



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

NOV 15 1967

Tamarack Petroleum Company, Inc.  
910 Bank of the Southwest Building  
Midland, Texas 79701

Attention: Mr. Albert G. Metcalfe

Gentlemen:

Your application of September 16 filed with the Oil and Gas Supervisor, Roswell, New Mexico, requests the designation of the South Pearl Queen unit encompassing 1,520 acres in Lea County, New Mexico, as logically subject to unit operations under the unitization provisions of the Mineral Leasing Act, as amended. Our records show the proposed unit area embraces 1,522.71 acres, containing 1,320.77 acres (86.8 percent) of Federal lands and 201.94 acres (13.2 percent) of fee lands. Please recheck and correct your acreage figures, if appropriate.

Unitization is for the purpose of conducting secondary recovery operations by waterflooding and will be limited to the Queen formation as defined in Section 2(f) of the unit agreement. The unit area has been developed by 28 wells completed in the formation to be unitized. Phase I participation is based 100 percent on current production for the period from January 1, 1967, to July 1, 1967. Phase II participation is based 75 percent on reservoir volume and 25 percent on cumulative production. You estimate the waterflood project will result in the recovery of 1,614,525 barrels of oil over and above that recoverable by primary methods.

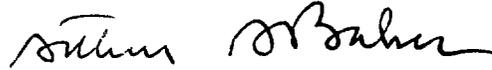
The land outlined on your plat marked "Exhibit A, South Pearl Queen Unit, Lea County, New Mexico," is acceptable as a logical unit area for secondary recovery operations. Your proposed form of unit agreement which modifies the standard form (1961 reprint) to the extent necessary to cover conditions incidental to secondary recovery operation of a producing unit will be acceptable if further modified as

BEFORE EXAMINER NUTTER	
CONSERVATION COMMISSION	
<i>Open C</i>	EXHIBIT NO. <u>2</u>
CASE NO.	<u>3730 - 573</u>

marked on the attached form. One copy of the marked form is returned herewith and the remaining copies are retained for distribution to the appropriate offices of the Geological Survey.

In the absence of any type of land requiring special provisions or any other objections not now apparent, a duly executed agreement conformed to the marked copy will be approved if submitted in approvable status within a reasonable period of time. However, the right is reserved to deny approval of any executed agreement that, in our opinion, does not have the full commitment of sufficient lands to afford effective control of secondary recovery operations. Please include the latest status of all acreage when the executed agreement is submitted for final approval.

Sincerely yours,

A handwritten signature in cursive script, appearing to read "Arthur Bohner".

Acting Director



Unit Agreement  
South Pearl Queen Unit  
Lea County, New Mexico

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SOUTH PEARL QUEEN UNIT AGREEMENT  
LEA COUNTY, NEW MEXICO

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THIS AGREEMENT entered into as of the 1st day of September 1967, by and between the parties subscribing, ratifying or consenting hereto, and herein referred to as "parties hereto".

W I T N E S S E T H:

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

WHEREAS, the Mineral Leasing Act of February 25, 1920, 41 Stat. 437, as amended, 30 U.S.C. Sec. 181 et seq, authorizes Federal leasees and their representatives to unite with each other, or jointly or separately with others, in collectively adopting and operating a co-operative or unit plan of development or operation of any oil or gas pool, field, or like area, or any part hereof 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 Oil Conservation Commission of the State of New Mexico is authorized by an Act of the Legislature (Article 3, Chapter 65, Vol. 9, Part 2, 1953 Statutes) to approve this agreement and the conservation provisions hereof, and

WHEREAS, the parties hereto hold sufficient interests in the South Pearl Queen 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 privately owned lands, the oil and gas operating regulations in effect as of the effective date hereof governing drilling and producing operations, not inconsistent with the terms hereof or the laws of the State of New Mexico are hereby accepted and made a part of the agreement.

2. DEFINITIONS. For the purpose of this agreement, the following terms and expressions as used herein shall mean:

(a) "Commission" is defined as the Oil Conservation Commission of the State of New Mexico.

(b) "Director" is defined as the Director of the United States Geological Survey.

(c) "Secretary" is defined as the Secretary of the Interior of the United States of America.

(d) "Department" is defined as the Department of the Interior of the United States of America.

(e) "Supervisor" is defined as the Oil and Gas Supervisor of the United States Geological Survey.

(f) "Unitized Formation" Shall mean that subsurface portion of the unit area commonly known as the Queen Sand zone and more specifically defined as that formation occurring between the depths below rotary drive bushing according to the well logs described below:

<u>Operator</u>	<u>Location, Lease and Well number</u>	<u>Top of Unitized Formation</u>	<u>Base of Unitized Formation</u>	<u>Type Log</u>
Tamarack Petroleum Company, Inc.	Federal #2 - 1980' FSL & 660 FEL, Sec. 4, T20S-R35E	4553 ft.	4986 ft.	Schlumberger Gamma Ray-Sonic, dated

(g) "Unitized Substances" is defined as and shall mean all oil and gas, gaseous substances, sulphur contained in gas, condensate, distillate and all associated and constituent liquids or liquefiable hydrocarbons within or produced from the Unitized Formation.

(h) "Working Interest" is defined as the right to search for, produce and acquire Unitized Substances whether held as an incident of ownership of mineral fee simple title, under an oil and gas lease, or otherwise held.

(i) "Working Interest Owner" is defined as and shall mean any party hereto owning a Working Interest, including a carried working interest owner, holding an interest in Unitized Substances by virtue of a lease, operating agreement, fee title or otherwise, which interest is chargeable with and obligated to pay or bear, either in cash or out of production, or otherwise, all or a portion of the cost of drilling developing, operating and producing the Unitized Substances from the Unitized Formation.

(j) "Royalty Interest" or "Royalty" is defined as an interest other than a Working Interest in or right to receive a portion of the Unitized Substances or the proceeds thereof and includes the royalty interest reserved by the lessors in oil and gas leases and any overriding royalty interest, oil payment interest, net profit contract, or any other payment or burden which does not carry with it the right to search for and produce Unitized Substances.

(k) "Royalty Owner" is defined as and shall mean the owner of a Royalty Interest.

(l) "Unit Operating Agreement" is defined as and shall mean any agreement or agreements (whether one or more) entered into (separately or collectively) by and between the unit operator and the Working Interest Owners as provided in Section 8, infra, and shall be styled "Unit Operating Agreement, South Pearl Queen Unit, Lea County, New Mexico.

(m) "Paying Quantities" is defined as production of Unitized Substances in quantities sufficient to pay for the cost of producing same from wells on the unitized land.

(n) "Phase I" is defined as that period of time that Unitized Substances are produced from the unit area from and after the effective date of this agreement until 7:00 a.m. the first day of the calendar month ensuing after 316,200 barrels of oil minus the gross oil production from March 1, 1967 to the effective date of this agreement have been produced from the Unitized Formation. For the purpose of this definition the Operator's Monthly Report, Form C-115, filed with the New Mexico Oil Conservation Commission shall be deemed the controlling evidence of the production of 316,200 barrels of oil after March 1, 1967.

(o) "Phase II" is defined as the remainder of the term of this agreement after the expiration of Phase I.

(p) "Current Rate" is defined as the total amount of oil produced from any tract within the unit area during the period of January 1, 1967 through June 30, 1967.

(q) "Cumulative Production" for each tract is defined as the total amount of oil produced from the Unitized Formation from the date of initial production through June 30, 1967. For the purposes of this definition the Operator's Monthly Report, Form C-115, filed with the New Mexico Oil Conservation Commission shall be deemed the controlling evidence of the

cumulative production from each tract.

(r) "Productive Volume" is defined as that sand volume under each tract deemed oil productive and will be the volume as expressed in acre feet in the Leibrock, Landreth, Campbell & Callaway revised report dated April 25, 1967.

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

Township 20 South, Range 35 East, N.M.P.M.

Section 3	W/2, NW/4 of NE/4
Section 4	S/2, S/2 of NE/4, NE/4 of NE/4, SE/4 of NW/4
Section 5	S/2 of SE/4, NE/4 of SE/4
Section 8	NE/4 of NE/4
Section 9	N/2
Section 10	NW/4, NW/4 of NE/4

Containing 1522.71 acres, more or less.

Exhibit "A" attached hereto is a map showing, to the extent known to the Unit Operator, the unit area and the boundaries and identity of tracts and leases in said unit area. Exhibit "B" attached hereto is a schedule showing, to the extent known to the Unit Operator, the acreage comprising each tract, percentage of ownership of each Working Interest Owner in each tract, the ownership of the Royalty in each tract and the Record Title interest in each tract. Exhibit "C" attached hereto is a schedule showing the percentage of participation each tract will have in the unit production based upon the assumption that all tracts are effectively committed to Unit Agreement. 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 interest as are shown in said map or schedule as owned by such party. Exhibit "A", "B", and "C" shall be revised by the Unit Operator whenever changes render such revision necessary, and not less than six copies thereof shall be filed with the Supervisor.

The above described unit area may, when practicable, be expanded to include therein any additional tract or tracts regarded as reasonably necessary or advisable for the purposes of this agreement to conform with the purposes of this agreement. Such expansion shall be effected in the following manner:

(a) The Working Interest Owner or owners of a tract or tracts desiring to bring such tract or tracts into this unit, shall file an application therefore with Unit Operator requesting such admission.

(b) Unit Operator shall circulate a notice to each Working Interest Owner of the proposed expansion, setting out the basis for admission, the unit participation to be assigned to such tract or tracts, and other pertinent data. If 90 per cent of the Working Interest Owners (on the basis of unit participation for Phase II) have agreed to such tract or tracts being brought into the unit, then Unit Operator shall after preliminary concurrence by the Director:

(1) Prepare a notice of proposed expansion describing the contemplated changes in the boundaries of the unit area, the reason therefore, the basis for admission of the additional tract or tracts, the unit participation to be assigned thereto and the proposed effective date thereof, preferably the first day of a month subsequent to the date of notice; and

(2) Deliver copies of said notice to the Director each Working Interest Owner and to the lessee and lessor whose interests are affected, advising such parties that thirty (30) days will allowed for submission to the Unit Operator of any objection to such proposed expansion; and

(3) File, for approval upon the expiration of said thirty (30) day period as set out in (2) immediately above with the Commission and the Director the following: (a) comprehensive statement as to mailing such notice of expansion; (b) sufficient copies of any application for such expansion; (c) sufficient copies of any instrument containing the appropriate joinders in compliance with the participation requirements of Section 12, infra; (d) copies of any objections thereto which have been filed with the Unit Operator.

The expansion shall, after due consideration of all pertinent information and upon approval by the Director and the Commission become effective as of the date prescribed in the notice thereof or on such other date as set by the Commission and the Director in the order or instrument approving such expansion.

4. UNITIZED LAND AND UNITIZED SUBSTANCES. All lands committed to this agreement as to the South Pearl Queen formation as defined under "Unitized Formation" shall constitute land referred to herein as "Unitized Land" or "land subject to this agreement". All oil and gas in or produced from said Unitized Formation of the "Unitized Land" are unitized under the terms of this agreement and herein are called "Unitized Substances". Surface rights of ingress and egress shall be maintained for the benefit of the unit.

Nothing herein shall be construed to unitize, pool or in any way affect the oil, gas and other minerals contained in or that may be produced from any for-

mation other than the Unitized Formation.

5. UNIT OPERATOR. Tamarack Petroleum Company, Inc. with office at Midland, Texas, is hereby designated as Unit Operator, and by signing the instrument as Unit Operator it agrees and consents to accept the duties and obligations of Unit Operator for the operation, development and production of Unitized Substances as herein provided.

6. RESIGNATION OR REMOVAL OF UNIT OPERATOR. Unit Operator shall have the right to resign at any time, 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 ninety (90) days after notice of intention to resign has been served by Unit Operator on all Working Interest Owners, and the Director, and until all wells then drilled hereunder are placed in a satisfactory condition for suspension or abandonment whichever is required by the Supervisor, unless a new unit Operator shall have been selected and accepted and shall have taken over and assumed the duties and obligations of Unit Operator prior to the expiration of said period.

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.

Working Interest Owners may remove Unit Operator at any time by the affirmative vote of at least eighty percent (80%) of the voting interest remaining after excluding the voting interest of Unit Operator. Such removal shall be effective upon notice thereof to the Director.

In all instances of resignation or removal, until a successor Unit Operator is selected and accepted as hereinafter provided, the Working Interest Owners shall be jointly responsible for performance of the duties of the Unit Operator and shall, not later than 30 days before such resignation or removal becomes effective, appoint a common agent to represent them in any action to be taken hereunder.

The resignation 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 wells, equipment, books and records, materials, appurtenances and any other assets used in conducting the unit operations and owned by the Working Interest Owners (including any and all data and information which it might have gained or assembled by reason of its operation of the unit area) 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.

7. SUCCESSOR UNIT OPERATOR. Whenever the Unit Operator shall tender its resignation as Unit Operator or shall be removed as hereinabove provided, or a change of Unit Operator is negotiated by Working Interest Owners, a successor Unit Operator shall be selected by Working Interest Owners. If the Unit Operator that is removed votes only to succeed itself or fails to vote, the successor Unit Operator may be selected by the affirmative vote of two or more Working Interest Owners having at least fifty-one percent (51%) of the voting interest remaining after excluding the voting interest of the Unit Operator that was removed. Such selection shall not become effective until:

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

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

8. ACCOUNTING PROVISIONS AND UNIT OPERATING AGREEMENT. Costs and expenses incurred by Unit Operator in conducting unit operations hereunder shall be paid, apportioned among and borne by the Working Interest Owners

in accordance with 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 the 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 obligations 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 true copies thereof shall be filed with the Supervisor prior to approval of this agreement.

9. 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 his capacity as Unit Operator, shall exercise the rights of possession and use vested in the parties hereto only for the purposes herein specified.

10. PLAN OF OPERATIONS. It is recognized and agreed by the parties hereto that a large percentage of the land subject to this agreement is reasonably proved to be productive of Unitized Substances in paying quantities and that the object and purpose of this agreement is to formulate and to put into

effect a pressure maintenance and secondary recovery project in order to effect additional recovery of Unitized Substances, prevent waste and conserve natural resources. The parties hereto agree that the Unit Operator may, subject to the consent and approval of a plan of operation by the Working Interest Owners, the Supervisor and the Commission, inject into the Unitized Formation, through any well or wells completed therein, brine, water, air, gas, oil, liquefied petroleum gas, and any other substances or a combination of any of said substances, whether produced from the Unit Area or not, and that the location of input wells and the rate of injection therein and the rate of production shall be governed by standards of good geologic and petroleum engineering practices and conservation methods, After commencement of pressure maintenance and secondary recovery operations, Unit Operator shall furnish the Commission, and the Supervisor monthly injection and production reports for each well in the unit. The Working Interest Owners, the Supervisor and the Commission shall be furnished periodical reports on the progress of the plan of operation and any revisions or changes thereto; provided, however, that any major revisions of the plan of operations involving a basic deviation from the initial plan of operations shall be subject to the consent and approval of the Working Interest Owners, the Supervisor and the Commission.

The initial plan of operations shall be filed with the Supervisor and the Commission concurrently with the filing of this Unit Agreement for final approval. Said initial plan of operation and all revisions thereof shall be as complete and adequate as the Supervisor and the Commission may determine to be necessary for timely operation consistent herewith. Reasonable diligence shall be exercised in complying with the obligations of the approved plan of operation.

Notwithstanding anything to the contrary herein contained, the Unit Operator shall commence pressure maintenance and secondary recovery operations on the unit area within six (6) months after the effective date of this agreement, or any extension thereof approved by the Commission and the Director, or this agreement shall terminate automatically, in which latter event Unit Operator shall notify all interested parties. After such operations are commenced, Unit Operator

shall carry on such operations as would a reasonably prudent operator under the same or similar circumstances.

11. TRACT PARTICIPATION. Exhibit "C" attached hereto shows the percentage of participation allocated to each tract in the unit area during Phase I and during Phase II, as defined in subsections (n) and (o) specifically of Section 2 hereof. The formulas used for the calculations of such percentages of participations are as follows:

(a) Phase I participation of each tract, beginning at 7:00 a. m. on the effective date hereof and until 7:00 a. m. on the first day of the month next following the date when cumulative oil production from all of the tracts described in Exhibit "B" from the Unitized Formation subsequent to 7:00 a. m. March 1, 1967 equal 316,200 barrels, shall be equal to one hundred per cent (100%) of the ratio of the Current Rate of production from each tract to the total Current Rate of production from all such tracts.

(b) Phase II participation of each tract beginning at 7:00 a. m. on the first day of the month following the date when the 316,200 barrels referred to above shall have been produced, shall be equal to twenty-five per cent (25%) of the ratio of the Cumulative Production from each of such tracts, to the total Cumulative Production of all such tracts plus seventy-five per cent (75%) of the ratio of the Productive Volume of each tract to the total Productive Volume of all such tracts.

The percentages of participation set forth opposite each tract in Exhibit "C" are calculated on the basis of 100% tract commitment. If the Unit Agreement is approved with less than 100% tract commitment, said percentage of participation shall be revised to reflect the commitment status as of the effective date hereof, using the above formulas as to the committed tracts only and thereafter, as needed, pursuant to Section 13, (Allocation of Unitized Substances.)

12. TRACTS QUALIFIED FOR PARTICIPATION. As the objective of this Unit Agreement is to have lands in the Unit Area operated and entitled to participation under the terms hereof, it is agreed that, notwithstanding anything else herein, no joinder shall be considered a commitment to this Unit Agreement unless the tract involved is qualified under this section. On and after the effective date hereof, the Tracts within the Unit Area that shall be entitled to participate in the production of Unitized Substances therefrom shall be the Tracts within the Unit Area that are qualified as follows (the record interest shall supplant the

royalty interest as to Federal land for purposes of this section):

(a) Each Tract as to which Working Interest Owners owning one hundred per cent (100%) of the Working Interest therein have become parties hereto and as to which Royalty Owners owning seventy-five per cent (75%) or more of the Royalty Interest therein have become parties hereto.

(b) Each Tract as to which Working Interest Owners owning one hundred per cent (100%) of the Working Interest therein have become parties hereto and as to which Royalty Owners owning less than seventy-five per cent (75%) of the Royalty Interest therein have become parties hereto and, further, as to which:

(i) All Working Interest Owners in any such Tract have joined in a request for the qualification of such Tract under this agreement, and

(ii) Seventy-five per cent (75%) of the combined voting interests of Working Interest Owners in all Tracts meeting the requirements of Section 12 (a) hereof have voted in favor of the qualification of such Tract.

For the Purposes of this Section 12 (b), a Working Interest Owner's "voting interest" shall be equal to the ratio (expressed in per cent) which its aggregate Phase II Unit Participation in all Tracts qualifying under Section 12 (a) bears to the Total Phase II Unit Participation of all Working Interest Owners in all Tracts qualifying under Section 12 (a), as such Unit Participation is determined from the Tract Participations set out in Exhibit "C".

(c) Each Tract as to which Working Interest Owners owning less than one hundred per cent (100%) of the Working Interest therein have become parties hereto, regardless of the percentage of Royalty Interest therein which is committed hereto and, further, as to which:

(i) The Working Interest Owner Operating any such Tract and all of the other Working Interest Owners in such Tract who have become parties hereto have joined in a request for the qualification of such Tract under this agreement and have executed and delivered an indemnity agreement indemnifying and agreeing to hold harmless the other Working Interest Owners in the Unit Area, their successors and assigns, against all claims and demands which may be made by the owners of working interests in such Tract who are not parties hereto and which arise out of the qualification of such Tract under this agreement, and

(ii) Seventy-five per cent (75%) of the combined voting interest of Working Interest Owners in all Tracts meeting the requirements of Section 12 (a) and 12 (b) have voted in favor of the qualification of such Tract and acceptance of the indemnity agreement.

For the purpose of this Section 12 (c), a Working Interest Owner's "voting interest" shall be equal to the ratio (expressed in per cent) which its aggregate Phase II Unit Participation in all Tracts qualifying under Section 12 (a) and 12 (b) bears to the total Phase II Unit participation of all Working Interest Owners in all Tracts Qualifying under Section 12 (a) and 12 (b) as such Unit Participation is determined from

the Tract Participations set out in Exhibit "C" upon the qualification of such a Tract under this agreement, the Unit Participation that would have been attributed to the nonsubscribing owners of the Working Interest in such Tract, had they become parties to this agreement and the Unit Operating Agreement, shall be attributed to the Working Interest Owners in such Tract who have become parties to such agreements in proportion to their respective Working Interest in the Tract.

If, on the effective date of this agreement, there is any tract or tracts which have not been committed to or made subject to this agreement by qualifying as above provided, then such tract or tracts shall not be entitled to participate hereunder. Unit Operator shall, when submitting this agreement for final approval by the Director or as soon thereafter as practical file a revised Exhibit "C" which shall show those tracts which have been qualified under this agreement and are entitled to participate in the production from the unit area hereunder. Said revised Exhibit "C" shall set forth opposite each qualified tract the lease number and assignment number, the owner of record of the lease, and the percentage of participation of such tract which shall be computed according to the participation formulas set out in Section II (Tract Participation) above and, upon approval thereof by the Director shall become a part of this agreement and shall govern the allocation of production of Unitized Substances until the effective date of a subsequent revised Exhibit "C" has been approved by the Director.

13. ALLOCATION OF UNITIZED SUBSTANCES. All Unitized Substances produced and saved (less, save and except any part of such Unitized Substances used in conformity with good operating practices on unitized land for drilling, operating, camp and other production or development purposes and for pressure maintenance or unavoidable loss) shall be apportioned among and allocated to the committed tracts within the unit area in accordance with the respective tract participations then effective hereunder during the respective periods such Unitized Substances were produced, as set forth in the schedule of participation in Exhibit "C". The amount of Unitized Substances so allocated to each tract, and only that amount, (regardless of whether it be more or less than the amount of the actual production of Unitized Substances from the well

or wells, if any, on such tract) shall, for all intents, uses and purposes be deemed to have been produced from such tract.

The Unitized Substance allocated to each tract shall be distributed among, or accounted for, to the parties executing, consenting to or ratifying this agreement entitled to share in the production from such tract in the same manner, in the same proportions, and upon the same conditions, as they would have participated and shared in the production from such tracts, or in the proceeds thereof, had this agreement not been entered into; and with the same legal force and effect.

No tract committed to this agreement and qualified for participation as above provided shall be subsequently excluded from participation hereunder on account of depletion of Unitized Substances, and nothing herein contained shall be construed as requiring any retroactive adjustment for production obtained prior to the effective date of the joinder of any tract.

If the working interest and/or the royalty interest in any tract are divided with respect to separate parcels or portions of such tract and owned severally by different persons, the percentage participation assigned to such tract shall, in the absence of a recordable instrument executed by all owners and furnished to Unit Operator fixing the division of ownership, by division of ownership, be divided among such parcels or portions in proportion to the number of surface acres in each.

The Unitized Substances allocated to each tract shall be delivered in kind to the respective Working Interest Owners and parties entitled thereto by virtue of the ownership of oil and gas rights therein or by purchase from such owners. Each Working Interest Owner and the parties entitled thereto shall have the continuing right to receive such production in kind at a common point within the unit area and to sell or dispose of the same as it sees fit. Each such party shall have the right to construct, maintain and operate all necessary facilities for that purpose on unitized land, provided the same are so constructed, maintained and operated as not to interfere with operations carried on pursuant hereto. Subject to Section 14

hereof, any extra expenditure incurred by Unit Operator by reason of the delivery in kind of any portion of the Unitized Substances shall be borne by the party receiving the same in kind. In the event any party hereto shall fail to take or otherwise adequately dispose of its proportionate share of the production from the unit area currently as and when produced, then so long as such conditions continue, Unit Operator, for the account and at the expense of such party and in order to avoid curtailing the operation of the unit area, may sell or otherwise dispose of such production to itself or others on a day-to-day basis at not less than prevailing market price in the area for like production, and the account of such party shall be charged therewith as having received such production. The net proceeds, if any, of the unitized substances so disposed of by Unit Operator shall be paid to the party entitled thereto.

Any party receiving in kind or separately disposing of all or any part of the Unitized Substances allocated to any tract, or receiving the proceeds therefrom if the same is sold or purchased by Unit Operator, shall be responsible for the payment of all royalty on the lease or leases and tracts contributed by it and received into the unit, and each such party shall hold each other party hereto harmless against all claims, demands and causes of action for such royalty on the lease or leases and tracts contributed by it and received into the unitized land.

If, after the effective date of this agreement there is any tract or tracts that are subsequently committed hereto as provided in Section 3 (Unit Area) hereof, or any tract or tracts within the unit area not committed hereto as of the effective date hereof but which are subsequently committed hereto under the provisions of Section 31 (Nonjoinder and Subsequent Joinder), or if any tract is excluded from the unit agreement as provided for in Section 28 (Loss of Title), the schedule of participation as shown in Exhibit "C", subject to Section 11 (Tract Participation) or Section 31 (Nonjoinder and Subsequent Joinder), whichever is appropriate, shall be revised by the Unit Operator and distributed to the Working Interest Owners, the Director to show the new percentages of participation of all then effectively committed tracts; and the revised schedule, upon approval by the Director, shall govern all the allocation of production from and after the effective date thereof until the effective date of a new schedule approved by the Director.

Unit Operator may use as much of the Unitized Substances as it may reasonably deem necessary for the operation and development of the unit area, including but not limited to the injection of Unitized Substances into the formation.

14. ROYALTY SETTLEMENT. The United States of America and all royalty owners who, under an existing contract, are entitled to take in kind a share of the substances produced from any tract unitized hereunder, shall continue to be entitled to such right to take in kind their share of the Unitized Substances allocated to such tract, and Unit Operator shall make deliveries of such royalty share taken in kind in conformity with the applicable contracts, laws and regulations. Settlement for royalty interests not taken in kind shall be made by Working Interest Owners responsible therefore under existing contracts, laws and regulations, on or before the last day of each month for Unitized Substances produced during the proceeding 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 royalty due under their leases, except that such royalty shall be computed in accordance with the terms of this unit agreement.

If gas, or any other substances, obtained from lands not subject to this agreement, is introduced into the Unitized Formation for use in repressuring, stimulation of production or increasing ultimate recovery in conformity with a plan approved pursuant to Section 10 (Plan of Operations), a like amount of gas or such other substance, less appropriate deductions for loss from any cause, may be withdrawn from the Unitized Formation, royalty free as to dry gas (but not as to the products extracted therefrom) or such other substance; provided such withdrawal shall be pursuant to such conditions and formulas as may be prescribed or approved by the Supervisor; and provided further that such right of royalty freewithdrawal shall terminate as of the effective date of termination of the unit agreement.

All Royalty due the United States of America and the other royalty owners hereunder shall be computed and paid on the basis of Unitized Substances allocated to the respective tract or tracts committed hereto, in lieu of actual pro-

duction from such tract or tracts.

Each royalty owner (other than the United States of America) that executes this agreement represents and warrants that it is the owner of a royalty interest in a tract or tracts within the unit area as its interest appears in Exhibit "B" attached hereto. If any royalty interest in a tract or tracts should be lost by title failure or otherwise in whole or in part, during the term of this agreement, then the royalty interest of the party representing himself to be the owner thereof shall be reduced proportionately and the interest of all parties shall be adjusted accordingly.

15. RENTAL SETTLEMENT. Rentals or minimum royalties due on leases committed hereto shall be paid by Working Interest Owners responsible therefore 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 of America subject to this agreement shall be paid at the rate specified in the respective leases from the United States of America, unless rental or minimum royalty is waived, suspended, or reduced by law or by approval of the Secretary or his duly authorized representative.

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 Federal and State laws and regulations.

17. DRAINAGE. The Unit Operator shall take appropriate and adequate measures to prevent drainage of Unitized Substances from unitized land by wells on land not subject to this agreement.

18. LEASES AND CONTRACTS CONFORMED AND EXTENDED. The terms, conditions and provisions of all leases, subleases and other contracts relating to exploration, drilling, development or operations for oil or gas on lands committed to this agreement are hereby expressly modified and amended.

to the extent necessary to make the same conform to the provisions hereof, but otherwise to remain in full force and effect, and the parties hereto consent that the Secretary shall and by his approval hereof, hereby establish, alter, change or revoke the drilling, producing, rental, minimum royalty and royalty requirements of Federal leases committed hereto and the regulations in respect thereto to conform said requirements to the provisions of this agreement.

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, producing or secondary recovery operations performed hereunder upon any tract of unitized lands shall 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 land therein embraced.

(c) Suspension of drilling or producing operations on all unitized lands pursuant to direction or consent of the Secretary or his 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 and gas 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 so long as such land remains committed hereto.

(e) The segregation of any Federal lease committed to this agreement is governed by the following provisions in the fourth paragraph of Section 17, (j) of said Act of February 25, 1920, as amended by the Act of September 2, 1960 (74 Stat. 781-784): "Any (Federal) lease hereto fore or hereafter committed to any such plan (Unit) embracing lands that are in part within and in part outside of the area covered by any such plan shall be segregated into separate leases as to the land committed and the lands not committed as of the effective date of unitization; provided, however, that any such lease as to the nonunitized portion shall continue in force and effect for the term thereof but for not less than two years from the date of such segregation and so long thereafter as oil or gas is produced in paying quantities."

19. MATHEMATICAL ERRORS. It is hereby agreed by all parties to this agreement that Unit Operator is empowered to correct any mathematical errors which might exist in the pertinent exhibit to this agreement upon approval of

the Supervisor and the Working Interest Owners.

20. 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 subject hereto shall be binding upon Unit Operator until the first day of the calendar month after Unit Operator is furnished with the original or acceptable photostatic or certified copy of the recorded instrument of transfer; and no assignment or transfer of any royalty interest subject hereto shall be binding upon the Working Interest Owner responsible therefore until the first day of the calendar month after said Working Interest Owner is furnished with the original or acceptable photostatic or certified copy of the recorded instrument of transfer.

21. EFFECTIVE DATE AND TERM. This agreement shall become binding upon each party who executes or ratifies it as of the date of execution or ratification by such party and shall become effective as of 7:00 a.m. of the first day of the month next following the approval of this agreement by the Director, and the Commission. At least one counter part of this agreement shall be filed for record in the office of the County Clerk of Lea County, New Mexico, by the Unit Operator. If this Unit Agreement is not filed for final approval by the Director on or before June 1, 1968 this agreement shall expire ipso facto on said date (hereinafter called "expiration date") and thereafter be of no further force or effect, unless prior thereto this agreement has been executed or ratified by Working Interest Owners having a combined Phase II Unit Participation of at least sixty-five per cent (65%), and the Working Interest Owners having at least eighty per cent (80%) of the combined Phase II Unit Participation committed to this agreement have decided to extend said expiration date for a period not to exceed one (1) year (hereinafter called "extended expiration date"). If said expiration date is so extended and

this Unit Agreement is not filed for final approval by the Director on or before said extended expiration date this agreement shall expire ipso facto on said extended expiration date and thereafter be of no further force or effect.

The term of this agreement shall be for and during the time that Unitized Substances are produced in Paying Quantities from the Unit Area and as long thereafter as diligent drilling, reworking or other operations (including secondary recovery operations) are prosecuted thereon without cessation of more than ninety (90) consecutive days; and as long thereafter as unitized substances can be produced as aforesaid, unless sooner terminated by Working Interest Owners in the manner hereinafter provided.

This agreement may be terminated at any time with the approval of the Director, by Working Interest Owners having at least ninety per cent (90%) Phase II Unit Participation, as determined from Exhibit "C". Notice of such termination shall be given by Unit Operator to all parties hereto.

Unit Operator shall within thirty (30) days after the termination date of this agreement, file for record in the office where a counterpart of this agreement is recorded, a certificate to the effect that this agreement has terminated according to its terms and stating further the termination date.

Upon termination of this agreement, the parties hereto shall be governed by the terms and provisions of the leases and contracts affecting the separate tracts.

22. RATE OF PROSPECTING, DEVELOPMENT AND PRODUCTION. All production and the disposal thereof shall be in conformity with allocations and quotas made or fixed by any duly authorized person or regulatory body under any Federal or State statute. The Director is hereby vested with authority to alter or modify from time to time at his discretion the quantity and rate of production under this agreement when such quantity and rate is not fixed pursuant to Federal and State law or does not conform to any state wide voluntary conservation or allocation program, which is established, recognized and generally adhered to by the majority of operators in such state, such authority

being hereby limited to alteration or modification in the public interest, the purpose thereof and the public interest to be served thereby to be stated in the order of alteration or modification. Without regard to the foregoing, the Director is also hereby vested with authority to alter or modify from time to time at his discretion the rate of prospecting and development and the quantity and rate of production under this agreement when such alteration or modification is in the interest of attaining the conservation objectives stated in this agreement and is not in violation of any applicable Federal or State law.

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

23. NONDISCRIMINATION. In connection with the performance of work under this agreement, the Unit Operator agrees to comply with all of the provisions of Section 202 (1) to (7) inclusive, of Executive Order 11246, as amended, (30 F. R. 12319), which are hereby incorporated by reference in this agreement.

24. APPEARANCES. Unit Operator shall, after notice to the other parties affected, have the right to appear for or on behalf of any and all interests affected hereby before the Department, and the Commission, and to appeal from any order issued under the rules and regulations of the Department or the Commission, or to apply for relief from any of said rules and regulations or in any proceedings relative to operations before the Department, or the Commission, or any other legally constituted authority; provided, however, that any other interested party shall also have the right at his or its own expense to be heard in any such proceeding.

25. NOTICES. All notices, demands, objections or statements required hereunder to be given or rendered to the parties hereto shall be deemed fully given if made in writing and personally delivered to the party or parties or sent by postpaid 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 or parties may have furnished in writing to the party sending the notice, demand or statement.

26. 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 laws of the United States of America or of the State of New Mexico or rules 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 waiver.

27. UNAVOIDABLE DELAY. All obligations under this agreement requiring the Unit Operator to commence or continue secondary recovery operations 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 agency, unvoidable accident, uncontrollable delays in transportation, inability to obtain necessary material in open market, or other matters beyond the reasonable control of the Unit Operator whether similar to matters herein enumerated or not.

28. LOSS OF TITLE. In the event title to any tract of unitized land shall fail so as to render the tract inoperable under this agreement and the true owner cannot be induced to join 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 interest subject hereto, payment or delivery on account thereof may be withheld without liability or interest until the dispute is finally settled; pro-

vided, that as to Federal land or leases, no payments of funds due the United States of America shall be withheld, but such funds shall be deposited as directed by the Supervisor to be held as unearned money pending final settlement of the title dispute, and then applied as earned or returned in accordance with such final settlement.

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

29. 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 provisions thereof to the extent that the said Unit Operator or the 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 matters or things concerning which it is required herein that such concurrence be obtained. The parties hereto and the Commission agree that all powers and authority vested in the Commission in and by any provisions of this agreement are vested in the Commission and shall be exercised by it pursuant to the provisions of the laws of the State of New Mexico and subject to any case to appeal or judicial review as may now or hereafter be provided by the laws of the State of New Mexico.

30. BORDER AGREEMENTS. Subject to the approval of the Supervisor, the Unit Operator, with concurrence of sixty-five per cent (65%) of the Working Interest Owners, based upon the percentages of participation during Phase II, may enter into a border protection agreement or agreements with the Working Interest Owners of adjacent lands along the boundaries of the unit area with respect to the operations in the border area for the maximum ultimate recovery, conservation

purposes and proper protection of the parties and interests.

31. NONJOINER AND SUBSEQUENT JOINER. Joinder by any Royalty Owner, at any time, must be accompanied by appropriate joinder of the corresponding Working Interest Owner in order for the interest of such Royalty Owner to be regarded as effectively committed. Joinder to the Unit Agreement by a Working Interest Owner, at any time, must be accompanied by appropriate joinder to the Unit Operating Agreement in order for such interest to be regarded as effectively committed to this unit agreement.

Any oil or gas interest in the lands in the unit area not committed hereto prior to submission of this agreement to the Director for final approval may thereafter be committed hereto upon compliance with the applicable provisions of this section and of Section 12 (Tracts Qualified for Unit Participation) hereof, at any time up to the effective date hereof and for a period to and including three (3) months thereafter, on the same basis of participation as provided in said Section 12 by the owner or owners thereof subscribing, ratifying, or consenting in writing to this agreement and, if the interest is a working interest, by the owner of such interest subscribing also to the Unit Operating Agreement.

It is understood and agreed, however, that from and after three (3) months from the effective date hereof the right of subsequent joinder as provided in this section shall be subject to such requirements or approval and on such equitable basis as may be agreed upon by ninety per cent (90%) of the Working Interest Owners (based upon the percentage of participation during Phase II). Such subsequent joinder by a Working Interest Owner must be evidenced by his execution or ratification of this agreement and the Unit Operating Agreement. Such subsequent joinder by a royalty owner must be evidenced by his execution, ratification or consent of this agreement and must be consented to in writing by the Working Interest Owner responsible for the payment of any benefits that may accrue hereunder in behalf of such royalty owner. Except as may be otherwise

herein provided, subsequent joinder to this agreement shall be effective at 7:00 o'clock a.m. as of the first day of the month following the filing with the Supervisor of duly executed counterparts of any and all documents necessary to establish effective commitment of any tract or interest to this agreement, unless objection to such joinder by the Director is duly made within sixty (60) days after such filing.

32. NO PARTNERSHIP. It is expressly agreed that the relation of the parties hereto is that of independent contractors and nothing in this agreement contained, expressed or implied, or any operations conducted hereunder shall create or be deemed to create a partnership or association between the parties hereto or any of them.

33. COUNTERPARTS. This agreement may be executed in any number of counterparts, no one of which needs to be executed by all parties and 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 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 have set opposite their respective names the date of execution.

DATE: Jan 8, 1968

TAMARACK PETROLEUM COMPANY, INC.

ATTEST:

Caryl Betlach  
Assistant Secretary

By: Olaf Knudsen  
Vice President

STATE OF TEXAS            )  
  ) SS  
COUNTY OF MIDLAND    )

Before me, the undersigned authority, on this day personally appeared Clay Knudsen, known to me to be the person whose name is subscribed to the foregoing instrument as \_\_\_\_\_ Vice President of TAMARACK PETROLEUM COMPANY, INC., and acknowledged to me that he executed the same for the purposes and consideration therein expressed, in the capacity therein stated, and as the act and deed of said Corporation.

GIVEN UNDER MY HAND AND SEAL of office on this the 8<sup>th</sup> day of January, 1968.

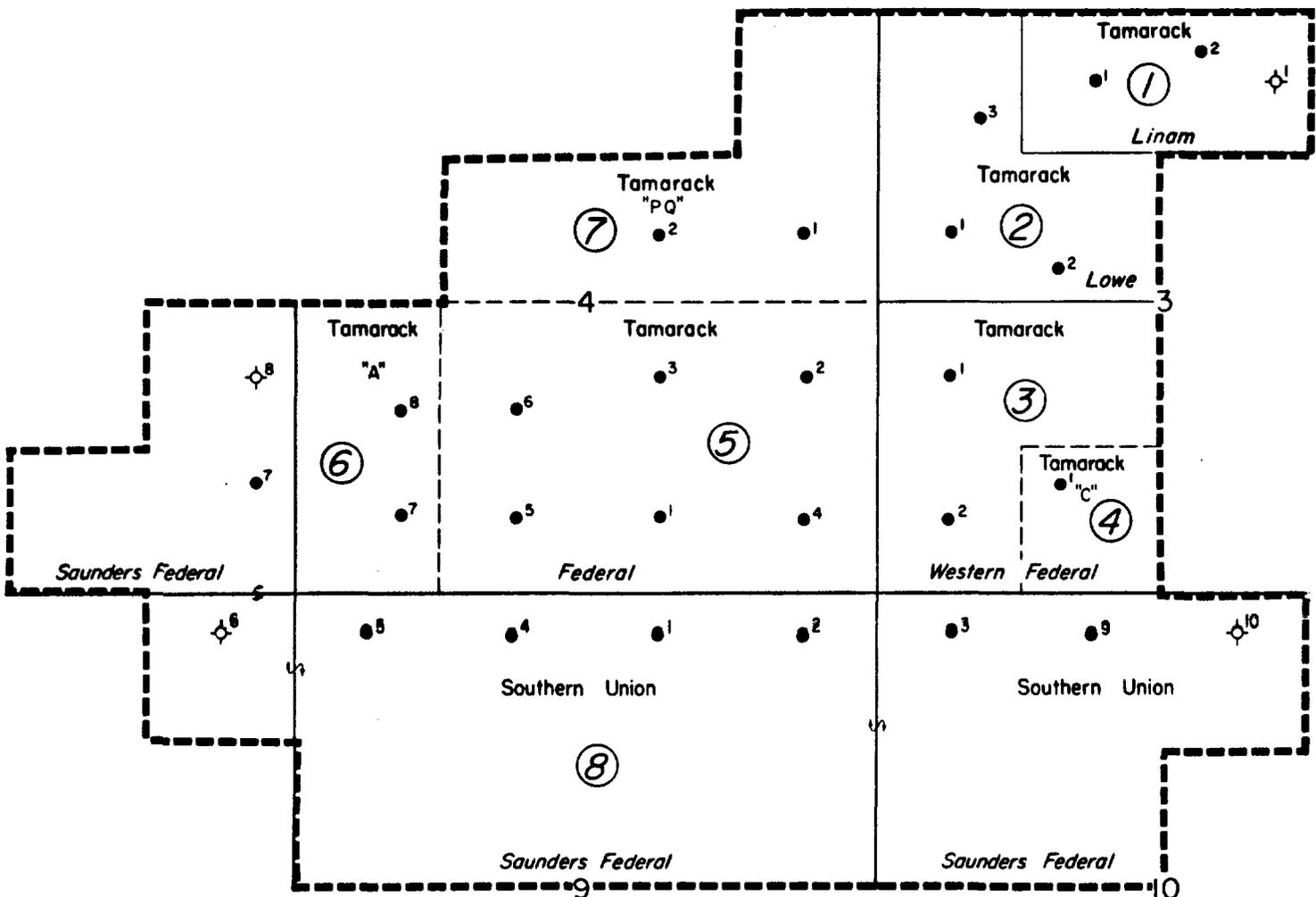
My commission expires:

June 1, 1969

James Reecer  
Notary Public in and for the State  
of Texas.

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LEGEND

② Tract Number

----- Unit Boundary

EXHIBIT "A"

TO UNIT AGREEMENT

SOUTH PEARL QUEEN UNIT

LEA COUNTY, NEW MEXICO

EXHIBIT "B"

SOUTH PEARL QUEEN UNIT AREA  
LEA COUNTY, NEW MEXICO  
T-20-S, R-35-E, N.M.P.M.  
Revised October 27, 1967

Tract No.	Description of Land	No. of Acres	Serial No. and Expiration Date	Basic royalty and ownership percentage	Lessee of record	Overriding Royalty and percentage	Working Interest and percentage
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Patented land

1 NW/4 NE/4,  
NE/4 NW/4  
Sec. 3

81.28

HBP

(Basic royalty  
3/16)

Georganna A.  
Vihlein - 1/6 of  
7/16

None.

Georganna A. Vihlein  
- 1/6 of 7/16 of  
13/16\*

Thelma Linam,  
a widow - 50%

7/16

Joseph E. Vihlein,  
Jr. - 1/6 of 7/16

Joseph E. Vihlein, Jr.  
- 1/6 of 7/16 of  
13/16\*

New Mexico Bank  
& Trust Company,  
Trustee of the  
Carlin Trust  
created under  
Last Will &  
Testament of  
Virgil Linam,  
Deceased -  
25%

John F. Vihlein -  
1/6 of 7/16

Robert A. Vihlein, Jr.  
- 1/4 of 7/16 of  
13/16\*

Mary U. Trainer -  
1/4 of 7/16

John F. Vihlein - 1/6  
of 7/16 of 13/16\*

Roy G. Barton - 1/8

Mary U. Trainer - 1/4  
of 7/16 of 13/16\*

New Mexico Bank  
& Trust Company,  
Trustee of the  
Klein Trust  
created under  
Last Will &  
Testament of  
Virgil Linam,  
Deceased - 25%

Smith Collins - 1/8  
Jack Daniels - 1/8  
Reed Harmon - 1/16

Roy G. Barton - 1/8  
of 13/16  
Smith Collins - 1/8  
of 13/16

Gordon E. Herkenhoff - 1/8

Jack Daniels - 1/8  
of 13/16

Tract Participation:  
Phase I - 18.1003%  
Phase II - 5.8716%

Reed Harmon - 1/16 of  
13/16  
Gordon E. Herkenhoff  
- 1/8 of 13/16

\*These interests are subject to production payment in the original sum of \$133,000 owned by Oak Corp. payable out of 75% of 7/16 of 13/16 and mortgaged to Continental Illinois National Bank and Trust Company of Chicago. When such sum has been recovered, the interest will revert to the above parties in proportion to their present interest.

EXHIBIT "B"  
 SOUTH PEARL QUEEN UNIT AREA  
 LEA COUNTY, NEW MEXICO  
 T-20-S, R-35-E, N.M.P.M.

Tract No.	Description of Land	No. of Acres	Serial No. and Expiration Date	Basic royalty and ownership percentage		Lessee of record		Overriding Royalty and percentage		Working Interest and percentage					
2	NW/4 NW/4, S/2 NW/4	120.66	HBP	(Basic royalty 1/4)	Lowe Land Co. - All	GeorgAnna A. Uihlein - 1/6 of 5/8	None.	GeorgAnna A. Uihlein - 1/6 of 5/8 of 75%*	Joseph E. Uihlein, Jr. - 1/6 of 5/8 of 75%*	Robert A. Uihlein, Jr. - 1/4 of 5/8 of 75%*	John F. Uihlein - 1/6 of 5/8 of 75%*	Mary U. Trainer - 1/4 of 5/8 of 75%*	Roy G. Barton - 1/8 of 75%	Smith Collins - 1/8 of 75%	Gordon E. Herkenhoff - 1/8 of 75%

Tract Participation:  
 Phase I - 5.2818%  
 Phase II - 10.7979%

\*These interests are subject to production payment in the original sum of \$133,000 owned by Oak Corp. payable out of 75% of 5/8 of 75% and mortgaged to Continental Illinois National Bank and Trust Company of Chicago. When such sum has been recovered, the interest will revert to the above parties in proportion to their present interest.

2 Patented tracts 201.94 acres, 23.3821% of unit area as to Phase I  
 16.6695% of unit area as to Phase II

EXHIBIT "B"  
SOUTH PEARL QUEEN UNIT AREA  
LEA COUNTY, NEW MEXICO  
T-20-S, R-35-E, N.M.P.M.

Tract No.	Description of Land	No. of Acres	Serial No. and Expiration Date	Basic royalty and ownership percentage	Lessee of record	Overriding Royalty and percentage	Working Interest and percentage
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Federal Lands

3	N/2 SW/4, SW/4 SW/4 Sec. 3	120	NM-0349793 - HBP	U. S. - All	Georganna A. Vihlein - 1/6 of 5/8	Anna Barrow - 1% Western Oil Field, Inc. - 6.25%	Georganna A. Vihlein - 1/6 of 5/8 of 80.25%* Joseph E. Vihlein, Jr. - 1/6 of 5/8 of 80.25%*
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Tract Participation:  
Phase I - 14.4313%  
Phase II - 13.9635%

John F. Vihlein - 1/6 of 5/8	John F. Vihlein - 1/6 of 5/8 of 80.25%*
Mary U. Trainer - 1/4 of 5/8	Mary U. Trainer - 1/4 of 5/8 of 80.25%*
Roy G. Barton - 1/8	Roy G. Barton - 1/8 of 80.25%
Smith Collins - 1/8	Smith Collins - 1/8 of 80.25%
Gordon E. Herkenhoff - 1/8	Gordon E. Herkenhoff - 1/8 of 80.25%

\*These interests are subject to production payment in the original sum of \$133,000.00 owned by Oak Corp. payable out of 75% of 5/8 of 80.25% and mortgaged to Continental Illinois National Bank and Trust Company of Chicago. When such sum has been recovered, the interest will revert to the above parties in proportion to their present interest.

EXHIBIT "B"  
 SOUTH PEARL QUEEN UNIT AREA  
 LEA COUNTY, NEW MEXICO  
 T-20-S, R-35-E, N.M.P.M.

Tract No.	Description of Land	No. of Acres	Serial No. and Expiration Date	Basic royalty and ownership percentage	Lessees of record	Overriding		Working Interest and percentage
						Royalty and percentage		
4	SE/4 SW/4 Sec. 3	40	LC-066147-C	U. S. - All	Georganna A. Uihlein - 1/6 of 5/8 Uihlein - 1/6 of 5/8	Anna Barrow - 1% Western Oil Field, Inc. - 6.25%	Georganna A. Uihlein - 1/6 of 5/8 of 80.25%* Joseph E. Uihlein, Jr. - 1/6 of 5/8 of 80.25%*	Robert A. Uihlein, Jr. - 1/4 of 5/8 of 80.25%* John F. Uihlein - 1/6 of 5/8 of 80.25%* Mary U. Trainer - 1/4 of 5/8 of 80.25%* Roy G. Barton - 1/8 of 80.25%* Smith Collins - 1/8 of 80.25%* Gordon E. Herkenhoff - 1/8 of 80.25%*

Tract Participation:  
 Phase I - 2.3113%  
 Phase II - 2.6712%

\*These interests are subject to production payment in the original sum of \$133,000.00 owned by Oak Corp. payable out of 75% of 5/8 of 80.25% and mortgaged to Continental Illinois National Bank and Trust Company of Chicago. When such sum has been recovered, the interest will revert to the above parties in proportion to their present ownership.

EXHIBIT "B"  
 SOUTH PEARL QUEEN UNIT AREA  
 LEA COUNTY, NEW MEXICO  
 T-20-S, R-35-E, N.M.P.M.

Tract No.	Description of Land	No. of Acres	Serial No. and Expiration Date	Basic royalty and ownership percentage		Lessees of record	Overriding Royalty and percentage		Working Interest and percentage
				U. S. - All			Gulf Oil Corporation - All	Gulf Oil Corporation - 5%	
5	SE/4 and E/2 SW/4 Sec. 4	240	LC-060881 - HBP	U. S. - All		Gulf Oil Corporation - All	Gulf Oil Corporation - 5%	Billie M. Triggs and Ralph S. Triggs - 6.25%	Estate of R. De-Chicchis - 3/32 of 76.25% Oscar Bourg - 1/16 of 76.25% James R. Day - 1/64 of 76.25% James G. Brown & Associates - 22.5% of 76.25%

Georganna A. Vihlein - 7/128 of 76.25%\*\*\*  
 Joseph E. Vihlein, Jr. 1/4 of 27.5% of 76.25%  
 \*\*\* + 7/128 of 76.25%  
 John F. Vihlein - 1/4 of 27.5% of 76.25%\*\*\* + 7/128 of 76.25%\*\*\*  
 Robert A. Vihlein, Jr. 1/4 of 27.5% of 76.25%  
 \*\* + 21/256 of 76.25%\*\*\*  
 Mary U. Trainer - 1/4 of 27.5% of 76.25%\*\*\* + 1/256 of 76.25%\*\*\*

Tract Participation:  
 Phase I - 37.1970%  
 Phase II - 35.5005%

\*\* These interests are subject to production payment in the original sum of \$3,650,000.00 plus certain additional sums owned by Grove Oil & Gas, Inc. payable out of 80% of 27.5% of 76.25% and mortgaged to Continental Illinois National Bank and Trust Company of Chicago. When such sum has been recovered, the interest will revert to the above parties in proportion to their present ownership.

\*\*\* These interests are subject to production payment in the original sum of \$225,000.00 plus certain additional sums owned by Grove Oil & Gas, Inc. payable out of 75% of 21/64 of 76.25% and mortgaged to Continental Illinois National Bank and Trust Company of Chicago. At such time as such sum has been recovered, the interest will revert to the

EXHIBIT "B"  
 SOUTH PEARL QUEEN UNIT AREA  
 LEA COUNTY, NEW MEXICO  
 T-20-S, R-35-E, N.M.P.M.

Tract No.	Description of Land	No. of Acres	Serial No. and Expiration Date	Basic royalty and ownership percentage		Overriding Royalty and percentage		Working Interest and percentage
				U. S. - All	Lessee of record	Gulf Oil Corporation -	Gulf Oil Corporation -	
6	W/2 SW/4 Sec. 4	80	LC-060881-A HBP		Gulf Oil Corporation - All	Gulf Oil Corporation - 5%	Estate of Blanche S. Trigg - 6.25%	Estate of R. De- Chicchis - 3/32 of 76.25% Oscar Bourg - 1/16 of 76.25% James R. Day - 1/64 of 76.25% James G. Brown & Associates - 22.5% of 76.25% Georganna A. Vihlein - 7/128 of 76.25%***

Tract Participation:  
 Phase I - 4.2340%  
 Phase II - 5.1211%

\*\* These interests are subject to production payment in the original sum of \$3,650,000.00 plus certain additional sums owned by Grove Oil & Gas, Inc. payable out of 80% of 27.5% of 76.25% and mortgaged to Continental Illinois National Bank and Trust Company of Chicago. When such sum has been recovered, the interest will revert to the above parties in proportion to their present ownership.

\*\*\* These interests are subject to production payment in the original sum of \$225,000.00 plus certain additional sums owned by Grove Oil & Gas, Inc. payable out of 75% of 21/64 of 76.25% and mortgaged to Continental Illinois National Bank and Trust Company of Chicago. At such time as such sum has been recovered, the interest will revert to the parties in proportion to their present ownership.

Joseph E. Vihlein, Jr.  
 1/4 of 27.5% of 76.25%  
 \*\* + 7/128 of 76.25%  
 \*\*\*  
 John F. Vihlein - 1/4  
 of 27.5% of 76.25%\*\*\* +  
 7/128 of 76.25%\*\*\*  
 Robert A. Vihlein, Jr.  
 1/4 of 27.5% of 76.25%  
 \*\* + 21/256 of  
 76.25%\*\*\*  
 Mary U. Trainer - 1/4  
 of 27.5% of 76.25%\*\*\* +  
 21/256 of 76.25%\*\*\*

EXHIBIT "B"  
 SOUTH PEARL QUEEN UNIT AREA  
 LEA COUNTY, NEW MEXICO  
 T-20-S, R-35-E, N.M.P.M.

Tract No.	Description of Land	No. of Acres	Serial No. and Expiration Date	Basic royalty and ownership percentage		Lessee of record	Overriding Royalty and percentage		Working Interest and percentage
				Basic royalty percentage	ownership percentage		Overriding Royalty percentage	percentage	
7	NE/4 NE/4,	160.77	NM-0349792 - HBP U. S. All			Gulf Oil Corporation - All	Ralph S.		Oak Corp. - All of 82.5%
	S/2 NE/4 and						Trigg - 1/2		
	SE/4 NW/4						of 5%		
				Estate of					
				Blanche S.					
				Trigg - 1/2					
				of 5%					

Tract Participation:  
 Phase I - .7122%  
 Phase II - 5.6717%

8	E/2 SE/4,	680	LC-065649 - HBP U. S. All			Southern Union Gas Company - All	Virginia Lee		Southern Union Gas Company - All of 82.5%
	SW/4 SE/4						Saunders - 5/8		
	Sec. 5;						of 2.5%		
	NE/4 NE/4						Mary Lee		
	Sec. 8;						Saunders -		
	N/2 Sec. 9;						3/16 of 2.5%		
	NW/4, NW/4 NE/4						Woodlan Perry		
	Sec. 10						Saunders -		
	Tract Participation:						3/16 of 2.5%		
	Phase I - 17.7321%						Caldwell J.		
Phase II - 20.4025%		Saunders - 2.5%							

6 Federal tracts 132077 acres, 76.6179% of unit area as to Phase I  
 83.3305% of unit area as to Phase II

Total: 8 tracts 132271 acres in entire unit area.

EXHIBIT "C"  
Attached to Unit Agreement  
South Pearl Queen Unit  
Lea County, New Mexico  
T-20-S, R-35-E, N.M.P.M.

<u>Tract No.</u>	<u>Description of Land</u>	<u>Tract Participation Percent During Phase I</u>	<u>Tract Participation Percent During Phase II</u>
1	NW/4 NE/4, NE/4 NW/4, Section 3	18.1003	5.8716
2	NW/4 NW/4, S/2 NW/4, Section 3	5.2818	10.7979
3	N/2 SW/4, SW/4 SW/4, Section 3	14.4313	13.9635
4	SE/4 SW/4, Section 3	2.3113	2.6712
5	SE/4 and E/2 SW/4 Section 4	37.1970	35.5005
6	W/2 SW/4, Section 4	4.2340	5.1211
7	NE/4 NE/4, S/2 NE/4 and SE/4 NW/4, Section 4	0.7122	5.6717
8	E/2 SE/4, SW/4 SE/4, Section 5; NE/4 NE/4, Section 8; N/2 Section 9; NW/4, NW/4 NE/4, Section 10	<u>17.7321</u> 100.0000	<u>20.4025</u> 100.0000