exhibit "B", does hereby commit all of its said interests to the Hat Mesa Unit Agreement and does hereby consent to said Unit Agreement and the Unit Operating Agreement and ratifies all of the terms and provisions thereof exactly the same as if the undersigned had executed the original of said Unit Agreement and Unit Operating Agreement, or a counterpart thereof.

IN WITNESS WHEREOF, this instrument is executed by the undersigned as of the date set forth opposite its signature.

ATTEST:

UNION OIL COMPANY OF CALIFORNIA

~~Secretary~~

By

John Hansen

Attorney-in-Fact

*JHC
24
J.E.*

DATE: April 11, 1967

STATE OF TEXAS

COUNTY OF MIDLAND

The foregoing instrument was acknowledged before me this 11th day of April, 1967 by JOHN HANSEN,
Attorney-in-Fact of UNION OIL COMPANY OF CALIFORNIA,
a California corporation, on behalf of said corporation.

My Commission Expires:

June 1, 1967

Edna H. Sloan

EDNA H. SLOAN

Notary Public

CONSENT AND RATIFICATION
HAT MESA UNIT AND UNIT OPERATING AGREEMENT
EMBRACING LANDS IN LEA COUNTY, NEW MEXICO

The undersigned hereby acknowledges receipt of a copy of the Unit Agreement for the Development and Operation of the Hat Mesa Unit Area embracing lands situated in Lea County, New Mexico and also a copy of the Unit Operating Agreement for said unit area, both of which are dated March 22, 1967 and further acknowledges that the undersigned is familiar with the terms and conditions thereof. The undersigned, being the owner of certain leasehold or other interests in the lands or minerals embraced in said unit area as set forth on the schedule attached to said Unit Agreement as Exhibit "B", does hereby commit all of its said interests to the Hat Mesa Unit Agreement and does hereby consent to said Unit Agreement and the Unit Operating Agreement and ratifies all of the terms and provisions thereof exactly the same as if the undersigned had executed the original of said Unit Agreement and Unit Operating Agreement, or a counterpart thereof.

IN WITNESS WHEREOF, this instrument is executed by the undersigned as of the date set forth opposite its signature.

Law	<i>[Signature]</i>
Serv.	<i>Har</i>
Exp.	
Pres.	<i>M. G.</i>

ATTEST:

GULF OIL CORPORATION

[Signature]
Assistant Secretary

By *[Signature]*
Attorney in Fact

DATE: APR 27 1967

STATE OF NEW MEXICO

COUNTY OF CHAVES

The foregoing instrument was acknowledged before me this 27th day of April, 1967 by F. O. Mortlock, Attorney in Fact of GULFOIL CORPORATION, a Pennsylvania corporation, on behalf of said corporation.

My Commission Expires:

My Commission Expires August 15, 1970

[Signature]
Notary Public

CONSENT AND RATIFICATION
HAT MESA UNIT AND UNIT OPERATING AGREEMENT
EMBRACING LANDS IN LEA COUNTY, NEW MEXICO

The undersigned hereby acknowledges receipt of a copy of the Unit Agreement for the Development and Operation of the Hat Mesa Unit embracing lands situated in Lea County, New Mexico and also a copy of the Unit Operating Agreement for said unit area, both of which are dated March 22, 1967 and further acknowledges that the undersigned is familiar with the terms and conditions thereof. The undersigned, being the owner of certain leasehold or other interests in the lands or minerals embraced in said unit area as set forth on the schedule attached to said Unit Agreement as Exhibit "B", does hereby commit all of its said interests to the Hat Mesa Unit Agreement and does hereby consent to said Unit Agreement and the Unit Operating Agreement and ratifies all of the terms and provisions thereof exactly the same as if the undersigned had executed the original of said Unit Agreement and Unit Operating Agreement, or a counterpart thereof.

IN WITNESS WHEREOF, this instrument is executed by the undersigned as of the date set forth opposite its signature.

ATTEST:

THE SUPERIOR OIL COMPANY

R.T. Benson
ASSISTANT Secretary

By C.A. Noble
Vice President

DATE: MAY 4 1967

STATE OF Texas

COUNTY OF Lewis

The foregoing instrument was acknowledged before me this 4th day of May, 1967 by C.A. NOBLE, Vice President of THE SUPERIOR OIL COMPANY, a Nebraska corporation, on behalf of said corporation.

My Commission Expires:

Edwina Steel
Notary Public

CONSENT AND RATIFICATION
HAT MESA UNIT AND UNIT OPERATING AGREEMENT
EMBRACING LANDS IN LEA COUNTY, NEW MEXICO

The undersigned hereby acknowledges receipt of a copy of the Unit Agreement for the Development and Operation of the Hat Mesa Unit Area embracing lands situated in Lea County, New Mexico and also a copy of the Unit Operating Agreement for said unit area, both of which are dated March 22, 1967 and further acknowledges that the undersigned is familiar with the terms and conditions thereof. The undersigned, being the owner of certain leasehold or other interests in the lands or minerals embraced in said unit area as set forth on the schedule attached to said Unit Agreement as Exhibit "B", does hereby commit all of its said interests to the Hat Mesa Unit Agreement and does hereby consent to said Unit Agreement and the Unit Operating Agreement and ratifies all of the terms and provisions thereof exactly the same as if the undersigned had executed the original of said Unit Agreement and Unit Operating Agreement, or a counterpart thereof.

IN WITNESS WHEREOF, this instrument is executed by the undersigned as of the date set forth opposite its signature.

ATTEST:

PAN AMERICAN PETROLEUM CORPORATION

J. K. Smith
Assistant Secretary

By *[Signature]*
Attorney in Fact



DATE: May 3, 1967

STATE OF TEXAS

COUNTY OF TARRANT

The foregoing instrument was acknowledged before me this 3rd day of May, 1967 by D. B. Mason, Jr.,
a Delaware corporation, on behalf of said corporation.
Attorney in Fact of PAN AMERICAN PETROLEUM CORPORATION

My Commission Expires:

June 1, 1967

Velma B. Craft
Notary Public
VELMA B. CRAFT

CONSENT AND RATIFICATION
HAT MESA UNIT AND UNIT OPERATING AGREEMENT
EMBRACING LANDS IN LEA COUNTY, NEW MEXICO

The undersigned hereby acknowledges receipt of a copy of the Unit Agreement for the Development and Operation of the Hat Mesa Unit Area embracing lands situated in Lea County, New Mexico and also a copy of the Unit Operating Agreement for said unit area, both of which are dated March 22, 1967 and further acknowledges that the undersigned is familiar with the terms and conditions thereof. The undersigned, being the owner of certain leasehold or other interests in the lands or minerals embraced in said unit area as set forth on the schedule attached to said Unit Agreement as Exhibit "B", does hereby commit all of its said interests to the Hat Mesa Unit Agreement and does hereby consent to said Unit Agreement and the Unit Operating Agreement and ratifies all of the terms and provisions thereof exactly the same as if the undersigned had executed the original of said Unit Agreement and Unit Operating Agreement, or a counterpart thereof.

IN WITNESS WHEREOF, this instrument is executed by the undersigned as of the date set forth opposite its signature.

ATTEST:

SINCLAIR OIL & GAS COMPANY

[Signature]
Asst. Secretary

By [Signature]
VICE PRESIDENT

APPROVED	
FORM	<u>[Signature]</u>
SUBSTANCE	<u>[Signature]</u>
	<u>[Signature]</u>

DATE: APR 25 1967

STATE OF Nebraska
COUNTY OF Dodd

The foregoing instrument was acknowledged before me this 25th day of April, 1967 by O. G. Simpson, Vice-President of Sinclair Oil & Gas Company, a Maine corporation, on behalf of said corporation.

My Commission Expires:

June 1, 1967

[Signature] BARBARA C. TUTTLE
Notary Public

CONSENT AND RATIFICATION
HAT MESA UNIT AND UNIT OPERATING AGREEMENT
EMBRACING LANDS IN LEA COUNTY, NEW MEXICO

The undersigned hereby acknowledges receipt of a copy of the Unit Agreement for the Development and Operation of the Hat Mesa Unit Area embracing lands situated in Lea County, New Mexico and also a copy of the Unit Operating Agreement for said unit area, both of which are dated March 22, 1967 and further acknowledges that the undersigned is familiar with the terms and conditions thereof. The undersigned, being the owner of certain leasehold or other interests in the lands or minerals embraced in said unit area as set forth on the schedule attached to said Unit Agreement as Exhibit "B", does hereby commit all of its said interests to the Hat Mesa Unit Agreement and does hereby consent to said Unit Agreement and the Unit Operating Agreement and ratifies all of the terms and provisions thereof exactly the same as if the undersigned had executed the original of said Unit Agreement and Unit Operating Agreement, or a counterpart thereof.

IN WITNESS WHEREOF, this instrument is executed by the undersigned as of the date set forth opposite its signature.

ATTEST:

UNION PRODUCING COMPANY

J. L. Davis
ASSISTANT Secretary

By F. L. Schneider
VICE-PRESIDENT

DATE: May 2 1967

STATE OF Louisiana
Parish of Caddo
COUNTY OF Caddo

The foregoing instrument was acknowledged before me this 2nd day of May, 1967 by F. L. Schneider,
vice-president of Union Producing Company,
a Missouri corporation, on behalf of said corporation.

My Commission Expires:

at death

C. O. Bluff
Notary Public

CONSENT AND RATIFICATION
HAT MESA UNIT AND UNIT OPERATING AGREEMENT
EMBRACING LANDS IN LEA COUNTY, NEW MEXICO

The undersigned hereby acknowledges receipt of a copy of the Unit Agreement for the Development and Operation of the Hat Mesa Unit Area embracing lands situated in Lea County, New Mexico and also a copy of the Unit Operating Agreement for said unit area, both of which are dated March 22, 1967 and further acknowledges that the undersigned is familiar with the terms and conditions thereof. The undersigned, being the owner of certain leasehold or other interests in the lands or minerals embraced in said unit area as set forth on the schedule attached to said Unit Agreement as Exhibit "B", does hereby commit all of its said interests to the Hat Mesa Unit Agreement and does hereby consent to said Unit Agreement and the Unit Operating Agreement and ratifies all of the terms and provisions thereof exactly the same as if the undersigned had executed the original of said Unit Agreement and Unit Operating Agreement, or a counterpart thereof.

IN WITNESS WHEREOF, this instrument is executed by the undersigned as of the date set forth opposite its signature.

H. L. Landua
H. L. Landua

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

James L. Morris
James L. Morris

Dee H. Rose
Dee H. Rose

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

A majority of the duly appointed, qualified and acting
Independent Executors of the Estate of Ralph Lowe, Deceased

Erma Lowe
Erma Lowe, Individually and as
Independent Executrix of the
Estate of Ralph Lowe, Deceased

ADDRESS: P. O. Box 832
Midland, Texas 79701

STATE OF TEXAS

COUNTY OF MIDLAND

The foregoing instrument was acknowledged before me this 28th day of April, 1967, by THE ESTATE OF RALPH LOWE, DECEASED, by and through H. L. Landua, Charles L. Morgan, Jr., James L. Morris, Dee H. Rose and V. H. Van Horn, Jr., a majority of its duly appointed, qualified and acting Independent Executors, and ERMA LOWE, Individually and as Independent Executrix of the Estate of Ralph Lowe, Deceased.

My commission expires:

JOYCE R. LEACH - Notary Public
In and For Midland County, Texas

~~My Commission Expires June 1, 1967~~

Joyce R. Leach
Notary Public in and for
Midland County, Texas

CONSENT AND RATIFICATION

HAT MESA UNIT AGREEMENT

LEA COUNTY, NEW MEXICO

The undersigned (whether one or more) hereby acknowledge receipt of a copy of the Unit Agreement for the Development and Operation of the Hat Mesa Unit Area embracing lands situated in Lea County, New Mexico, which said agreement is dated the 22nd day of March, 1967, and acknowledge that they have read the same and are familiar with the terms and conditions thereof.

The undersigned also being the owners of the leasehold, royalty or other interest in the lands or minerals embraced in said unit area, as indicated on the schedule attached to said Unit Agreement as Exhibit "B", do hereby commit all of their said interest to the Hat Mesa Unit Agreement and do hereby consent thereto and ratify all of the terms and provisions thereof exactly the same as if the undersigned had executed the original of said Unit Agreement or a counterpart thereof.

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

SIGNATURE

Beard Oil Company

By

W. M. Beard
Partner

STATE OF OKLAHOMA I

COUNTY OF _____ I

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

My Commission Expires: _____

Notary Public in and for _____ County, _____.

STATE OF OKLAHOMA I

COUNTY OF OKLAHOMA I

The foregoing instrument was acknowledged before me this 11th day of April, 1967, by W. M. Beard, Partner of
BEARD OIL COMPANY.

My Commission Expires: 1-12-68

Katharine Dodson
Notary Public in and for Oklahoma County, Oklahoma

CONSENT AND RATIFICATION

HAT MESA UNIT AGREEMENT

LEA COUNTY, NEW MEXICO

The undersigned (whether one or more) hereby acknowledge receipt of a copy of the Unit Agreement for the Development and Operation of the Hat Mesa Unit Area embracing lands situated in Lea County, New Mexico, which said agreement is dated the 22nd day of March, 1967, and acknowledge that they have read the same and are familiar with the terms and conditions thereof.

The undersigned also being the owners of the leasehold, royalty or other interest in the lands or minerals embraced in said unit area, as indicated on the schedule attached to said Unit Agreement as Exhibit "B", do hereby commit all of their said interest to the Hat Mesa Unit Agreement and do hereby consent thereto and ratify all of the terms and provisions thereof exactly the same as if the undersigned had executed the original of said Unit Agreement or a counterpart thereof.

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

SIGNATURE

ATTEST:

Amax Petroleum Corporation

W. E. Hall
Assistant Secretary

By

W. E. Long
Vice President

STATE OF OKLAHOMA ICOUNTY OF TULSA I

The foregoing instrument was acknowledged before me this 13 day of

April, 1967, by W. E. Long,

Vice President of AMAX PETROLEUM CORPORATION,

a Delaware corporation, on behalf of said corporation.

My Commission Expires: _____

Janette Grogg
Notary Public in and for Oklahoma
County, _____

My Commission Expires Aug. 20, 1967

STATE OF _____ ICOUNTY OF _____ I

The foregoing instrument was acknowledged before me this _____ day

of _____, 1967, by _____

My Commission Expires: _____

Notary Public in and for _____
County, _____

CONSENT AND RATIFICATION

HAT MESA UNIT AGREEMENT

LEA COUNTY, NEW MEXICO

The undersigned (whether one or more) hereby acknowledge receipt of a copy of the Unit Agreement for the Development and Operation of the Hat Mesa Unit Area embracing lands situated in Lea County, New Mexico, which said agreement is dated the 22nd day of March, 1967, and acknowledge that they have read the same and are familiar with the terms and conditions thereof.

The undersigned also being the owners of the leasehold, royalty or other interest in the lands or minerals embraced in said unit area, as indicated on the schedule attached to said Unit Agreement as Exhibit "B", do hereby commit all of their said interest to the Hat Mesa Unit Agreement and do hereby consent thereto and ratify all of the terms and provisions thereof exactly the same as if the undersigned had executed the original of said Unit Agreement or a counterpart thereof.

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

ADDRESS
660 NORTHCENT TOWER, HOUSTON, TEXAS 77002

930 Petroleum Club Bldg.

600 SOUTHWEST TOWER, HOUSTON, TEXAS 77002

Denver, Colorado

SIGNATURE

Bruce Anderson

Jacqueline Anderson

STATE OF Texas 0

COUNTY OF Harris 0

The foregoing instrument was acknowledged before me this 7th day of April, 1967, by Bruce Anderson and Jacqueline Anderson, his wife.

My Commission Expires: June 1, 1967

Ann H. Drummond
Notary Public in and for the State of Texas
My Commission Expires June 1, 1967
Bonded By Alexander Lovett - Lanyon Surety Corp.

STATE OF _____ 0

COUNTY OF _____ 0

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

My Commission Expires: _____

Notary Public in and for _____
County, _____

CONSENT AND RATIFICATION

HAT MESA UNIT AGREEMENT

LEA COUNTY, NEW MEXICO

The undersigned (whether one or more) hereby acknowledge receipt of a copy of the Unit Agreement for the Development and Operation of the Hat Mesa Unit Area embracing lands situated in Lea County, New Mexico, which said agreement is dated the 22nd day of March, 1967, and acknowledge that they have read the same and are familiar with the terms and conditions thereof.

The undersigned also being the owners of the leasehold, royalty or other interest in the lands or minerals embraced in said unit area, as indicated on the schedule attached to said Unit Agreement as Exhibit "B", do hereby commit all of their said interest to the Hat Mesa Unit Agreement and do hereby consent thereto and ratify all of the terms and provisions thereof exactly the same as if the undersigned had executed the original of said Unit Agreement or a counterpart thereof.

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

ADDRESS

SIGNATURE

P. O. Box 1882

Vol V. Bunnel
Vola V. Bunnel a/k/a Vola Horst Bunnel

Santa Fe, New Mexico

STATE OF New Mexico 0

COUNTY OF Santa Fe 0

The foregoing instrument was acknowledged before me this 27th day of April, 1967, by Vola V. Bunnel a/k/a Vola Horst Bunnel

My Commission Expires: 3-21-68

Nancy J. Gallivan
Notary Public in and for Santa Fe
County, New Mexico

STATE OF _____ 0

COUNTY OF _____ 0

The foregoing instrument was acknowledged before me this _____ day of _____, 1967, by _____

My Commission Expires: _____

Notary Public in and for _____
County, _____

CONSENT AND RATIFICATION

HAT MESA UNIT AGREEMENT

LEA COUNTY, NEW MEXICO

The undersigned (whether one or more) hereby acknowledge receipt of a copy of the Unit Agreement for the Development and Operation of the Hat Mesa Unit Area embracing lands situated in Lea County, New Mexico, which said agreement is dated the 22nd day of March, 1967, and acknowledge that they have read the same and are familiar with the terms and conditions thereof.

The undersigned also being the owners of the leasehold, royalty or other interest in the lands or minerals embraced in said unit area, as indicated on the schedule attached to said Unit Agreement as Exhibit "B", do hereby commit all of their said interest to the Hat Mesa Unit Agreement and do hereby consent thereto and ratify all of the terms and provisions thereof exactly the same as if the undersigned had executed the original of said Unit Agreement or a counterpart thereof.

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

ADDRESS

1331 Third St.

~~1331 Third St.~~

New Orleans, La. 70130

SIGNATURE

Bryan Bell

Bryan Bell

Ruby C. Bell

Ruby C. Bell

STATE OF Louisiana 0

COUNTY OF Orleans 0

The foregoing instrument was acknowledged before me this 6th day of April, 1967, by Bryan Bell and
Ruby C. Bell, his wife

My Commission Expires: issued for life Notary Public in and for Orleans County, Louisiana

STATE OF _____ 0

COUNTY OF _____ 0

The foregoing instrument was acknowledged before me this _____ day of _____, 1967, by _____

My Commission Expires: _____

Notary Public in and for _____ County, _____

CONSENT AND RATIFICATION

HAT MESA UNIT AGREEMENT

LEA COUNTY, NEW MEXICO

The undersigned (whether one or more) hereby acknowledge receipt of a copy of the Unit Agreement for the Development and Operation of the Hat Mesa Unit Area embracing lands situated in Lea County, New Mexico, which said agreement is dated the 22nd day of March, 1967, and acknowledge that they have read the same and are familiar with the terms and conditions thereof.

The undersigned also being the owners of the leasehold, royalty or other interest in the lands or minerals embraced in said unit area, as indicated on the schedule attached to said Unit Agreement as Exhibit "B", do hereby commit all of their said interest to the Hat Mesa Unit Agreement and do hereby consent thereto and ratify all of the terms and provisions thereof exactly the same as if the undersigned had executed the original of said Unit Agreement or a counterpart thereof.

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

ADDRESS

SIGNATURE

1101 Ainslee

Fred G. Goodman
Fred G. Goodman

Midland, Texas

Vera L. Goodman
Vera L. Goodman

STATE OF TEXAS Q

COUNTY OF MIDLAND Q

The foregoing instrument was acknowledged before me this 10th day of April, 1967, by Fred G. Goodman and

Vera L. Goodman, his wife

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

Joyce R. Leach
Notary Public in and for Midland
County, Texas

STATE OF _____ Q

COUNTY OF _____ Q

The foregoing instrument was acknowledged before me this _____ day of _____, 1967, by _____

My Commission Expires: _____

Notary Public in and for _____
County, _____

CONSENT AND RATIFICATION

HAT MESA UNIT AGREEMENT

LEA COUNTY, NEW MEXICO

The undersigned (whether one or more) hereby acknowledge receipt of a copy of the Unit Agreement for the Development and Operation of the Hat Mesa Unit Area embracing lands situated in Lea County, New Mexico, which said agreement is dated the 22nd day of March, 1967, and acknowledge that they have read the same and are familiar with the terms and conditions thereof.

The undersigned also being the owners of the leasehold, royalty or other interest in the lands or minerals embraced in said unit area, as indicated on the schedule attached to said Unit Agreement as Exhibit "B", do hereby commit all of their said interest to the Hat Mesa Unit Agreement and do hereby consent thereto and ratify all of the terms and provisions thereof exactly the same as if the undersigned had executed the original of said Unit Agreement or a counterpart thereof.

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

ADDRESS

SIGNATURE

Fred G. Goodman
Fred G. Goodman

H. L. Landua
H. L. Landua

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

James L. Morris
James L. Morris

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

A majority of the duly appointed, qualified and acting Independent Executors of the Estate of Ralph Lowe, Deceased

Erma Lowe
Erma Lowe, Individually and as Independent Executrix of the Estate of Ralph Lowe, Deceased

ADDRESS: P. O. Box 832
Midland, Texas 79701

STATE OF TEXAS

COUNTY OF MIDLAND

The foregoing instrument was acknowledged before me this 10th day of April, 1967, by THE ESTATE OF RALPH LOWE, DECEASED, by and through Fred G. Goodman, H. L. Landua, Charles L. Morgan, Jr., James L. Morris and V. H. Van Horn, Jr., a majority of its duly appointed, qualified and acting Independent Executors, and ERMA LOWE, Individually and as Independent Executrix of the Estate of Ralph Lowe, Deceased.

My commission expires:

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

Joyce R. Leach
Notary Public in and for
Midland County, Texas

CONSENT AND RATIFICATION
HAT MESA UNIT AGREEMENT
LEA COUNTY, NEW MEXICO

The undersigned (whether one or more) hereby acknowledge receipt of a copy of the Unit Agreement for the Development and Operation of the Hat Mesa Unit Area embracing lands situated in Lea County, New Mexico, which said agreement is dated the 22nd day of March, 1967, and acknowledge that they have read the same and are familiar with the terms and conditions thereof.

The undersigned also being the owners of the leasehold, royalty or other interest in the lands or minerals embraced in said unit area, as indicated on the schedule attached to said Unit Agreement as Exhibit "B", do hereby commit all of their said interest to the Hat Mesa Unit Agreement and do hereby consent thereto and ratify all of the terms and provisions thereof exactly the same as if the undersigned had executed the original of said Unit Agreement or a counterpart thereof.

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

ADDRESS

SIGNATURE

P. O. Box 168

Taos, New Mexico

Volta Horst Bunnell
Volta Horst Bunnell
Robert L. Bunnell
Robert L. Bunnell

STATE OF New Mexico 0

COUNTY OF Taos 0

The foregoing instrument was acknowledged before me this 6th day of April, 1967, by Volta Horst Bunnell and Robert L. Bunnell, her husband.

My Commission Expires: 8-21-70

Lita G. Rucio
Notary Public in and for Taos
County, New Mexico

STATE OF _____ 0

COUNTY OF _____ 0

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

My Commission Expires: _____

Notary Public in and for _____
County, _____

CONSENT AND RATIFICATION

HAT MESA UNIT AGREEMENT

LEA COUNTY, NEW MEXICO

The undersigned (whether one or more) hereby acknowledge receipt of a copy of the Unit Agreement for the Development and Operation of the Hat Mesa Unit Area embracing lands situated in Lea County, New Mexico, which said agreement is dated the 22nd day of March, 1967, and acknowledge that they have read the same and are familiar with the terms and conditions thereof.

The undersigned also being the owners of the leasehold, royalty or other interest in the lands or minerals embraced in said unit area, as indicated on the schedule attached to said Unit Agreement as Exhibit "B", do hereby commit all of their said interest to the Hat Mesa Unit Agreement and do hereby consent thereto and ratify all of the terms and provisions thereof exactly the same as if the undersigned had executed the original of said Unit Agreement or a counterpart thereof.

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

SIGNATURE

ATTEST:

J. F. Shaw
J. F. Shaw, Assistant Secretary

Pubco Petroleum Corporation

By Frank D. Gorham, Jr.
Frank D. Gorham, Jr., President

STATE OF New Mexico I

COUNTY OF Bernalillo I

The foregoing instrument was acknowledged before me this 4th day of April, 1967, by Frank D. Gorham, Jr., President of PUBCO PETROLEUM CORPORATION, a New Mexico corporation, on behalf of said corporation.

My Commission Expires: May 27, 1968
Notary Public in and for Bernalillo County, N.M.

STATE OF _____ I

COUNTY OF _____ I

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

My Commission Expires: _____
Notary Public in and for _____ County, _____

CONSENT AND RATIFICATION
HAT MESA UNIT AGREEMENT
LEA COUNTY, NEW MEXICO

The undersigned (whether one or more) hereby acknowledge receipt of a copy of the Unit Agreement for the Development and Operation of the Hat Mesa Unit Area embracing lands situated in Lea County, New Mexico, which said agreement is dated the 22nd day of March, 1967, and acknowledge that they have read the same and are familiar with the terms and conditions thereof.

The undersigned also being the owners of the leasehold, royalty or other interest in the lands or minerals embraced in said unit area, as indicated on the schedule attached to said Unit Agreement as Exhibit "B", do hereby commit all of their said interest to the Hat Mesa Unit Agreement and do hereby consent thereto and ratify all of the terms and provisions thereof exactly the same as if the undersigned had executed the original of said Unit Agreement or a counterpart thereof.

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

ADDRESS

910 Midland Savings Bldg.

Denver 2, Colorado

SIGNATURE

Gerald T. Tresner

Amy Tresner

STATE OF COLORADO
CITY &
COUNTY OF DENVER

The foregoing instrument was acknowledged before me this 3rd day of April, 1967, by Gerald T. Tresner and Amy Tresner, his wife.

My Commission Expires: March 14, 1971

Notary Public in and for the STATE OF COLORADO

STATE OF
COUNTY OF

The foregoing instrument was acknowledged before me this day of , 1967, by .

My Commission Expires:

Notary Public in and for County, .

CONSENT AND RATIFICATION

HAT MESA UNIT AGREEMENT

LEA COUNTY, NEW MEXICO

The undersigned (whether one or more) hereby acknowledge receipt of a copy of the Unit Agreement for the Development and Operation of the Hat Mesa Unit Area embracing lands situated in Lea County, New Mexico, which said agreement is dated the 22nd day of March, 1967, and acknowledge that they have read the same and are familiar with the terms and conditions thereof.

The undersigned also being the owners of the leasehold, royalty or other interest in the lands or minerals embraced in said unit area, as indicated on the schedule attached to said Unit Agreement as Exhibit "B", do hereby commit all of their said interest to the Hat Mesa Unit Agreement and do hereby consent thereto and ratify all of the terms and provisions thereof exactly the same as if the undersigned had executed the original of said Unit Agreement or a counterpart thereof.

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

ADDRESS

SIGNATURE

1620 Vermont Street

Houston, Texas 77006

Walter L. Morrison

Kathleen Morrison

STATE OF UTAH 0

COUNTY OF SALT LAKE 0

The foregoing instrument was acknowledged before me this 15th day of April, 1967, by Walter L. Morrison

~~Walter L. Morrison~~

Commission Expires November 28, 1969

My Commission Expires:

L. L. Morrison
Notary Public in and for Salt Lake
County, Utah

STATE OF TEXAS 0

COUNTY OF HARRIS 0

The foregoing instrument was acknowledged before me this 10th day of April, 1967, by Kathleen Morrison

My Commission Expires:

Lorraine Caltagirone
Notary Public in and for Harris
County, Texas

LORRAINE CALTAGIRONE

Notary Public in and for Harris County, Texas

My Commission Expires June 1, 1967

CONSENT AND RATIFICATION

HAT MESA UNIT AGREEMENT

LEA COUNTY, NEW MEXICO

The undersigned (whether one or more) hereby acknowledge receipt of a copy of the Unit Agreement for the Development and Operation of the Hat Mesa Unit Area embracing lands situated in Lea County, New Mexico, which said agreement is dated the 22nd day of March, 1967, and acknowledge that they have read the same and are familiar with the terms and conditions thereof.

The undersigned also being the owners of the leasehold, royalty or other interest in the lands or minerals embraced in said unit area, as indicated on the schedule attached to said Unit Agreement as Exhibit "B", do hereby commit all of their said interest to the Hat Mesa Unit Agreement and do hereby consent thereto and ratify all of the terms and provisions thereof exactly the same as if the undersigned had executed the original of said Unit Agreement or a counterpart thereof.

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

ADDRESS

SIGNATURE

1211 South 19th Street

Bertha W. Hendel
Bertha W. Hendel

Salt Lake City, Utah

Charles W. Hendel, III
Charles W. Hendel, III

STATE OF UTAH ☐

COUNTY OF SALT LAKE ☐

The foregoing instrument was acknowledged before me this 14th day of April, 1967, by Bertha W. Hendel and Charles W. Hendel, III,
her husband

Paul Peterson
Notary Public in and for Salt Lake

My Commission Expires: March 5, 1968 County, Utah

STATE OF _____ ☐

COUNTY OF _____ ☐

The foregoing instrument was acknowledged before me this _____ day of _____, 1967, by _____

My Commission Expires: _____

Notary Public in and for _____
County, _____

CONSENT AND RATIFICATION

HAT MESA UNIT AGREEMENT

LEA COUNTY, NEW MEXICO

The undersigned (whether one or more) hereby acknowledge receipt of a copy of the Unit Agreement for the Development and Operation of the Hat Mesa Unit Area embracing lands situated in Lea County, New Mexico, which said agreement is dated the 22nd day of March, 1967, and acknowledge that they have read the same and are familiar with the terms and conditions thereof.

The undersigned, also being the owners of the leasehold, royalty or other interest in the lands or minerals embraced in said unit area, as indicated on the schedule attached to said Unit Agreement as Exhibit "B", do hereby commit all of their said interest to the Hat Mesa Unit Agreement and do hereby consent thereto and ratify all of the terms and provisions thereof exactly the same as if the undersigned had executed the original of said Unit Agreement or a counterpart thereof.

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

ADDRESS

SIGNATURE

454 Petroleum Club Building

R. L. Grady

R. L. Grady

Denver, Colorado

Ann M. Grady

Ann M. Grady

STATE OF Colorado 0

COUNTY OF Denver 0

The foregoing instrument was acknowledged before me this 14 day of April, 1967, by R. L. Grady and Ann M. Grady,
his wife

Patricia Young Berni

Notary Public in and for Denver
County, Colorado

My Commission Expires: Feb. 3, 1969

STATE OF _____ 0

COUNTY OF _____ 0

The foregoing instrument was acknowledged before me this _____ day of _____, 1967, by _____

My Commission Expires: _____

Notary Public in and for _____
County, _____

CONSENT AND RATIFICATION

HAT MESA UNIT AGREEMENT

LEA COUNTY, NEW MEXICO

The undersigned (whether one or more) hereby acknowledge receipt of a copy of the Unit Agreement for the Development and Operation of the Hat Mesa Unit Area embracing lands situated in Lea County, New Mexico, which said agreement is dated the 22nd day of March, 1967, and acknowledge that they have read the same and are familiar with the terms and conditions thereof.

The undersigned also being the owners of the leasehold, royalty or other interest in the lands or minerals embraced in said unit area, as indicated on the schedule attached to said Unit Agreement as Exhibit "B", do hereby commit all of their said interest to the Hat Mesa Unit Agreement and do hereby consent thereto and ratify all of the terms and provisions thereof exactly the same as if the undersigned had executed the original of said Unit Agreement or a counterpart thereof.

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

SIGNATURE

ATTEST:

S. Bramson
S. Bramson, Secretary

Amco Oil Corporation

By A. M. Culver
A. M. Culver Pres.

STATE OF COLORADO I

COUNTY OF DENVER I

The foregoing instrument was acknowledged before me this 4th day of April, 1967, by A. M. Culver,
President of AMCO OIL CORPORATION,
a Colorado corporation, on behalf of said corporation.

My Commission Expires: 1/5/71
Notary Public in and for DENVER
County, Denver, Colorado.

STATE OF _____ I

COUNTY OF _____ I

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

My Commission Expires: _____
Notary Public in and for _____
County, _____.

CONSENT AND RATIFICATION

HAT MESA UNIT AGREEMENT

LEA COUNTY, NEW MEXICO

The undersigned (whether one or more) hereby acknowledge receipt of a copy of the Unit Agreement for the Development and Operation of the Hat Mesa Unit Area embracing lands situated in Lea County, New Mexico, which said agreement is dated the 22nd day of March, 1967, and acknowledge that they have read the same and are familiar with the terms and conditions thereof.

The undersigned also being the owners of the leasehold, royalty or other interest in the lands or minerals embraced in said unit area, as indicated on the schedule attached to said Unit Agreement as Exhibit "B", do hereby commit all of their said interest to the Hat Mesa Unit Agreement and do hereby consent thereto and ratify all of the terms and provisions thereof exactly the same as if the undersigned had executed the original of said Unit Agreement or a counterpart thereof.

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

ADDRESS

SIGNATURE

13826 Taylorcrest

Houston 24, Texas

STATE OF Texas 0

COUNTY OF Harris 0

E. Jeanne Slaydon
E. Jeanne Slaydon

A. G. Slaydon
A. G. Slaydon

The foregoing instrument was acknowledged before me this 20th day of April, 1967, by E. Jeanne Slaydon and A. G. Slaydon,
her husband

My Commission Expires: June 1, 1967

Spencer M. Belknap
Notary Public in and for Harris
County, Texas

STATE OF _____ 0

COUNTY OF _____ 0

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

My Commission Expires: _____

Notary Public in and for _____
County, _____

CONSENT AND RATIFICATION

HAT MESA UNIT AGREEMENT

LEA COUNTY, NEW MEXICO

The undersigned (whether one or more) hereby acknowledge receipt of a copy of the Unit Agreement for the Development and Operation of the Hat Mesa Unit Area embracing lands situated in Lea County, New Mexico, which said agreement is dated the 22nd day of March, 1967, and acknowledge that they have read the same and are familiar with the terms and conditions thereof.

The undersigned also being the owners of the leasehold, royalty or other interest in the lands or minerals embraced in said unit area, as indicated on the schedule attached to said Unit Agreement as Exhibit "B", do hereby commit all of their said interest to the Hat Mesa Unit Agreement and do hereby consent thereto and ratify all of the terms and provisions thereof exactly the same as if the undersigned had executed the original of said Unit Agreement or a counterpart thereof.

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

ADDRESS

SIGNATURE

340 Pine Street

Ted A. Beach

Ted A. Beach

San Francisco, California 94104

STATE OF California Ø

COUNTY OF San Francisco Ø

The foregoing instrument was acknowledged before me this 10th day
of April, 1967, by Ted A. Beach

CORA D. GARCIA

Cora D. Garcia

My Commission Expires:

My Commission Expires April 20, 1968

Notary Public in and for City and
County, San Francisco

STATE OF _____ Ø

COUNTY OF _____ Ø

The foregoing instrument was acknowledged before me this _____ day
of _____, 1967, by _____

My Commission Expires: _____

Notary Public in and for _____
County, _____

CONSENT AND RATIFICATION

HAT MESA UNIT AGREEMENT

LEA COUNTY, NEW MEXICO

The undersigned (whether one or more) hereby acknowledge receipt of a copy of the Unit Agreement for the Development and Operation of the Hat Mesa Unit Area embracing lands situated in Lea County, New Mexico, which said agreement is dated the 22nd day of March, 1967, and acknowledge that they have read the same and are familiar with the terms and conditions thereof.

The undersigned also being the owners of the leasehold, royalty or other interest in the lands or minerals embraced in said unit area, as indicated on the schedule attached to said Unit Agreement as Exhibit "B", do hereby commit all of their said interest to the Hat Mesa Unit Agreement and do hereby consent thereto and ratify all of the terms and provisions thereof exactly the same as if the undersigned had executed the original of said Unit Agreement or a counterpart thereof.

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

ADDRESS

SIGNATURE

1700 Broadway, Suite 2115

John A. Wyman

Denver, Colorado

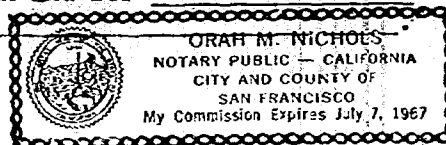
STATE OF CALIFORNIA
CITY AND
COUNTY OF SAN FRANCISCO

The foregoing instrument was acknowledged before me this 13th day of April, 1967, by John A. Wyman

My Commission Expires:

Notary Public in and for
County,

STATE OF
COUNTY OF



The foregoing instrument was acknowledged before me this ____ day of ____, 1967, by ____.

My Commission Expires:

Notary Public in and for
County,

CONSENT AND RATIFICATION

HAT MESA UNIT AGREEMENT

LEA COUNTY, NEW MEXICO

The undersigned (whether one or more) hereby acknowledge receipt of a copy of the Unit Agreement for the Development and Operation of the Hat Mesa Unit Area embracing lands situated in Lea County, New Mexico, which said agreement is dated the 22nd day of March, 1967, and acknowledge that they have read the same and are familiar with the terms and conditions thereof.

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

ADDRESS

SIGNATURE

P. O. Box 737

Curtis R. Inman

Curtis R. Inman

Midland, Texas

Muriel Henderson Inman

Muriel Henderson Inman

STATE OF Texas Q

COUNTY OF Midland Q

The foregoing instrument was acknowledged before me this 25th day of April, 1967, by Curtis R. Inman and Muriel Henderson Inman,
his wife

Ellen Fegett (Ellen Fegett)
Notary Public in and for Midland
County, Texas

My Commission Expires: 6-1-67

STATE OF _____ Q

COUNTY OF _____ Q

The foregoing instrument was acknowledged before me this _____ day of _____, 1967, by _____

My Commission Expires: _____

Notary Public in and for _____
County, _____

CONSENT AND RATIFICATION

HAT MESA UNIT AGREEMENT

LEA COUNTY, NEW MEXICO

The undersigned (whether one or more) hereby acknowledge receipt of a copy of the Unit Agreement for the Development and Operation of the Hat Mesa Unit Area embracing lands situated in Lea County, New Mexico, which said agreement is dated the 22nd day of March, 1967, and acknowledge that they have read the same and are familiar with the terms and conditions thereof.

The undersigned also being the owners of the leasehold, royalty or other interest in the lands or minerals embraced in said unit area, as indicated on the schedule attached to said Unit Agreement as Exhibit "B", do hereby commit all of their said interest to the Hat Mesa Unit Agreement and do hereby consent thereto and ratify all of the terms and provisions thereof exactly the same as if the undersigned had executed the original of said Unit Agreement or a counterpart thereof.

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

ADDRESS

SIGNATURE

P. O. Box 876

Elsie G. Gorman

Elsie G. Gorman

Artesia, New Mexico

B. R. Gorman

B. R. Gorman

STATE OF New Mexico 0

COUNTY OF Eddy 0

The foregoing instrument was acknowledged before me this 17th day of April, 1967, by Elsie G. Gorman and B. R. Gorman,
her husband

My Commission Expires: 8/28/69

Joanta Braun
Notary Public in and for Eddy
County, New Mexico

STATE OF _____ 0

COUNTY OF _____ 0

The foregoing instrument was acknowledged before me this _____ day of _____, 1967, by _____

My Commission Expires: _____

Notary Public in and for _____
County, _____

CONSENT AND RATIFICATION

HAT MESA UNIT AGREEMENT

LEA COUNTY, NEW MEXICO

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

ADDRESS

SIGNATURE

P. O. Box 2904

Katherine V. Johnson

Denver, Colorado

M. S. Johnson

STATE OF Colorado 0

COUNTY OF Denver 0

The foregoing instrument was acknowledged before me this 24 day of April, 1967, by Katherine V. Johnson and M. S. Johnson,
her husband

My Commission Expires: 1-13-68

Laurie Shelton
Notary Public in and for Denver
County, Colo

STATE OF _____ 0

COUNTY OF _____ 0

The foregoing instrument was acknowledged before me this _____ day of _____, 1967, by _____

My Commission Expires: _____

Notary Public in and for _____
County, _____

CONSENT AND RATIFICATION

HAT MESA UNIT AGREEMENT

LEA COUNTY, NEW MEXICO

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

ADDRESS

SIGNATURE

124 West Center Street

Erma Dee Robley
Erma Dee Robley

Provo, Utah 84601

Paul P. Robley
Paul P. Robley

STATE OF Utah 0

COUNTY OF Utah 0

The foregoing instrument was acknowledged before me this 17th day of April, 1967, by Erma Dee Robley and Paul P. Robley, her husband

My Commission Expires: 1-9-70

Notary Public in and for Utah
County, Utah

STATE OF _____ 0

COUNTY OF _____ 0

The foregoing instrument was acknowledged before me this _____ day of _____, 1967, by _____

My Commission Expires: _____

Notary Public in and for _____
County, _____

CONSENT AND RATIFICATION
HAT MESA UNIT AGREEMENT
LEA COUNTY, NEW MEXICO

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

ADDRESS

4417 South 3080 East Street

Salt Lake City, Utah

SIGNATURE

Robert P. Kunkel
Robert P. Kunkel

Frances Kunkel
Frances Kunkel

STATE OF Utah 0

COUNTY OF Salt Lake 0

The foregoing instrument was acknowledged before me this 14th day of April, 1967, by Robert P. Kunkel and Frances Kunkel, his wife

Malcolm J. Justus
Notary Public in and for Salt Lake
County, State of Utah
Residing at Salt Lake City, Utah

STATE OF _____ 0

COUNTY OF _____ 0

The foregoing instrument was acknowledged before me this _____ day of _____, 1967, by _____

My Commission Expires: _____
Notary Public in and for _____
County, _____

CONSENT AND RATIFICATION

HAT MESA UNIT AGREEMENT

LEA COUNTY, NEW MEXICO

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

ADDRESS

SIGNATURE

78 Edgecombe Drive

Helen I. Fehr, a widow

Salt Lake City, Utah

STATE OF Utah 0

COUNTY OF Salt Lake 0

The foregoing instrument was acknowledged before me this 26th day of April, 1967, by Helen I. Fehr, a widow

My Commission Expires: Sept. 13, 1968

Melvin E. Leslie
Notary Public in and for Salt Lake
County, State of Utah

STATE OF _____ 0

COUNTY OF _____ 0

The foregoing instrument was acknowledged before me this _____ day of _____, 1967, by _____

My Commission Expires: _____

Notary Public in and for _____
County, _____

CONSENT AND RATIFICATION

HAT MESA UNIT AGREEMENT

LEA COUNTY, NEW MEXICO

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

ADDRESS

SIGNATURE

P. O. Box 4182

M. M. Merritt

M. M. Merritt

Midland, Texas

Ellen Marie Merritt

Ellen Marie Merritt

STATE OF TEXAS ☐

COUNTY OF Midland ☐

The foregoing instrument was acknowledged before me this 21st day of April, 1967, by M. M. Merritt and wife Ellen Marie Merritt.

Grace Hoffman
Notary Public in and for Midland

My Commission Expires: June 1, 1967 County, Midland, Texas

Grace Hoffman, Notary Public
In and for Midland County, Texas

STATE OF ☐

COUNTY OF ☐

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

Notary Public in and for _____
County, _____

My Commission Expires: _____

CONSENT AND RATIFICATION

HAT MESA UNIT AGREEMENT

LEA COUNTY, NEW MEXICO

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

ADDRESS

SIGNATURE

707 Interurban Building

Dallas, Texas 75201

John K. Funk
John K. Funk

x Elsie Lat Funk

STATE OF TEXAS 0

COUNTY OF Dallas 0

The foregoing instrument was acknowledged before me this 14th day of April, 1967, by John K. Funk 31
Elsie Lat Funk

My Commission Expires: June 1967

James D. Denny
Notary Public in and for Dallas
County, TEXAS

STATE OF _____ 0

COUNTY OF _____ 0

The foregoing instrument was acknowledged before me this _____ day of _____, 1967, by _____

My Commission Expires: _____

Notary Public in and for _____
County, _____

CONSENT AND RATIFICATION

HAT MESA UNIT AGREEMENT

LEA COUNTY, NEW MEXICO

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

ADDRESS

SIGNATURE

P. O. Box 1004

320 Minerals, Ltd.

Midland, Texas, 79701

By: John B. Castle
John B. Castle, General Partner

STATE OF Texas 0

COUNTY OF Midland 0

The foregoing instrument was acknowledged before me this 3rd day of April, 1967, by John B. Castle, General Partner in 320 Minerals, Ltd.

My Commission Expires: 6-1-67

M. L. Meyer
Notary Public in and for Midland
County, Texas

STATE OF _____ 0

COUNTY OF _____ 0

The foregoing instrument was acknowledged before me this _____ day of _____, 1967, by _____

My Commission Expires: _____

Notary Public in and for _____
County, _____

UNIT OPERATING AGREEMENT
FOR THE HAT MESA UNIT AREA
LEA COUNTY, NEW MEXICO

THIS AGREEMENT, made and entered into as of the 22nd day of March, 1967, by and between PHILLIPS PETROLEUM COMPANY, a Delaware corporation, with an office in Midland, Texas, hereinafter referred to as "Unit Operator," and such other working interest owners who subscribe to this agreement who have working interests subject to the Unit Agreement for the operation and development of the Hat Mesa Unit Area, which said parties are hereinafter referred to as "Working Interest Owners" or as "Nonoperators,"

W I T N E S S E T H:

WHEREAS, the parties hereto have concurrently herewith as of the date hereof, entered into a certain Unit Agreement for the development and operation of the Hat Mesa Unit Area, which is hereinafter referred to as "Unit Agreement," embracing lands situated in Lea County, State of New Mexico, described in Section 1 hereof; and

WHEREAS, Phillips Petroleum Company has been designated as the Unit Operator under the terms of said Unit Agreement and is also a Working Interest Owner under said Unit Agreement and enters into this agreement in both capacities; and

WHEREAS, the undersigned Working Interest Owners have committed certain oil and gas leasehold interests to said Unit Agreement which are to be subject to the terms and conditions thereof; and

WHEREAS, the parties hereto enter into this agreement pursuant to Section 7 of the Unit Agreement;

NOW, THEREFORE, it is mutually agreed between the parties hereto as follows:

1. DESCRIPTION OF UNIT AREA: The term "Unit Area" as used herein shall mean and include the following described land:

Township 21 South, Range 32 East, N.M.P.M.

Section 1:	Lots 11, 12, 13, 14 and S/2
Section 2:	Lots 9, 10, 11, 12, 13, 14, 15, 16 and S/2
Section 3:	SE/4
Section 10:	E/2
Section 11:	All
Section 12:	All
Section 13:	All
Section 14:	N/2 and SE/4
Section 24:	N/2

Township 21 South, Range 33 East, N.M.P.M.

Section 6:	Lot 18, and SE/4 SW/4
Section 7:	Lots 1, 2, 3, 4, E/2 W/2, E/2
Section 8:	All
Section 9:	W/2
Section 16:	W/2

Section 17: All
Section 18: Lots 1, 2, 3, 4, E/2 W/2, E/2
Section 19: Lots 1, 2, E/2 NW/4, NE/4

Containing 7874.03 acres, more or less

2. UNIT OPERATOR AND EMPLOYEES: Phillips Petroleum Company, a corporation, the party hereto named as Unit Operator of the Unit Area under the provisions of the Unit Agreement, or its duly appointed successor Unit Operator, shall have the exclusive right to develop and operate the Unit Area subject to the provisions of this agreement and the Unit Agreement. All individuals employed by Unit Operator in the conduct of operations hereunder shall be the employees of Unit Operator alone and their working hours, rates of compensation and all other matters relating to their employment shall be determined solely by Unit Operator.

3. UNIT OPERATOR - DUTIES: Unit Operator shall in the conduct of operations:

(a) Consult freely with Working Interest Owners concerning unit operations, and keep Working Interest Owners informed of all matters arising during the operation of the Unit Area which Unit Operator, in the exercise of its best judgment, considers important;

(b) Keep full and accurate records of all costs incurred, rentals and royalties paid, and controllable materials and equipment, which records, receipts and vouchers in support thereof shall be available for inspection by authorized representatives of the Working Interest Owners at reasonable intervals during usual business hours, at the office of the Unit Operator;

(c) Permit each of the Working Interest Owners, through its duly authorized representatives, but at its sole risk and expense, to have access to the Unit Area at all times and to the derrick floor of each well drilled or being drilled hereunder, for the purpose of observing operations conducted hereunder and inspecting jointly owned materials, equipment and other property, and to have access at reasonable times to information and data in the possession of Unit Operator concerning the Unit Area;

(d) Furnish to each of the other parties who makes timely written request therefor, copies of Unit Operator's authorization for expenditures of itemizations thereof in excess of Five Thousand (\$5,000.00) Dollars, and copies of all drilling reports, well logs, basic engineering data, tank tables, gauge reports and run tickets, and reports of stock on hand at the first of each month, if available, and samples of

cores or cuttings taken from wells drilled hereunder, containers therefor to be furnished by the party requesting such samples;

(e) Comply with the terms and conditions of the Unit Agreement and all valid applicable Federal and State laws and regulations;

(f) Keep the land in the Unit Area free from liens and encumbrances occasioned by its operations, except such liens as the Working Interest Owners elect to contest, and save only the lien granted the Unit Operator under this agreement.

4. UNIT OPERATOR - RESTRICTIONS: The Unit Operator shall not do any of the following things without the consent of the Working Interest Owners obtained as herein provided:

(a) Locate, drill, deepen, or plug back any well or let any contract therefor, except as otherwise permitted under this agreement. The approval of the drilling, deepening or plugging back of any well shall be construed to mean and include the approval of any reasonably necessary expenditures for the approved operation, including the completing and equipping of such well, and the necessary lines, separators and necessary tankage if a producer, and if a dry hole, the plugging and abandonment thereof, except as otherwise provided herein;

(b) Make any other expenditures in excess of Five Thousand (\$5,000) Dollars for any one single item;

(c) Make any partial relinquishment of the rights of the Unit Operator;

(d) Abandon any well or wells;

(e) Enter into any plans for development of the Unit Area or any participating area or amendment thereof, or any expansion or contraction of the Unit Area or any designation or enlargement of a participating area;

(f) Drill or abandon any injection wells or convert any well into an injection well;

(g) Determine whether to drill a demanded offset well or pay compensatory royalty;

(h) Make any arrangement for repressuring, cycling or pressure maintenance, or approve or disapprove any change in the existing method of operation;

(i) Contest any encumbrance or lien.

In case of blowout, explosion, fire, flood or other sudden emergency, Unit Operator may take such steps and incur such expense as, in its opinion, are required to deal with the emergency and to safeguard life and property; provided that Unit Operator shall, as promptly as reasonably possible, report the emergency to the other

parties and shall endeavor to secure any sanction that might otherwise have been required.

Subject to the provisions hereof, Unit Operator shall have full control of the premises subjected hereto and shall conduct and manage the development and operation of unitized lands for the production of unitized substances therefrom for the account of the parties hereto.

5. CONSENT OF WORKING INTEREST OWNERS: In connection with operations conducted by Unit Operator for which consent of Nonoperators is required under this agreement, the Working Interest Owners shall have the right to vote thereon in proportion to their respective participation percentages under this agreement, except that with respect to such operations as are being conducted at the cost of less than all of the Working Interest Owners those Working Interest Owners bearing the cost of such operations shall have the right to vote whenever their consent is required in the proportion that their respective participation percentages under this agreement bear to the total of such percentages of such Working Interest Owners. Except as otherwise specified herein or in the Unit Agreement, an affirmative vote of 70% of the voting power of the Working Interest Owners involved shall constitute the decision of the Working Interest Owners, which decision shall be binding upon all; provided, however, that should any Working Interest Owner own as much as 70%, but less than 100%, voting interest, his vote must be supported by the affirmative vote of at least one additional Working Interest Owner; and provided, further, that if any party owns 30% or more voting interest, but less than 50%, the vote of such party shall not serve to defeat or disapprove any matters approved by the majority (over 50%) unless supported by at least two additional voting interests. Provided, however, if only one Working Interest Owner is entitled to vote, such party's vote shall control. If only two parties are entitled to vote, the vote of the one with the greater interest shall prevail.

The Working Interest Owners shall meet in regular or special meetings for the purpose of discussing unit business and of voting on matters in connection therewith, and of exercising any other powers by this agreement or by the Unit Agreement committed to the Working Interest Owners. A special meeting may be called by Operator at any time and shall be called by Operator promptly upon the request of any Working Interest Owner or Owners whose participation percentage totals twenty per cent (20%) or more. Each Working Interest Owner shall designate a representative and an alternate to represent him at such meeting, who shall have such powers as are

conferred on him by his principal, which powers shall be sufficiently broad to enable the representative to vote on matters coming before said meeting. Notices of meetings and place of holding same shall be served on such representative by the Unit Operator. The representatives of the Unit Operator shall act as Chairman at all meetings. Each Working Interest Owner shall have the right, from time to time, on notice to the Unit Operator, to change the representative or the alternate. With respect to the drilling of wells, other than the initial test well, approval of proposed plans of development or modifications or amendments thereof or the designation of participating areas or revisions thereof, Unit Operator shall submit to the Nonoperators entitled to vote thereon an agenda setting forth the matters to be determined at least fifteen (15) days prior to the date of the meeting; provided, however, that whenever a determination is to be made as to the deepening, plugging back or reworking of a well where a drilling rig is on location, Operator shall give Nonoperator at least forty-eight (48) hours' notice thereof, exclusive of Saturdays, Sundays and holidays. It shall be sufficient for the Unit Operator to poll all of the affected Working Interest Owners on all such matters without calling a meeting and any vote so taken pursuant to such poll shall be as binding on the Working Interest Owners as if done at a regular or special meeting at which a quorum was present. Unit Operator shall advise all Working Interest Owners the results of any poll so taken.

6. UNIT OPERATOR - LIABILITIES: In the conduct of operations hereunder Unit Operator shall be obligated to use only the care and diligence customarily exercised by a prudent operator in the area in which said lands are located, and Unit Operator shall not be liable for the result of any error of judgment or for the loss of or damage to any joint property not resulting from the gross negligence or willful misconduct of Unit Operator or its employees. Unit Operator shall not be responsible for the neglect or default of any drilling contractor or other contractor engaged by Unit Operator in operations hereunder.

7. ALLOCATION OF UNITIZED SUBSTANCES: All unitized substances produced and saved from each participating area established pursuant to the Unit 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 or for repressuring or recycling in accordance with an approved plan of development, 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 computing and paying all royalties, overriding royalties or obligations payable out of production of the respective Working Interest Owners, each such tract of unitized land shall have allocated to it such percentage of said production as the number of acres of each such tract included in said participating area bears to the total number of acres of unitized land in said participating area in conformity with Section 12 of the Unit Agreement.

All production remaining after allocating the production for the purpose of paying royalty, overriding royalties and obligations payable out of production as above provided (and being the working interest) shall be allocated to the respective Working Interest Owners in accordance with the percentages reflecting their respective beneficial interests determined as hereinafter provided.

The present beneficial interests of the respective Working Interest Owners are shown in Column No. (8) on Exhibit "D" and are determined as to each party on an adjusted surface acreage basis. The adjustment in surface area has been made by determining the percentage of the total production produced from or allocated to any tract which is required to meet all royalty, overriding royalty, production payments or other obligations payable out of the production from or allocated to such tract and multiplying the number of acres contained in such tract by such percentage and deducting the product from the total number of acres in said tract, the remainder being the adjusted surface acreage in each such tract. The beneficial interest of each party shown on Exhibit "D" attached hereto represents the sum of the net acre interests of each party in all tracts committed to the Unit Area divided by the total number of net acres committed to the Unit Area. Upon liquidation of any production payment shown on Exhibit "B" attached to the Unit Agreement, there shall be a readjustment of the adjusted surface acres on the basis set forth above and the interests of the parties recomputed on the basis of the revised adjusted acreage. The percentages of participation of the parties hereto shall remain the same regardless of any contraction of the Unit Area or automatic elimination of lands therefrom in accordance with Section 2 of the Unit Agreement but shall be revised upon commitment of any uncommitted acreage within the Unit Area, upon expansion of the Unit Area, upon loss or failure of title to any tract within the Unit Area, upon transfer of title to working interests subject to this agreement, or as provided in Section 18 upon assignment of leases in lieu of the designated payments or loss of a lease for failure to pay such payments.

The beneficial interest of each party, determined as provided herein, shall be the participation percentage of such party in the working interest production from the Unit Area. However, for all purposes other than allocation of production, the participation percentage of each party shall be that percentage of the total surface acres within the tracts committed to the Unit Area which is committed by such party.

If any tract committed to the Unit Agreement becomes burdened by any additional overriding royalties, obligations payable out of production, or like obligations, other than those shown on Exhibit "B" attached to the Unit Agreement, the burden thereof shall be borne exclusively by the owner or owners of such tract.

8. COST OF OPERATIONS: The actual cost of the Unit Operator of performing its obligations as Unit Operator hereunder shall be apportioned among the Working Interest Owners in proportion to their participation percentages under this agreement and shall be paid by the several Working Interest Owners as hereinafter provided. The cost of each operation not participated in by all Working Interest Owners shall be separately kept and charged to the Working Interest Owners affected in the proportions required by other applicable provisions of this agreement or in such other manner as such owners may agree. All materials, equipment and other property, whether real or personal, charged as a part of the cost of operations hereunder shall be owned by the Working Interest Owners in the same proportion that they were charged therefor. All such costs, expenses, credits and related matters and the method of handling the accounting with respect thereto shall be in accordance with the provisions of the Accounting Procedure attached hereto, made a part hereof and marked Exhibit C.

In the event of any conflict between the provisions contained either in the body of this instrument or in the Unit Agreement or in the Accounting Procedure, the provisions of the Unit Agreement shall govern to the extent of such conflict unless otherwise provided for therein. In the event of any conflict between the provisions contained in the body of this instrument and those contained in the Accounting Procedure, the provisions in the body of this instrument shall govern. The term "Operator" as used in Exhibit C shall be deemed to refer to the Unit Operator, and the term "Nonoperators" as used in Exhibit C shall be deemed to refer to the Working Interest Owners herein.

9. OPERATOR'S LIEN: Unit Operator is hereby granted a prior lien on the rights and interest of each Working Interest Owner in the Unit Area and the unitized substances allocated to each such Working Interest Owner, and the material and equipment thereon, to secure the payment of its proportionate part of the

said costs and expenses. Should any Working Interest Owner fail to pay its proportionate part of said costs and expenses within thirty (30) days after being billed therefor as provided in the referred to Accounting Procedure, Exhibit C, Unit Operator shall have the right at its option at any time thereafter, such default continuing, to foreclose said lien on the respective interests of such Working Interest Owners. In lieu of or in addition to such remedy, the parties hereto agree that in the event of default, except in cases of a bona fide dispute, the Unit Operator may notify the purchaser of the defaulting party's share of unitized substances (the purchaser not to be bound by the provisions hereof unless so notified) and such purchaser shall, without liability to the defaulting party, pay all proceeds accruing on account thereof to Unit Operator until said obligation is extinguished. In lieu of or in addition to the remedy above specified for such default, Unit Operator may have any other remedy afforded by law or equity against the defaulting party for such default.

Likewise, Nonoperators are hereby granted a prior lien on the rights and interests of the Unit Operator as a Working Interest Owner in the Unit Area and unitized substances and upon the interest of the Unit Operator in all materials and equipment to secure the payment of any amounts which may become due and owing from Unit Operator to any of the Nonoperators, which lien shall be subject to all of the terms and conditions provided for in the preceding paragraph.

10. ADVANCES: Unit Operator, at its election, may require each Working Interest Owner hereto to advance its respective portion of development costs hereunder in accordance with an estimate by Unit Operator to be made not less than fifteen (15) days in advance of the month in which the costs and expenses are to be incurred. If any party fails to pay its share of said estimate within said time, the amount due shall bear interest at the rate of 8% per annum from the date of expenditure until paid. Adjustment between estimates and actual costs shall be made by the Unit Operator at the close of each calendar month and the accounts of the Working Interest Owners adjusted accordingly.

11. TAXES: Unit Operator shall render for ad valorem taxes all jointly owned personal property acquired for or used in operations under this agreement. Such taxes shall be initially paid by Unit Operator and charged to the joint account for payment by the parties who own the taxed property.

12. INSURANCE: Unit Operator at all times while conducting operations hereunder shall purchase or provide for the protection and benefit of the parties hereto protection comparable to that afforded under standard form policies of insurance for:

(a) Workmen's compensation insurance to comply with the applicable federal and state workmen's compensation laws.

(b) General public liability insurance with bodily injury limits of \$50,000 any one person, \$100,000 any one accident and property damage limit of \$50,000 any one accident

(c) Automobile public liability insurance with bodily injury limits of \$50,000 any one person, \$100,000 any one accident and property damage limit of \$50,000 any one accident

Unit Operator shall charge to the joint account an amount equal to the premium applicable to the protection provided.

All losses not covered by standard form policies of insurance for the hazards set out above shall be borne by the parties hereto as their interests appear at the time of any loss.

Unit Operator shall notify non-operators in writing of any occurrences wherein liability may exceed the limits of the insurance if covered by insurance or \$5,000 if not covered by insurance.

13. INITIAL TEST WELL: Unit Operator is hereby authorized to drill the test well provided for in Section 9 of the Unit Agreement, at a location approved by the Supervisor in the SW/4 NE/4 of Section 11, Township 21 South, Range 32 East, Lea County, New Mexico, and in accordance with all applicable governmental rules and regulations. Said well shall be commenced by Unit Operator on or before May 31, 1967. After said well is commenced, Unit Operator shall prosecute the drilling of the well with reasonable diligence in a good and workmanlike manner, to a depth of 15,500 feet, or 200 feet into the Devonian formation, or to a depth at which conclusive fluid is encountered in the Devonian formation, or to a depth at which the parties agree and Unit Operator is satisfied, that further drilling of the well would be unwarranted or impracticable, whichever depth is lesser. In the event said well proves to be a dry hole or a well not capable of producing unitized substances in paying quantities, the same shall be plugged and abandoned in accordance with the applicable rules and regulations, and in such event Unit Operator shall make a diligent effort to salvage as much of the casing, equipment and other materials used in the drilling of such well as may prove economically feasible. The Working Interest Owners shall be responsible for the cost of drilling, completing and plugging said well in proportion to their respective participation percentages as shown in Column No. 1 on page 3 of Exhibit "D". It is agreed that in the event said well is not completed as a producer the Working Interest Owners who have participated in the cost of drilling the same shall own all casing materials and other equipment which may be salvaged

in connection therewith in the same proportion that they participated in the cost of drilling such well.

14. WELL CONTRACTS: All wells drilled in the Unit Area shall be drilled on a competitive contract basis at the usual rates prevailing in the area. Unit Operator, if it so desires, may employ its own tools and equipment in the drilling of wells, but its charges therefor shall not exceed the prevailing rates in the field, and the rate of such charges shall be agreed upon by the parties in writing before drilling operations are commenced, and such work shall be performed by Unit Operator under a written contract containing the same terms and conditions as shall be customary and usual in the field in contracts of independent contractors who are doing work of a similar nature.

15. OPERATIONS BY LESS THAN ALL PARTIES: If all the parties cannot mutually agree upon the drilling of any development well on the unit area (being any well proposed after production is established on the Unit Area) other than the test well provided for in Section 13 hereof and other than "forced" wells provided for in Section 16 hereof, or upon the re-working, deepening or plugging back of a dry hole drilled at the joint expense of all parties or a well jointly owned by all the parties and not then producing in paying quantities (i.e., in quantities sufficient to pay the cost of producing same) on the Unit Area, any party or parties wishing to drill, re-work, deepen or plug back such a well may give the other parties written notice of the proposed operation, specifying the work to be performed, the location, proposed depth, objective formation and the estimated cost of the operation. The parties receiving such a notice shall have thirty (30) days (except that as to re-working, plugging back or drilling deeper, where a drilling rig is on location, the notice shall be given by telegram, and the period shall be limited to forty-eight (48) hours exclusive of Saturday, Sunday or holidays) after receipt of the notice within which to notify the parties wishing to do the work whether they elect to participate in the cost of the proposed operation. Failure of a party receiving such a notice to so reply to it within the period above fixed shall constitute an election by that party not to participate in the cost of the proposed operation.

If any party receiving such a notice elects not to participate in the proposed operation (such party or parties being hereafter referred to as the "Non-Consenting Parties"), then in order to be entitled to the benefits of this Section ,

the party or parties giving the notice and such other parties as shall elect to participate in the operation (all such parties being hereafter referred to as the "Consenting Parties") shall, within sixty (60) days after the expiration of the notice period of thirty (30) days (or as promptly as possible after the expiration of the forty-eight (48) hour period where the drilling rig is on location, as the case may be), actually commence work on the proposed operation and complete it with due diligence.

The entire cost and risk of conducting such operations shall be borne by the Consenting Parties in the proportions that their respective participation percentages bears to the total interest of all Consenting Parties. Consenting Parties shall keep the leasehold estates involved in such operations free and clear of all liens and encumbrances of every kind created by or arising from the operations of the Consenting Parties. If such an operation results in a dry hole, the Consenting Parties shall plug and abandon the well at their sole cost, risk and expense. If any well drilled, re-worked, deepened or plugged back under the provisions of this Section results in a producer of oil and/or gas in paying quantities (i.e., in quantities sufficient to pay the cost of producing same), the Consenting Parties shall complete and equip the well to produce at their sole cost and risk, and the well shall then be turned over to Unit Operator and shall be operated by it at the expense and for the account of the Consenting Parties. Upon commencement of operations for the drilling, re-working, deepening or plugging back of any such well by Consenting Parties in accordance with the provisions of this Section, each Non-Consenting Party shall be deemed to have relinquished to Consenting Parties, and the Consenting Parties shall own and be entitled to receive, in proportion to their respective interests, all of such Non-Consenting Party's interest in the well, its leasehold operating rights, and share of production therefrom until the proceeds or market value thereof (after deducting production taxes, royalty, overriding royalty and other interests payable out of or measured by the production from such well accruing with respect to such interest until it reverts) shall equal the total of the following:

(a) One hundred per cent (100%) of such Non-Consenting Party's share of the cost of any newly acquired surface equipment beyond the well-head connections (including, but not limited to, stock tanks, separators, treaters, pumping equipment and piping), plus one hundred per cent (100%) of each such Non-Consenting Party's share of the cost of operation of the well commencing with first production and continuing until each such Non-Consenting Party's relinquished

interest shall revert to it under the provisions of this Section, it being agreed that each Non-Consenting Party's share of such cost and equipment will be that interest which would have been chargeable to each Non-Consenting Party had all participated in the well from the beginning of the operation; and,

(b) Three hundred per cent (300%) of that portion of the costs and expenses of drilling, re-working, deepening or plugging back, testing and completing, after deducting any cash contributions received, and three hundred per cent (300%) of that portion of the cost of newly acquired equipment in the well (to and including the wellhead connections) which would have been chargeable to such Non-Consenting Party if all had participated therein.

Before any re-working, plugging back or deeper drilling operation is undertaken on any well which has been completed as a producer the Consenting Party shall first obtain the permission of all parties then owning an interest in said well to carry on such operation and the Consenting Party shall then be entitled to purchase each Non-Consenting Party's share of the value of the well's salvageable material and equipment, determined in accordance with the provisions of Exhibit "C", less the estimated cost of salvaging and the estimated cost of plugging and abandoning. The material and equipment shall thereafter, for the purposes of this Section 15, be deemed newly acquired material and equipment of the Consenting Parties and the Consenting Parties shall in a successful operation be entitled to receive one hundred (100%) or three hundred per cent (300%) as the case may be (depending upon whether the material and equipment is before or beyond the wellhead connection), of the entire net salvage value of said material and equipment before the reversion of the interest in the well, the material and equipment thereon to any Non-Consenting Party as hereinafter in this Section 15 provided.

Within sixty (60) days after the completion of any operation under this Section, the party conducting the operations for the Consenting Parties shall furnish each Non-Consenting Party with an inventory of the equipment in and connected to the well, and an itemized statement of the cost of drilling, deepening, plugging back, testing, completing, and equipping the well for production; or, at its option, the operating party, in lieu of an itemized statement of such cost of operation, may submit a detailed statement of monthly billings. Each month thereafter, during the time the Consenting Parties are being reimbursed as provided above, the Consenting Parties shall furnish the Non-Consenting Parties with an itemized statement of all cost and liabilities incurred in the operation of the well,

together with the statement of quantity of oil and gas produced from it and the amount of proceeds realized from the sale of the well's working interest production during the preceding month. Any amount realized from the sale or other disposition of equipment newly acquired in connection with any such operation which would have been owned by a Non-Consenting Party had it participated therein shall be credited against the total unreturned costs of the work done and of the equipment purchased, in determining when the interest of such Non-Consenting Party shall revert to it as above provided; if there is a credit balance it shall be paid to such Non-Consenting Party.

If and when the Consenting Parties recover from a Non-Consenting Party's relinquished interest the amounts provided for above, the relinquished interests of such Non-Consenting Party shall automatically revert to it and from and after such reversion such Non-Consenting Party shall own the same interest in such well, the operating rights and working interest therein, the material and equipment in or pertaining thereto, and the production therefrom as such Non-Consenting Party would have owned had it participated in the drilling, re-working, deepening or plugging back of said well. Thereafter, such Non-Consenting Party shall be charged with and shall pay its proportionate part of the further cost of the operation of said well in accordance with the terms of this agreement and the Accounting Procedure Schedule, Exhibit "C", attached hereto.

Notwithstanding the provisions of this Section 15, it is agreed that without the mutual consent of all parties, no wells shall be completed in or produced from a source of supply from which a well located elsewhere on the Unit Area is producing, unless such well conforms to the then-existing well spacing pattern for such source of supply.

The provisions of this Section shall have no application whatsoever to the drilling of the Initial Test Well on the Unit Area, but shall apply to the re-working, deepening or plugging back of the initial test well after it has been drilled to the depth specified in Section 9 of the Unit Agreement, if it is, or thereafter shall prove to be, a dry hole or non-commercial well, and to all other development wells drilled, re-worked, deepened or plugged back, upon the Unit Area subsequent to the drilling of the Initial Test Well.

16. FORCED WELLS: In the event Unit Operator is required to drill any well upon the Unit Area by governmental order or demand (including any Federal or State Agency), the cost of drilling and completing said well if a producer, and of plugging and abandoning the well if a dry hole, shall except as otherwise herein provided be borne by all of the Working Interest Owners as though they had all agreed to the drilling of the well pursuant to this agreement. The foregoing shall include, without limitation, an exploratory well or an extension well to determine the limits of any producing formation, or a well to meet any offset well drilled on lands contiguous to the Unit Area which are required to be drilled by such governmental order or demand.

As in the case of any well to be drilled pursuant to this agreement, a vote shall be taken on whether the parties desire to drill any well so required by governmental order or demand. If any party votes against drilling the well, it shall not be drilled at the cost of all Working Interest Owners unless and until the governmental order or demand becomes final, and any party or parties voting against drilling such well shall have the right, at its or their sole cost, risk and expense, to prosecute an appeal from such order or demand. If less than all of the parties consent to the drilling of the well, said well shall be commenced when said order or demand becomes final and shall thereafter be drilled to the required depth at the sole cost, risk and expense of the Consenting Parties in consideration for which the Non-Consenting Parties shall each assign to the Consenting Parties in proportion to their respective interests and without warranty of title all of Non-Consenting Parties respective interests in and under the drillsite, the area of which shall be the same as the spacing unit to be dedicated to said required well.

17. ABANDONMENT OF PRODUCING WELLS: If some but not all of the affected Working Interest Owners determine to abandon any well or wells completed as a producer but any other party or parties having an interest therein object thereto, then such party or parties not desiring to abandon the same shall, within ten (10) days after receipt of written notice of the proposed abandonment, notify the other parties of their desire to take over and operate said well and shall tender to such other affected Working Interest Owner or Owners a sum equal to the value of the last named parties' proportionate share of the salvagable material and equipment in said well or wells determined in accordance with the Accounting Procedure Exhibit "C" attached hereto less the reasonable cost of salvaging the material

and equipment and plugging and abandoning the well, and on receipt of said sum the said parties having any interest in the well and wishing to abandon said well shall within twenty-five (25) days thereafter assign without warranty to the other Working Interest Owners, in the proportions that such Owners' respective participation percentages under this agreement bear to the total of such percentages of such Owners, the rights of the abandoning parties in the well and well property as to the producing formation only and any interest they have in the land on which said well is situated, and in the leasehold estate in a tract surrounding said well of an area equal to that prescribed by the applicable spacing rule of State or Federal authority, but if there is no such established rule, then said assignment shall cover the working interest and leasehold estate in the producing formation only in 40 acres surrounding the well, or 160 acres if a gas well. Said well may thereafter be operated by the Unit Operator for the separate account of the Working Interest Owners retaining interests in the well; however, nothing done pursuant to this Section shall otherwise at any time affect the participation percentages of the parties under this agreement. Proper bills of sale and division orders shall be executed by the assigning parties to accomplish the purposes hereof.

18. RENTALS AND SHUT-IN WELL PAYMENTS: The Working Interest Owners in each tract shall pay all rentals, and shut-in well payments which may become due under the lease thereon and shall, at least ten (10) days prior to the due date thereof, notify the Unit Operator of such payment. Evidence of such payment shall be submitted to Unit Operator promptly after payment is made. If the Working Interest Owners in any tract determine not to pay any such rental or shut-in well payment, they shall notify Unit Operator at least sixty (60) days before the due date and they shall, upon request, thereupon assign to all other Working Interest Owners (in the proportion that such owners' respective participation percentages under this agreement bear to the total of such percentages of such owners) all of their right, title and interest under said lease; provided, however, all such assignments shall be subject to all obligations with respect to reassignments, if any, of the parties making such assignments theretofore created in favor of parties who are not parties to this agreement. As of the effective date of each such assignment, the participation percentages of the parties under this agreement shall be revised to reflect the change in working interest ownership on an adjusted acreage basis as described in Section 7 hereof. In the event of failure

of any Working Interest Owner to make proper payment of any delay rental or shut-in well payment through mistake or oversight where such rental or payment is required to continue the lease in force, there shall be no money liability on the part of the party failing to pay such rental or payment, but such party shall make a bona fide effort to secure a new lease covering the same interest and commit such lease to the Unit Agreement and this agreement, and in the event of failure to secure a new lease within a reasonable time, the participation percentages of the parties hereto shall be revised to reflect the change in working interest ownership on an adjusted acreage basis as provided in Section 7 hereof and the party failing to pay any such rental or shut-in well payment shall not be credited with the ownership of any lease on which rental or payment was required but was not paid. In the event of loss of title to a lease for failure to pay rental or shut-in well payment, all loss occasioned thereby shall be that of the Working Interest Owners who should have paid the same.

Unit Operator will use its best efforts in good faith to furnish all Working Interest Owners prior notice at any time a gas well is to be shut-in and notice of the date or dates it is reopened for production; provided, however, Unit Operator will suffer no liability because of failure through mistake, inadvertance or oversight so to notify any other Working Interest Owner.

19. DISPOSAL OF PRODUCTION: Each of the parties hereto shall own and, at its own expense, shall take in kind and separately dispose of its proportionate part of all the unitized substances produced and saved from the lease acreage covered hereby, exclusive of the production that the Unit Operator may use in developing and producing operations and in preparing and treating oil for market purposes and of production unavoidably lost; provided that each party shall pay or secure the payment of the royalty interests payable by or chargeable to such party under the provisions of this agreement. At such time or times as a Working Interest Owner shall fail or refuse to take in kind or separately dispose of its proportionate part of said production, Unit Operator shall have the authority, revocable by Working Interest Owner at will, to sell all or part of such production to others or to purchase same for its own account. Any such sale or purchase by Unit Operator shall be for a price at not less than the prevailing market price in the area and at not less than the price which Unit Operator receives for its proportionate part of said production. All such sales or purchases by Unit Operator of Working Interest Owner's production shall be only for such reasonable periods of time

as are consistent with the minimum needs of the industry under the circumstances, but in no event shall any such sale be for a period in excess of one (1) year. Notwithstanding the foregoing, Unit Operator shall not make a sale into interstate commerce of any other Working Interest Owner's share of gas production without first securing such Working Interest Owner's written consent. This Agreement shall not be construed to mean that any party or parties are obligated to represent any other party or parties hereto before the Federal Power Commission.

20. EXAMINATION AND LOSS OF TITLE:

(a) Title Examination: There shall be no examination of title to leases, or to oil and gas interests, except that title to the drillsite on which the initial test well is to be drilled in accordance with Section 13 hereof shall be examined by a reputable attorney, using any available title opinion previously prepared by a reputable attorney, such abstracts of title as the examining attorney deems necessary, and any title papers in possession of the Working Interest Owner committing the land on which the drillsite is located. A copy of the examining attorney's opinion shall be sent to each party and, also, each party shall be given a copy of all subsequent supplemental attorney's reports. A good faith effort to satisfy any title requirements shall be made and the cost of any curative work and any necessary title examination shall be charged to the joint account.

If title to the proposed drillsite is not acceptable for a material reason, and all the parties do not accept the title, the parties shall by vote select a new drillsite for the Initial Test Well, subject to approval of the Supervisor, United States Geological Survey, Roswell, New Mexico; provided, if the parties are unable to select another drillsite, such drillsite may be selected by said Supervisor at the request of any party hereto. When a new drillsite is selected, title to the oil and gas lease covering it and to the fee title of the lessor shall be examined, and title shall be accepted or rejected in like manner as provided above concerning the drillsite first selected. If title to the oil and gas lease covering the second choice drillsite is not accepted, other drillsites shall be successively selected and title examined as in the case of the first drillsite until a drillsite is chosen to which title is accepted.

No well other than the first test shall be drilled in the Unit Area until after (1) the title to the drilling unit has been examined by an attorney, and (2) the title has been accepted by all of the parties who are to participate in the drilling of the well. The Working Interest Owner committing the land on which such drilling unit is located shall furnish such abstracts of title thereon as are in such party's possession, with any title opinion and other title papers in such party's possession. Any further title examination, curative work or abstracts shall be at the expense of parties who are to participate in the drilling of the well.

(b) Failure of Title: Should any oil and gas lease, or interest therein, be lost through failure of title, this agreement shall, nevertheless, continue in force as to all remaining leases and interests, and,

(1) The party whose title or interest is affected by the title failure shall bear alone the entire loss and it shall not be entitled to recover from Operator or the other parties any development or operating costs which it may have theretofore paid, but there shall be no monetary liability on its part to the other parties hereto by reason of such title failure; and

(2) There shall be no retroactive adjustment of expense incurred or revenues received from the operation of the interest which has been lost, but as of the time it is determined finally that title failure has occurred the interests of the parties shall be revised to reflect the change in working interest ownership and the party whose title or interest is lost by the title failure will not be credited with ownership of that to which title is lost; and

(3) If the proportionate interests of the other parties hereto in any producing well theretofore drilled on the Unit Area are increased by reason of the title failure, the party whose title has failed shall receive the proceeds attributable to the increase in such interests (less operating costs attributable thereto) until it has been reimbursed for any unrecovered costs paid by it in connection with such well; and

(4) Should any person not a party to this agreement, who is determined to be the owner of any interest in the title which has failed, pay in any manner any part of the cost of operation, development or equipment previously paid under this agreement, such amount shall be proportionately paid to the party or parties hereto who in the first instance paid the costs which are so refunded; and

(5) Any liability to account to a third party for prior production of oil and gas which arises by reason of title failure shall be borne by the parties in the same proportions in which they shared in such prior production. Each party whose title fails shall hold other parties harmless from loss resulting from payment of proceeds of production to the losing party.

(6) The expiration of any lease because of the failure of the parties to extend same, in accordance with the provisions thereof, beyond its primary term shall not be considered as a loss or failure of title within the meaning of this Article 20. Any loss of a lease because of its expiration under its own terms at or after the expiration of its primary term shall be a common loss of the parties. Likewise, where all of the parties consent to a surrender of a lease (whether during or after its primary term) such loss shall be a common loss of the parties. "Primary term", as used herein, shall mean the term a lease may be held by paying rentals or by other means in absence of production.

21. MAINTENANCE OF UNIT OWNERSHIP: Should a sale be made by Unit Operator of all of its rights and interests, the other parties shall have the right within sixty (60) days after the date of such sale, by majority vote in interest, to select a new Operator. If a new Operator is not so selected, the transferee of the present Operator shall assume the duties of and act as Operator. In either case, the retiring Operator shall continue to serve as Operator, and discharge its duties in that capacity under this agreement, until its successor Operator is selected and begins its functions, but the present Operator shall not be obligated to continue the performance of its duties for more than one hundred twenty (120) days after the sale of its rights and interests has been completed.

For the purpose of maintaining uniformity of ownership in the oil and gas leasehold interest covered by this contract, and notwithstanding any other provisions to the contrary, no party shall sell, encumber, transfer or make any other disposition of its interest in the leases embraced within the Unit Area and in wells, equipment and production unless such disposition covers either:

(a) The entire interest of the party in all leases and equipment and production; or

(b) An equal undivided interest in all leases and equipment and production in the Unit Area.

Every such sale, encumbrance, transfer or other disposition made by any party shall be made expressly subject to this agreement, and shall be made without prejudice to the rights of the other parties.

If at any time the interest of any party is divided among and owned by four or more co-owners, Unit Operator may, at its discretion, require such co-owners to appoint a single trustee or agent with full authority to receive notices, approve expenditures, receive billings for and approve and pay such party's share of the joint expenses, and to deal generally with - with power to bind - the co-owners of such party's interests within the scope of the operations embraced in this contract; however, all such co-owners shall enter into and execute all contracts or agreements for the disposition of their respective shares of the oil and gas produced from the Unit Area and they shall have the right to receive, separately, payment of the sale proceeds thereof.

22. COVENANTS RUNNING WITH THE LAND: This agreement shall be deemed a covenant running with the leases and the lands subject hereto and shall be binding upon and inure to the benefit of the heirs, personal representatives, successors and assigns of the parties respectively.

23. SUBSEQUENT JOINDER: Prior to commencement of operations under the Unit Agreement, all owners of working interests in the Unit Area who have not joined in the Unit Agreement shall be privileged to join in this agreement by subscribing to the Unit Agreement and this agreement. After commencement of operations under the Unit Agreement, however, subsequent joinder in the Unit Agreement and in this agreement by any party owning a working interest in the Unit Area shall be on such reasonable terms and conditions as the parties who are then committed to this agreement may require in view of the circumstances existing at the time such subsequent joinder is sought.

24. SURRENDER OR TERMINATION OF INTERESTS: No lease committed to the Unit Agreement shall be surrendered in whole or in part, unless the parties hereto mutually consent thereto. Should any party at any time desire to surrender any lease committed to the Unit Agreement insofar as it applies to the lands covered by said Unit Agreement and the other parties should not agree or consent to such surrender, the party desiring so to surrender shall assign, without express or implied warranty of title, subject to the approval of the Director of the Bureau of Land Management, Department of the Interior or the Commissioner of Public Lands as the case may be, if Federal or State lands are involved, all

of such party's interest in such lease to the other parties hereto in proportion to the participation percentages of such parties under this agreement. If all of the parties are not willing to accept the assignment of such interest, the assignment shall be made to those willing to accept such interest in the proportions that their respective participation percentages under this agreement bear to the aggregate of such percentages of such parties. Such assignment shall be free and clear of all liens and encumbrances and upon delivery thereof the assigning party shall be relieved of all further obligations with respect to the lease or leases so assigned, but such assignment shall not relieve the assigning party of any obligation or liability approved, accrued or incurred with respect to such lease or leases or the interest referable thereto prior to the assignment thereof.

If any party hereto so desires, it may withdraw from this agreement by conveying, assigning and transferring, without warranty, either express or implied, to the other parties hereto who do not desire to withdraw, all of its right, title and interest in and under the leases included in the Unit Area, together with the withdrawing party's interest in all wells, casing material, equipment, fixtures and other personal property acquired for or used in operations under this agreement, but such conveyance or assignment shall not relieve said party from any obligation or liability in connection with a drilling or reworking operation theretofore approved or from any obligation or liability accrued or incurred prior to the date of such assignment. The interest so conveyed and assigned shall be held and owned by the Assignees in proportion to their participation percentages under this agreement, and thereupon the withdrawing party shall be relieved from all obligations and liabilities thereafter to accrue under this agreement except as above provided and the right of such party to any benefits subsequently accruing hereunder shall cease; but Assignees shall pay Assignor for its interest in all casing, material, equipment, fixtures and other personal property assigned to them at the salvage value thereof computed in accordance with the Accounting Procedure, Exhibit "C", hereto attached, less the estimated cost of salvaging and estimated cost of plugging and abandoning. If all of the parties are not willing to accept the assignment from the withdrawing party, the assignment shall be made to those parties willing to accept such assignment in the proportions that their respective participation percentages under this agree-

ment bear to the aggregate of such percentages of such parties.

25. NOTICES: Except as herein otherwise expressly provided, all notices, reports or other communications required or permitted hereunder shall be deemed to have been properly given or delivered when sent by first class mail or telegraph with all postage or charges fully prepaid, and addressed to the parties hereto, at the addresses set opposite their respective names, or at such other address as may be thereafter furnished to Unit Operator in writing by the respective parties. The date of service by mail shall be the date on which such written notice or other communication is deposited in the United States Post Office, addressed as above provided.

26. RELATION OF PARTIES: The rights, duties, obligations and liabilities of the parties hereto under this agreement and the Unit Agreement shall be several and not joint or collective, it being the express purpose and intention of the parties hereto that nothing contained in this agreement or the Unit Agreement or any operation under either agreement shall ever be construed as creating a partnership of any kind, joint venture, an association or a trust, or any legal entity for any purpose or as imposing upon any one or more of the parties hereto any partnership duty, obligation or liability. Each party hereto shall be individually responsible only for its obligations as set out in this agreement and in the Unit Agreement.

27. INTERNAL REVENUE CODE ELECTION: While each of the parties hereto recognizes and intends that its rights and liabilities under this agreement and the Unit Agreement are several and not joint or collective, if, for income tax purposes, the parties should be regarded as partners or joint venturers, or if this agreement, the Unit Agreement, or any operations carried on under either agreement be treated as a partnership for income tax purposes, each and all of the parties hereto do fully and finally elect to exclude themselves, this agreement, the Unit Agreement and all such operations from the application of all of Subchapter K of Chapter 1, of Subtitle A, of the Internal Revenue Code of 1954 as provided in Section 761 (a) thereof. Each party hereto further agrees not to give any notices or take any other action inconsistent with the election made hereby. If any present or future income tax laws of the State in which the property covered by this agreement is located, or any future income tax laws of the United States, contain, or shall hereafter contain, any other provisions under

which an election similar to that provided by Section 761 of said Subchapter K is permitted, each of the parties hereto hereby makes such election with the same purpose and effect as the election made above and each party agrees to take such action as may be necessary to make such election as may be permitted by such laws.

28. FORCE MAJEURE: In the event any party hereto is rendered unable, wholly or in part, by force majeure to carry out its obligations under this contract other than the obligation to make payments of amounts due hereunder, it is agreed that upon such party's giving notice and reasonably full particulars of force majeure in writing or by telegraph to the other parties hereto within a reasonable time after the occurrence of the cause relied upon, then the obligations of the party giving the notice, so far as they are affected by force majeure, shall be suspended during the continuance of any inability so caused, but for no longer period; and the cause of the force majeure shall, so far as possible, be remedied with all reasonable dispatch. The term "force majeure" as employed herein shall mean delay or loss resulting from fire, flood, action of the elements, strikes or other labor difficulties, acts or orders of civil or military authorities, restrictions or restraints imposed by law or ordinance, or by order or regulation of public authority, whether Federal, State or local, inability to procure necessary materials or labor in the open market and on usual and lawful terms, or any other cause reasonably beyond the control of the party claiming suspension.

The settlement of strikes and lockouts shall be entirely within the discretion of the party having the difficulty and the above mentioned requirement that any force majeure shall be remedied with all reasonable dispatch shall not require the settlement of strikes and lockouts by acceding to the demands of opposing party when such course is inadvisable in the discretion of the party having the difficulty.

29. ASSIGNMENTS OF PARTIAL INTERESTS: Under various provisions of this agreement, a party hereto is permitted, or may be obligated, to assign to another party or parties hereto, all or a part of such party's interest in its oil and gas leases subject to this agreement. In the event assignment of record title is not permitted under the rules and regulations of the Bureau of Land Management or of the Commissioner of Public Lands of the State of New Mexico, as the case may be, then the interest to be assigned shall be conveyed by appropriate operating agreements or by any other valid instrument that will

carry out the intention of such provision or provisions or in case of a State lease or leases where undivided interests are to be assigned, the same may be assigned to the Unit Operator to be held in trust for the parties entitled to participation therein in proportion to their respective interests.

30. PROVISIONS CONFORMED WITH LAWS AND REGULATIONS: All of the provisions of this agreement are hereby expressly made subject to all applicable Federal or State laws, orders, rules and regulations, and in the event this contract or any provision hereof is found to be inconsistent with or contrary to any such law, order, rule or regulation, the latter shall be deemed to control and this contract shall be regarded as modified accordingly and as so modified shall continue in full force and effect.

31. EFFECTIVE DATE AND TERM: This agreement shall become effective as of the effective date of the Unit Agreement and shall remain in full force and effect during the term of said Unit Agreement and any and all extensions or renewals thereof, and, in the event of the termination of the Unit Agreement for any reason as to all or any part of the land now or hereafter included in the Unit Area, this agreement shall continue in full force and effect with respect to any land as to which the Unit Agreement terminates which is included in any drilling unit or proration unit for any unabandoned well which has been drilled or commenced pursuant to this agreement. After such termination the royalties reserved in the lease covering any such drilling or proration unit and the overriding royalties and production payments specified in Exhibit "B" which are applicable to production from such unit shall be paid and satisfied with the actual production from such unit by the owner of the lease covering such unit, and the remaining production therefrom and the cost of all subsequent operations thereon shall be allocated among the parties to this agreement in accordance with the other provisions of this agreement; such remaining production being in lieu of any other working interest production from or allocated to such unit to which any working interest owner or owners might otherwise be entitled under this agreement. Any additional overriding royalties or burdens on production from such drilling or proration unit shall be paid and satisfied by the owner of the lease covering such unit and such owner shall hold the other parties harmless from any such additional overriding royalties and burdens on production. The rights and interests of the parties hereto in such drilling or proration units, the wells thereon and their participation in the production

therefrom and in the costs of operations thereon, shall be governed by the provisions hereof and this agreement with respect to each such well and its drilling unit or proration unit shall remain in full force and effect so long as any well thereon is being drilled or re-worked or is capable of producing oil or gas in paying quantities and until same is plugged and abandoned and the accounts of all parties hereto are settled.

No termination of the Unit Agreement as to any land (except as a result of loss or failure of title or loss of a lease through failure to pay rental or shut-in well payment) shall cause a revision of the participation percentages of the parties under this agreement.

32. MODIFICATIONS OF DRILLING REQUIREMENTS OF UNIT AGREEMENT: The Unit Operator may apply for and obtain a modification of the drilling requirements of said unit agreement or an extension or extensions of time within which to comply therewith as provided by the terms of said unit agreement and any such application or applications may be made without the consent of any of the working interest owners subscribing hereto.

33. EXHIBITS: Exhibit "A" (map of the Unit Area) and Exhibit "B" (Schedule of Ownership of Oil and Gas Interests in the Unit Area) which are attached to the Unit Agreement, are hereby confirmed and by reference made a part hereof. Exhibit "C" (Accounting Procedure) and Exhibit "D" (Schedule of Participation Percentages in Costs and Working Interest Production and Schedule as to Participation in the Initial Test Well) are attached hereto and made a part hereof.

It is recognized that the Exhibits attached hereto will need to be revised from time to time, as provided in the Unit Agreement and as necessary due to changes in ownership, retirements of production payments and as required by the Commissioner of Public Lands and the United States Geological Survey, and may need to be revised to correct any arithmetical mistakes that may be discovered after the execution of this Agreement. Unit Operator will make such changes or revisions as are necessary and promptly thereafter furnish the parties hereto such revised or changed Exhibits.

34. SPECIAL AGREEMENTS CONCERNING DRILLING AND COMPLETING THE INITIAL TEST WELL.

(a) Rights to be Earned. It is understood and agreed between the respective parties named in this Section 34 that, subject only to the provisions of this Section, Phillips Petroleum Company, Union Oil of California, Gulf Oil Corporation,

Union Producing Company and Sinclair Oil & Gas Company, hereinafter referred to as the "Acquiring Parties" shall have and are hereby granted the right to acquire the following described leasehold interests from the respective parties hereinafter designated "Carried Parties" named below:

(1) From Pan American Petroleum Corporation, an undivided one-half (1/2) of all of its leasehold interests as they appear in Exhibit "B" to the Unit Agreement from the surface of the ground down to and including one hundred (100) feet below the deepest depth drilled in the test well provided for in Section 13 of this Agreement. Such interests appear in said Exhibit "B" in Tract Nos. 8 and 20, which together are shown in said exhibit to contain a total of 231.51 leasehold acres, more or less.

(2) From the Ralph Lowe Estate, an undivided one-half (1/2) of all of its leasehold interests as they appear in Exhibit "B" to the Unit Agreement from the surface of the ground down to and including one hundred (100) feet below the deepest depth drilled in the test well provided for in Section 13 of this Agreement. Such interests appear in said Exhibit "B" in Tract No. 3 and 19 which together are shown in said exhibit to contain a total of 600.00 leasehold acres, more or less.

The Acquiring Parties shall each bear and pay in direct proportion to their respective participation percentages as shown in Column 3 on Pages 2 and 3 of Exhibit "D", all costs and expenses which would otherwise be chargeable to said Carried Parties' respective interests under this agreement in connection with drilling and completing into the tanks the initial test well provided for in Section 13 of this agreement, and, if no completion attempt is made after reaching the depth specified in Section 13, the plugging and abandoning of said well.

When the test well has been drilled to the depth required by Section 13 and completed as a producer of oil and/or gas, the Carried Parties shall promptly execute and deliver to the Acquiring Parties a good and valid assignment, without warranty of title, vesting in said Acquiring Parties, in the same proportions in which the costs of the initial test well attributable to the Carried Parties were borne by said Acquiring Parties, the legal title to the interests above provided for in the tracts of the respective Carried Parties as shown above. After the assignments by Carried Parties as herein provided for have been made, Unit Operator shall revise Exhibit "B" to the Unit Agreement and Exhibit "D" of the Unit Operating Agreement to reflect the then true status of leasehold ownership. The proportionate

shares of costs of drilling and completing the initial test well which are to be borne by all parties hereto are more clearly shown in Column 1 on Page 3 of Exhibit "D" attached hereto.

35. ADDITIONAL ENCUMBRANCES. If any Working Interest Owner hereafter creates any overriding royalty, production payment or other burden against its working interest production, and if the other party conducts operations hereunder in which the party so creating said burden against its working interest production elects not to participate under any provision of this agreement, and, as a result, the party conducting such operations becomes entitled to receive the working interest production otherwise belonging to such other party, said party conducting such operations shall receive such production free and clear of any burden so created by the other party, and the latter shall save the party conducting such operations completely harmless with respect to the receipt of such working interest production.

36. COUNTERPARTS. This agreement may be executed in any number of counterparts, no one of which needs to be executed by the other parties hereto, and the same shall be binding upon all those parties who have executed such a counterpart, regardless of whether the same shall have been executed by all of the parties owning oil and gas leasehold interests within the Unit Area, and such counterpart shall have the same force and effect as if all parties signing such counterparts had signed the same document; or this agreement may be ratified with like force and effect by a separate instrument in writing specifically referring hereto.

37. 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 FR 12319), which are hereby incorporated by reference in this agreement.

38. HEADINGS AND SUBHEADINGS. The headings and subheadings used in this agreement are inserted for convenience only and shall be disregarded in construing this agreement.

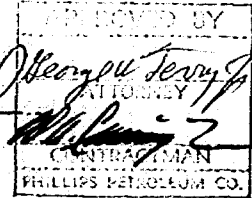
IN WITNESS WHEREOF this Agreement was executed by the undersigned parties hereto on the respective dates hereinafter shown with the effective date to be the day and year first hereinabove written or as otherwise controlled by Section 31 hereof; provided, however, that each party executing this Agreement expressly agrees to remain bound to any authority for expenditure or separate agreement concerning the initial test well which may have been executed or

entered into previous to said effective date to the extent that authorized costs incurred prior to the effective date hereof shall be deemed to have accrued under the terms and provisions of this Operating Agreement.

PHILLIPS PETROLEUM COMPANY

Date: April 24, 1967

By Fred Forward
Fred Forward
Attorney-in-Fact



THE STATE OF TEXAS I

COUNTY OF MIDLAND I

BEFORE ME, the undersigned authority, a Notary Public in and for said County and State, on this day personally appeared FRED FORWARD, Attorney-in-Fact for PHILLIPS PETROLEUM COMPANY, known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that the same was the act of the said PHILLIPS PETROLEUM COMPANY, a corporation, and that he executed the same as the act of such corporation for the purposes and consideration therein expressed, and in the capacity therein stated.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this the 24th day of

April, 1967.

Lorraine A. Galois
Notary Public in and for Midland
County, Texas *Lorraine A. Galois*

EXHIBIT "C"

Attached to and made a part of HAT MESA UNIT AREA OPERATING
AGREEMENT, LEA COUNTY, NEW MEXICO

ACCOUNTING PROCEDURE (JOINT OPERATIONS)

I. GENERAL PROVISIONS

1. Definitions

"Joint Property" shall mean the real and personal property subject to the agreement to which this "Accounting Procedure" is attached.

"Joint Operations" shall mean all operations necessary or proper for the development, operation, protection and maintenance of the Joint Property.

"Operator" shall mean the party designated to conduct the Joint Operations.

"Non-Operators" shall mean the nonoperating parties, whether one or more.

"Joint Account" shall mean the account showing the charges and credits accruing because of the Joint Operations and which are to be shared by the Parties.

"Parties" shall mean Operator and Non-Operators.

"Material" shall mean personal property, equipment or supplies acquired or held for use on the Joint Property.

"Controllable Material" shall mean material which at the time is so classified in the Material Classification Manual as most recently recommended by the Council of Petroleum Accountants Societies of North America.

2. Conflict with Agreement

In the event of a conflict between the provisions of this Accounting Procedure and the provisions of the agreement to which this Accounting Procedure is attached, the provisions of the agreement shall control.

3. Collective Action by Non-Operators

Where an agreement or other action of Non-Operators is expressly required under this Accounting Procedure and if the agreement to which this Accounting Procedure is attached contains no contrary provisions in regard thereto, the agreement or action of a majority in interest of the Non-Operators shall be controlling on all Non-Operators.

4. Statements and Billings

Operator shall bill Non-Operators on or before the last day of each month for their proportionate share of costs and expenses, for the preceding month. Such bills will be accompanied by statements reflecting the total charges and credits as set forth under Subparagraph "C" below:

A. Statement in detail of all charges and credits to the Joint Account.

B. Statement of all charges and credits to the Joint Account, summarized by appropriate classifications indicative of the nature thereof.

C. Statement of all charges and credits to the Joint Account summarized by appropriate classifications indicative of the nature thereof, except that items of Controllable Material and unusual charges and credits shall be detailed.

5. Payment and Advances by Non-Operators

Each Non-Operator shall pay its proportion of all such bills within fifteen (15) days after receipt thereof. If payment is not made within such time, the unpaid balance shall bear interest at the rate of ~~six~~ ^{eight} per cent (8%) per annum until paid.

6. Adjustments

Payment of any such bills shall not prejudice the right of any Non-Operators to protest or question the correctness thereof; provided however, all bills and statements rendered to Non-Operators by Operator during any calendar year shall conclusively be presumed to be true and correct after twenty-four (24) months following the end of any such calendar year, unless within the said twenty-four (24) month period a Non-Operator takes written exception thereto and makes claim on Operator for adjustment. No adjustment favorable to Operator shall be made unless it is made within the same prescribed period. The provisions of this paragraph shall not prevent adjustments resulting from a physical inventory of the Joint Property as provided for in Section VII.

7. Audits

A Non-Operator, upon notice in writing to Operator and all other Non-Operators, shall have the right to audit Operator's accounts and records relating to the accounting hereunder for any calendar year within the twenty-four (24) month period following the end of such calendar year; provided however, the making of an audit shall not extend the time for the taking of written exception to and the adjustment of accounts as provided for in Paragraph 6 of this Section I. Where there are two or more Non-Operators, the Non-Operators shall make every reasonable effort to conduct joint or simultaneous audits in a manner which will result in a minimum of inconvenience to the Operator.

II. DIRECT CHARGES

Subject to limitations hereinafter prescribed, Operator shall charge the Joint Account with the following items:

1. Rentals and Royalties

Delay or other rentals and royalties when such rentals and royalties are paid by Operator for the Joint Account of the Parties.

2. Labor

A. Salaries and wages of Operator's employees directly engaged on the Joint Property in the conduct of the Joint Operations, and salaries or wages of technical employees who are temporarily assigned to and directly employed on the Joint Property.

B. Operator's cost of holiday, vacation, sickness and disability benefits and other customary allowances paid to the employees whose salaries and wages are chargeable to the Joint Account under Paragraph 2A of this Section II and Paragraph 1 of Section III; except that in the case of those employees only a pro rata portion of whose salaries and wages are chargeable to the Joint Account under Paragraph 1 of Section III, not more than the same pro rata portion of the benefits and allowances herein provided for shall be charged to the Joint Account. Cost under this Paragraph 2B may be charged on a "when and as paid basis" or by "percentage assessment" on the amount of salaries and wages chargeable to the Joint Account under Paragraph 2A of this Section II and Paragraph 1 of Section III. If percentage assessment is used, the rate shall be based on the Operator's cost experience.

C. Expenditures or contributions made pursuant to assessments imposed by governmental authority which are applicable to Operator's labor cost of salaries and wages chargeable to the Joint Account under Paragraphs 2A and 2B of this Section II and Paragraph 1 of Section III.

D. Reasonable personal expenses of those employees whose salaries and wages are chargeable to the Joint Account under Paragraph 2A of this Section II and for which expenses the employees are reimbursed under Operator's usual practice.

3. Employee Benefits

Operator's current cost of established plans for employees' group life insurance, hospitalization, pension, retirement, stock purchase, thrift, bonus, and other benefit plans of a like nature, applicable to Operator's labor cost; provided however, the total of such charges shall not exceed ten percent (10%) of Operator's labor costs chargeable to the Joint Account under Paragraphs 2A and 2B of this Section II and Paragraph 1 of Section III.

4. Material

Material purchased or furnished by Operator for use on the Joint Property. So far as it is reasonably practical and consistent with efficient and economical operation, only such Material shall be purchased for or transferred to the Joint Property as may be required for immediate use; and the accumulation of surplus stocks shall be avoided.

5. Transportation

Transportation of employees and Material necessary for the Joint Operations but subject to the following limitations:

- A. If Material is moved to the Joint Property from the Operator's warehouse or other properties, no charge shall be made to the Joint Account for a distance greater than the distance from the nearest reliable supply store or railway receiving point where like material is available, except by agreement with Non-Operators.
- B. If surplus Material is moved to Operator's warehouse or other storage point, no charge shall be made to the Joint Account for a distance greater than the distance to the nearest reliable supply store or railway receiving point, except by agreement with Non-Operators. No charge shall be made to Joint Account for moving Material to other properties belonging to Operator, except by agreement with Non-Operators.
- C. In the application of subparagraphs A and B above, there shall be no equalization of actual gross trucking costs of \$100 or less.

6. Services

- A. The cost of contract services and utilities procured from outside sources other than services covered by Paragraph 8 of this Section II and Paragraph 2 of Section III.
- B. Use and service of equipment and facilities furnished by Operator as provided in Paragraph 5 of Section IV.

7. Damages and Losses to Joint Property

All costs or expenses necessary for the repair or replacement of Joint Property made necessary because of damages or losses incurred by fire, flood, storm, theft, accident, or any other cause, except to the extent that the damage or loss could have been avoided through the exercise of reasonable diligence on the part of Operator. Operator shall furnish Non-Operators written notice of damages or losses incurred as soon as practicable after a report thereof has been received by Operator.

8. Legal Expense

All costs and expenses of handling, investigating and settling litigation or claims arising by reason of the Joint Operations or necessary to protect or recover the Joint Property, including, but not limited to, attorneys' fees, court costs, cost of investigation or procuring evidence and amounts paid in settlement or satisfaction of any such litigation or claims; provided, (a) no charge shall be made for the services of Operator's legal staff or other regularly employed personnel (such services being considered to be Administrative Overhead under Section III), except by agreement with Non-Operators; and (b) no charge shall be made for the fees and expenses of outside attorneys unless the employment of such attorneys is agreed to by Operator and Non-Operators.

9. Taxes

All taxes of every kind and nature assessed or levied upon or in connection with the Joint Property, the operation thereof, or the production therefrom, and which taxes have been paid by the Operator for the benefit of the Parties.

10. Insurance Premiums

Premiums paid for insurance required to be carried on the Joint Property for the protection of the Parties.

11. Other Expenditures

Any other expenditure not covered or dealt with in the foregoing provisions of this Section II, or in Section III, and which is incurred by the Operator for the necessary and proper conduct of the Joint Operations.

III. INDIRECT CHARGES

Operator may charge the Joint Account for indirect costs either by use of an allocation of district expense items plus a fixed rate for administrative overhead, and plus the warehousing charges, all as provided for in Paragraphs 1, 2, and 3 of this Section III OR by combining all three of said items under the fixed rate provided for in Paragraph 4 of this Section III, as indicated next below:

OPERATOR SHALL CHARGE THE JOINT ACCOUNT UNDER THE TERMS OF:

- ☐ Paragraphs 1, 2 and 3. (Allocation of district expense plus fixed rate for administrative overhead plus warehousing.)
- ☒ Paragraph 4. (Combined fixed rate)

1. District Expense

Operator shall charge the Joint Account with a pro rata portion of the salaries, wages and expenses of Operator's production superintendent and other employees serving the Joint Property and other properties of the Operator in the same operating area, whose time is not allocated directly to the properties, and a pro rata portion of the cost of maintaining and operating a production office known as Operator's

office located at or near _____ (or a comparable office if location changed), and necessary sub-offices (if any), maintained for the convenience of the above-described office, and all necessary camps, including housing facilities for employees if required, used in connection with the operations of the Joint Property and other properties in the same operating area. The expense of, less any revenue from, such facilities may, at the option of Operator, include depreciation of investment or a fair monthly rental in lieu of depreciation. Such charges shall be apportioned to all properties served on some equitable basis consistent with Operator's accounting practice.

2. Administrative Overhead

Operator shall charge administrative overhead to the Joint Account at the following rates, which charge shall be in lieu of the cost and expense of all offices of the Operator not covered by Paragraph 1 of this Section III, including salaries, wages and expenses of personnel assigned to such offices. Such charges shall be in addition to the salaries, wages and expenses of employees of Operator authorized to be charged as direct charges as provided in Paragraphs 2 and 8 of Section II.

WELL BASIS (RATE PER WELL PER MONTH)

Well Depth	DRILLING WELL RATE (Use Total Depth)	PRODUCING WELL RATE (Use Current Producing Depth)		
	Each Well	First Five	Next Five	All Wells Over Ten
.....
.....
.....

The cost and expense of services from outside sources in connection with matters of taxation, traffic, accounting, or matters before or involving governmental agencies shall be considered as included in the overhead rates provided for in this Paragraph 2 of Section III, unless such cost and expense are agreed upon between Operator and Non-Operators as a direct charge to the Joint Account.

3. **Operator's Fully Owned Warehouse Operating and Maintenance Expense**
(Describe fully the agreed procedure to be followed by the Operator.)

4. **Combined Fixed Rates**

Operator shall charge the Joint Account for the services covered by Paragraph 1, 2 and 3 of this Section III, the following fixed per well rates:

WELL BASIS (RATE PER WELL PER MONTH)

Well Depth	DRILLING WELL RATE (Use Total Depth)	PRODUCING WELL RATE (Use Current Producing Depth)		
	Each Well	First Five	Next Five	All Wells Over Ten
All depths	\$749.00	\$107.00	\$96.00	\$76.00

Said fixed rate ~~(shall)~~ (shall not) include salaries and expenses of production foremen.

5. **Application of Administrative Overhead or Combined Fixed Rates**

The following limitations, instructions and charges shall apply in the application of the per well rates as provided under either Paragraph 2 or Paragraph 4 of this Section III:

- A. Charges for drilling wells shall begin on the date each well is spudded and terminate on the date the drilling or completion rig is released, whichever is later, except that no charge shall be made during the suspension of drilling operations for fifteen (15) or more consecutive days.
- B. The status of wells shall be as follows:
 - (1) Producing gas wells, injection wells for recovery operations, water supply wells utilized for water flooding operations and salt water disposal wells shall be considered the same as producing wells.
 - (2) Wells permanently shut down but on which plugging operations are deferred shall be dropped from the well schedule at the time the shutdown is effected. When such a well is plugged a charge shall be made at the producing well rates.
 - (3) Wells being plugged back, drilled deeper, converted to a source or input well, or which are undergoing any type of workover that requires the use of a drilling or workover rig shall be considered the same as drilling wells.
 - (4) Temporarily shut-down wells, which are not produced or worked upon for a period of a full calendar month, shall not be included in the well schedule, provided however, wells shut in by governmental regulatory body shall be included in the well schedule only in the event the allowable production is transferred to some other well or wells on the Joint Property. In the event of a unit allowable, all wells capable of producing will be counted in determining the charge.
 - (5) Gas wells shall be included in the well schedule if directly connected to a permanent sales outlet even though temporarily shut in due to overproduction or failure of purchaser to take the allowed production.
 - (6) Wells completed in multiple horizons, in which the production is not commingled down hole, shall be considered as a producing well for each separately producing horizon.
- C. The well rates shall apply to the total number of wells being drilled or operated under the agreement to which this Accounting Procedure is attached, irrespective of individual leases.
- D. The well rates shall be adjusted on the first day of April of each year following the effective date of the agreement to which this Accounting Procedure is attached. The adjustment shall be computed by multiplying the rate currently in use by the percentage increase or decrease in the average weekly earnings of Crude Petroleum and Gas Production Workers for the last calendar year compared to the preceding calendar year as shown by "The Index of Average Weekly Earnings of Crude Petroleum and Gas Production Workers" as published by the United States Department of Labor, Bureau of Labor Statistics. The adjusted rates shall be the rates currently in use, plus or minus the computed adjustment.
6. ~~For the construction of compressor plants, water stations, secondary recovery system, salt water disposal facilities, and other such projects, as distinguished from the more usual drilling and producing operations, Operator in addition to the Administrative Overhead or Combined Fixed Rates provided for in Paragraph 2 and 4 of this Section III, shall charge the Joint Account with an additional overhead charge as follows:~~
 - A. Total cost less than \$25,000, no charge.
 - B. Total cost more than \$25,000 but less than \$100,000, ____ % of total cost.
 - C. Total cost of \$100,000 or more, ____ % of the first \$100,000 plus ____ % of all over \$100,000 of total cost.~~Total cost shall mean the total gross cost of any one project. For the purpose of this Paragraph the component parts of a single project shall not be treated separately and the cost of drilling wells shall be excluded.~~
7. The specific rates provided for in this Section III may be amended from time to time by mutual agreement between the Parties hereto if, in practice, the rates are found to be insufficient or excessive.

IV. BASIS OF CHARGES TO JOINT ACCOUNT

Subject to the further provisions of this Section IV, Operator will procure all Material and services for the Joint Property. At the Operator's option, Non-Operator may supply Material or services for the Joint Property.

1. **Purchases**

Material purchased and service procured shall be charged at the price paid by Operator after deduction of all discounts actually received.

2. **Material furnished from Operator's Warehouse or Other Properties**

A. **New Material (Condition "A")**

- (1) Tubular goods, two inch (2") and over, shall be priced on Eastern Mill base (i. e. Youngstown, Ohio; Lorain, Ohio; and Indiana Harbor, Indiana) on a minimum carload basis effective at date of movement and f. o. b. railway receiving point nearest the Joint Property, regardless of quantity. In equalized hauling charges, Operator is permitted to include ten cents (10c) per hundred-weight on all tubular goods furnished from his stocks in lieu of loading and unloading costs sustained.
- (2) Other Material shall be priced at the current replacement cost of the same kind of Material, effective at date of movement and f. o. b. the supply store or railway receiving point nearest the Joint Property where Material of the same kind is available.
- (3) The Joint Account shall not be credited with cash discounts applicable to prices provided for in this Paragraph 2 of Section IV.

B. **Used Material (Condition "B" and "C")**

- (1) Material in sound and serviceable condition and suitable for reuse without reconditioning, shall be classified as Condition "B" and priced at seventy-five per cent (75%) of the current price of new Material.
- (2) Material which cannot be classified as Condition "B" but which,
 - (a) After reconditioning will be further serviceable for original function as good secondhand Material (Condition "B"), or
 - (b) Is serviceable for original function but substantially not suitable for reconditioning, shall be classified as Condition "C" and priced at fifty per cent (50%) of current new price.
- (3) Obsolete Material or Material which cannot be classified as Condition "B" or Condition "C" shall be priced at a value commensurate with its use. Material no longer suitable for its original purpose but usable for

some other purpose, shall be priced on a basis comparable with that of items normally used for such other purpose.

- (4) Material involving erection costs shall be charged at applicable percentage of the current knocked-down price of new Material.

3. Premium Prices

Whenever Material is not readily obtainable at prices specified in Paragraphs 1 and 2 of this Section IV because of national emergencies, strikes or other unusual causes over which the Operator has no control, the Operator may charge the Joint Account for the required Material at the Operator's actual cost incurred in procuring such Material, in making it suitable for use, and in moving it to the Joint Property, provided, that notice in writing is furnished to Non-Operators of the proposed charge prior to billing Non-Operators for such Material. Each Non-Operator shall have the right, by so electing and notifying Operator within 10 days after receiving notice from Operator, to furnish in kind all or part of his share of such Material suitable for use and acceptable to Operator.

4. Warranty of Material Furnished by Operator

Operator does not warrant the Material furnished. In case of defective Material, credit shall not be passed to the Joint Account until adjustment has been received by Operator from the manufacturers or their agents.

5. Equipment and Facilities Furnished by Operator

A. Operator shall charge the Joint Account for use of equipment and facilities at rates commensurate with cost of ownership and operation. Such rates shall include cost of maintenance, repairs, other operating expense, insurance, taxes, depreciation and interest on investment not to exceed six per cent (6%) per annum, provided such rates shall not exceed those currently prevailing in the immediate area within which the Joint Property is located. Rates for automotive equipment shall generally be in line with the schedule of rates adopted by the Petroleum Motor Transport Association, or some other recognized organization, as recommended uniform charges against Joint Property operations. Rates for laboratory services shall not exceed those currently prevailing if performed by outside service laboratories. Rates for trucks, tractors and well service units may include wages and expenses of operator.

B. Whenever requested, Operator shall inform Non-Operators in advance of the rates it proposes to charge.

C. Rates shall be revised and adjusted from time to time when found to be either excessive or insufficient.

V. DISPOSAL OF MATERIAL

The Operator may purchase, but shall be under no obligation to purchase, interest of Non-Operators in surplus Condition "A" or "B" Material. The disposition of surplus Controllable Material, not purchased by Operator, shall be subject to agreement between Operator and Non-Operators, provided Operator shall dispose of normal accumulations of junk and scrap Material either by transfer or sale from the Joint Property.

1. Material Purchased by the Operator or Non-Operators

Material purchased by either the Operator or Non-Operators shall be credited by the Operator to the Joint Account for the month in which the Material is removed by the purchaser.

2. Division in Kind

Division of Material in kind, if made between Operator and Non-Operators, shall be in proportion to the respective interests in such Material. The Parties will thereupon be charged individually with the value of the Material received or receivable. Proper credits shall be made by the Operator in the monthly statement of operations.

3. Sales to Outsiders

Sales to outsiders of Material from the Joint Property shall be credited by Operator to the Joint Account at the net amount collected by Operator from vendee. Any claim by vendee related to such sale shall be charged back to the Joint Account if and when paid by Operator.

VI. BASIS OF PRICING MATERIAL TRANSFERRED FROM JOINT ACCOUNT

Material purchased by either Operator or Non-Operators or divided in kind, unless otherwise agreed to between Operator and Non-Operators shall be priced on the following basis:

1. New Price Defined

New price as used in this Section VI shall be the price specified for New Material in Section IV.

2. New Material

New Material (Condition "A"), being new Material procured for the Joint Property but never used, at one hundred per cent (100%) of current new price (plus sales tax if any).

3. Good Used Material

Good used Material (Condition "B"), being used Material in sound and serviceable condition, suitable for reuse without reconditioning:

A. At seventy-five per cent (75%) of current new price if Material was charged to Joint Account as new, or

B. At sixty-five per cent (65%) of current new price if Material was originally charged to the Joint Account as secondhand at seventy-five percent (75%) of new price.

4. Other Used Material

Used Material (Condition "C"), at fifty per cent (50%) of current new price, being used Material which:

A. Is not in sound and serviceable condition but suitable for reuse after reconditioning, or

B. Is serviceable for original function but not suitable for reconditioning.

5. Bad-Order Material

Material (Condition "D"), no longer suitable for its original purpose without excessive repair cost but usable for some other purpose at a price comparable with that of items normally used for such other purpose.

6. Junk Material

Junk Material (Condition "E"), being obsolete and scrap Material, at prevailing prices.

7. Temporarily Used Material

When the use of Material is temporary and its service to the Joint Property does not justify the reduction in price as provided for in Paragraph 3 B of this Section VI, such Material shall be priced on a basis that will leave a net charge to the Joint Account consistent with the value of the service rendered.

VII. INVENTORIES

The Operator shall maintain detailed records of Material generally considered controllable by the Industry.

1. Periodic Inventories, Notice and Representation

At reasonable intervals, inventories shall be taken by Operator of the Joint Account Material, which shall include all such Material as is ordinarily considered controllable. Written notice of intention to take inventory shall be given by Operator at least thirty (30) days before any inventory is to begin so that Non-Operators may be represented when any inventory is taken. Failure of Non-Operators to be represented at an inventory shall bind Non-Operators to accept the inventory taken by Operator, who shall in that event furnish Non-Operators with a copy thereof.

2. Reconciliation and Adjustment of Inventories

Reconciliation of inventory with charges to the Joint Account shall be made, and a list of overages and shortages shall be jointly determined by Operator and Non-Operators. Inventory adjustments shall be made by Operator with the Joint Account for overages and shortages, but Operator shall be held accountable to Non-Operator only for shortages due to lack of reasonable diligence.

3. Special Inventories

Special inventories may be taken whenever there is any sale or change of interest in the Joint Property. It shall be the duty of the party selling to notify all other Parties as quickly as possible after the transfer of interest takes place. In such cases, both the seller and the purchaser shall be governed by such inventory.

HAT MESA UNIT AREA, LEA COUNTY, NEW MEXICO

EXHIBIT "D" - - - PAGE 1

SCHEDULE SHOWING COMMITTED ACRES, PARTICIPATION PERCENTAGE, BURDENS AND BENEFICIAL INTEREST OF EACH WORKING INTEREST OWNER IN THE UNIT AREA PRIOR TO COMPLETION OF THE INITIAL TEST WELL

(1) Working Interest Owner and Tract Numbers	(2) Committed Acres and Percent	(3)	(4) Basic	(5) Royalty and Percent Excess	(6) Net Working Interest Percent	(7) Interest Acres	(8) Beneficial Interest (Percent)
<u>Phillips Petroleum Company</u>							
1	480.00		12.50	6.25	81.25	390.00	
2	80.00		12.50	\$750/Ac. x 5% *	82.50	66.00	
5	160.00		12.50	12.50	75.00	120.00	
9	320.00		12.50	5.00	82.50	264.00	
13	80.00		12.50	5.00	82.50	66.00	
14	320.00		12.50	5.00	82.50	264.00	
15	480.00		12.50	5.00	82.50	396.00	
16	320.00		12.50	5.00	82.50	264.00	
26	400.00		12.50	\$750/Ac. x 5% *	82.50	330.00	
27	360.00		12.50	None	87.50	315.00	
28	312.04		12.50	None	87.50	273.03	
	3,312.04 - 42.49457%					2,748.03	41.86575%
<u>Union Oil of California</u>							
4	640.00		12.50	5.00	82.50	528.00	
11	80.00		12.50	5.00	82.50	66.00	
17	320.00		12.50	None	87.50	280.00	
18	400.00		12.50	None	87.50	350.00	
21	160.00		12.50	None	87.50	140.00	
23	151.87		12.50	None	87.50	132.89	
	1,751.87 - 22.47708%					1,496.89	22.80485%

*For purposes of this Exhibit "D" and computations hereon, Production Payments are treated as straight overrides. As each production payment is paid out and retired, the Interests shown will be recalculated as provided in the Unit Operating Agreement.

(1) Working Interest Owner and Tract Numbers	(2) Committed Acres and Percent	(3)	(4) Basic	(5) Royalty and Percent Excess	(6) Net Working Interest Percent	(7) Net Working Interest Acres	(8) Beneficial Interest (Percent)
<u>Gulf Oil Corporation</u>							
6	160.00		12.50	5.00	82.50	132.00	
7	711.69		12.50	5.00	82.50	587.14	
10	320.00		12.50	4.00	83.50	267.20	
	1,191.69 - 15.28978%					986.34	15.02671%
<u>Ralph Lowe Estate</u>							
3	240.00		12.50	None	87.50	210.00	
19	360.00		12.50	None	87.50	315.00	
	600.00 - 7.69820%					525.00	7.99828%
<u>Union Producing Company</u>							
22	320.00 - 4.10571%		12.50	None	87.50	280.00	4.26575%
<u>Pan American Pet. Corp.</u>							
8	80.00		12.50	5.00	82.50	66.00	
20	151.51		12.50	6.25	81.25	123.10	
	231.51 - 2.97035%					189.10	2.88091%
<u>Sinclair Oil & Gas Company</u>							
24	226.92 - 2.91146%		12.50	None	87.50	198.55	3.02487%
<u>Superior Oil Company</u>							
12	160.00 - 2.05285%		12.50	None	87.50	140.00	2.13288%
	7,794.03 - 100.00000%					6,563.91	100.00000%

Note: Atlantic Richfield has 80 acres within the Unit Area not committed to the Hat Mesa Unit.

SCHEDULE SHOWING PARTICIPATION PERCENTAGES IN INITIAL TEST WELL AND IN SUBSEQUENT COSTS AND WORKING INTEREST PRODUCTION UPON COMPLETION OF INITIAL TEST WELL AS A PRODUCER

Working Interest Owner	Column 1	Column 2	Column 3
	Participation Percentages of Initial Test Well Costs	Upon Completion of a Producing Well the Participation Percentage of Operating Costs, Costs of Subsequent Wells and Ownership of All Equipment and Wells	Participation Percentage in Working Interest Production Upon Completion of A Producing Well (Beneficial Interest)
Phillips Petroleum Company	17.68892%	45.09182%	44.51420%
Union Oil of California	25.22458%	23.85082%	24.20572%
Gulf Oil Corporation	17.15874%	16.22421%	15.97964%
Ralph Lowe Estate	None	3.84910%	3.99914%
Union Producing Company	4.60757%	4.35667%	4.52164%
Pan American Petroleum Corp.	None	1.43511%	1.44045%
Sinclair Oil & Gas Company	3.26734%	3.08942%	3.20633%
Superior Oil Company	2.05285%	2.05285%	2.13288%
	100.00000%	100.00000%	100.00000%

Percentages will be adjusted upon retirement of production payments.

EXHIBIT "D" - HAT MESA UNIT AREA - - PAGE 3

SCHEDULE SHOWING PARTICIPATION PERCENTAGES IN INITIAL TEST WELL AND IN SUBSEQUENT COSTS AND WORKING INTEREST PRODUCTION UPON COMPLETION OF INITIAL TEST WELL AS A PRODUCER

	Column 1	Column 2	Column 3
	Participation Percentages of Initial Test Well Costs	Upon Completion of a Producing Well the Participation Percentage of Operating Costs, Costs of Subsequent Wells and Ownership of All Equipment and Wells	Participation Percentage in the Working Interest Production Upon Completion of A Producing Well (Beneficial Interest)
Company	47.68892%	45.09182%	44.51420%
ia	25.22458%	23.85082%	24.20572%
	17.15874%	16.22421%	15.97964%
	None	3.84910%	3.99914%
ry	4.60757%	4.35667%	4.52164%
Corp.	None	1.43511%	1.44045%
pany	3.26734%	3.08942%	3.20633%
	2.05285%	2.05285%	2.13288%
	100.00000%	100.00000%	100.00000%

Percentages will be adjusted upon retirement of production payments.

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BEFORE THE
New Mexico Oil Conservation Commission
Santa Fe, New Mexico
EXAMINER HEARING

April 26, 1967

IN THE MATTER OF:)
)
)
)
)
)
)

Application of Phillips Petroleum
Company for a unit agreement, Lea
County, New Mexico.

Case 3560

BEFORE: Elvis A. Utz, Examiner

TRANSCRIPT OF HEARING

MR. UTZ: Case 3560.

MR. HATCH: Case 3560, An application of Phillips Petroleum Company for a unit agreement, Lea County, New Mexico.

MR. KELLAHIN: If the Examiner please. Jason Kellahin, Kellahin and Fox, appearing for the applicant.

I have three witnesses.

(Witnesses sworn.)

MR. UTZ: Are there any other appearances in this case?

MR. KELLAHIN: I would like to call as my first witness, Mr. Cunningham.

W. A. CUNNINGHAM, called as a witness on behalf of the Applicant, first having been duly sworn, was examined and testified as follows:

DIRECT EXAMINATION

BY MR. KELLAHIN:

Q Would you state your name, please?

A W. A. Cunningham.

Q By whom are you employed and in what position, Mr. Cunningham?

A Phillips Petroleum Company, as District Contract man.

Q In connection with your work as District Contract

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man, where are you located?

A In Midland.

Q And, do you have anything to do with the work of organizing a unit agreement?

A Yes, I do. I prepare the unit agreements and unit operating agreements.

Q And, in that connection, did you have anything to do with the unit agreement designated as the Hat Mesa Unit?

A Yes, I prepared it.

(Whereupon, Applicant's Exhibit Number 1 was marked for identification.)

Q Referring to what has been marked as Exhibit Number 1, is that a copy of the unit agreement?

A That's correct.

Q And attached to that agreement is there a plat showing the acreage involved in this unit?

A Yes, sir, there is a plat showing the outline of the unit area, of the proposed unit area.

Q And, also, attached to the plat is there an exhibit showing the ownership of all the lands within the unit area?

A Yes, sir.

Q Now of the lands that are in the unit area, what percentage are Federal, what percentage are State and what

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percentage are Fee?

A Approximately 58.82 percent are Federal lands, and 41 percent are State lands and there is no Fee acreage within the boundaries of the proposed unit area.

Q Now, is this a unit agreement designed as an exploratory unit?

A Yes, sir.

Q Is it in a form that has been used heretofor and approved by the United States Geological Survey and the Department of Interior and the State of New Mexico Land Office?

A Yes, sir, it is.

Q And by this Commission?

A Right.

Q Has this unit agreement been submitted to the Department of Interior?

A Yes, it has.

Q Has it received tentative approval?

A It has received preliminary approval for the unit agreement.

Q And the area has been designated by the Department of Interior as appropriate for unit development, is this true?

A As to area and depth.

Q As to area and depth? Now, in connection with

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that, what depths are you talking about?

A We are talking about a 15,500 foot Devonian wildcat.

Q Is the unit agreement confined to the Devonian production?

A No, sir.

Q It would include any producing horizon that might be encountered in the well deep enough to test the Devonian, is that correct?

A Yes, that's correct.

Q So, that it covers all possible producing formations from the surface to the Devonian?

A That is correct.

Q Has the unit agreement been submitted to the Commissioner of Public Lands?

A Yes, sir.

Q Has it received preliminary approval there?

A Yes, sir.

Q What is the status of the agreement, insofar as participation of the working interest is concerned?

A All parties, there are nine working interest owners within the boundaries of the unit outline and eight of the nine companies have agreed to commit their acreage to the unit area.

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Q And what acreage is not committed to the unit area?

A The acreage not committed to the unit area is the Atlantic Richfield tract which is the East half of the Southwest Quarter of Section 19, Township 21 South, Range 33 East, which is on the east side of the unit area.

Q It is on the boundary of the unit, is that correct?

A Yes, sir.

Q And it is an eighty acre tract?

A That's correct.

Q Is there a provision in the unit agreement for a subsequent joinder for a tract such as that?

A Yes, sir, there is.

Q Is there a provision in the unit agreement for any expansion of the unit --

A Yes, sir.

Q -- should it become necessary on the development of this area?

A Yes, sir.

Q As I understand, you prepare the unit agreements. Was this unit agreement prepared under your supervision?

A Yes, sir.

MR. KELLAHIN: At this time I would like to offer

in evidence Exhibit Number 1.

MR. NUTTER: Without objection Exhibit Number 1 will be entered into the record.

(Whereupon, Applicant's Exhibit Number 1 was admitted into evidence.)

MR. UTZ: Any questions of the witness? The witness may be excused.

(Witness excused.)

MR. KELLAHIN: We would like to call as our next witness Mr. Charles W. Betton.

CHARLES W. BETTON, called as a witness on behalf of the Applicant, first having been duly sworn was examined and testified as follows:

DIRECT EXAMINATION

BY MR. KELLAHIN:

Q Would you state your name, please?

A Charles W. Betton, B-e-t-t-o-n.

Q By whom are you employed and in what position, Mr. Betton?

A Phillips Petroleum Company, Area Exploration Geologist.

Q And where are you located?

A Midland, Texas.

Q Have you ever testified before the New Mexico Oil

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Conservation Commission?

A No, I haven't.

Q For the benefit of the Examiner, will you briefly review your education and experience as a geologist?

A I received a Bachelor of Science Major in Geology Degree from Colorado College in 1951, was employed by Phillips Petroleum in May of 1952 and have been employed by them since that time. I have been an Area Geologist for our western area for approximately four years, the last four years.

Q Now, in connection with your work as Area Geologist, do you have anything to do with the area that is included in what has been designated as the Hat Mesa unit area?

A Yes, it is under my supervision.

Q Have you made any investigation of this area yourself?

A Yes, sir, I have.

MR. KELLAHIN: Are the witness' qualifications acceptable?

MR. UTZ: Yes, sir, they are.

(Whereupon, Applicant's Exhibit Number 2 was marked for identification.)

Q (By Mr. Kellahin) Mr. Betton, referring to what has been marked as Exhibit Number 2, would you state what that

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exhibit is?

A Exhibit Number 2 is a seismic structure map contoured on the Devonian top, contour intervals 100 feet. The plat also depicts the proposed unit outline and the well control which is available in the area.

Q Now, as I understand, you say that is contoured on the top of the Devonian. What type of information did you have in the preparation of this map?

A Well, this is a map prepared by a reflection seismograph method, our latest magnetic tape recording technique, using a dynamite method as opposed to the surface technique.

Q Was it also used in connection with a computer of some kind?

A Yes. The results are in a computerized program.

Q There are other zones than the Devonian present in this area that may be productive, is that correct?

A That is correct.

Q What would those zones be?

A We consider the Morrow Pennsylvanian Sands, and sandstones and carbonates of the Bone Springs-Leonard H formation to be secondary objectives in this well and in addition, there are other, what we consider less attractive objectives in the Wolfcamp and Delaware Mountain group.

Q Would the Strawn possibly be --

A Yes, the Strawn and Ben 2, as a matter of fact.

Q The unit agreement Mr. Betton is an exploratory unit. In reference to your Exhibit Number 2, that reflects a structure in the Devonian, does it not?

A That is correct.

Q Does the unit area embrace substantially all of the structure as reflected by this information?

A Yes, the unit outline has been drawn to include all that we feel is potentially productive within this.

Q Would the unit area, as outlined, give the unit operator effective control of the structure in the event production is encountered there?

A Yes, it would.

Q Now, do you have the same situation as to the other zones you have mentioned?

A Yes we have shallower depth mapping, also seismic mapping, in which the interpretation is essentially the same at the Morrow horizon with slightly less relief and it is also similar on the middle Bone Springs horizon as mapped by seismic methods.

Q Is it your opinion as a geologist as to those other zones, the operator of the unit would have effective control of any area of development?

A Yes.

(Whereupon, Applicant's Exhibit Number 3 was marked for identification.)

Q Now, referring to what has been marked as Exhibit Number 3, would you identify that exhibit, please?

A Exhibit Number 3 is the geological report concerning the proposed unit.

Q Is there any information in that report that you would like to call to the attention of the Examiner?

A Well, the report states briefly our interpretation of the structure, the stratigraphy to be expected at the proposed drill site, the productive possibilities which we feel are most likely, and the proposed method of development if the unit is approved.

Q Now, you said at the proposed drill site. Where is the proposed drill site?

A The proposed drill site is located in Section 11 of Township 21 South, Range 32 East, of Lea County and is located 1980 from the north and east lines of Section 11.

Q Is that marked in red on Exhibit Number 2?

A Marked in a red 'X'.

Q On Exhibit Number --

A On Exhibit Number 2, yes.

Q Now, there are some dry holes that have been

drilled in this area, are there not?

A Yes, there are.

Q Where are they located?

A Well, there are a number of shallow dry holes scattered, actually, several of them within the unit, proposed unit outline which penetrated approximately to the top of the Capitan Reef. We do not consider these to be detrimental to the proposed test, inasmuch as they are dry holes, as compared to the objectives that we are scheduling this well for.

The Phillips Number 1S immediately on the outside of the boundary, at the north in Section 1, Township 2132, was drilled to a total depth of 16,396 feet in 1956 and the hole was lost at that depth. This well is one of our key points that we are basing our interest in, in that our seismic picture clearly shows this well to be low by some 450 feet to the crest of our seismic structure and separated from this structure by synclinal trough, synclinal trough running through the northern part of Sections 2 and 1 of 2132. This well also is of considerable significance to us, in that the Morrow Sands that we contemplate of being perspective were not tested in any fashion in this well and the zones in the Bone Springs, which we consider to be perspective were also not tested in this well. However, correlation from this

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well to the Lea pool, some eight miles to the northeast, is quite good and we feel that we have good correlation between known-producing horizons in these two formations at the Lea pool, so we consider the likelihood of these perspective reservoirs as being present on the structure to be quite good.

Q Were Exhibits 2 and 3 prepared by you, or under your supervision?

A Exhibit Number 3, the report, was prepared by me. The Exhibit Number 2, the seismic structure map, was not prepared by me. This map was prepared by our district geophysicist.

Q Have you examined Exhibit Number 2 and in your opinion does it correctly reflect the information shown on the Devonian?

A Yes, it does.

MR. KELLAHIN: At this time I would like to offer Exhibits 2 and 3.

MR. UTZ: Without objection, Exhibits 2 and 3 will be entered into the record of this case.

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

MR. KELLAHIN: That's all I have of this witness, Mr. Utz.

MR. UTZ: Are there any questions of the witness?

He may be excused.

(Witness excused.)

MR. KELLAHIN: I would like to call Mr. Wolfenberger.

DON WOLFENBERGER, called as a witness on behalf of the Applicant, first having been duly sworn, was examined and testified as follows:

DIRECT EXAMINATION

BY MR. KELLAHIN:

Q Would you state your name, please?

A Don Wolfenberger.

Q How do you spell that, Mr. Wolfenberger?

A W-o-l-f-e-n-b-e-r-g-e-r.

Q By whom are you employed and in what position?

A Phillips Petroleum Company, Senior Lease Man.

Q Where are you located, Mr. Wolfenberger?

A Midland, Texas.

Q Have you ever testified before the Oil Conservation Commission?

A No, I haven't.

Q In your duties as Senior Lease Man, how long have you been working in the state of New Mexico?

A Since 1959.

Q And have you handled leases for Phillips in this

area during that period of time?

A Yes.

Q Did you have anything to do with the examining of lease data and getting agreement to the proposed Hat Mesa unit agreement?

A Yes, I did.

Q In that connection, Mr. Wolfenberger, did you find anything about the leases in regard to the potash area?

A Yes, we found that our unit fell in the secondary potash area as designated in October 16, 1951, also, the revised area of May 11th, 1965 and a small portion in the south part of the unit area falls in our 1 11A area.

(Whereupon, Applicant's Exhibit Number 4 was marked for identification.)

Q Now, referring to what has been marked as Exhibit Number 4, does that show the potash area?

A Yes.

Q How is it shown on that Exhibit?

A It is outlined in red.

Q The area outlined in red is that portion of the area included under the Oil Conservation Commission's Order R No. 1 11A?

A True.

Q What does the other colored area signify?

A The orange area is potash leases owned by Potash Company of America and the green acreage is U. S. Borax.

Q And the entire unit area, as I understand it, is in the area designated by the Secretary of Interior as a potash area, is that correct?

A Yes.

Q Now, is there any potash development in the vicinity of this unit?

A No.

Q How far away is the nearest potash development?

A Kerr-McGee, approximately eight miles west.

Q As far as you know, then, there is no prospect of development in the immediate vicinity of this unit?

A That's true. The federal acreage in the area does not have potash leases on it.

Q And the leases that are there are all state leases?

A State leases held by production over ten years.

Q Now, in connection with Exhibit Number 4, is that a revision of Exhibit A attached to the unit agreement?

A Yes.

Q Now, is there an error in connection with one of the lease numbers there?

A Right. On, except in the unit agreement, Tract 2

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there is two inverted numbers there. That number should be 028705 on the federal.

Q Now, you are familiar --

MR. UTZ: Tract 2?

THE WITNESS: Yes and the corrections have been made on the unit agreement.

Q (By Mr. Kellahin) Are you familiar with the exploration dates on the various leases involved in this unit?

A Yes, indeed.

Q Is there any reason for immediate action on this application before the Oil Conservation Commission?

A Yes, Tract 2, which is the same eighty acre tract, is Phillips' tract and the ten year term expires May 31st, 1967. We would like to get this well drilling prior to, or before, the 20th of May.

Q Now, do you anticipate that you can have not less than seventy-five percent of the working interests signed up by that date?

A Absolutely yes.

Q What is the situation as to the royalty interests, or do you know?

A We have twenty-six royalty interests owners in the unit, overriding royalty owners in the unit, and at the present time, twenty-two have executed a ratification and

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and the four others have indicated they would as soon as possible.

Q And, other than the one Atlantic tract, you anticipate one hundred percent participation on the working interests, is that correct?

A Yes, sir.

Q Was Exhibit Number 4 prepared by you or under your supervision?

A Yes, sir.

MR. KELLAHIN: I would like to offer Exhibit Number 4.

MR. UTZ: Without objection, Exhibit Number 4 will be entered into the record.

(Whereupon, Applicant's Exhibit Number 4 was admitted into evidence.)

MR. KELLAHIN: That's all I have Mr. Utz.

MR. UTZ: Are there any questions of the witness? The witness may be excused.

(Witness excused.)

MR. UTZ: Statements in this case? The case will be taken under advisement.

STATE OF NEW MEXICO)
) SS
 COUNTY OF BERNALILLO)

I, JERRY POTTS, Notary Public, do hereby certify that the foregoing and attached transcript of proceedings before the New Mexico Oil Conservation Commission Examiner at Santa Fe, New Mexico, is a true and correct record to the best of my knowledge, skill and ability.

In Witness whereof, I have affixed my hand and notarial seal this 15th of June, 1967.

Jerry Potts
 Notary Public

My Commission Expires:

July 10, 1970

I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case No. 3560 heard by me on Sept. 20, 1967.

Thos. H. H. Examiner
 New Mexico Oil Conservation Commission

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BEFORE THE
New Mexico Oil Conservation Commission
Santa Fe, New Mexico
EXAMINER HEARING

April 26, 1967

IN THE MATTER OF:

Application of Phillips Petroleum
Company for a unit agreement, Lea
County, New Mexico.

Case 3560

BEFORE: Elvis A. Utz, Examiner

TRANSCRIPT OF HEARING

MR. UTZ: Case 3560.

MR. HATCH: Case 3560, An application of Phillips Petroleum Company for a unit agreement, Lea County, New Mexico.

MR. KELLAHIN: If the Examiner please. Jason Kellahin, Kellahin and Fox, appearing for the applicant. I have three witnesses.

(Witnesses sworn.)

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MR. KELLAHIN: I would like to call as my first witness, Mr. Cunningham.

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DIRECT EXAMINATION

BY MR. KELLAHIN:

Q Would you state your name, please?

A W. A. Cunningham.

Q By whom are you employed and in what position, Mr. Cunningham?

A Phillips Petroleum Company, as District Contract man.

Q In connection with your work as District Contract

man, where are you located?

A In Midland.

Q And, do you have anything to do with the work of organizing a unit agreement?

A Yes, I do. I prepare the unit agreements and unit operating agreements.

Q And, in that connection, did you have anything to do with the unit agreement designated as the Hat Mesa Unit?

A Yes, I prepared it.

(Whereupon, Applicant's Exhibit Number 1 was marked for identification.)

Q Referring to what has been marked as Exhibit Number 1, is that a copy of the unit agreement?

A That's correct.

Q And attached to that agreement is there a plat showing the acreage involved in this unit?

A Yes, sir, there is a plat showing the outline of the unit area, of the proposed unit area.

Q And, also, attached to the plat is there an exhibit showing the ownership of all the lands within the unit area?

A Yes, sir.

Q Now of the lands that are in the unit area, what percentage are Federal, what percentage are State and what

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percentage are Fee?

A Approximately 58.82 percent are Federal lands, and 41 percent are State lands and there is no Fee acreage within the boundaries of the proposed unit area.

Q Now, is this a unit agreement designed as an exploratory unit?

A Yes, sir.

Q Is it in a form that has been used heretofore and approved by the United States Geological Survey and the Department of Interior and the State of New Mexico Land Office?

A Yes, sir, it is.

Q And by this Commission?

A Right.

Q Has this unit agreement been submitted to the Department of Interior?

A Yes, it has.

Q Has it received tentative approval?

A It has received preliminary approval for the unit agreement.

Q And the area has been designated by the Department of Interior as appropriate for unit development, is this true?

A As to area and depth.

Q As to area and depth? Now, in connection with

that, what depths are you talking about?

A We are talking about a 15,500 foot Devonian wildcat.

Q Is the unit agreement confined to the Devonian production?

A No, sir.

Q It would include any producing horizon that might be encountered in the well deep enough to test the Devonian, is that correct?

A Yes, that's correct.

Q So, that it covers all possible producing formations from the surface to the Devonian?

A That is correct.

Q Has the unit agreement been submitted to the Commissioner of Public Lands?

A Yes, sir.

Q Has it received preliminary approval there?

A Yes, sir.

Q What is the status of the agreement, insofar as participation of the working interest is concerned?

A All parties, there are nine working interest owners within the boundaries of the unit outline and eight of the nine companies have agreed to commit their acreage to the unit area.

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Q And what acreage is not committed to the unit area?

A The acreage not committed to the unit area is the Atlantic Richfield tract which is the East half of the Southwest Quarter of Section 9, Township 21 South, Range 33 East, which is on the east side of the unit area.

Q It is on the boundary of the unit, is that correct?

A Yes, sir.

Q And it is an eighty acre tract?

A That's correct.

Q Is there a provision in the unit agreement for a subsequent joinder for a tract such as that?

A Yes, sir, there is.

Q Is there a provision in the unit agreement for any expansion of the unit --

A Yes, sir.

Q -- should it become necessary on the development of this area?

A Yes, sir.

Q As I understand, you prepare the unit agreements. Was this unit agreement prepared under your supervision?

A Yes, sir.

MR. KELLAHIN: At this time I would like to offer

in evidence Exhibit Number 1.

MR. NUTTER: Without objection Exhibit Number 1 will be entered into the record.

(Whereupon, Applicant's Exhibit Number 1 was admitted into evidence.)

MR. UTZ: Any questions of the witness? The witness may be excused.

(Witness excused.)

MR. KELLAHIN: We would like to call as our next witness Mr. Charles W. Betton.

CHARLES W. BETTON, called as a witness on behalf of the Applicant, first having been duly sworn was examined and testified as follows:

DIRECT EXAMINATION

BY MR. KELLAHIN:

Q Would you state your name, please?

A Charles W. Betton, B-e-t-t-o-n.

Q By whom are you employed and in what position, Mr. Betton?

A Phillips Petroleum Company, Area Exploration Geologist.

Q And where are you located?

A Midland, Texas.

Q Have you ever testified before the New Mexico Oil

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Conservation Commission?

A No, I haven't.

Q For the benefit of the Examiner, will you briefly review your education and experience as a geologist?

A I received a Bachelor of Science Major in Geology Degree from Colorado College in 1951, was employed by Phillips Petroleum in May of 1952 and have been employed by them since that time. I have been an Area Geologist for our western area for approximately four years, the last four years.

Q Now, in connection with your work as Area Geologist, do you have anything to do with the area that is included in what has been designated as the Hat Mesa unit area?

A Yes, it is under my supervision.

Q Have you made any investigation of this area yourself?

A Yes, sir, I have.

MR. KELLAHIN: Are the witness' qualifications acceptable?

MR. UTZ: Yes, sir, they are.

(Whereupon, Applicant's Exhibit Number 2 was marked for identification.)

Q (By Mr. Kellahin) Mr. Betton, referring to what has been marked as Exhibit Number 2, would you state what that

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exhibit is?

A Exhibit Number 2 is a seismic structure map contoured on the Devonian top, contour intervals 100 feet. The plat also depicts the proposed unit outline and the well control which is available in the area.

Q Now, as I understand, you say that is contoured on the top of the Devonian. What type of information did you have in the preparation of this map?

A Well, this is a map prepared by a reflection seismograph method, our latest magnetic tape recording technique, using a dynamite method as opposed to the surface technique.

Q Was it also used in connection with a computer of some kind?

A Yes. The results are in a computerized program.

Q There are other zones than the Devonian present in this area that may be productive, is that correct?

A That is correct.

Q What would those zones be?

A We consider the Morrow Pennsylvanian Sands, and sandstones and carbonates of the Bone Springs-Leonard H formation to be secondary objectives in this well and in addition, there are other, what we consider less attractive objectives in the Wolfcamp and Delaware Mountain group.

Q Would the Strawn possibly be --

A Yes, the Strawn and Ben 2, as a matter of fact.

Q The unit agreement Mr. Betton is an exploratory unit. In reference to your Exhibit Number 2, that reflects a structure in the Devonian, does it not?

A That is correct.

Q Does the unit area embrace substantially all of the structure as reflected by this information?

A Yes, the unit outline has been drawn to include all that we feel is potentially productive within this.

Q Would the unit area, as outlined, give the unit operator effective control of the structure in the event production is encountered there?

A Yes, it would.

Q Now, do you have the same situation as to the other zones you have mentioned?

A Yes we have shallower depth mapping, also seismic mapping, in which the interpretation is essentially the same at the Morrow horizon with slightly less relief and it is also similar on the middle Bone Springs horizon as mapped by seismic methods.

Q Is it your opinion as a geologist as to those other zones, the operator of the unit would have effective control of any area of development?

A Yes.

(Whereupon, Applicant's
Exhibit Number 3 was
marked for identification.)

Q Now, referring to what has been marked as
Exhibit Number 3, would you identify that exhibit, please?

A Exhibit Number 3 is the geological report con-
cerning the proposed unit.

Q Is there any information in that report that you
would like to call to the attention of the Examiner?

A Well, the report states briefly our interpretation
of the structure, the stratigraphy to be expected at the
proposed drill site, the productive possibilities which we
feel are most likely, and the proposed method of development
if the unit is approved.

Q Now, you said at the proposed drill site. Where
is the proposed drill site?

A The proposed drill site is located in Section 11
of Township 21 South, Range 32 East, of Lea County and is
located 1980 from the north and east lines of Section 11.

Q Is that marked in red on Exhibit Number 2?

A Marked in a red 'X'.

Q On Exhibit Number --

A On Exhibit Number 2, yes.

Q Now, there are some dry holes that have been

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drilled in this area, are there not?

A Yes, there are.

Q Where are they located?

A Well, there are a number of shallow dry holes scattered, actually, several of them within the unit, proposed unit outline which penetrated approximately to the top of the Capitan Reef. We do not consider these to be detrimental to the proposed test, inasmuch as they are dry holes, as compared to the objectives that we are scheduling this well for.

The Phillips Number 1S immediately on the outside of the boundary, at the north in Section 1, Township 2132, was drilled to a total depth of 16,396 feet in 1956 and the hole was lost at that depth. This well is one of our key points that we are basing our interest in, in that our seismic picture clearly shows this well to be low by some 450 feet to the crest of our seismic structure and separated from this structure by synclinal trough, synclinal trough running through the northern part of Sections 2 and 1 of 2132. This well also is of considerable significance to us, in that the Morrow Sands that we contemplate of being perspective were not tested in any fashion in this well and the zones in the Bone Springs, which we consider to be perspective were also not tested in this well. However, correlation from this

well to the Lea pool, some eight miles to the northeast, is quite good and we feel that we have good correlation between known producing horizons in these two formations at the Lea pool, so we consider the likelihood of these perspective reservoirs as being present on the structure to be quite good.

Q Were Exhibits 2 and 3 prepared by you, or under your supervision?

A Exhibit Number 3, the report, was prepared by me. The Exhibit Number 2, the seismic structure map, was not prepared by me. This map was prepared by our district geophysicist.

Q Have you examined Exhibit Number 2 and in your opinion does it correctly reflect the information shown on the Devonian?

A Yes, it does.

MR. KELLAHIN: At this time I would like to offer Exhibits 2 and 3.

MR. UTZ: Without objection, Exhibits 2 and 3 will be entered into the record of this case.

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

MR. KELLAHIN: That's all I have of this witness, Mr. Utz.

MR. UTZ: Are there any questions of the witness?

He may be excused.

(Witness excused.)

MR. KELLAHIN: I would like to call Mr. Wolfenberger.

DON WOLFENBERGER, called as a witness on behalf of the Applicant, first having been duly sworn, was examined and testified as follows:

DIRECT EXAMINATION

BY MR. KELLAHIN:

Q Would you state your name, please?

A Don Wolfenberger.

Q How do you spell that, Mr. Wolfenberger?

A W-o-l-f-e-n-b-e-r-g-e-r.

Q By whom are you employed and in what position?

A Phillips Petroleum Company, Senior Lease Man.

Q Where are you located, Mr. Wolfenberger?

A Midland, Texas.

Q Have you ever testified before the Oil Conservation Commission?

A No, I haven't.

Q In your duties as Senior Lease Man, how long have you been working in the state of New Mexico?

A Since 1959.

Q And have you handled leases for Phillips in this

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area during that period of time?

A Yes.

Q Did you have anything to do with the examining of lease data and getting agreement to the proposed Hat Mesa unit agreement?

A Yes, I did.

Q In that connection, Mr. Wolfenberger, did you find anything about the leases in regard to the potash area?

A Yes, we found that our unit fell in the secondary potash area as designated in October 16, 1951, also, the revised area of May 11th, 1965 and a small portion in the south part of the unit area falls in our 1 11A area.

(Whereupon, Applicant's Exhibit Number 4 was marked for identification.)

Q Now, referring to what has been marked as Exhibit Number 4, does that show the potash area?

A Yes.

Q How is it shown on that Exhibit?

A It is outlined in red.

Q The area outlined in red is that portion of the area included under the Oil Conservation Commission's Order R No. 1 11A?

A True.

Q What does the other colored area signify?

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A The orange area is potash leases owned by Potash Company of America and the green acreage is U. S. Borax.

Q And the entire unit area, as I understand it, is in the area designated by the Secretary of Interior as a potash area, is that correct?

A Yes.

Q Now, is there any potash development in the vicinity of this unit?

A No.

Q How far away is the nearest potash development?

A Kerr-McGee, approximately eight miles west.

Q As far as you know, then, there is no prospect of development in the immediate vicinity of this unit?

A That's true. The federal acreage in the area does not have potash leases on it.

Q And the leases that are there are all state leases?

A State leases held by production over ten years.

Q Now, in connection with Exhibit Number 4, is that a revision of Exhibit A attached to the unit agreement?

A Yes.

Q Now, is there an error in connection with one of the lease numbers there?

A Right. On, except in the unit agreement, Tract 2

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there is two inverted numbers there. That number should be 028705 on the federal.

Q Now, you are familiar --

MR. UTZ: Tract 2?

THE WITNESS: Yes and the corrections have been made on the unit agreement.

Q (By Mr. Kellahin) Are you familiar with the exploration dates on the various leases involved in this unit?

A Yes, indeed.

Q Is there any reason for immediate action on this application before the Oil Conservation Commission?

A Yes, Tract 2, which is the same eighty acre tract, is Phillips' tract and the ten year term expires May 31st, 1967. We would like to get this well drilling prior to, or before, the 20th of May.

Q Now, do you anticipate that you can have not less than seventy-five percent of the working interests signed up by that date?

A Absolutely yes.

Q What is the situation as to the royalty interests, or do you know?

A We have twenty-six royalty interests owners in the unit, overriding royalty owners in the unit, and at the present time, twenty-two have executed a ratification and

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and the four others have indicated they would as soon as possible.

Q And, other than the one Atlantic tract, you anticipate one hundred percent participation on the working interests, is that correct?

A Yes, sir.

Q Was Exhibit Number 4 prepared by you or under your supervision?

A Yes, sir.

MR. KELLAHIN: I would like to offer Exhibit Number 4.

MR. UTZ: Without objection, Exhibit Number 4 will be entered into the record.

(Whereupon, Applicant's Exhibit Number 4 was admitted into evidence.)

MR. KELLAHIN: That's all I have Mr. Utz.

MR. UTZ: Are there any questions of the witness? The witness may be excused.

(Witness excused.)

MR. UTZ: Statements in this case? The case will be taken under advisement.

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STATE OF NEW MEXICO)
) ss
 COUNTY OF BERNALILLO)

I, JERRY POTTS, Notary Public, do hereby certify that the foregoing and attached transcript of proceedings before the New Mexico Oil Conservation Commission Examiner at Santa Fe, New Mexico, is a true and correct record to the best of my knowledge, skill and ability.

In Witness whereof, I have affixed my hand and notarial seal this 15th of June, 1967.

Jerry Potts
 Notary Public

My Commission Expires:
 July 10, 1970

I hereby certify that the foregoing is a true and correct record of the proceedings in the hearing of Case No. 3560, held at Santa Fe, New Mexico, on June 15, 1967.
Therese J. [Signature] Examiner
 New Mexico Oil Conservation Commission

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