

Twin Lakes San Andres Unit
Chaves County, New Mexico

Township 8 South - Range 28 East

Section 25:	SE/4, S/2SW/4, NE/4SW/4 SE/4NW/4	320.00 acres
Section 26:	SE/4SE/4	40.00 acres
Section 35:	E/2E/2	160.00 acres
Section 36:	All	<u>640.00 acres</u>
		1,160.00 acres

Township 8 South - Range 29 East

Section 30:	Lots 3 & 4, E/2SW/4, SW/4SE/4	197.60 acres
Section 31:	All	634.88 acres
Section 32:	W/2SW/4	<u>80.00 acres</u>
		912.48 acres

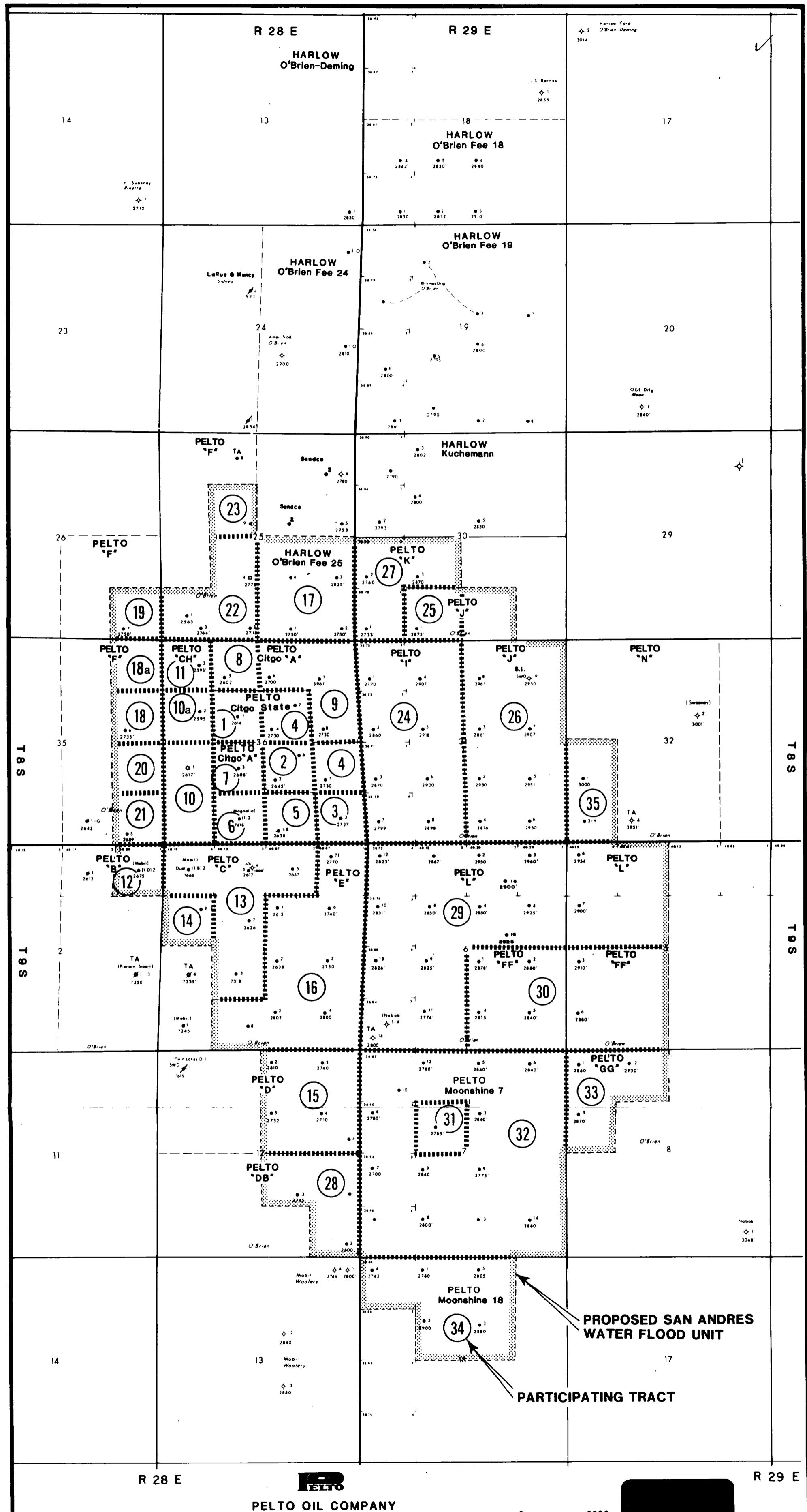
Township 9 South - Range 28 East

Section 1:	Lots 1-4, S/2N/2, SE/4, E/2SW/4	560.46 acres
Section 2:	Lot 1	40.20 acres
Section 12:	NE/4, N/2SE/4, SE/4SE/4	<u>280.00 acres</u>
		880.66 acres



Township 9 South - Range 29 East

Section 5: Lots 3 & 4, S/2NW/4, SW/4	320.46 acres
Section 6: All	635.67 acres
Section 7: All	635.69 acres
Section 8: W/2NW/4, NE/4NW/4	120.00 acres
Section 18: Lot 1, E/2NW/4, W/2NE/4	<u>198.86 acres</u>
	1,910.68 acres
Total Unit Acreage	4,863.82 acres



**PELTO OIL COMPANY
TWIN LAKES FIELD
CHAVES COUNTY, NEW MEXICO**

UNIT AGREEMENT
TWIN LAKES SAN ANDRES UNIT
CHAVES COUNTY, NEW MEXICO

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Exhibit "A" (Map of Unit Area)

Exhibit "B" (Schedule of Ownership)

Exhibit "C" (Schedule of Tract Unit Participation)

UNIT AGREEMENT
FOR THE DEVELOPMENT AND OPERATION OF THE
TWIN LAKES SAN ANDRES UNIT
CHAVES COUNTY, NEW MEXICO

THIS AGREEMENT, entered into as of the 1st day of June, 1987, 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 T H A T :

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 Commissioner of Public Lands of the State of New Mexico is authorized by law (Sec. 3, Chap. 88, Laws 1943) as amended by Dec. 1 of Chapter 162, Laws of 1951, (Chap. 19, Art. 10, Sec. 45, N.M. Statutes 1978 Annot.), to consent to and approve the development or operation of State lands under agreements made by lessees of State land jointly or severally with other lessees where such agreements provide for the unit operation or development of part of or all of any oil or gas pool, field or area; and

WHEREAS, the Commissioner of Public Lands of the State of New Mexico is authorized by an Act of the Legislature (Sec. 1, Chap. 162, Laws of 1951; Chap. 19 Art. 10 Sec. 47, N.M. Statutes 1978 Annot.) to amend with the approval of lessee, evidenced by the lessee's execution of such agreement or otherwise, any oil and gas lease embracing State lands so that the length of the term of said lease may coincide with the term of such agreements for the unit operation and development of part or all of any oil or gas pool, field or area; and

WHEREAS, the Oil Conservation Division of the Energy & Minerals Department of the State of New Mexico or any successor agency is authorized

by law (Chap. 72, Laws 1935, as amended, being Sec. 70-2-1 et seq. and Section 70-7-1 et seq., etc., New Mexico Statutes, 1978 Annotated) to approve this agreement and the conservation provisions hereof; and

WHEREAS, the parties hereto hold sufficient interests in the Twin Lakes Unit Area, comprised of the land hereinafter designated, to give reasonably effective control of operations therein; and

WHEREAS, it is the purpose of the parties hereto to enable institution and consummation of secondary and/or enhanced oil recovery operations, conserve natural resources, prevent waste and secure the 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 Unitized Formation underlying the Unit Area, and agree severally among themselves as follows:

SECTION 1. ENABLING ACT AND REGULATIONS: 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.

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

- (a) "Unit Area" is defined as the land depicted on Exhibit "A" and described by Tracts in Exhibit "B" attached hereto, and said land is hereby designated and recognized as constituting the Unit Area.
- (b) "Commissioner" is defined as the Commissioner of Public Lands of the State of New Mexico.
- (c) "Division" is defined as the Oil Conservation Division of the State of New Mexico.
- ★ (d) "Unitized Formation" is defined as that stratigraphic equivalent of that interval occurring between the Top of the Pl and base of

} the P2 Zone of the San Andres Formation, said P1 and P2 Zone interval being identified as that interval occurring between 2708 feet and 2798 feet in the Pelto Oil Company O'Brien "L" No. 16 Well located 2,310 feet from the north line and 1,675 feet from the east line of Section 6, Township 9 South, Range 29 East, N.M.P.M., Chaves County, New Mexico as recorded on the Dual Laterolog of said well dated December 23, 1984.

- * (e) { "Unitized Substances" is defined as all oil, gas, gaseous substances, sulphur contained in gas, condensate, distillate and all associated and constituent liquid or liquefiable hydrocarbons within or produced from the Unitized Formation.
- (f) "Working Interest" is defined as an interest in Unitized Substances by virtue of a lease, operating agreement or otherwise, including a carried or net profits interest, 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, producing and operating the Unitized Formation. Any interest in Unitized Substances which is a Working Interest as of the date the owner thereof executes, ratifies or consents to this agreement shall thereafter be treated as a Working Interest for all purposes of this agreement.
- (g) "Royalty Interest" is defined as a right to or interest in any portion of the Unitized substances or proceeds thereof other than a Working Interest.
- (h) "Working Interest Owner" is defined as a party hereto who owns a Working Interest.
- (i) "Royalty Owner" is defined as a party hereto who owns a Royalty Interest.
- (j) "Tract" is defined as each parcel of land described as such and given a Tract number in Exhibit "B".
- (k) "Tract Participation" is defined as the percentage, expressed as a decimal fraction, of Unitized Substances allocated hereunder to a Tract as hereinafter defined. The Tract Participation of the Tracts within the Unit Area is shown on Exhibit "C" attached hereto.
- (l) "Unit Participation" is defined as the sum of the percentages, expressed as decimal fractions, obtained by multiplying the

Working Interest of a Working Interest Owner in each Tract having Tract Participation by the Tract Participation of such Tract.

- (m) "Unit Operating Agreement" is defined as any agreement or agreements entered into, separately or collectively, by and between the Unit Operator and the Working Interest Owners as provided in Section 9, Accounting Provisions and Unit Operating Agreement, infra, and shall be styled "Unit Operating Agreement, Twin Lakes San Andres Unit, Chaves County, New Mexico".
- (n) "Unit Manager" is defined as the person or corporation appointed by the Unit Working Interest Owners to perform the duties of the Unit Operator until the selection and qualification of a successor Unit Operator as provided for in Section 8, Successor Unit Operator, hereof.

SECTION 3. UNIT AREA: The area specified on the map attached hereto marked Exhibit "A" is hereby designated and recognized as constituting the Unit Area, containing 4,863.82 acres, more or less.

Exhibit "A" to the extent known to Unit Operator, shows the boundaries and identity of Tracts and leases in the Unit Area. Exhibit "B" attached hereto is a schedule showing, to the extent known to Unit Operator, the acreage comprising each Tract and the percentage of ownership of each Working Interest Owner in each Tract. 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 as are shown in said map or schedule as being owned by such party. Exhibit "C" attached hereto is a schedule showing the Tract Participation of each Tract in the Unit Area which Tract Participation has been calculated upon the basis of all tracts within the Unit Area being committed to this agreement as of the effective date hereof.

Exhibits "A", "B", and "C" shall be revised by Unit Operator whenever changes render such revision necessary and not less than two copies of such revision shall be filed with the Commissioner and the Division.

SECTION 4. EXPANSION: The 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. Such expansion shall be effected in the following manner.

(a) Seventy-five percent (75%) of the Working Interest Owners of a Tract or Tracts desiring to bring such Tract or Tracts into the Unit Area shall file an application therefor with Unit Operator requesting such admission.

(b) Unit Operator shall circulate a notice of the proposed expansion to each Working Interest Owner in the Unit and/or affected by the proposed expansion setting out the basis for admission, the Tract Participation proposed to be allocated to such Tract or Tracts, and other pertinent data. After negotiation (at Working Interest Owners' meeting or otherwise) if Working Interest Owners having a combined Unit Participation of seventy-five percent (75%) or more have agreed to such Tract or Tracts being brought into the Unit Area, then Unit Operator shall, after preliminary concurrence by the Commissioner and the Division:

- (1) Prepare a notice of proposed expansion describing the contemplated changes in the boundaries of the Unit Area, the reason therefor, the basis for admission of the additional Tract or Tracts, the Tract Participation to be allocated thereto, and the proposed effective date thereof; and**
- (2) Furnish copies of said notice to the Commissioner and the Division, each Working Interest Owner and to the lessee and lessor whose interests are proposed to be committed, advising such parties that thirty (30) days will be allowed for submission to the Unit Operator of any objections to such proposed expansion; and**
- (3) File, upon the expiration of said thirty-day period as set out in Subsection (2) immediately above, with the Commissioner and Division the following: (a) Evidence of mailing copies of said notice of expansion; (b) An application for such expansion; (c) An instrument containing the appropriate joinders of both Working Interest Owners and Royalty Owners in compliance with the qualification requirements of Section 4.(a) and 4.(b) above; and (d) Copies of any objections received.**

The expansion shall, after due consideration of all pertinent information and upon approval by the Commissioner and Division, become effective as of the date prescribed in the notice thereof. The revised Tract Participation of the respective Tracts included within the Unit Area prior to such enlargement shall remain in the same ratio one to another.

There shall never be any retroactive allocation or adjustment of operating expenses or of interest in the Unitized Substances produced (or the proceeds of the sale thereof) by reason of an expansion of the Unit Area; provided, however, this limitation shall not prevent any adjustment of investment necessitated by such expansion.

SECTION 5. UNITIZED LAND AND UNITIZED SUBSTANCES: All land committed to this agreement, as to the Unitized Formation defined in Section 2. **Definitions**, shall constitute land referred to herein as "Unitized Land" or "land subject to this agreement". All oil and gas in the Unitized Formation in the Unitized Land are unitized under the terms of this agreement and herein are called "Unitized Substances".

SECTION 6. UNIT OPERATOR: Pelto Oil Company is hereby designated as Unit Operator, and by signing this 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. Whenever reference is made hereto to the Unit Operator, such reference means the Unit Operator acting in that capacity and not as an owner of interests 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.

SECTION 7. 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 six (6) months after written notice of intention to resign has been given by Unit Operator to all Working Interest Owners and the

Commissioner and Division unless a new Unit Operator shall have taken over and assumed the duties and obligations of Unit Operator prior to the expiration of said period.

The Unit Operator shall, upon default or failure in the performance of its duties and obligations hereunder, be subject to removal only by unanimous vote of all Working Interest Owners other than Unit Operator. Such removal shall be effective upon notice thereof to the Commissioner and Division.

In all such instances of resignation or removal, until a successor to Unit Operator is selected and approved as hereinafter provided, the Working Interest Owners shall be jointly responsible for the performance of the duties of the Unit Operator and shall, not later than thirty (30) days before such resignation or removal becomes effective, appoint a Unit Manager 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 equipment, books and records, materials, appurtenances and 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 Unit Manager 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 or appurtenances needed for the preservation of any wells. Nothing herein contained shall be construed to relieve or discharge any Unit Operator who resigns or is removed hereunder from any liability or duties accruing to or performable by it prior to the effective date of such resignation or removal.

SECTION 8. SUCCESSOR UNIT OPERATOR: Whenever Unit Operator shall tender its resignation as Unit Operator or shall be removed as hereinabove provided, the Working Interest Owners, voting in the manner provided in the Unit Operating Agreement, shall select a successor Unit Operator; provided, however, that the voting interest of the outgoing Unit Operator shall not be considered for any purpose if such outgoing Unit Operator fails to vote or votes only to succeed itself. Such selection of a successor Unit Operator 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 approved by the Commissioner and Division. If no successor Unit Operator is selected as herein provided, the Commissioner may declare this agreement terminated.

SECTION 9. ACCOUNTING PROVISIONS AND UNIT OPERATING AGREEMENT: All costs and expenses incurred by Unit Operator in connection with the organization and formation of the Unit as well as those costs and expenses incurred 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 hereunder 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 obligation established under this agreement, and in case of any inconsistency or conflict between this agreement and the Unit Operator Agreement, this agreement shall prevail. One true copy of any Unit Operating Agreement executed pursuant to this Section shall be filed with

the Commissioner and one true copy shall be filed in the Official Records of Chaves County, New Mexico.

SECTION 10. 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. Upon request therefor, 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.

SECTION 11. PLAN OF OPERATIONS: It is recognized and agreed by the parties hereto that all of the land subject to this agreement has been reasonably proven to be productive of Unitized Substances in paying quantities or is necessary for Unit Operations and that the object and purpose of this agreement is to formulate and to put into effect a secondary enhanced oil recovery project in order to effect a greater 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 Division and the Commissioner, inject into the Unitized Formation, through any well or wells completed therein, brine, water, air, gas, oil, liquefied petroleum gas, steam and any other substance or a combination of any of said substances, whether produced from the Unitized Formation or not, and that the location of input wells and the rates of injection therein and the rate of production shall be governed by standards

of good geologic and petroleum engineering practices and conservation methods. Reasonable diligence shall be exercised by Unit Operator in complying with the obligations of any approved plan of operation. The parties hereto, to the extent they have the right so to do, hereby grant Unit Operator the right to use brine or water (or both) produced from any formation underlying the Unit Area for injection into the Unitized Formation; provided, however, that this grant of said right shall not preclude or restrict the use of brine or water (or both) produced and/or transported from sources other than the Unit Area for injection into the Unitized Formation. After commencement of secondary and/or enhanced oil recovery operations, Unit Operator shall furnish the Commissioner and the Division monthly injection and production reports for each well in the Unit. The Working Interest Owners, the Commissioner and the Division shall be furnished periodic reports on the progress of the plan of operation and any revisions or changes thereto necessary to meet changed conditions or to protect the interests of all parties to this agreement; provided, however that any major revisions of the plan of operation involving a basic deviation from the initial plan of operation shall be subject to the consent and approval of the Working Interest Owners, the Commissioner and Division.

The Initial plan of operation shall be filed with the Division and the Commissioner concurrently with the filing of this Unit Agreement for final approval. Reasonable diligence shall be exercised in complying with the obligations of said plan of operation.

Notwithstanding anything to the contrary herein contained, the Unit Operator shall commence, if not already having done so, operations requisite to secondary and/or enhanced oil recovery on the Unit Area not later than six (6) months after the effective date of this Agreement, or any extension thereof approved by the Commissioner and Division, or this Agreement shall terminate automatically in which latter event the 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.

SECTION 12. TRACT PARTICIPATION: The Tract Participation set forth in Exhibit "C" for each Tract within the Unit Area have been calculated and determined for in accordance with the following formulas:

WHERE:

A = Tract Cumulative Oil Produced to 4-1-86
B = Tract Remaining Oil Reserves At 4-1-86
 (Using 1 BOPD/Well Cutoff)
C = Total Unit Area Cumulative Oil Production to 4-1-86
D = Total Unit Area Remaining Oil Reserves at 4-1-86
 (Using 1 BOPD/Well Cutoff)

THEN:

$$\text{Tract Participation} = \frac{A + B}{C + D}$$

Such of Tract Participation have been calculated upon the basis of all of said Tracts within the Unit Area being committed to this agreement as of the effective date hereof, and such Tract Participations shall govern the allocation of all Unitized Substances produced after the effective date hereof, subject, however, to any revision or revisions of the Unit Area and Exhibit "C" in accordance with the provisions hereof.

In the event less than all of the Tracts are committed hereto as of the effective date hereof Unit Operator shall promptly file with the Commissioner and Division at least two copies of revised Exhibits "B" and "C" setting forth on Exhibit "C" the revised Tract Participations opposite each of the qualified tracts, which shall be calculated by using the tract

factors and formula set forth hereinabove, but applying the same only to the qualified Tracts. The revised Exhibit "B" and "C" shall, effective as of the effective date of this agreement, supersede the original Exhibits "B" and "C" attached hereto and shall thereafter govern the allocation of Unitized Substances unless disapproved by the Commissioner and Division within 30 days after filing.

If, subsequent to the effective date of this agreement, any additional tract becomes committed hereto under the provisions of Section 3. Unit Area, or Section 28, Non-joinder and Subsequent Joinder, or any committed tract is excluded herefrom under the provisions of Section 27. Loss of Title, Unit Operator shall revise said Exhibits "B" and "C" or the latest revision thereof to show the new percentage participations of the then committed tracts, which revised exhibit shall, upon its approval by the Commissioner and the Division, supersede, as of its effective date, the last previously effective Exhibits "B" and "C". In any such revision of Exhibit "C", the revised percentage participations of the respective tracts listed in the last previously effective Exhibit "C" shall remain in the same ratio one to another.

SECTION 13. TRACTS QUALIFIED FOR UNIT PARTICIPATION: 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:

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

(b) Each Tract as to which Working Interest Owners owning one hundred percent (100%) of the Working Interest therein have become parties hereto and as to which Royalty Owners owning less than seventy-five percent (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 commitment of such Tract to this agreement, and
 - (ii) Seventy-five percent (75%) of the combined voting interest of Working Interest Owners in all Tracts meeting the requirements of Section 13 (a) hereof have voted in favor of the commitment of such Tract.
- (c) Each Tract as to which Working Interest Owners owning less than one hundred percent (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 commitment of such Tract to 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 commitment of such Tract to this agreement, and
 - (ii) Seventy-five percent (75%) of the combined voting interests of Working Interest Owners in all Tracts meeting the requirements of Section 13 (a) and 13 (b) have voted in favor of the commitment of such Tract and acceptance of the indemnity agreement.

For the purpose of this Section 13 (b) and (c), a Working Interest Owner's "voting interest" shall be equal to the ratio (expressed in percent) which its aggregate Unit Participation in all Tracts qualifying under Section 13 (a) and 13 (b) bears to the total Unit Participation of all Working Interest Owners in all Tracts qualifying under Section 13 (a) and 13 (b) as such Unit Participation is determined from the Tract Participations set out in Exhibit "C". Upon the commitment of such a Tract to 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 Interests in the Tract.

SECTION 14. ALLOCATION OF UNITIZED SUBSTANCES: All Unitized Substances produced and saved from the committed Tracts within the Unit Area (less, save and except any part of such Unitized Substances which is used in conformity with good operating practices on the Unit Area for drilling, operating, camp and other production, development and pressure maintenance purposes, or which is unavoidably lost) shall be apportioned among and allocated to the committed Tracts within the Unit Area in accordance with the Tract Participation effective hereunder as such Tract Participation is shown in Exhibit "C" or any revision thereof. 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 Substances allocated to each Tract shall be distributed among or accounted for to the parties hereto 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 Tract, 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 heretofore provided shall be subsequently excluded from participation hereunder on account of depletion of Unitized Substances from such Tract.

If the Working Interest or the Royalty Interest in any Tract is, on or after the effective date hereof, divided with respect to separate parcels or portions of such Tract and owned severally by different persons, the Tract Participations assigned to such Tract shall, in the absence of a recordable instrument executed by all owners and furnished to Unit Operator fixing the divisions 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 the Unit Area, provided the same are so constructed, maintained and operated as not to interfere with operations carried on pursuant hereto or with operations upon or with regard to formations other than the Unitized Formation conducted within the Unit Area. Subject to Section 16, Royalty Settlement, 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 (excepting the State of New Mexico) receiving the same in kind.

If any party fails to take in kind or separately dispose of its proportionate share of Unitized Substances, Unit Operator shall have the right, for the time being and subject to revocation at will by the party owning the share, to purchase for its own account or sell to others such share at not less than the prevailing market price in the area for like production; provided that, all contracts of sale by Unit Operator of any other party's share of Unitized Substances shall be only for such reasonable periods of time as are consistent with the minimum needs of the industry under the circumstances. The proceeds of the Unitized Substances so disposed of by Unit Operator shall be paid to the party entitled thereto net of all taxes and any other related costs incurred by Unit Operator.

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 shall be responsible for making payment of all royalty to the parties entitled thereto, and shall indemnify all parties hereto, including

Unit Operator, against any liability for all royalties, overriding royalties, production payments, and all other payments chargeable against or payable out of such Unitized Substances or the proceeds therefrom.

SECTION 15. OIL IN LEASE TANKAGE ON EFFECTIVE DATE: Unit Operator shall make a proper and timely gauge of all lease and other tanks within the Unit Area in order to ascertain the amount of merchantable oil above the pipeline connection in such tanks as of 7:00 A.M. on the effective date hereof. All such oil which has then been produced legally shall be and remain the property of the Working Interest Owner entitled thereto the same as if the Unit had not been formed; and such Working Interest Owner shall promptly remove said oil from the Unit Area. Any such oil not so removed shall be sold by Unit Operator for the account of such Working Interest Owner, subject to the payment of all royalty to Royalty Owners under the terms and provisions of the Unit Agreement and any applicable lease or leases and other contracts and subject to bearing its pro rata share of all taxes or other related costs incurred by Unit Operator in order to render such oil merchantable. All such oil as is in excess of the prior allowable of the well or wells from which the same was produced shall be regarded and treated the same as Unitized Substances produced after the effective date hereof. If, as of the effective date, hereof, any Tract is overproduced with respect to the allowable of the well or wells on that Tract and the amount of such overproduction has been sold or otherwise disposed of, such overproduction shall be regarded and included as a part of the Unitized Substances produced after the effective date hereof and the amount thereof charged to such Tract as having been delivered to the persons entitled to Unitized Substances allocated to such Tract.

SECTION 16. ROYALTY SETTLEMENT: The State of New Mexico and all Royalty Owners who, under existing contracts, are entitled to take in kind a share of the substances produced from any Tract unitized hereunder, shall hereafter be entitled 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 Unit Operator for and on behalf of the 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 Royalty due under their leases, except that such Royalty shall be computed in accordance with the terms of this Unit Agreement.

If gas obtained from lands not subject to this Agreement is introduced into the Unitized Formation for use in pressure maintenance, stimulation of production, or increasing ultimate recovery, which shall be in conformity with a plan first approved by the Commissioner and the Division a like amount of gas, less appropriate deductions for loss from any cause may be withdrawn from the formation into which the gas was introduced, royalty free as to dry gas, but not to the products extracted therefrom; provided that such withdrawal shall be pursuant to such conditions and formula as may be prescribed or approved by the Commissioner and Division; provided further, that such right of withdrawal shall terminate on the termination of this agreement. If liquefied petroleum gases obtained from lands or formations not subject to this agreement be injected into the Unitized Formation for the purpose of increasing ultimate recovery, which shall be in conformance with the plan first approved by the Commissioner and Division; part or all of such liquefied petroleum gases may be withdrawn royalty free pursuant to such conditions and formula as may be prescribed or approved by the Commissioner and Division.

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

SECTION 17. RENTAL SETTLEMENT: Rentals 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 payment of any rental or minimum royalty in lieu thereof due under their leases. Rental for lands of the State of New Mexico subject to this agreement shall be paid at the rate specified in the respective leases from the State of New Mexico, or may be reduced or suspended under order of the Commissioner pursuant to applicable laws and regulations.

SECTION 18. 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 State laws and regulations.

SECTION 19. DRAINAGE: The Unit Operator shall for and on behalf of the Working Interest Owners, take all reasonable and prudent measures to prevent drainage of Unitized Substances from unitized land by wells on land not subject to this agreement.

SECTION 20. 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 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 Commissioner, as to State leases, shall 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 State 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 the 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 secondary recovery or enhanced oil 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 land pursuant to direction or consent of the Supervisor and Commissioner of 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 lands.
- (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 and during the terms of this agreement.
- (e) Termination of this agreement shall not affect any lease which, pursuant to the terms thereof or any applicable laws shall continue in force and effect thereafter.
- (f) Any lease which is made subject to this agreement shall continue in force beyond the term provided therein as long as such lands and leases remain subject hereto.
- (g) Any lease embracing lands of the State of New Mexico having only a portion of its land committed hereto, shall be segregated as to that portion committed and that not committed, and the terms of such lease shall apply separately to such segregated portions commencing as of the effective date hereof; provided, however that notwithstanding any of the provisions of this agreement to the contrary, such lease 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, or has

heretofore been discovered in paying quantities on some part of the lands embraced in such lease committed to this agreement or, so long as a portion of the Unitized Substances produced from the Unit Area is, under the terms of this agreement, allocated to the portion of the lands covered by such lease committed to this agreement, or at any time during the term hereof, as to any lease that is then valid and subsisting and upon which the lessee or the Unit Operator is then engaged in bona fide drilling, reworking, or secondary recovery operations on any part of the lands embraced in such lease, then the same as to all lands embraced therein shall remain in full force and effect so long as such operations are 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.

SECTION 21. COVENANTS RUN WITH LAND: The covenants herein shall be construed to be covenants running with the land with respect to the interests 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 record instrument of transfer; and no assignment or transfer or any Royalty Interest subject hereto shall be binding upon the Working Interest owner responsible therefor 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.

SECTION 22. 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 on the first day of the calendar month next following the approval of this Agreement by the Commissioner and the Division.

If this Agreement does not become effective on or before June 1, 1988, it shall ipso facto expire 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 owning a combined Participation of at least seventy-five percent (75%); and at least seventy-five percent (75%) of such Working Interest Owners committed to this Agreement have decided to extend Expiration Date for a period not to exceed one (1) year (hereinafter called "Extended Expiration Date"). If Expiration Date is so extended and this Agreement does not become effective on or before Extended Expiration Date, it shall ipso facto expire on Extended Expiration Date and thereafter be of no further force and effect.

Unit Operator shall file for record within thirty (30) days after the Effective Date of this Agreement, in the office of the County Clerk of Chaves County, New Mexico, where a counterpart of this Agreement has become effective according to its terms and stating further the effective date.

The terms of this Agreement shall be for and during the time that Unitized Substances are produced from the unitized land and so long thereafter as drilling, reworking or other operations (including improved recovery operations) are prosecuted thereon without cessation of more than ninety (90) consecutive days unless sooner terminated as herein provided.

This Agreement may be terminated with the approval of the Commissioner and by Working Interest Owners owning eighty percent (80%) of the Unit Participation then in effect whenever such Working Interest Owners determine that Unit Operations are no longer profitable, or in the interest of conservation. Upon approval, such termination shall be effective as of the first day of the month after said Working Interest Owners' determination. Notice of any such termination shall be filed by Unit Operator in the office of the County Clerk of Chaves County, New Mexico, within thirty (30) days of the effective date of termination.

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 just as if this Agreement had never been entered into.

Notwithstanding any other provision in the leases unitized under this Agreement, Royalty Owners hereby grant Unit Operator and/or Working Interest Owners a period of six months after termination of this Agreement in which to salvage, sell, distribute or otherwise dispose of the personal property and facilities used in connection with Unit Operations.

SECTION 23. APPEARANCES: Unit Operator shall have the right to appear for or on behalf of any and all interests affected hereby before the Commissioner and the Division and to appeal from any order issued under the rules and regulations of the Commissioner or the Division or to apply for relief from any of said rules and regulations or in any proceedings relative to operations before the Commissioner or the Division, 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 proceedings.

SECTION 24. 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.

SECTION 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 the validity or invalidity of any law of the State wherein said unitized lands are located, 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 waive; provided, however, that each party hereto covenants that during the existence of this agreement such party will not resort to any action at law or in equity to partition the Unit Area or the facilities used in the development or operation hereof and to that extent waives the benefits of all laws authorizing such partition.

SECTION 26. 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, unavoidable accident, 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.

SECTION 27. LOSS OF TITLE: In the event any Tract ceases to have sufficient Working Interest Owners or Royalty Owners committed to this agreement to meet the conditions of Section 13, Tracts Qualified for Unit Participation, because of failure of title of any party hereto, such Tract shall be automatically regarded as not committed to this agreement effective as of 7:00 A.M. on the first day of the calendar month in which the failure of title is finally determined; provided, however, that such Tract shall not be so regarded if said Tract can be requalified for admission under Section 13 within ninety (90) days after the date on which such title failure was finally determined.

If any such Tract cannot be so requalified, Unit Operator shall revise the schedule previously filed with the Commissioner setting forth the Tracts committed hereto, and Unit Operator shall revise Exhibit "C" to show the tracts in the Unit Area that remain committed hereto and the Tract Participation of each of said Tracts, which revised Tract Participation

shall be calculated and determined on the basis that the Tract Participation of each of said Tracts shall remain in the same ratio one to the other. Copies of the revised schedule and exhibit shall be filed with the Commissioner and same shall be effective as of 7:00 A.M. on the first day of the calendar month in which such failure of title is finally determined.

If title to a Working Interest fails, the rights and obligations of Working Interest Owners by reason of such failure shall be governed by the Unit Operating Agreement. If title to a Royalty Interest fails, but the Tract to which it relates remains committed to this agreement, the party whose title failed shall not be entitled to participate hereunder insofar as its participation is based on such lost Royalty Interest.

In the event of a dispute as to the title to any Working Interest or Royalty Interest subject hereto, payment or delivery on account thereof may be withheld without liability or interest until the dispute is finally settled; provided, that as to State land or leases, no payments of funds due the State of New Mexico shall be withheld, but such funds shall be deposited as directed by the Commissioner to be held as unearned money pending final settlement of 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.

SECTION 28. NONJOINDER AND SUBSEQUENT JOINDER: Joinder by any Royalty Owner, at any time, must be accompanied by appropriate joinder of the corresponding Working Interest Owner in order the interest of such Royalty Owner to be regarded as effectively committed. Joinder to this 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 Agreement.

Any oil or gas interest in the Unitized Formations not committed hereto prior to submission of this Agreement to the Commissioner for final

approval may thereafter be committed hereto upon compliance with the applicable provisions of this Section and of Section 13 (Tracts Qualified for Participation) hereof, at any time up to the Effective Date hereof on the same basis of Tract Participation as provided in 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 the Effective Date hereof the right of subsequent joinder as provided in this Section shall be subject to such requirements or approvals and on such basis as may be agreed upon by Working Interest Owners owning not less than sixty-five percent (65%) of the Unit Participation then in effect, and approved by the Commissioner. Such subsequent joinder by a proposed Working Interest Owner must be evidenced by his execution or ratification of this Agreement and the Unit Operating Agreement and, where State land is involved, such joinder must be approved by the Commissioner. Such joinder by a proposed 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 proposed Royalty Owner. Except as may be otherwise herein provided, subsequent joinder to this Agreement shall be effective as of the first day of the month following the filing with the Commissioner 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 Commissioner is duly made sixty (60) days after such filing.

SECTION 29. 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.

SECTION 30. JOINDER IN DUAL CAPACITY: Execution as herein provided by any party either as a Working Interest Owner or as a Royalty Owner shall commit all interests that may be owned or controlled by such party.

SECTION 31. TAXES: Each party hereto shall, for its own account, render and pay its share of any taxes levied against or measured by the amount or value of the Unitized Substances produced from the unitized land; provided, however, that if it is required or if it be determined that the Unit Operator or the several Working Interest Owners must pay or advance said taxes for the account of the parties hereto, it is hereby expressly agreed that the parties so paying or advancing said taxes shall be reimbursed therefor by the parties hereto, including Royalty Owners, who may be responsible for taxes on their respective allocated share of said Unitized Substances. No such taxes shall be charged to the State of New Mexico, or to any lessor who had a contract with a lessee which requires his lessee to pay such taxes.

SECTION 32. PERSONAL PROPERTY EXCEPTED: All lease and well equipment, materials and other facilities heretofore or hereafter placed by any of the Working Interest Owners on the lands covered hereby shall be deemed to be and shall remain personal property belonging to the respective Working Interest Owners. The rights and interest therein as among Working Interest Owners are covered by the Unit Operating Agreement.

SECTION 33. NO PARTNERSHIP: The duties, obligations and liabilities of the parties hereto are intended to be several and not joint or collective. This agreement is not intended to create, and shall not be construed to create, an association or trust, or to impose a partnership duty, obligation or liability with regard to any one or more of the parties hereto. Each party hereto shall be individually responsible for its own obligations as herein provided.

SECTION 34. STATUTORY UNITIZATION. If and when Working Interest Owners owning at least seventy-five percent (75%) Unit Participation and Royalty Owners owning at least seventy-five percent (75%) Royalty Interest have become parties to this Agreement or have approved this Agreement in writing and such Working Interest Owners have also become parties to the Unit Operating Agreement, Unit Operator may make application to the Division for statutory unitization of the uncommitted interests pursuant to the Statutory Unitization Act (Chapter 65, Article 14, N.M.S. 1953 Annotated). If such application is made and statutory unitization is approved by the Division, then effective as of the date of the Division's order approving statutory unitization, this Agreement and/or the Unit Operating Agreement shall automatically be revised and/or amended in accordance with the following:

(1) Section 13 of this Agreement shall be revised by substituting for the entire said section the following:

"SECTION 13. TRACTS QUALIFIED FOR PARTICIPATION. On and after the Effective Date hereof, all Tracts within the Unit Area shall be entitled to participation in the production of Unitized Substances."

(2) Section 22 of this Agreement shall be revised by substituting for the first three paragraphs of said section the following:

"SECTION 22. EFFECTIVE DATE AND TERM. This Agreement shall become effective on the first day of the calendar month next following the effective date of the Division's order approving statutory unitization upon the terms and conditions of this Agreement, as amended (if any amendment is necessary) to conform to the Division's order; approval of this Agreement, as so amended, by the Commissioner; and the filing by Unit Operator of this Agreement or notice thereof for record in the office of the County Clerk of Chaves County, New Mexico. Unit Operator shall not file this Agreement or notice thereof for record, and hence this Agreement shall not become effective, unless within ninety (90) days after the date all other prerequisites for effectiveness of this Agreement have been satisfied, such filing is approved by Working Interest Owners owing a combined Unit Participation of at least sixty-five percent (65%) as to all Tracts within the Unit Area.

(3) This Agreement and/or the Unit Operating Agreement shall be amended in any and all respects necessary to conform to the Division's order approving statutory unitization.

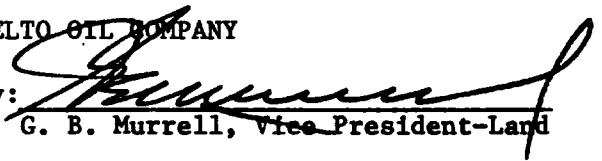
Any and all amendments of this Agreement and/or the Unit Operating Agreement that are necessary to conform said agreements to the Division's order approving statutory unitization shall be deemed to be hereby approved in writing by the parties hereto without any necessity for further approval by said parties.

SECTION 35. CORRECTION OF ERRORS: It is hereby agreed by all parties to this agreement that Unit Operator is empowered to correct any mathematical or clerical errors which may exist in the pertinent exhibits to this agreement; provided, however, that correction of any error other than mathematical or clerical shall be made by Unit Operator only after first having obtained approval of Working Interest Owners having a combined Unit Participation of fifty percent (50%) or more and the Commissioner.

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

OPERATOR

PELTO OIL COMPANY

By: 
G. B. Murrell, Vice President-Land

ATTEST:


L. G. Ferszt, Assistant Secretary

Date: August 4, 1987

Address: One Allen Center
Suite 1800
500 Dallas Street
Houston, Texas 77002

STATE OF TEXAS \$

\$

COUNTY OF HARRIS \$

\$

The foregoing instrument was acknowledged before me this 4th day of August, 1987, by G. B. MURRELL, Vice President of PELTO OIL COMPANY, a Delaware corporation, on behalf of said corporation.


Notary Public, State of Texas
LLANA M. DOBBIE
Notary Public in and for the State of Texas
My Commission Expires August 3, 1989

UNIT OPERATOR AND WORKING INTEREST OWNERS

ATTEST:

By: _____

Date: _____

Address: _____

ATTEST:

By: _____

Date: _____

Address: _____

ATTEST: _____

_____ **By:** _____

Date: _____ **Address:** _____

J47/7

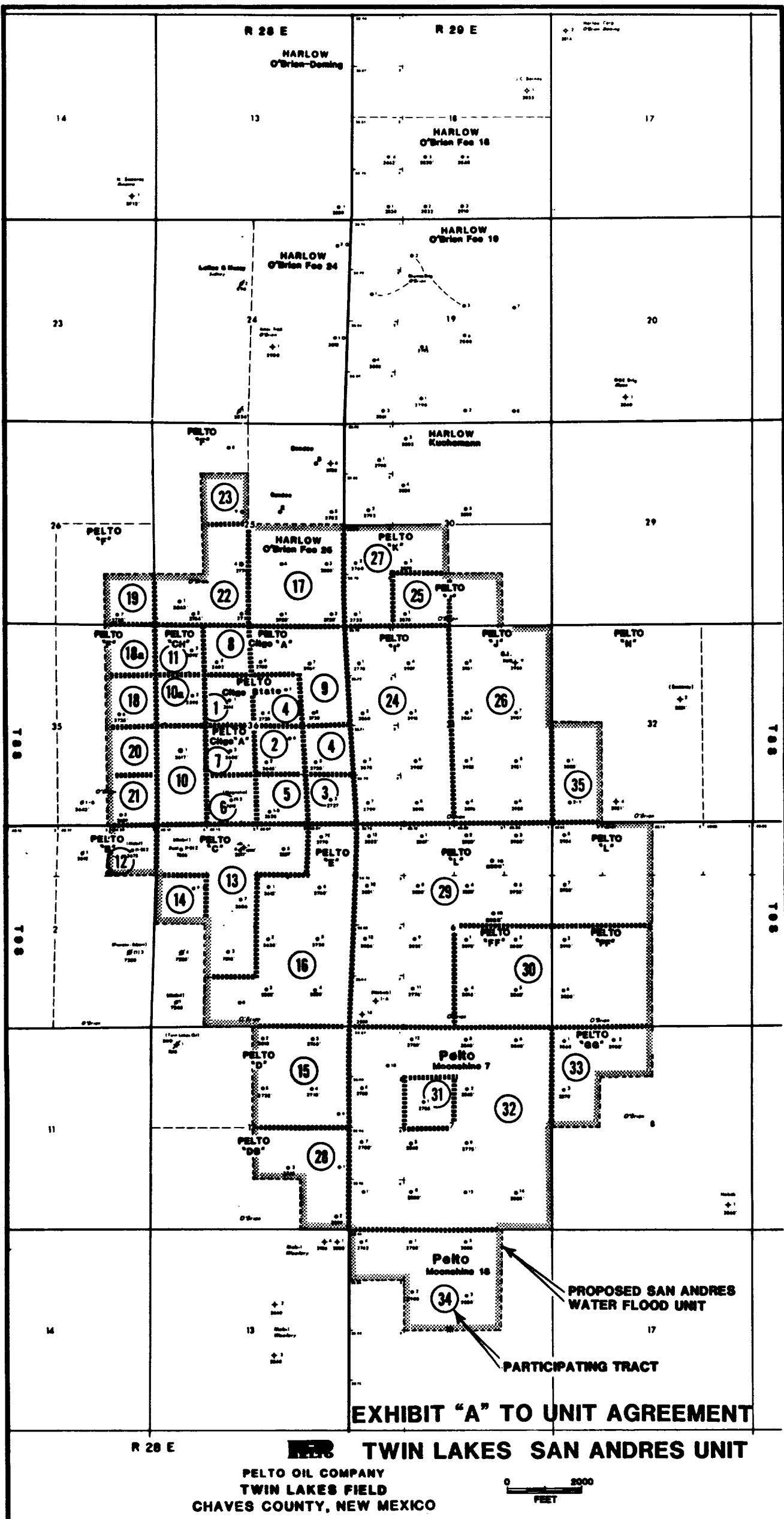


EXHIBIT "A" TO UNIT AGREEMENT

R 28 E

TWIN LAKES SAN ANDRES UNIT

**PELTO OIL COMPANY
TWIN LAKES FIELD
CHAVES COUNTY, NEW MEXICO**

A horizontal scale bar with markings at 0 and 2000. Below it, the word "FEET" is printed in capital letters.

EXHIBIT "B"

PART I

Schedule of Ownership

Unit Agreement

Twin Lakes San Andres Unit

Chaves County, New Mexico

TRACT NO. & PARTICIPATION FACTOR IN UNIT	WELLS	DESCRIPTION	GROSS ACRES	LEASE NOS.	OWNERS	TYPE INTEREST	GROSS WORKING INTEREST	NET INTEREST
1 .0160189	Citgo State 1	Section 36: SE/4NW/4, T8S-R28E, N.M.P.M.	40.00	K-2803-8	*Peltro Oil Company Trinidad Petroleum Corp. Harbert Energy Corp., Agent Comm. of Public Lands H. Lee Harvard	WI WI WI WI OR	0.51500000 0.20989870 0.27510130 0.12500000 0.01000000 <u>1.00000000</u>	0.45062500 0.17933350 0.23504150 0.01000000 <u>1.00000000</u>
2 .0057700	Citgo State 2 & 6	Section 36: NW/4SE/4, T8S-R28E, N.M.P.M.	40.00	K-2803-7	Peltro Oil Company Comm. of Public Lands *Cities Service Oil Company	WI RI OR	1.00000000 <u>1.00000000</u>	0.79296880 0.12500000 0.08203120 <u>1.00000000</u>
3 .0008767	Citgo State 3	Section 36: SE/4SE/4, T8S-R28E, N.M.P.M.	40.00	K-2803-7	Peltro Oil Company Trinidad Petroleum Corp. Harbert Energy Corp., Agent Comm. of Public Lands *Cities Service Oil Company	WI WI WI WI OR	0.75750000 0.10494940 0.13755060 0.12500000 0.10000000 <u>1.00000000</u>	0.58706250 0.08133580 0.10660170 0.12500000 0.10000000 <u>1.00000000</u>
4 .0218646	Citgo State 4, 5, & 7	Section 36: SW/4NE/4; NE/4SE/4, T8S-R28E, N.M.P.M.	80.00	K-2803-7	Peltro Oil Company W. G. Stroecker Marion Weeks Brenda & Rick Winther Comm. of Public Lands *Cities Service Oil Company	WI WI WI WI OR	0.84250000 0.07500000 0.07500000 0.00750000 0.65293750 0.05812500 0.05812500 0.00581250 0.12500000 0.10000000 <u>1.00000000</u>	0.65293750 0.05812500 0.05812500 0.00581250 0.12500000 0.10000000 <u>1.00000000</u>

* DENOTES LESSEE OF RECORD ON STATE LEASES August 3, 1987

TRACT NO. & PARTICIPATION FACTOR IN UNIT	WELLS	DESCRIPTION	GROSS ACRES	LEASE NOS.	OWNERS	TYPE INTEREST	GROSS WORKING INTEREST	NET INTEREST
5 .0040045	Citgo A State 1	Section 36: SW/4SE/4, T8S-R28E, N.M.P.M.	40.00	OG-4681-10	Pelto Oil Company Comm. of Public Lands *Cities Service Oil Company Robert L. Haynie Len Mayer George E. Conley	WI RI OR OR OR	1.00000000 0.12500000 0.05203120 0.00500000 0.00500000 <u>0.02000000</u>	0.79296880 0.12500000 0.05203120 0.00500000 0.00500000 <u>1.00000000</u>
6 .0122048	Citgo A State 2	Section 36: SE/4SW/4, T8S-R28E, N.M.P.M.	40.00	OG-4681-11	*Pelto Oil Company Trinidad Petroleum Comm. of Public Lands Robert L. Haynie Len Mayer George E. Conley	WI WI RI OR OR OR	0.50000000 0.50000000 0.12500000 0.00500000 0.00500000 <u>1.00000000</u>	0.42250000 0.42250000 0.12500000 0.00500000 0.00500000 <u>1.00000000</u>
7 .0186278	Citgo A State 3	Section 36: NE/4SW/4, T8S-R28E, N.M.P.M.	40.00	OG-4681-11	*Pelto Oil Company Trinidad Petroleum Corp. Harbert Energy Corp., Agent Comm. of Public Lands Robert L. Haynie Len Mayer George E. Conley	WI WI WI WI RI OR OR	0.51500000 0.20989870 0.27510130 0.12500000 0.00500000 0.00500000 <u>1.00000000</u>	0.43517500 0.17736440 0.23246060 0.12500000 0.00500000 0.00500000 <u>1.00000000</u>
8 .0144380	Citgo A State 5	Section 36: NE/4NW/4; T8S-R28E, N.M.P.M.	40.00	OG-4681-11	*Pelto Oil Company Harbert Energy Corp., Agent Comm. of Public Lands Robert L. Haynie Len Mayer George E. Conley H. Lee Harvard	WI WI RI OR OR OR	0.52500000 0.47500000 0.12500000 0.00500000 0.02000000 <u>1.00000000</u>	0.44362500 0.39137500 0.12500000 0.00500000 0.02000000 <u>1.00000000</u>

TRACT NO. & PARTICIPATION FACTOR IN UNIT	WELLS	DESCRIPTION	GROSS ACRES	LEASE NOS.	OWNERS	TYPE INTEREST	GROSS WORKING INTEREST	NET INTEREST
9 .0476502	Citgo A State 6, 7, & 8	Section 36: N/2NE/4; SE/4NE/4, T8S-R28E,	120.00	0G-4681-10	Pelto Oil Company W. G. Strocker	WI WI	0.84250000 0.07500000	0.65293750 0.05812500
	N.M.P.M.				Marion Weeks Brenda & Rick Winther Comm. of Public Land *Cities Service Oil Company	WI WI RI OR	0.07500000 0.00750000	0.05812500 0.00581250 0.12500000 0.07000000
					Robert L. Haynie Len Mayer George E. Conley	OR OR OR		0.00500000 0.00500000 0.02000000
							<u>1.00000000</u>	<u>1.00000000</u>
10 .0001050	State Ch 1	Section 36: W/2SW/4 T8S-R28E, N.M.P.M.	80.00	0G-4681-11	*Pelto Oil Company Comm. of Public Lands Cities Service Robert L. Haynie Len Mayer George E. Conley	WI RI OR OR OR	1.00000000	0.80531250 0.12500000 0.05468750 0.00250000 0.00250000 0.01000000
							<u>1.00000000</u>	<u>1.00000000</u>
10A .0025428	State Ch 2	Section 36: SW/4NW/4, T8S-R28E, N.M.P.M.	40.00	K-6716-3	*Pelto Oil Company Comm. of Public Lands Cities Service Robert L. Haynie Len Mayer George E. Conley	WI RI OR OR OR	1.00000000	0.80531250 0.12500000 0.05468750 0.00250000 0.00250000 0.01000000
							<u>1.00000000</u>	<u>1.00000000</u>
11 .0030963	State Ch 3	Section 36: NW/4NW/4, T8S-R28E, N.M.P.M.	40.00	K-2803-8	*Pelto Oil Company W. G. Strocker Marion Weeks Brenda & Rick Winther Comm. of Public Lands Cities Service Robert L. Haynie Len Mayer George E. Conley	WI WI WI WI RI OR OR OR	0.84250000 0.07500000 0.07500000 0.00750000 0.12500000 0.05468750 0.00250000 0.00250000 0.01000000	0.67847580 0.06039840 0.06039840 0.06039900 0.12500000 0.05468750 0.00250000 0.00250000 0.01000000
							<u>1.00000000</u>	<u>1.00000000</u>

TRACT NO. & PARTICIPATION FACTOR IN UNIT	WELLS	DESCRIPTION	GROSS ACRES	LEASE NOS.	OWNERS	TYPE INTEREST	GROSS WORKING INTEREST	NET INTEREST
12 .0005594	O'Brien B #2	Section 2: NE/4NE/4 (Lot 1), T9S-R28E, N.M.P.M.	40.20	4A-4I	Pelto Oil Company Marshall & Winston Moon Co. J. T. Wyman Trust P. W. Parker Trust Francisca Winston Est. Trust	WI RI RI RI RI RI	1.00000000	0.85937500 0.00585940 0.08203130 0.00292970 0.00292970 0.00585940
					F. S. Winston Marital Trust	RI	0.00292970	
					Charles A. Kelly Murray C. McKinnon Trust EM Nominee Ptsp Co. Frates Seeligson	RI RI RI NPRI	0.00146480 0.00146480 0.02343750 0.01171870	
							<u>1.00000000</u>	<u>1.00000000</u>
.0267552	13 O'Brien C #2, 3, 5, 6 & 7	Section 1: Lot 2, 3, 4; SE/4NW/4; NE/4SW/4, T9S-R28E, N.M.P.M.	200.39	5	Pelto Oil Company Marshall & Winston Moon Co. J. T. Wyman Trust P. W. Parker Trust Francisca Winston Est. Trust	WI RI RI RI RI RI	1.00000000	0.84765620 0.00390630 0.08203120 0.00195310 0.00195310 0.00390630
					F. S. Winston Marital Trust	RI	0.00195310	
					Charles A. Kelly Murray C. McKinnon Trust EM Nominee PTSP Co. Barbara Sweeney Frates Seeligson	RI OR NPRI	0.00097650 0.00097660 0.01562500 0.02734380 0.01171880	
							<u>1.00000000</u>	<u>1.00000000</u>

TRACT NO. & PARTICIPATION FACTOR IN UNIT	WELLS	DESCRIPTION	GROSS ACRES	LEASE NOS.	OWNERS	TYPE INTEREST	GROSS WORKING INTEREST	NET INTEREST
16 .0217479	O'Brien E #1 - #8	Section 1: Lot 1; S/2NE/4; SE/4; SE/4SW/4, T9S-R28E, N.M.P.M.	320.07	5	Pelto Oil Company W. G. Stroecker Marion Weeks Brenda & Rick Winther Marshall & Winston Moon Co. J. T. Wyman Trust P. W. Parker Trust F. S. Winston Charles A. Kelly Murray C. McKinnon Trust EM Nominee Ptsp Co. Francisca Winston Estate Trust Frates Seeligson	WI WI WI WI RI RI RI RI RI RI RI RI RI RI NPRI	0.84250000 0.07500000 0.07500000 0.00750000 0.00656250 0.00390630 0.08203120 0.00195310 0.00195310 0.00195310 0.00097650 0.00097660 0.01562500 0.00390630 1.00000000	0.73718750 0.06562500 0.06562500 0.00656250 0.00656250 0.00656250 0.00656250 0.00195310 0.00195310 0.00195310 0.00097650 0.00097660 0.01171880 1.00000000
17 .0420482	O'Brien Fee 25 #1 - #4	Section 25: SE/4 • T8S-R28E, N.M.P.M.	160.00	22A-I	The Harlow Corporation Adams & McGahey J. W. Adams & June Adams Estate J. W. Adams Nabob Prod. Co. Moon Co. EM Nominee Ptsp. Co. Marshall & Winston Francisca Winston Estate Trust F. S. Winston Marital Trust	WI WI WI WI WI WI RI RI RI RI RI RI	0.62500000 0.07500000 0.07500000 0.03750000 0.18750000 0.08203130 0.02500000 0.00585940 0.00585940 0.00292960	0.48156250 0.06187500 0.06187500 0.03093750 0.15468750 0.08203130 0.02500000 0.00585940 0.00585940 0.00292960

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TRACT NO. & PARTICIPATION FACTOR IN UNIT	WELLS	DESCRIPTION	GROSS ACRES	LEASE NOS.	OWNERS	TYPE INTEREST	GROSS WORKING INTEREST	NET INTEREST
Charles A. Kelly Murray C. McKinnon Trust		RI RI			Charles A. McKinnon Douglas A. McKinnon Trust	RI	0.00146480 0.00073250	0.00073240
W. V. Harlow, Jr. Aviva Ltd. Ptsp. C. H. Kimbro		OR OR OR			W. V. Harlow, Jr. Aviva Ltd. Ptsp. C. H. Kimbro	OR OR OR	0.03750000 0.01061750 0.00750000	0.01061750
J. E. Abram		OR			J. E. Abram	OR	0.00014780	0.00014780
Sally Feldman		OR			Sally Feldman	OR	0.00295610	0.00295610
Jack W. Fleck		OR			Jack W. Fleck	OR	0.00073900	0.00073900
William J. Harbeck		OR			William J. Harbeck	OR	0.00036950	0.00036950
Robert T. Jackson		OR			Robert T. Jackson	OR	0.00036950	0.00036950
Jackie H. Johnson		OR			Jackie H. Johnson	OR	0.00014780	0.00014780
John G. Leondukais		OR			John G. Leondukais	OR	0.00059120	0.00059120
Ralph E. Lowenberg		OR			Ralph E. Lowenberg	OR	0.00036950	0.00036950
David L. Peterson		OR			David L. Peterson	OR	0.00059120	0.00059120
Charles I. Petschek		OR			Charles I. Petschek	OR	0.00118240	0.00118240
Lee S. Schlessman		OR			Lee S. Schlessman	OR	0.00036950	0.00036950
Robert Rex Silverstone		OR			Robert Rex Silverstone	OR	0.00073900	0.00073900
H. Peter Stern		OR			H. Peter Stern	OR	0.00044340	0.00044340
John E. Walsh, Jr.		OR			John E. Walsh, Jr.	OR	0.00059120	0.00059120
Donald S. Wood		OR			Donald S. Wood	OR	0.00002460	0.00002460
Tania C. Whitman		OR			Tania C. Whitman	OR	0.0000739000	0.0000739000
Trust					Trust	OR	0.00036950	0.00036950
1029 Plus One					1029 Plus One	OR		
Investors					Investors			
Mildred Miller					Mildred Miller	OR	0.00014780	0.00014780
David E. Wyman, Jr.					David E. Wyman, Jr.	OR	0.00036950	0.00036950
Frates Seeligson					Frates Seeligson	NPRI	0.01171880	0.01171880
							<u>1.00000000</u>	<u>1.00000000</u>

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TRACT NO. & PARTICIPATION FACTOR IN UNIT	WELLS	DESCRIPTION	GROSS ACRES	LEASE NOS.	OWNERS	TYPE INTEREST	GROSS WORKING INTEREST	NET INTEREST
23 .0002051	O'Brien F #9	Section 25: SE/4NW/4, T8S-R28E, N.M.P.M.	40.00	8AL- 8AT, 8BK	Pelto Oil Company W. G. Stroecker Marion Weeks Brenda & Rick Winther Moon Co. Francisca Winston Est. Trust F. S. Winston Marital Trust Charles A. Kelly P. W. Parker Trust J. T. Wyman Trust Marshall & Winston Murray C. McKinnon Trust Tenneco Frates Seeligson	WI WI WI WI RI RI RI RI RI NPRI	0.84250000 0.07500000 0.07500000 0.00750000 0.12304690 0.00585940 0.00292970 0.00146480 0.00292970 0.00585940 0.00146480 0.03125000 0.01757810 <u>1.00000000</u>	0.67794930 0.06035150 0.06035150 0.00603520 0.12304690 0.00585940 0.00292970 0.00146480 0.00292970 0.00585940 0.00146480 0.03125000 0.01757810 <u>1.00000000</u>
24 .1037733	O'Brien I #1 - #8	Section 31: Lots 1-2, 3, 4; E/2W/2, T8S-R29E, N.M.P.M.	314.88	9A- 9J	Pelto Oil Company W. G. Stroecker Marion Weeks Brenda & Rick Winther Marshall & Winston Tenneco Moon Co. J. T. Wyman Trust P. W. Parker Trust Francisca Winston Est. Trust F. S. Winston Marital Trust Charles A. Kelly Murray C. McKinnon Trust Frates Seeligson	WI WI WI WI RI RI RI RI RI RI RI RI NPRI	0.84250000 0.07500000 0.07500000 0.00750000 0.12304690 0.00292970 0.00292970 0.00585940 0.00292970 0.00146480 0.00146480 0.01757810 <u>1.00000000</u>	0.68453120 0.06093750 0.06093750 0.00609380 0.02343750 0.12304690 0.00292970 0.00292970 0.00585940 0.00292970 0.00146480 0.00146480 0.01757810 <u>1.00000000</u>

TRACT NO. & PARTICIPATION FACTOR IN UNIT	WELLS	DESCRIPTION	GROSS ACRES	LEASE NOS.	OWNER(S)	Type Interest	GROSS WORKING INTEREST	NET INTEREST
25 .0016035	O'Brien J #1	Section 30: SE/4SW/4 T8S-R29E, N.M.P.M.	40.00	10A- 10I	Pelto Oil Company W. G. Stroecker Marion Weeks Brenda & Rick Winther Marshall & Winston Tenneco Moon Co.	WI WI WI WI RI RI RI	0.84250000 0.07500000 0.07500000 0.00750000 0.00585940 0.12304690 0.00292970	0.68453120 0.06093750 0.06093750 0.00609380 0.00585940 0.00292970 0.00292970
					J. T. Wyman Trust P. W. Parker Trust F. S. Winston Marital Trust Charles A. Kelly Murray C. McKinnon Trust Francisca Winston Est. Trust Frates Seeligson	RI RI RI RI RI RI NPRI		
							0.01757810 <u>1.00000000</u>	<u>1.00000000</u> 1.00000000
26 .1231374	O'Brien J #2- #8	Section 30: SW/4SE/4; Section 31: E/2, T8S-R29E, N.M.P.M.	360.00	10A- 10H	Pelto Oil Company Tenneco W. G. Stroecker Marion Weeks Brenda & Rick Winther Marshall & Winston Moon Co.	WI WI WI WI WI RI RI RI	0.73718750 0.12500000 0.06562500 0.06562500 0.00656250 0.00585940 0.12304690 0.00292970	0.59896490 0.12500000 0.05332030 0.05332030 0.00533200 0.00585940 0.00292970 0.00146480
					J. T. Wyman Trust P. W. Parker Trust Francisca Winston Est. Trust F. S. Winston Marital Trust Charles A. Kelly Murray C. McKinnon Trust Frates Seeligson	RI RI RI RI NPRI		

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TRACT NO. & PARTICIPATION FACTOR IN UNIT	WELLS	DESCRIPTION	GROSS ACRES	LEASE NOS.	OWNERS	TYPE INTEREST	GROSS WORKING INTEREST	NET INTEREST
28 .0260934	O'Brien DB #1 - #3	Section 12: N/2SE/4; SE/4SE/4, T9S-R28E, N.M.P.M.	120.00	7A-7H	Pelto Oil Company TXO W. G. Stroecker Marion Weeks Brenda & Rick Winther Tenneco Marshall & Winston Moon Co.	WI WI WI WI WI RI RI RI RI	0.57921880 0.18750000 0.05156250 0.05156250 0.00515620 0.12500000 0.00781250 0.12304690 0.00390630 0.00390630 0.00781250	0.37517580 0.15234370 0.03339840 0.03339840 0.00333980 0.12500000 0.00781250 0.12304690 0.00390630 0.00390630 0.00781250
		F. S. Winston Marital Trust Charles A. Kelly Murray C. McKinnon Trust J. M. Huber Corp. Columbia Gas Frates Seeligson Trust			RI RI RI OR OR NPRI	WI WI WI RI RI RI	0.00390630 0.00195310 0.00195310 0.07031250 0.03515630 0.01757810	0.00390630 0.00195310 0.00195310 0.07031250 0.03515630 0.01757810
						WI WI WI WI RI RI RI RI	0.78984375 0.06250000 0.07031250 0.07031250 0.00703125 0.00390630 0.10048820 0.00146480 0.00146480 0.00097660 0.00097660 0.00292970	0.64051390 0.06250000 0.05701900 0.05701900 0.00570200 0.00390630 0.10048820 0.00146480 0.00146480 0.00097660 0.00097660 0.00292970
29 .1503259	O'Brien L #1 - #16	Section 5: Lots 3 & 4; S/2NW/4; Section 6: Lots 1 - 7; S/2NE/4; SE/4NW/4; E/2SW/4, T9S-R29E, N.M.P.M.	636.13	11A-11H	Pelto Oil Company Tenneco W. G. Stroecker Marion Weeks Brenda & Rick Winther Marshall & Winston Moon Co.	WI WI WI WI RI RI RI RI	0.78984375 0.06250000 0.07031250 0.07031250 0.00703125 0.00390630 0.10048820 0.00146480 0.00146480 0.00097660 0.00097660 0.00292970	0.64051390 0.06250000 0.05701900 0.05701900 0.00570200 0.00390630 0.10048820 0.00146480 0.00146480 0.00097660 0.00097660 0.00292970
		J. T. Wyman Trust P. W. Parker Trust Charles A. Kelly Murray C. McKinnon Trust Francisca Winston Est. Trust			RI RI RI RI RI	WI WI WI WI RI	0.00146480 0.00520830 0.00138890	0.00146480 0.00520830 0.00138890

TRACT NO. & PARTICIPATION FACTOR IN UNIT	WELLS	DESCRIPTION	GROSS ACRES	LEASE NOS.	OWNERS	Type Interest	GROSS WORKING INTEREST	NET INTEREST
31	Moonshine 7 #1	Section 7: SE/4 NW/4, T9S-R29E, N.M.P.M.	40.00	21A- 21I	Pelto Oil Company Sun Moon Co.	WI WI RI	0.7500000 0.2500000	0.58078120 0.19468750 0.12304680
.0084417		Francisca Winston Est. Trust Tenneco			RI		0.00781250 0.02968750	
		Murray C. McKinnon			RI		0.00097660 0.00097660	
		Douglas A. McKinnon			RI		0.00097660 0.00097660	
		Marshall & Winston			RI		0.00781250 0.00781250	
		F. S. Winston Marital Trust			RI		0.00390630 0.00390630	
		Charles A. Kelly			RI		0.00195310 0.00195310	
		P. W. Parker Trust			RI		0.00390630 0.00390630	
		J. T. Wyman Trust			RI		0.00390630 0.00390630	
		David I. Miller			OR		0.00750000 0.00750000	
		William O. DeWitt			OR		0.00093750 0.00093750	
		J. T. Howard			OR		0.00260410 0.00260410	
		Donald R. Watts			OR		0.00520830 0.00520830	
		Tenneco			OR(PP)		0.00156250 0.00156250	
		Pelto Oil Company			OR		0.00515640 0.00515640	
		Frates Seeligson			NPRI		0.01757800 0.01757800	
							<u>1.00000000</u>	<u>1.00000000</u>
32	Moonshine 7 #2- #14	Section 7: Lots 1-4; NE/4NW/4; E/2SW/4; E/2, T9S-R29E, N.M.P.M.	595.69	21A- 21C- 21I	Pelto Oil Company Tenneco Sun Moon Co.	WI WI WI RI	0.68750000 0.12500000 0.18750000 0.00781250	0.53484370 0.12500000 0.14812500 0.00390630
.0897968		Francisca Winston Est. Trust F. S. Winston Marital Trust Charles A. Kelly			RI		0.00195310 0.00195310 0.00195310	
		P. W. Parker Trust			RI		0.00390630 0.00390630	
		J. T. Wyman Trust			RI		0.00390630 0.00390630	
		Marshall & Winston			RI		0.00781250 0.00781250	
		Murray C. McKinnon Trust			RI		0.00195310 0.00195310	
		David I. Miller			OR		0.00750000 0.00750000	
		William O. DeWitt			OR		0.00093750 0.00093750	
		J. T. Howard			OR		0.00260420 0.00260420	
		Donald R. Watts			OR		0.00520830 0.00520830	
		Pelto Oil Company			OR		0.00390620 0.00390620	
		Frates Seeligson			NPRI		0.01757810 0.01757810	
							<u>T.00000000</u>	<u>T.00000000</u>

TRACT NO. & PARTICIPATION FACTOR IN UNIT	WELLS	DESCRIPTION	GROSS ACRES	LEASE NOS.	OWNERS	TYPE INTEREST	WORKING INTEREST	NET INTEREST
.0088242	O'Brien N #1 & #2Y	Section 32: W/2SW/4, T8S-R29E, N.M.P.M.	80.00	13A- 13H	Pelto Oil Company Tenneco W. G. Stroecker Marion Weeks Brenda & Rick Winther Marshall & Winston Moon Co. J. T. Wyman Trust J. W. Parker Trust Francisca Winston Est. Trust F. S. Winston Marital Trust Charles A. Kelly Murray C. McKinnon Trust Frates Seeligson	WI WI WI WI WI WI WI RI RI RI RI RI RI RI RI RI RI RI NPRI	0.73718750 0.12500000 0.06562500 0.06562500 0.00656250 0.00531010 0.00781260 0.12304680 0.00292970 0.00292970 0.00585940 0.00292970 0.00195310 0.00195310 0.01757810 <u>1.00000000</u>	0.59649650 0.12500000 0.05310060 0.05310060 0.00656250 0.00531010 0.00781260 0.12304680 0.00292970 0.00292970 0.00585940 0.00292970 0.00195310 0.00195310 0.01757810 <u>1.00000000</u>

TRACT NO. & PARTICIPATION FACTOR IN UNIT	WELLS	DESCRIPTION	GROSS ACRES	LEASE NOS.	OWNERS	TYPE INTEREST	WORKING INTEREST	NET INTEREST	SUMMARY	
									ACRES	PERCENTAGE
STATE LEASES			640.00						640.00	13.16%
PATENTED LEASES			4,223.82						4,223.82	86.84%
									4,863.82	100.00%

TWELVE (12) STATE TRACTS TOTALING 640 ACRES OR 13.16% OF UNIT AREA
TWENTY FIVE (25) PATENTED LEASES TOTALING 4,223.82 ACRES OR 86.84% OF UNIT AREA

August 3, 1987

EXHIBIT "B"
Part II
Schedule of Leases
Unit Agreement
Twin Lakes San Andres Unit
Chaves County, New Mexico

LEASE NO.	LESSOR	LESSEE	EFFECTIVE DATE	TRACT NO.
K-2803-7 (Pelt No. 1)	State of New Mexico	Cities Service Company	10/16/62	2, 3, 4
K-2803-8 (Pelt No. 1)	State of New Mexico	Original Lessee: Cities Service Oil Company Current Lessee of Record: Pelt Oil Company	10/16/62	1, 11
OG-4681-10 (Pelt No. 2)	State of New Mexico	Cities Service Oil Company	10/21/58	5, 9
OG-4681-11 (Pelt No. 2)	State of New Mexico	Original Lessee: Vincent Cuccia Current Lessee of Record: Pelt Oil Company	10/21/58	6, 7, 8, 10
K-6716-3 (Pelt No. 3)	State of New Mexico	Original Lessee: Cities Service Company Current Lessee of Record: Pelt Oil Company	02/21/67	10A

LEASE NO.	LESSOR	LESSEE	BOOK, PAGE	TRACT NOS.
4A	W. B. O'Brien, et al	Twinlakes Oil Company	132,150	12
4B	James T. Wyman, Trustee	Stevens Oil Company	159,191	12
4C	Marshall & Winston, Inc.	Stevens Oil Company	159,195	12
4D	Francisca S. Winston Trust	Stevens Oil Company	159,187	12
4E	Frederick S. Winston Trust	Stevens Oil Company	159,189	12
4F	Pauline W. Parker Trust	Stevens Oil Company	159,193	12
4G	Charles S. Kelly	Stevens Oil Company	159,197	12
4H	U. V. Industries, Inc.	Stevens Oil Company	159,199	12
4I	Douglas D. McKinnon	Stevens Oil Company	163,748	12
5	C. L. O'Brien, et al	Magnolia Petroleum Company	30,102	13, 14, 16
6A	Moon Company	Stevens Oil Company	186,776	15
6B	Francisca S. Winston Trust	Sam D. Gardiner	189,906	15
6C	James T. Wyman Trustee	Sam D. Gardiner	189,940	15
6D	Charles S. Kelly	Sam D. Gardiner	189,856	15
6E	Pauline W. Parker Trust	Sam D. Gardiner	189,956	15
6F	Marshall & Winston, Inc.	Sam D. Gardiner	189,836	15
6G	Douglas D. McKinnon Estate	Sam D. Gardiner	189,882	15

<u>LEASE NO.</u>	<u>LESSOR</u>	<u>LESSEE</u>	<u>BOOK, PAGE</u>	<u>TRACT NOS.</u>
6H	Frederick S. Winston Trust	Sam D. Gardiner	189,908	15
7A	J. G. O'Brien, et al	J. M. Huber Corporation	149,739	28
7B	Francisca S. Winston Trust	Sam D. Gardiner	192,133	28
7C	Frederick S. Winston Trust	Sam D. Gardiner	192,179	28
7D	Charles S. Kelly	Sam D. Gardiner	192,139	28
7E	Pauline W. Parker	Sam D. Gardiner	192,169	28
7F	James T. Wyman, Trustee	Sam D. Gardiner	192,159	28
7G	Marshall & Winston, Inc.	Sam D. Gardiner	192,117	28
7H	Douglas D. McKinnon Estate	Sam D. Gardiner	192,125	28
8AA	W. B. O'Brien, et al	Stevens Oil Company	168,813	18, 21, 22
8AB	Francisca S. Winston Trust	Stevens Oil Company	167,921	18, 21, 22
8AC	Frederick S. Winston Trust	Stevens Oil Company	167,919	18, 21, 22
8AD	Charles S. Kelly	Stevens Oil Company	167,915	18, 21, 22
8AE	Pauline W. Parker Trust	Stevens Oil Company	167,913	18, 21, 22
8AF	James T. Wyman, Trustee	Stevens Oil Company	167,917	18, 21, 22

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LEASE NO.	LESSOR	LESSEE	BOOK, PAGE	TRACT NOS.
8AG	Marshall & Winston, Inc.	Stevens Oil Company	168,833	18, 21, 22
8AH	Douglas D. McKinnon Estate	Stevens Oil Company	177,289	18, 21, 22
8AI	U. V. Industries, Inc.	Stevens Oil Company	167,925	20, 21
8AK	U. V. Industries, Inc.	Stevens Oil Company	167,923	22
8AL	Moon Company	Stevens Oil Company	242,629	18A, 19, 20, 23
8AM	Francisca S. Winston Trust	Stevens Oil Company	245,1019	23
8AN	Frederick S. Winston Trust	Stevens Oil Company	245,1001	23
8AO	Charles A. Kelly	Stevens Oil Company	245,923	23
8AP	Pauline W. Parker	Stevens Oil Company	245,983	23
8AQ	James T. Wyman, Trustee	Stevens Oil Company	245,1021	23
8AR	Marshall & Winston, Inc.	Stevens Oil Company	245, 941	23
8AS	Murray C. McKinnon, Trustee	Stevens Oil Company	250,904	23
8AT	Douglas A. McKinnon Trust	Stevens Oil Company	250,906	23
8BK	Tenneco Oil Company	Stevens Oil Company	265,390	23
8BL	Marshall & Winston, Inc.	Pelto Oil Company	309,103	18A, 19, 20
8BM	Douglas A. McKinnon Trust	Pelto Oil Company	310,492	18A, 19, 20
8BN	Murray C. McKinnon Trust	Pelto Oil Company	310,494	18A, 19, 20
8BO	Charles A. Kelley et ux	Pelto Oil Company	310,496	18A, 19, 20
8BP	Francisca S. Winston Trust	Pelto Oil Company	310,486	18A, 19, 20

<u>LEASE NO.</u>	<u>LESSOR</u>	<u>LESSEE</u>	<u>BOOK, PAGE</u>	<u>TRACT NOS.</u>
8BQ	Frederick S. Winston Trust	Pelto Oil Company	310,488	18A, 19, 20
8BR	James T. Wyman, Trustee	Pelto Oil Company	310,490	18A, 19, 20
8BS	Pauline W. Parker Trust	Pelto Oil Company		18A, 19, 20
9A	W. B. O'Brien, et al	Stevens Oil Company	176,40	24
9B	Francisca A. Winston Trust	Stevens Oil Company	176,531	24
9C	Frederick S. Winston Trust	Stevens Oil Company	176,533	24
9D	Charles S. Kelly	Stevens Oil Company	176,535	24
9E	Pauline W. Parker Trust	Stevens Oil Company	176,529	24
9F	James T. Wyman, Trustee	Stevens Oil Company	176,537	24
9G	Marshall & Winston, Inc.	Stevens Oil Company	178,628	24
9H	Douglas D. McKinnon Estate	Stevens Oil Company	176,539	24
9I	U. V. Industries, Inc.	Stevens Oil Company	176,545	24
9J	U. V. Industries, Inc.	Stevens Oil Company	176,543	24
10A	W. B. O'Brien, et al	Stevens Oil Company	176,42	25, 26
10B	Francisca S. Winston Trust	Stevens Oil Company	177,329	25, 26, 27
10C	Frederick S. Winston Trust	Stevens Oil Company	177,331	25, 26, 27
10D	Charles S. Kelly	Stevens Oil Company	177,327	25, 26, 27
10E	Pauline W. Parker Trust	Stevens Oil Company	177,333	25, 26, 27

LEASE NO.	LESSOR	LESSEE	BOOK, PAGE	TRACT NOS.
10F	James T. Wyman, Trustee	Stevens Oil Company	177,339	25, 26, 27
10G	Marshall & Winston, Inc.	Stevens Oil Company	177,337	25, 26, 27
10H	Douglas D. McKinnon Estate	Stevens Oil Company	177,335	25, 26, 27
10I	U. V. Industries, Inc.	Stevens Oil Company	176,547	25, 27
10J	J. G. O'Brien, et al	J. M. Huber Corporation	149,737	27
11A	W. B. O'Brien, et al	Stevens Oil Company	180,529	29
11B	Francisca W. Winston Trust	Stevens Oil Company	182,438	29
11C	Frederick S. Winston Trust	Stevens Oil Company	182,1023	29
11D	Pauline W. Parker Trust	Stevens Oil Company	182,447	29
11E	James T. Wyman, Trustee	Stevens Oil Company	182,1021	29
11F	Charles S. Kelly	Sam D. Gardiner	191,455	29
11G	Marshall & Winston, Inc.	Sam D. Gardiner	185,257	29
11H	Douglas D. McKinnon Estate	Sam D. Gardiner	185,335	29
13A	Moon Company	Stevens Oil Company	240,423	35
13B	Francisca S. Winston Trust	Stevens Oil Company	182,442	35
13C	Frederick S. Winston Trust	Stevens Oil Company	182,1025	35
13D	Charles S. Kelly	Sam D. Gardiner	191,463	35
13E	Pauline W. Parker Trust	Stevens Oil Company	182,449	35

LEASE NO.	LESSOR	LESSEE	BOOK, PAGE	TRACT NOS.
13F	James T. Wyman, Trustee	Stevens Oil Company	182,1017	35
13G	Marshall & Winston, Inc.	Sam D. Gardiner	185,281	35
13H	Douglas D. McKinnon Estate	Sam D. Gardiner	185,327	35
16A	Moon Company	Stevens Oil Company	194,396	30
16B	Francisca S. Winston Trust	Sam D. Gardiner	185,429	30
16C	Frederick S. Winston Trust	Sam D. Gardiner	185,403	30
16D	Charles S. Kelly	Sam D. Gardiner	191,467	30
16E	Pauline W. Parker Trust	Sam D. Gardiner	185,453	30
16F	James T. Wyman, Trustee	Sam D. Gardiner	185,289	30
16G	Marshall & Winston, Inc.	Sam D. Gardiner	185,263	30
16H	Douglas D. McKinnon Estate	Sam D. Gardiner	185,337	30
17A	Moon Company	Stevens Oil Company	194,402	33
17B	Francisca S. Winston Trust	Sam D. Gardiner	192,906	33
17C	Frederick S. Winston Trust	Sam D. Gardiner	192,908	33
17D	Pauline W. Parker Trust	Sam D. Gardiner	192,898	33
17E	James T. Wyman, Trustee	Sam D. Gardiner	192,918	33
17F	Marshall & Winston, Inc.	Sam D. Gardiner	192,886	33
17G	Douglas D. McKinnon Estate	Sam D. Gardiner	192,890	33

<u>LEASE NO.</u>	<u>LESSOR</u>	<u>LESSEE</u>	<u>BOOK, PAGE</u>	<u>TRACT NOS.</u>	<u>Page 8</u>
17H	Charles A. Kelly, et al	Stevens Oil Company	261,530	33	
21A	Moon Company	Santa Rita Exploration Co.	190,1026	31, 32, 34	
21B	Tenneco Oil Company	Santa Rita Exploration Co.	206,441	31	
21C	Marshall & Winston, Inc.	Sam D. Gardiner	192,115	31, 32	
21D	Frederick S. Winston Trust	Sam D. Gardiner	192,181	31, 32	
21E	Charles S. Kelly	Sam D. Gardiner	192,141	31, 32	
21F	Douglas D. McKinnon Estate	Sam D. Gardiner	192,123	31, 32	
21G	Francisca S. Winston Trust	Sam D. Gardiner	192,135	31, 32	
21H	James T. Wyman, Trustee	Sam D. Gardiner	192,153	31, 32	
21I	Pauline W. Parker Trust	Sam D. Gardiner	192,167	31, 32	
21J	Frederick S. Winston Trust	Sam D. Gardiner	192,177	34	
21K	Charles S. Kelly	Sam D. Gardiner	192,145	34	
21L	Douglas D. McKinnon Estate	Sam D. Gardiner	192,127	34	
21M	Francisca S. Winston Trust	Sam D. Gardiner	192,149	34	
21N	James T. Wyman, Trustee	Sam D. Gardiner	192,161	34	
21O	Pauline W. Parker Trust	Sam D. Gardiner	192,165	34	
21P	Marshall & Winston, Inc.	Sam D. Gardiner	192,113	34	

<u>LEASE NO.</u>	<u>LESSOR</u>	<u>LESSEE</u>	<u>BOOK, PAGE</u>	<u>TRACT NOS.</u>
22A	Moon Company	W. V. Harlow, Jr.	151,785	17
22B	Marshall & Winston, Inc.	NRM Petroleum Corp.	169,353	17
22C	Pauline W. Parker Trust	NRM Petroleum Corp.	169,356	17
22D	Francisca S. Winston Trust	NRM Petroleum Corp.	169,358	17
22E	James T. Wyman, Trustee	NRM Petroleum Corp.	169,361	17
22F	Frederick S. Winston Trust	NRM Petroleum Corp.	169,364	17
22G	Charles S. Kelly	NRM Petroleum Corp.	172,323	17
22H	EM Nominee Partnership Company	NRM Petroleum Corp.	172,342	17
22I	Murray C. McKinnon Trust	NRM Petroleum Corp.	180,358	17

August 3, 1987

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EXHIBIT

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SCHEDULE OF LEASES

LEASE NO.	LESSOR	LESSEE	BOOK, PAGE	DESCRIPTION
8AI	U.V. Industries	Stevens Oil Company	167,925	INSIDE UNIT - TRACTS 20 & 21 E/2SE/4 Section 35, T8S-R28E, N.M.P.M.
				OUTSIDE UNIT W/2SE/4 Section 35, T8S-R28E, N.M.P.M.
				Limited in depth from the surface of the ground to the base of the San Andres Formation.
8BK	Tenneco Oil Company	Stevens Oil Company	265,390	INSIDE UNIT - TRACT 23 SE/4NW/4 Section 25, T8S-R28E, N.M.P.M. Limited in depth from the surface of the ground to the base of the San Andres Formation.
9I	U.V. Industries	Stevens Oil Company	176,545	INSIDE UNIT - TRACT 24 Lots 3 & 4, E/2SW/4 Section 31, T8S-R29E, N.M.P.M. Limited in depth from the surface of the ground to the base of the San Andres Formation.
9J	U.V. Industries	Stevens Oil Company	176,543	INSIDE UNIT - TRACT 24 Lots 1 & 2, E/2NW/4 Section 31, T8S-R29E, N.M.P.M. Limited in depth from the surface of the ground to the base of the San Andres Formation.
10I	U.V. Industries	Stevens Oil Company	176,547	INSIDE UNIT - TRACTS 25 & 27 Lots 3 & 4, E/2SW/4 Section 30, T8S-R29E, N.M.P.M. Limited in depth from the surface of the ground to the base of the San Andres Formation.

EXHIBIT _____

Page 2 of 2

SCHEDULE OF LEASES

<u>LEASE NO.</u>	<u>LESSOR</u>	<u>LESSEE</u>	<u>BOOK, PAGE</u>	<u>DESCRIPTION</u>
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21B	Tenneco Oil Company	Selco, Inc.	206,441	INSIDE UNIT - TRACT 31 SE/4NW/4 Section 7, T9S-R29E, N.M.P.M. Limited in depth from the surface of the ground to 2885' subsurface.
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EXHIBIT "C"
PART I
TRACT & UNIT PARTICIPATION - TRACT BASIS
UNIT AGREEMENT

TRACT #	LEASE/WELLS CITGO STATE 1	OWNER	TYPE	GROSS WI WI WI WI OR	NET INTEREST 0.45062500 0.17933350 0.23504150 0.12500000 0.01000000	TRACT PARTICIPATION 1 BOPD/WELL CUTOFF	UNIT PARTICIPATION (EXPENSE)	UNIT PARTICIPATION (REVENUE)
							0.0082497 0.0160189 0.0160189 0.0160189 0.0160189	0.0072185 0.0028727 0.0033623 0.0044068 0.0000000
2	CITGO STATE 2 & 6	IPOC COMM. OF PUBLIC LANDS CITIES SERVICE	WI RI OR	1.00000000	1.00000000	0.0160189	0.0160189	0.0160189
3	CITGO STATE 3	IPOC TRINIDAD PETROLEUM CORP HARBERT ENERGY CORP, AGENT COMM. OF PUBLIC LANDS CITIES SERVICE	WI WI WI RI OR	1.00000000	1.00000000	0.00577000	0.00577000	0.0045754
4	CITGO STATE 4,5,7	IPOC W G STROECKER MARION WEEKS B & R WINTHROP COMM. OF PUBLIC LANDS CITIES SERVICE	WI WI WI WI RI OR	1.00000000	1.00000000	0.00577000	0.00577000	0.004733
5	CITGO A STATE 1	IPOC COMM. OF PUBLIC LANDS CITIES SERVICE ROBERT L HAYNIE LEN MAYER GEORGE E CONLEY	WI RI OR OR OR	1.00000000	1.00000000	0.00577000	0.00577000	0.004733
6	CITGO A STATE 2	IPOC TRINIDAD PETROLEUM CORP COMM. OF PUBLIC LANDS ROBERT L HAYNIE LEN MAYER GEORGE E CONLEY	WI WI RI RI OR OR	1.00000000	1.00000000	0.00577000	0.00577000	0.004733

EXHIBIT "C"
PART I
TRACT & UNIT PARTICIPATION - TRACT BASIS
UNIT AGREEMENT

TRACT #	LEASE/WELLS CITGO A STATE 3	OWNER	TYPE WI WI WI RI RI OR OR OR	GROSS WI 0.51500000 0.20989870 0.27510130	NET INTEREST 0.43517500 0.17736440 0.23246060 0.12500000 0.05000000 0.05000000 0.02000000	PARTICIPATION 1 BOPD/WELL CUTOFF		PARTICIPATION (EXPENSE) 0.0095933 0.0039100 0.0051245 0.0000000 0.0000000 0.0000000 0.0000000	UNIT PARTICIPATION (REVENUE) 0.0081064 0.0033039 0.0043302 0.0023285 0.0000931 0.0000931 0.0003726
						TRACT	UNIT		
7									
8	CITGO A STATE 5	POC HARBERT ENERGY CORP, AGENT COMM. OF PUBLIC LANDS ROBERT L HAYNIE LEN MAYER GEORGE E CONLEY H LEE HARVARD	WI WI RI OR OR OR OR	0.52500000 0.47500000	0.44362500 0.39137500 0.12500000 0.05000000 0.05000000 0.02000000 0.01000000	0.0144380 0.0144380 0.0144380 0.0144380 0.0144380 0.0144380 0.0144380	0.0186278 0.0186278 0.0186278 0.0186278 0.0186278 0.0186278 0.0186278	0.0064051 0.0068580 0.0000000 0.0000000 0.0000000 0.0000000 0.0000000	0.0056507 0.018048 0.000722 0.000722 0.002888 0.001444 0.0186278
9	CITGO A STATE 6,7,8	POC W G STROECKER MARION WEEKS B & R WINTHER COMM. OF PUBLIC LANDS CITIES SERVICE ROBERT L HAYNIE LEN MAYER GEORGE E CONLEY	WI WI WI RI RI OR OR OR	0.84250000 0.07500000 0.07500000 0.12500000 0.07000000 0.05000000 0.05000000	0.65293750 0.05812500 0.05812500 0.05812500 0.0476502 0.0476502 0.0476502 0.0476502	0.0476502 0.0476502 0.0476502 0.0476502 0.0476502 0.0476502 0.0476502 0.0476502	0.035738 0.035738 0.003574 0.0000000 0.0000000 0.0000000 0.0000000 0.0000000	0.027697 0.027697 0.002770 0.005953 0.003355 0.002383 0.000000 0.000000	0.0311126 0.0000000 0.0000000 0.0000000 0.0000000 0.0000000 0.0000000 0.0000000
10	STATE CH 1	POC COMM. OF PUBLIC LANDS CITIES SERVICE ROBERT L HAYNIE LEN MAYER GEORGE E CONLEY	WI RI OR OR OR OR	1.00000000	1.00000000	1.00000000	1.00000000	0.0476502	0.0476502
10A	STATE CH 2	POC COMM. OF PUBLIC LANDS CITIES SERVICE ROBERT L HAYNIE LEN MAYER GEORGE E CONLEY	WI RI OR OR OR OR	1.00000000	1.00000000	1.00000000	1.00000000	0.0001050	0.0001050

EXHIBIT "C"

PART 1
TRACT & UNIT PARTICIPATION - TRACT BASIS
UNIT AGREEMENTTLPARTC. WR1
9-1-87

TRACT #	LEASE / WELLS STATE CH 3	TRACT & UNIT PARTICIPATION - TRACT BASIS		OWNER	TYPE	GROSS WI WI WI WI WI OR OR OR OR	NET INTEREST 0.67847580 0.06039840 0.06039840 0.06039900 0.12500000 0.05468750 0.00250000 0.00250000 0.01000000	PARTICIPATION 1 BOPD/WELL CUTOFF 0.0030963 0.0030963 0.0030963 0.0030963 0.0030963 0.0030963 0.0030963 0.0030963 0.0030963	UNIT PARTICIPATION (EXPENSE) 0.0026086 0.0002322 0.0002322 0.0002322 0.0003870 0.0000000 0.0000000 0.0000000 0.0000000	UNIT PARTICIPATION (REVENUE) 0.0021008 0.0001870 0.0001870 0.0001870 0.0003870 0.0001693 0.0000077 0.0000077 0.00000310	
		TRACT	UNIT								
12	O'BRIEN B 2	POC MARSHALL & WINSTON MOON CO. J T WYMAN TRUST P W PARKER TRUST FRANCISCA WINSTON EST. TRUST F S WINSTON MARITAL TRUST CHARLES A KELLY MURRAY C MCKINNON TRUST EM NOMINEE PTSP CO FRATES SEELIGSON	WI RI RI RI RI RI RI RI NPR1	1.00000000	1.00000000	0.85937500 0.00585940 0.08203130 0.00292970 0.00585940 0.00292970 0.00146480 0.02343750 0.01171870	0.0005594 0.0005594 0.0005594 0.0005594 0.0005594 0.0005594 0.0005594 0.0005594 0.	0.0005594 0.0005594 0.0005594 0.0005594 0.0005594 0.0005594 0.0005594 0.0005594 0.	0.0004807 0.0000033 0.0000459 0.0000016 0.0000033 0.0000016 0.0000008 0.0000008 0.0000066	0.0005594 0.0005594 0.0005594 0.0005594 0.0005594 0.0005594 0.0005594 0.0005594 0.	0.0005594 0.0005594 0.0005594 0.0005594 0.0005594 0.0005594 0.0005594 0.0005594 0.
13	O'BRIEN C #2,3,5,6,7	POC MARSHALL & WINSTON MOON CO. J T WYMAN TRUST P W PARKER TRUST FRANCISCA WINSTON EST. TRUST F S WINSTON MARITAL TRUST CHARLES A KELLY MURRAY C MCKINNON TRUST EM NOMINEE PTSP CO BARBARA SWEENEY FRATES SEELIGSON	WI RI RI RI RI RI RI RI NPR1	1.00000000	1.00000000	0.84765620 0.0390630 0.08203120 0.00195310 0.00195310 0.00390630 0.00195310 0.00097650 0.00097660 0.01562500 0.02734380 0.01171880	0.0267552 0.0267552 0.0267552 0.0267552 0.0267552 0.0267552 0.0267552 0.0267552 0.0267552 0.0267552 0.0267552 0.0267552	0.0267552 0.0267552 0.0267552 0.0267552 0.0267552 0.0267552 0.0267552 0.0267552 0.0267552 0.0267552 0.0267552 0.0267552	0.0226792 0.0001045 0.0021948 0.0000523 0.0001045 0.0000523 0.0000261 0.0000261 0.0004181 0.0007316 0.0003135	0.0267552 0.0267552 0.0267552 0.0267552 0.0267552 0.0267552 0.0267552 0.0267552 0.0267552 0.0267552 0.0267552 0.0267552	0.0267552
						1.00000000	1.00000000			0.0267552	

EXHIBIT "C"

TRACT & UNIT PARTICIPATION - TRACT BASIS PART I UNIT AGREEMENT

EXHIBIT "C"
PART I
TRACT & UNIT PARTICIPATION UNIT AGREEMENT

TLPARTC.WR1
9-1-87

EXHIBIT "C"
PART I
**TRACT & UNIT PARTICIPATION
UNIT AGREEMENT**

TRACT #	LEASE/WELLS	OWNER	GROSS	NET INTEREST	PARTICIPATION (REVENUE)	
					TRACT 1 BOPD/WELL	UNIT PARTICIPATION (EXPENSE)
18	O'BRIEN F #6	PDC W G STROECKER MARION WEEKS B & R WINther MARSHALL & WINSTON MOON CO.	0.84250000 0.07500000 0.07500000 0.00750000	0.626660930 0.05578110 0.05578110 0.00468760	0.0005888 0.0005888 0.0005888 0.0005888	0.0004961 0.0004442 0.000442 0.00044
		J T WYMAN TRUST P W PARKER TRUST F S WINSTON MARITAL TRUST CHARLES A KELLY MURRAY C MCKINNON TRUST FRANCISCA WINSTON EST TRUST FRATES SEELOGSON TENNECO (UV INDUSTRIES)		0.00117190 0.00117190 0.00468760 0.01406250 0.12500000	0.0005888 0.0005888 0.0005888 0.0005888	0.0005888 0.0005888 0.0005888 0.0005888
18A		PDC W G STROECKER MARION WEEKS B & R WINther MARSHALL & WINSTON MOON CO. FRATES SEELOGSON TENNECO (UV INDUSTRIES) FRANCISCA WINSTON EST TRUST F S WINSTON MARITAL TRUST CHARLES A KELLY P W PARKER TRUST J T WYMAN TRUST J MARSHALL & WINSTON MURRAY C MCKINNON TRUST	1.00000000	1.00000000	0.00000000	0.0005888
19	O'BRIEN F #7	PDC W G STROECKER MARION WEEKS B & R WINther MARSHALL & WINSTON MOON CO. J T WYMAN TRUST P W PARKER TRUST F S WINSTON MARITAL TRUST CHARLES A KELLY MURRAY C MCKINNON TRUST FRANCISCA WINSTON EST TRUST FRATES SEELOGSON TENNECO (UV INDUSTRIES)		1.00000000	1.00000000	0.00000000

EXHIBIT "C"
PART I
TRACT & UNIT PARTICIPATION - TRACT BASIS
UNIT AGREEMENT

EXHIBIT "C"
PART I
TRACT & UNIT PARTICIPATION UNIT AGREEMENT

EXHIBIT "C"
PART I
**TRACT & UNIT PARTICIPATION
UNIT AGREEMENT**

TRACT #		LEASE/WELLS		OWNER		UNIT AGREEMENT		PARTICIPATION (REVENUE)		PARTICIPATION (EXPENSE)		PARTICIPATION (EXPENSE)		PARTICIPATION (EXPENSE)	
TRACT #	LEASE/WELLS	OWNER	OWNER	OWNER	OWNER	TRACT	TRACT	TRACT	TRACT	TRACT	TRACT	TRACT	TRACT	TRACT	TRACT
26	O'BRIEN J 2-8	POC	TENNeco	W G STROECKER	MARION WEEKS	J T WYMAN TRUST	P W PARKER TRUST	FRANCISCA WINSTON EST TRUST	F S WINSTON MARITAL TRUST	CHARLES A KELLY	MURRAY C MCKINNON TRUST	FRAATES SEELOGSON	J M HUBER CORP	FRATES SEELOGSON	FRATES SEELOGSON
		TXO										NANCY E CARLOCK	NANCY E CARLOCK	NANCY E CARLOCK	NANCY E CARLOCK
												VICTOR E CARLOCK	VICTOR E CARLOCK	VICTOR E CARLOCK	VICTOR E CARLOCK
												BEATRICE P B STONE	BEATRICE P B STONE	BEATRICE P B STONE	BEATRICE P B STONE
												GROVER S STONE, JR	GROVER S STONE, JR	GROVER S STONE, JR	GROVER S STONE, JR
												STEVEN L STONE	STEVEN L STONE	STEVEN L STONE	STEVEN L STONE
												SANDRA J STONE	SANDRA J STONE	SANDRA J STONE	SANDRA J STONE
												MARGARET E B DANIELS	MARGARET E B DANIELS	MARGARET E B DANIELS	MARGARET E B DANIELS
												DIANNE E DANIELS	DIANNE E DANIELS	DIANNE E DANIELS	DIANNE E DANIELS
												JUNE A D GROTHE	JUNE A D GROTHE	JUNE A D GROTHE	JUNE A D GROTHE
												CHARLES W DANIELS	CHARLES W DANIELS	CHARLES W DANIELS	CHARLES W DANIELS
												JOHN D BRISCOE	JOHN D BRISCOE	JOHN D BRISCOE	JOHN D BRISCOE
27	O'BRIEN K #1 - #3	POC	TENNeco	W G STROECKER	MARION WEEKS	J T WYMAN TRUST	P W PARKER TRUST	FRANCISCA WINSTON EST TRUST	F S WINSTON MARITAL TRUST	CHARLES A KELLY	MURRAY C MCKINNON TRUST	TENNeco	J M HUBER CORP	FRATES SEELOGSON	FRATES SEELOGSON
		TXO										NANCY E CARLOCK	NANCY E CARLOCK	NANCY E CARLOCK	NANCY E CARLOCK
												VICTOR E CARLOCK	VICTOR E CARLOCK	VICTOR E CARLOCK	VICTOR E CARLOCK
												BEATRICE P B STONE	BEATRICE P B STONE	BEATRICE P B STONE	BEATRICE P B STONE
												GROVER S STONE, JR	GROVER S STONE, JR	GROVER S STONE, JR	GROVER S STONE, JR
												STEVEN L STONE	STEVEN L STONE	STEVEN L STONE	STEVEN L STONE
												SANDRA J STONE	SANDRA J STONE	SANDRA J STONE	SANDRA J STONE
												MARGARET E B DANIELS	MARGARET E B DANIELS	MARGARET E B DANIELS	MARGARET E B DANIELS
												DIANNE E DANIELS	DIANNE E DANIELS	DIANNE E DANIELS	DIANNE E DANIELS
												JUNE A D GROTHE	JUNE A D GROTHE	JUNE A D GROTHE	JUNE A D GROTHE
												CHARLES W DANIELS	CHARLES W DANIELS	CHARLES W DANIELS	CHARLES W DANIELS
												JOHN D BRISCOE	JOHN D BRISCOE	JOHN D BRISCOE	JOHN D BRISCOE
												0.00000000	0.00000000	0.00000000	0.00000000

EXHIBIT "C"
PART I
TRACT & UNIT PARTICIPATION - TRACT BASIS
UNIT AGREEMENT

EXHIBIT "C"
PART I
TRACT & UNIT PARTICIPATION - TRACT BASIS
UNIT AGREEMENT

EXHIBIT "C"
PART I
**TRACT & UNIT PARTICIPATION
UNIT AGREEMENT**

EXHIBIT "C"
PART I
TRACT & UNIT PARTICIPATION - TRACT BASIS
UNIT AGREEMENT

TRACT #	LEASE/WELLS	OWNER	GROSS WI	NET INTEREST	PARTICIPATION (REVENUE)	
					TRACT 1 BOPD/WELL CUTOFF	UNIT PARTICIPATION (EXPENSE)
34	MOONSHINE 18 #1-5	POC	0.68750000	0.53484380	0.0212418	0.0045766
	SUN	WI	0.18750000	0.12500000	0.0308971	0.0038621
	TENNECO	WI	0.12500000	0.12304690	0.0308971	0.0038018
	MURRAY C MCKINNON TRUST	RI	0.14812500	0.12500000	0.0308971	0.0038018
	FRANCISCA WINSTON EST TRUST	RI	0.12500000	0.12304690	0.0308971	0.0038018
	F S WINSTON MARITAL TRUST	RI	0.00195310	0.00195310	0.0308971	0.0000000
	MARSHALL & WINSTON	RI	0.00781250	0.00781250	0.0308971	0.0000000
	CHARLES A KELLY	RI	0.00390630	0.00390630	0.0308971	0.0000000
	P W PARKER TRUST	RI	0.00390630	0.00390630	0.0308971	0.0000000
	J T WYMAN TRUST	RI	0.00750000	0.00750000	0.0308971	0.0000000
	DAVID I MILLER	OR	0.00093750	0.00093750	0.0308971	0.0000000
	WILLIAM O DEWITT	OR	0.00260420	0.00260420	0.0308971	0.0000000
	J T HOWARD	OR	0.00520830	0.00520830	0.0308971	0.0000000
	DONALD R WATTS	OR	0.01757800	0.01757800	0.0308971	0.0000000
	FRATES SEELOGSON	NPRI	1.00000000	1.00000000	0.0308971	0.0308971
35	O'BRIEN N #1 & #2Y	POC	WI	0.73718750	0.59649650	0.0088242
	TENNECO	WI	0.12500000	0.12500000	0.0088242	0.0011030
	WG STROECKER	WI	0.06562500	0.05310060	0.0088242	0.0004686
	MARION WEEKS	WI	0.06562500	0.05310060	0.0088242	0.0004686
	B & R WINTHER	WI	0.06562500	0.05310110	0.0088242	0.0004697
	MARSHALL & WINSTON	RI	0.00781260	0.00781260	0.0088242	0.0000000
	MOON CO	RI	0.12304680	0.12304680	0.0088242	0.0010858
	J T WYMAN TRUST	RI	0.00292970	0.00292970	0.0088242	0.0000259
	P W PARKER TRUST	RI	0.00585940	0.00585940	0.0088242	0.0000517
	FRANCISCA WINSTON EST TRUST	RI	0.00292970	0.00292970	0.0088242	0.0000259
	F S WINSTON MARITAL TRUST	RI	0.00195310	0.00195310	0.0088242	0.0000172
	CHARLES A KELLY	RI	0.00195310	0.00195310	0.0088242	0.0000172
	MURRAY C MCKINNON TRUST	RI	0.01757810	0.01757810	0.0088242	0.0001551
	FRATES SEELOGSON	NPRI	1.00000000	1.00000000	0.0088242	0.0088242
					1.00000000	1.00000000

EXHIBIT "C"
PART 1
TRACT & UNIT PARTICIPATION - WORKING INTEREST OWNERSHIP BASIS
UNIT AGREEMENT

TRACT #		OWNER	TYPE	GROSS WI	NET INTEREST	TRACT PARTICIPATION 1 BOPD/WELL CUTOFF	UNIT PARTICIPATION (EXPENSE)	UNIT PARTICIPATION (REVENUE)
17	ADAMS, J W	WI	WI	0.03750000	0.03093750	0.0420482	0.0015768	0.0013009
17	ADAMS, J W & JUNE EST	WI	WI	0.07500000	0.06187500	0.0420482	0.0031536	0.0026017
17	ADAMS & MCGAHEY	WI	WI	0.07500000	0.06187500	0.0420482	0.0031536	0.0026017
27	COLUMBIA GAS	WI	WI	0.21875000	0.17773440	0.0318665	0.0069708	0.0056638
1	HARBERT ENERGY CORP, AGENT	WI	WI	0.27510130	0.23504150	0.0160189	0.0044068	0.0037651
13	HARBERT ENERGY CORP, AGENT	WI	WI	0.13755060	0.10660170	0.0008767	0.0001206	0.0000935
17	HARBERT ENERGY CORP, AGENT	WI	WI	0.27510130	0.23246060	0.0186278	0.0051245	0.0043302
8	HARBERT ENERGY CORP, AGENT	WI	WI	0.47500000	0.39137500	0.0144380	0.0068580	0.0056507
TOTAL						0.0165100	0.0138395	
17	HARLOW CORP	WI	WI	0.62500000	0.48156250	0.0420482	0.0262801	0.0202488
27	HARLOW CORP	WI	WI	0.10937500	0.07792970	0.0318665	0.0034854	0.0024833
TOTAL						0.0297655	0.0227322	
17	NABOB PROD CO	WI	WI	0.18750000	0.15468750	0.0420482	0.0078840	0.0065043
10A	POC	WI	WI	0.51500000	0.45062500	0.0160189	0.0082497	0.0072185
10A	POC	WI	WI	1.00000000	0.80531250	0.0001050	0.0001050	0.0000846
11	POC	WI	WI	1.00000000	0.80531250	0.0025428	0.0025428	0.0020477
12	POC	WI	WI	0.84250000	0.67847580	0.0030963	0.0026086	0.0021008
13	POC	WI	WI	1.00000000	0.85937500	0.0005594	0.0005594	0.0004807
14	POC	WI	WI	1.00000000	0.84765620	0.0267552	0.0267552	0.0226792
15	POC	WI	WI	0.84250000	0.73718750	0.0001182	0.0000996	0.0000871
16	POC	WI	WI	0.84250000	0.59238280	0.0423152	0.0311942	0.0250668
18A	POC	WI	WI	0.84250000	0.73718750	0.0217479	0.0183226	0.0160323
18A	POC	WI	WI	0.84250000	0.62660930	0.00005888	0.0004961	0.0003689
19	POC	WI	WI	0.84250000	0.59896490	0.0000000	0.0000000	0.0000000
20	POC	WI	WI	0.84250000	0.59896490	0.0000000	0.0000000	0.0000000
21	POC	WI	WI	0.84250000	0.59896490	0.0000000	0.0000000	0.0000000
22	POC	WI	WI	0.84250000	0.71217570	0.0234414	0.0197494	0.0166944
23	POC	WI	WI	0.84250000	0.67794930	0.0002051	0.0001728	0.0001390
24	POC	WI	WI	0.84250000	0.68453120	0.0103733	0.0874290	0.0710361
25	POC	WI	WI	0.84250000	0.68453120	0.0016035	0.0013509	0.0010976
26	POC	WI	WI	0.84250000	0.59896490	0.01231374	0.0907754	0.0737550
27	POC	WI	WI	0.84250000	0.3989430	0.029480770	0.0127142	0.0093945
28	POC	WI	WI	0.84250000	0.577921880	0.37517580	0.0260934	0.0151138
29	POC	WI	WI	0.84250000	0.78984375	0.64051390	0.1503259	0.1187340
30	POC	WI	WI	0.84250000	0.75750000	0.58706250	0.0008767	0.0006641
31	POC	WI	WI	0.84250000	0.78984375	0.63845700	0.1163759	0.0919188
32	POC	WI	WI	0.75000000	0.58078120	0.0084417	0.0063313	0.0617353
33	POC	WI	WI	0.68750000	0.53484380	0.0897968	0.049028	0.0480273
				0.78984375	0.63845700	0.0021324	0.0013614	0.0016843

EXHIBIT "C"
PART II
TRACT & UNIT PARTICIPATION - WORKING INTEREST OWNERSHIP BASIS
UNIT AGREEMENT

EXHIBIT "C"
PART I
TRACT & UNIT PARTICIPATION - WORKING INTEREST OWNERSHIP BASIS
UNIT AGREEMENT

TRACT		TRACT #	OWNER	TYPE	GROSS WI	NET INTEREST	TRACT PARTICIPATION 1 BOPD/WELL CUTOFF	UNIT PARTICIPATION 1 (EXPENSE)	UNIT PARTICIPATION 1 (REVENUE)
35	TENNECO	WI	0.12500000	0.12500000	0.0088242	0.0011030	0.0011030	0.00000000	0.00000000
1	TOTAL	WI	0.20989870	0.17933350	0.0160189	0.0033623	0.0028727	0.00000000	0.00000000
3	TRINIDAD PETROLEUM CORP	WI	0.10494940	0.08133580	0.008767	0.000920	0.0000713	0.00000000	0.00000000
6	TRINIDAD PETROLEUM CORP	WI	0.50000000	0.42250000	0.0122048	0.0061024	0.0051565	0.00000000	0.00000000
7	TRINIDAD PETROLEUM CORP	WI	0.20989870	0.17736440	0.016278	0.0039100	0.0033039	0.00000000	0.00000000
27	TXO	WI	0.21875000	0.15234370	0.0318665	0.0069708	0.0056638	0.0039752	0.00000000
28	TOTAL	WI	0.18750000	0.15234370	0.0260934	0.0118633	0.0096389	0.00000000	0.00000000
11	WEEKS, MARION	WI	0.07500000	0.0639840	0.0030963	0.002322	0.0001870	0.00000078	0.00000000
14	WEEKS, MARION	WI	0.07500000	0.06562500	0.0030892	0.0000898	0.00000000	0.00000000	0.00000000
15	WEEKS, MARION	WI	0.06562500	0.05273440	0.00217479	0.0027769	0.0022315	0.00000000	0.00000000
16	WEEKS, MARION	WI	0.07500000	0.06562500	0.005578110	0.0000442	0.0014272	0.00000000	0.00000000
18A	WEEKS, MARION	WI	0.07500000	0.05332030	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000
19	WEEKS, MARION	WI	0.07500000	0.05332030	0.00003464	0.0000260	0.0000185	0.00000000	0.00000000
20	WEEKS, MARION	WI	0.07500000	0.06093750	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000
21	WEEKS, MARION	WI	0.07500000	0.06339830	0.0014065	0.00234414	0.0014861	0.00000000	0.00000000
22	WEEKS, MARION	WI	0.07500000	0.06339830	0.00035150	0.0002051	0.0001244	0.00000000	0.00000000
23	WEEKS, MARION	WI	0.07500000	0.06093750	0.0010555	0.0010154	0.0001244	0.00000000	0.00000000
24	WEEKS, MARION	WI	0.07500000	0.06339830	0.0017581	0.0017733	0.00063237	0.00000000	0.00000000
25	WEEKS, MARION	WI	0.07500000	0.06093750	0.0014065	0.0014065	0.0000892	0.00000000	0.00000000
26	WEEKS, MARION	WI	0.06562500	0.05332030	0.001231374	0.0012033	0.0001244	0.00000000	0.00000000
27	WEEKS, MARION	WI	0.02578130	0.01930660	0.0318665	0.008216	0.0006152	0.00000000	0.00000000
28	WEEKS, MARION	WI	0.05156250	0.03339840	0.0260934	0.013454	0.0008715	0.00000000	0.00000000
29	WEEKS, MARION	WI	0.07031250	0.05701900	0.01503259	0.0105698	0.0008715	0.00000000	0.00000000
30	WEEKS, MARION	WI	0.07031250	0.05683590	0.01163759	0.0066143	0.0008715	0.00000000	0.00000000
33	WEEKS, MARION	WI	0.06562500	0.05310060	0.0088242	0.001499	0.0004686	0.00000000	0.00000000
35	WEEKS, MARION	WI	0.07500000	0.05812500	0.0218646	0.016398	0.0005791	0.00000000	0.00000000
4	WEEKS, MARION	WI	0.07500000	0.05812500	0.0476502	0.035738	0.027697	0.00000000	0.00000000
9	WEEKS, MARION	WI	0.07500000	0.05812500	0.0476502	0.035738	0.027697	0.00000000	0.00000000
11	WINITHER, B & R	WI	0.00750000	0.0060390	0.0030963	0.00000000	0.00000000	0.00000000	0.00000000
14	WINITHER, B & R	WI	0.00750000	0.00656250	0.00527340	0.00423152	0.00000000	0.00000000	0.00000000
15	WINITHER, B & R	WI	0.00750000	0.00656250	0.00557810	0.00423152	0.00000000	0.00000000	0.00000000
16	WINITHER, B & R	WI	0.00750000	0.00533200	0.00533200	0.00423152	0.00000000	0.00000000	0.00000000
18	WINITHER, B & R	WI	0.00750000	0.00750000	0.00750000	0.00423152	0.00000000	0.00000000	0.00000000
18A	WINITHER, B & R	WI	0.00750000	0.00609380	0.00633980	0.00423152	0.00000000	0.00000000	0.00000000
19	WINITHER, B & R	WI	0.00750000	0.00633980	0.00633980	0.00423152	0.00000000	0.00000000	0.00000000
20	WINITHER, B & R	WI	0.00750000	0.00633980	0.00633980	0.00423152	0.00000000	0.00000000	0.00000000
21	WINITHER, B & R	WI	0.00750000	0.0014065	0.0004424	0.00000000	0.00000000	0.00000000	0.00000000

EXHIBIT "C"
PART II
TRACT & UNIT PARTICIPATION - WORKING INTEREST OWNERSHIP BASIS
UNIT AGREEMENT

TRACT #	OWNER	TYPE	GROSS WI	NET INTEREST	TRACT PARTICIPATION 1 BOPD/WELL CUTOFF		PARTICIPATION (EXPENSE)	UNIT PARTICIPATION (REVENUE)
					1 BOPD/WELL CUTOFF	UNIT PARTICIPATION (EXPENSE)		
22	WINNHER, B & R	WI	0.00750000	0.00633980	0.0234414	0.0001758	0.0001486	
23	WINNHER, B & R	WI	0.00750000	0.00603520	0.0002051	0.0000015	0.0000012	
24	WINNHER, B & R	WI	0.00750000	0.00609380	0.1037733	0.0007783	0.0006324	
25	WINNHER, B & R	WI	0.00750000	0.00609380	0.0016035	0.0000120	0.0000098	
26	WINNHER, B & R	WI	0.00656250	0.00533200	0.1231374	0.0008081	0.0006566	
27	WINNHER, B & R	WI	0.00257810	0.00193070	0.0318665	0.0000822	0.0000615	
28	WINNHER, B & R	WI	0.00515620	0.0033980	0.0260934	0.0001345	0.0000871	
29	WINNHER, B & R	WI	0.00703125	0.00570200	0.1503259	0.0010570	0.0008572	
30	WINNHER, B & R	WI	0.00703125	0.00568360	0.1163759	0.0008183	0.0006614	
33	WINNHER, B & R	WI	0.00703125	0.00568360	0.0021324	0.0000150	0.0000121	
35	WINNHER, B & R	WI	0.00656250	0.00531010	0.0088242	0.0000579	0.0000469	
4	WINNHER, B & R	WI	0.00750000	0.00581250	0.0218646	0.0001640	0.0001271	
9	WINNHER, B & R	WI	0.00750000	0.00581250	0.0476502	0.0003574	0.0002770	
TOTAL					0.0049444	0.0039783		
					1.0000000	0.8120279		

EXHIBIT "C"
PART III
TRACT & UNIT PARTICIPATION - ROYALTY OWNERSHIP BASIS
UNIT AGREEMENT

TRACT #		OWNER	TYPE	NET INTEREST	TRACT 1 PARTICIPATION 1 BOPD/WELL CUTOFF	TRACT 1 BOPD/WELL PARTICIPATION
17	1029 PLUS ONE INVESTORS	OR	OR	0.00036950	0.0420482	0.0000155
17	ABRAM, J E	OR	OR	0.00014780	0.0420482	0.0000062
17	AVIVA LTD PTSP	OR	OR	0.01061750	0.0420482	0.0004464
27	BRISCOE, JOHN D	NPRI	0.02812500	0.0318665	0.0008962	
29	BRISCOE, JOHN D	NPRI	0.02812500	0.1503259	0.0042279	
30	BRISCOE, JOHN D	NPRI	0.02812500	0.1163759	0.0032731	
33	BRISCOE, JOHN D	NPRI	0.02812500	0.0021324	0.0000600	
	TOTAL				0.0084572	
27	CARLOCK, NANCY E	NPRI	0.00117180	0.0318665	0.0000373	
29	CARLOCK, NANCY E	NPRI	0.00117190	0.1503259	0.0001762	
30	CARLOCK, NANCY E	NPRI	0.00117180	0.1163759	0.0001364	
33	CARLOCK, NANCY E	NPRI	0.00117180	0.0021324	0.0000025	
	TOTAL				0.0003524	
27	CARLOCK, VICTOR E	NPRI	0.00117180	0.0318665	0.0000373	
29	CARLOCK, VICTOR E	NPRI	0.00117190	0.1503259	0.0001762	
30	CARLOCK, VICTOR E	NPRI	0.00117180	0.1163759	0.0001364	
33	CARLOCK, VICTOR E	NPRI	0.00117180	0.0021324	0.0000025	
	TOTAL				0.0003524	
10	CITIES SERVICE	OR	0.05468750	0.0001050	0.0000057	
10A	CITIES SERVICE	OR	0.05468750	0.0025428	0.0001391	
11	CITIES SERVICE	OR	0.05468750	0.0030963	0.0001693	
2	CITIES SERVICE	OR	0.08203120	0.0057700	0.0004733	
23	CITIES SERVICE	OR	0.10000000	0.0008767	0.0000877	
24	CITIES SERVICE	OR	0.10000000	0.0218646	0.0021865	
5	CITIES SERVICE	OR	0.05203120	0.0040045	0.0002084	
9	CITIES SERVICE	OR	0.07000000	0.0476502	0.0033355	
	TOTAL				0.0066055	
28	COLUMBIA GAS	OR	0.03515630	0.0260934	0.0009173	
1	COMM. OF PUBLIC LANDS	RI	0.12500000	0.0160189	0.0020024	
10	COMM. OF PUBLIC LANDS	RI	0.12500000	0.0001050	0.0000131	
10A	COMM. OF PUBLIC LANDS	RI	0.12500000	0.0025428	0.0003179	
11	COMM. OF PUBLIC LANDS	RI	0.12500000	0.0030963	0.0003870	
2	COMM. OF PUBLIC LANDS	RI	0.12500000	0.0057700	0.0007213	
3	COMM. OF PUBLIC LANDS	RI	0.12500000	0.0008767	0.0001096	
4	COMM. OF PUBLIC LANDS	RI	0.12500000	0.0218646	0.0027331	

EXHIBIT "C"
PART III
TRACT & UNIT PARTICIPATION - ROYALTY OWNERSHIP BASIS

TRACT #	OWNER	TYPE	NET INTEREST	TRACT PARTICIPATION	
				1 BOFD/WELL	CUTOFF UNIT PARTICIPATION
5	COMM. OF PUBLIC LANDS	RI	0.12500000	0.0040045	0.0005006
6	COMM. OF PUBLIC LANDS	RI	0.12500000	0.0122048	0.0015256
7	COMM. OF PUBLIC LANDS	RI	0.12500000	0.0186278	0.0023285
8	COMM. OF PUBLIC LANDS	RI	0.12500000	0.0144380	0.0018048
9	COMM. OF PUBLIC LANDS	RI	0.12500000	0.0476502	0.0059563
	TOTAL				0.0183999
10	CONLEY, GEORGE E	OR	0.01000000	0.0001050	0.0000011
10A	CONLEY, GEORGE E	OR	0.01000000	0.0025428	0.0000254
11	CONLEY, GEORGE E	OR	0.01000000	0.0030963	0.0000310
5	CONLEY, GEORGE E	OR	0.02000000	0.0040045	0.0000801
6	CONLEY, GEORGE E	OR	0.02000000	0.0122048	0.0002441
7	CONLEY, GEORGE E	OR	0.02000000	0.0186278	0.0003726
8	CONLEY, GEORGE E	OR	0.02000000	0.0144380	0.0002888
9	CONLEY, GEORGE E	OR	0.02000000	0.0476502	0.0009530
	TOTAL				0.0019959
27	DANIELS, CHARLES W	NPRI	0.00138890	0.0318665	0.0000443
29	DANIELS, CHARLES W	NPRI	0.00138890	0.1503259	0.0002088
30	DANIELS, CHARLES W	NPRI	0.00138890	0.1163759	0.0001616
33	DANIELS, CHARLES W	NPRI	0.00138890	0.0021324	0.0000030
	TOTAL				0.0004176
27	DANIELS, DIANNE E	NPRI	0.00138890	0.0318665	0.0000443
29	DANIELS, DIANNE E	NPRI	0.00138890	0.1503259	0.0002088
30	DANIELS, DIANNE E	NPRI	0.00138890	0.1163759	0.0001616
33	DANIELS, DIANNE E	NPRI	0.00138890	0.0021324	0.0000030
	TOTAL				0.0004176
27	DANIELS, MARGARET E B	NPRI	0.00520830	0.0318665	0.0001660
29	DANIELS, MARGARET E B	NPRI	0.00520830	0.1503259	0.0007829
30	DANIELS, MARGARET E B	NPRI	0.00520830	0.1163759	0.0006061
33	DANIELS, MARGARET E B	NPRI	0.00520830	0.0021324	0.0000111
	TOTAL				0.0015661
31	DEWITT, WILLIAM O	OR	0.00093750	0.0084417	0.0000079
32	DEWITT, WILLIAM O	OR	0.00093750	0.0897968	0.0000842
34	DEWITT, WILLIAM O	OR	0.00093750	0.0308971	0.0000290
	TOTAL				0.0001211
12	EM NOMINEE PTS P CO	RI	0.02343750	0.0005594	0.0000131

EXHIBIT "C"
PART III
TRACT & UNIT PARTICIPATION - ROYALTY OWNERSHIP BASIS
UNIT AGREEMENT

TRACT #		OWNER	TYPE	NET INTEREST	PARTICIPATION 1 1 BOPD/WELL CUTOFF	TRACT PARTICIPATION UNIT PARTICIPATION
13	EM NOMINEE PTS P CO	RI	0.01562500	0.0267552	0.0004181	
14	EM NOMINEE PTS P CO	RI	0.01562500	0.0001182	0.0000018	
16	EM NOMINEE PTS P CO	RI	0.01562500	0.0217479	0.0003398	
17	EM NOMINEE PTS P CO	RI	0.02500000	0.0420482	0.0010512	
22	EM NOMINEE PTS P CO	RI	0.02343750	0.0234414	0.0005494	
TOTAL					0.0023734	
17	FELDMAN, SALLY	OR	0.00295610	0.0420482	0.0001243	
17	FLECK, JACK W	OR	0.00073900	0.0420482	0.0000311	
27	GROTHE, JUNE A D	NPRI	0.00138890	0.0318665	0.0000443	
29	GROTHE, JUNE A D	NPRI	0.00138890	0.1503259	0.0002088	
30	GROTHE, JUNE A D	NPRI	0.00138890	0.1163259	0.0001616	
33	GROTHE, JUNE A D	NPRI	0.00138890	0.0021324	0.0000030	
TOTAL					0.0004176	
17	HARBECK, WM J	OR	0.00036950	0.0420482	0.0000155	
17	HARLOW, W V JR	OR	0.03750000	0.0420482	0.0015768	
1	HARVARD, H LEE	OR	0.01000000	0.0160189	0.0001602	
8	HARVARD, H LEE	OR	0.01000000	0.0144380	0.0001444	
TOTAL					0.0003046	
10	AYNIE, ROBERT L	OR	0.00250000	0.0001050	0.0000003	
10A	AYNIE, ROBERT L	OR	0.00250000	0.0025428	0.0000064	
11	AYNIE, ROBERT L	OR	0.00250000	0.0030963	0.0000077	
5	AYNIE, ROBERT L	OR	0.00500000	0.0040445	0.0000200	
6	AYNIE, ROBERT L	OR	0.00500000	0.0122048	0.0000610	
7	AYNIE, ROBERT L	OR	0.00500000	0.0186278	0.0000931	
8	AYNIE, ROBERT L	OR	0.00500000	0.0144380	0.0000722	
9	AYNIE, ROBERT L	OR	0.00500000	0.0476502	0.0002383	
TOTAL					0.0004990	
31	HOWARD, J T	OR	0.00260410	0.0084417	0.0000220	
32	HOWARD, J T	OR	0.00260420	0.0897968	0.0002338	
34	HOWARD, J T	OR	0.00260420	0.0308971	0.0000805	
TOTAL					0.0003363	
27	J M HUBER CORP	OR	0.04375000	0.0318665	0.0013942	
28	J M HUBER CORP	OR	0.07031250	0.0260934	0.0018347	

EXHIBIT "C"
PART III
TRACT & UNIT PARTICIPATION - ROYALTY OWNERSHIP BASIS
UNIT AGREEMENT

TRACT #	OWNER	TYPE	NET INTEREST	TRACT 1 PARTICIPATION 1 BOPD/WELL CUTOFF	UNIT PARTICIPATION
	TOTAL				0.0032289
17	JACKSON, ROBERT T	OR	0.00036950	0.0420482	0.0000155
17	JOHNSON, JACKIE H	OR	0.00014780	0.0420482	0.0000062
12	KELLY, CHARLES A	RI	0.00146480	0.0005594	0.0000008
13	KELLY, CHARLES A	RI	0.00097650	0.0267552	0.0000261
14	KELLY, CHARLES A	RI	0.00097650	0.0001182	0.0000001
15	KELLY, CHARLES A	RI	0.00195310	0.0423152	0.0000826
16	KELLY, CHARLES A	RI	0.00097650	0.0217479	0.0000212
17	KELLY, CHARLES A	RI	0.00146480	0.0420482	0.0000616
18	KELLY, CHARLES A	RI	0.00117190	0.0005888	0.0000007
18A	KELLY, CHARLES A	RI	0.00146480	0.0000000	0.0000005
19	KELLY, CHARLES A	RI	0.00146480	0.0003464	0.0000000
20	KELLY, CHARLES A	RI	0.00146480	0.0000000	0.0000016
21	KELLY, CHARLES A	RI	0.00117190	0.0014065	0.0000275
22	KELLY, CHARLES A	RI	0.00117190	0.0234414	0.0000003
23	KELLY, CHARLES A	RI	0.00146480	0.0002051	0.0001520
24	KELLY, CHARLES A	RI	0.00146480	0.103733	0.0000023
25	KELLY, CHARLES A	RI	0.00146480	0.0016035	0.0001804
26	KELLY, CHARLES A	RI	0.00073240	0.0318665	0.0000233
27	KELLY, CHARLES A	RI	0.00195310	0.0260934	0.0000510
28	KELLY, CHARLES A	RI	0.00097660	0.1503259	0.0001468
29	KELLY, CHARLES A	RI	0.00097660	0.1163759	0.0001137
30	KELLY, CHARLES A	RI	0.00195310	0.0084417	0.000165
31	KELLY, CHARLES A	RI	0.00195310	0.0897968	0.0001754
32	KELLY, CHARLES A	RI	0.00097660	0.0021324	0.0000021
33	KELLY, CHARLES A	RI	0.00195310	0.0308971	0.0000603
34	KELLY, CHARLES A	RI	0.00195310	0.0088242	0.0000172
35	KELLY, CHARLES A	RI			0.0011642
	TOTAL				
17	KIMBRO, C H	OR	0.00750000	0.0420482	0.0003154
17	LEONDUKAIS, JOHN G	OR	0.00059120	0.0420482	0.0000249
17	LOWENBERG, RALPH E	OR	0.00036950	0.0420482	0.0000155
12	MARSHALL & WINSTON	RI	0.00585940	0.0005594	0.0000033
13	MARSHALL & WINSTON	RI	0.00390630	0.0267552	0.0001045
14	MARSHALL & WINSTON	RI	0.00390630	0.0001182	0.0000005
15	MARSHALL & WINSTON	RI	0.00781250	0.0423152	0.0003306
16	MARSHALL & WINSTON	RI	0.00390630	0.0217479	0.0000850
17	MARSHALL & WINSTON	RI	0.00585940	0.0420482	0.0002464

**EXHIBIT "C"
PART II
TRACT & UNIT PARTICIPATION - ROYALTY OWNERSHIP BASIS
UNIT AGREEMENT**

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TRACT #	OWNER	TYPE	NET	UNIT PARTICIPATION
			INTEREST	
18	MARSHALL & WINSTON	RI	0.00468760	0.0058888
18A	MARSHALL & WINSTON	RI	0.00585940	0.0000000
19	MARSHALL & WINSTON	RI	0.00585940	0.0000000
20	MARSHALL & WINSTON	RI	0.00585940	0.0000000
21	MARSHALL & WINSTON	RI	0.00468760	0.0234414
22	MARSHALL & WINSTON	RI	0.00585940	0.0002051
23	MARSHALL & WINSTON	RI	0.00585940	0.1037733
24	MARSHALL & WINSTON	RI	0.00585940	0.0016035
25	MARSHALL & WINSTON	RI	0.00585940	0.1231374
26	MARSHALL & WINSTON	RI	0.00292970	0.0318665
27	MARSHALL & WINSTON	RI	0.00781250	0.0260934
28	MARSHALL & WINSTON	RI	0.00390630	0.1503259
29	MARSHALL & WINSTON	RI	0.00390630	0.1463759
30	MARSHALL & WINSTON	RI	0.00781250	0.0084417
31	MARSHALL & WINSTON	RI	0.00781250	0.0897968
32	MARSHALL & WINSTON	RI	0.00390630	0.0021324
33	MARSHALL & WINSTON	RI	0.00781250	0.0308971
34	MARSHALL & WINSTON	RI	0.00781260	0.0088242
35	MARSHALL & WINSTON	RI		
	TOTAL			0.0046568
10	MAYER, LEN	OR	0.00250000	0.0000003
10A	MAYER, LEN	OR	0.00250000	0.0000064
11	MAYER, LEN	OR	0.00250000	0.0000077
5	MAYER, LEN	OR	0.00500000	0.0000200
6	MAYER, LEN	OR	0.00500000	0.0000610
7	MAYER, LEN	OR	0.00500000	0.0000931
8	MAYER, LEN	OR	0.00500000	0.0000722
9	MAYER, LEN	OR	0.00500000	0.0002383
	TOTAL			0.0004990
17	MCKINNON, DOUGLAS A	RI	0.00073240	0.0420482
31	MCKINNON, DOUGLAS A	RI	0.00097660	0.0084417
	TOTAL			0.0000390
31	MCKINNON, MURRAY C	RI	0.00097660	0.0000082
12	MCKINNON, MURRAY C	TRUST	0.00146480	0.005594
13	MCKINNON, MURRAY C	TRUST	0.00097660	0.0267552
14	MCKINNON, MURRAY C	TRUST	0.00097660	0.001182
15	MCKINNON, MURRAY C	TRUST	0.00195310	0.0423152
16	MCKINNON, MURRAY C	TRUST	0.00097660	0.0217479
17	MCKINNON, MURRAY C	TRUST	0.00073250	0.0420482
18	MCKINNON, MURRAY C	TRUST	0.00117190	0.0005888

EXHIBIT "C"
PART III
TRACT & UNIT PARTICIPATION - ROYALTY OWNERSHIP BASIS

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TRACT #	OWNER	TYPE	NET INTEREST	TRACT 1	
				CUTOFF	BOPD/WELL
18A	MCKINNON, MURRAY C TRUST	RI	0.00146480	0.0000000	0.0000000
19	MCKINNON, MURRAY C TRUST	RI	0.00146480	0.00003464	0.0000005
20	MCKINNON, MURRAY C TRUST	RI	0.00146480	0.0000000	0.0000000
21	MCKINNON, MURRAY C TRUST	RI	0.00117190	0.0014065	0.0000016
22	MCKINNON, MURRAY C TRUST	RI	0.00117190	0.0234414	0.0000275
23	MCKINNON, MURRAY C TRUST	RI	0.00146480	0.0002051	0.0000003
24	MCKINNON, MURRAY C TRUST	RI	0.00146480	0.1037733	0.0001520
25	MCKINNON, MURRAY C TRUST	RI	0.00146480	0.0016035	0.0000023
26	MCKINNON, MURRAY C TRUST	RI	0.00146480	0.1231374	0.0001804
27	MCKINNON, MURRAY C TRUST	RI	0.00073240	0.0318665	0.0000233
28	MCKINNON, MURRAY C TRUST	RI	0.00195310	0.0260934	0.0000510
29	MCKINNON, MURRAY C TRUST	RI	0.00097660	0.1503259	0.0001468
30	MCKINNON, MURRAY C TRUST	RI	0.00097660	0.1163759	0.0001137
32	MCKINNON, MURRAY C TRUST	RI	0.00195310	0.08977968	0.0001754
33	MCKINNON, MURRAY C TRUST	RI	0.00097660	0.0021324	0.0000021
34	MCKINNON, MURRAY C TRUST	RI	0.00195310	0.0308971	0.0000603
35	MCKINNON, MURRAY C TRUST	RI	0.00195310	0.0088242	0.0000172
	TOTAL				0.0011169
31	MILLER, DAVID I	OR	0.00750000	0.0084417	0.0000633
32	MILLER, DAVID I	OR	0.00750000	0.0897968	0.0006735
34	MILLER, DAVID I	OR	0.00750000	0.0308971	0.0002317
	TOTAL				0.0009685
17	MILLER, MILDRED M	OR	0.00014780	0.0420482	0.0000062
17	MOON CO.	RI	0.08203130	0.0420482	0.0034493
18A	MOON CO.	RI	0.12304690	0.0000000	0.0000000
20	MOON CO.	RI	0.12304690	0.0000000	0.0000000
23	MOON CO.	RI	0.12304690	0.0002051	0.0000252
24	MOON CO.	RI	0.12304690	0.1037733	0.0126790
25	MOON CO.	RI	0.12304690	0.0016035	0.0001973
26	MOON CO.	RI	0.12304690	0.1231374	0.0151517
27	MOON CO.	RI	0.10048B40	0.0260934	0.0032022
28	MOON CO.	RI	0.10048B40	0.1503259	0.0151060
29	MOON CO.	RI	0.12304680	0.0084417	0.0010387
31	MOON CO.	RI	0.12304680	0.08977968	0.0110492
32	MOON CO.	RI	0.10048B40	0.0021324	0.0002143
33	MOON CO.	RI	0.12304690	0.0308971	0.003B01B
34	MOON CO.	RI	0.12304680	0.0888242	0.0010858
35	MOON CO.	RI	0.08203130	0.0005594	0.0000459
12	MOON CO.	RI	0.08203120	0.0267552	0.0021948
13	MOON CO.	RI	0.08203120	0.0001182	0.0000097
14	MOON CO.	RI	0.12304680	0.0423152	0.0052067
15	MOON CO.	RI			

EXHIBIT "C"
PART III
TRACT & UNIT PARTICIPATION - ROYALTY OWNERSHIP BASIS
UNIT AGREEMENT

TRACT #	OWNER	TYPE	NET INTEREST	TRACT PARTICIPATION	
				1 BOPD/WELL CUTOFF	UNIT PARTICIPATION
16 MOON CO.	RI	RI	0.08203120	0.0217479	0.0017840
18 MOON CO.	RI	RI	0.09843750	0.0005888	0.0000580
19 MOON CO.	RI	RI	0.12304690	0.0003464	0.0000426
21 MOON CO.	RI	RI	0.09843750	0.0014065	0.0001385
22 MOON CO.	RI	RI	0.09843750	0.0234414	0.0023075
30 MOON CO.	RI	RI	0.10048840	0.1163759	0.0116944
TOTAL				0.0937832	
12 PARKER, P W TRUST	RI	RI	0.00292970	0.0005594	0.0000016
13 PARKER, P W TRUST	RI	RI	0.00195310	0.0267552	0.00000523
14 PARKER, P W TRUST	RI	RI	0.00195310	0.0001182	0.0000002
15 PARKER, P W TRUST	RI	RI	0.00390630	0.0423152	0.0001653
16 PARKER, P W TRUST	RI	RI	0.00195310	0.0217479	0.0000425
17 PARKER, P W TRUST	RI	RI	0.00292960	0.0420482	0.0001232
18 PARKER, P W TRUST	RI	RI	0.00234380	0.0005888	0.0000014
18A PARKER, P W TRUST	RI	RI	0.00292970	0.0000000	0.0000000
19 PARKER, P W TRUST	RI	RI	0.00292970	0.0003464	0.0000010
20 PARKER, P W TRUST	RI	RI	0.00292970	0.0000000	0.0000000
21 PARKER, P W TRUST	RI	RI	0.00234380	0.0014065	0.0000033
22 PARKER, P W TRUST	RI	RI	0.00234380	0.0234414	0.0000549
23 PARKER, P W TRUST	RI	RI	0.00292970	0.0002051	0.0000006
24 PARKER, P W TRUST	RI	RI	0.00292970	0.1037733	0.0003040
25 PARKER, P W TRUST	RI	RI	0.00292970	0.0016035	0.0000047
26 PARKER, P W TRUST	RI	RI	0.00292970	0.1231374	0.0003508
27 PARKER, P W TRUST	RI	RI	0.00146480	0.0318665	0.0000467
28 PARKER, P W TRUST	RI	RI	0.00390630	0.0260934	0.0001019
29 PARKER, P W TRUST	RI	RI	0.00146480	0.1503259	0.0002202
30 PARKER, P W TRUST	RI	RI	0.00195310	0.1163759	0.0002273
31 PARKER, P W TRUST	RI	RI	0.00390630	0.0084417	0.0000330
32 PARKER, P W TRUST	RI	RI	0.00390630	0.0897968	0.0003508
33 PARKER, P W TRUST	RI	RI	0.00195310	0.0021324	0.0000042
34 PARKER, P W TRUST	RI	RI	0.00390630	0.0308971	0.0001207
35 PARKER, P W TRUST	RI	RI	0.00292970	0.0088242	0.0000259
TOTAL				0.0022464	
17 PETERSON, DAVID L	OR	OR	0.00059120	0.0420482	0.0000249
17 PETSCHEK, CHARLES I	OR	OR	0.00118240	0.0420482	0.0000497
31 POC	OR	OR	0.00515640	0.0084417	0.0000435
32 POC	OR	OR	0.00390620	0.0897968	0.0003508
34 POC	OR	OR	0.00390630	0.0308971	0.0001207
TOTAL				0.0005150	

EXHIBIT "C"
PART III
TRACT & UNIT PARTICIPATION - ROYALTY OWNERSHIP BASIS
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TRACT #	OWNER	TYPE	NET INTEREST	TRACT PARTICIPATION		UNIT PARTICIPATION
				1 BOPD/WELL CUTOFF	1	
17 SCHLESSMAN, LEE E	OR	0.00036950	0.0420482	0.0000155		
12 SEELEIGSON, FRATES	NPRI	0.01171870	0.0005594	0.0000066		
13 SEELEIGSON, FRATES	NPRI	0.01171880	0.0267552	0.0003135		
14 SEELEIGSON, FRATES	NPRI	0.01171880	0.0001182	0.000014		
15 SEELEIGSON, FRATES	NPRI	0.01757810	0.0423152	0.0007438		
16 SEELEIGSON, FRATES	NPRI	0.01171880	0.0217479	0.0002549		
17 SEELEIGSON, FRATES	NPRI	0.01171880	0.0420482	0.0004928		
18 SEELEIGSON, FRATES	NPRI	0.01406250	0.0005888	0.0000083		
18A SEELEIGSON, FRATES	NPRI	0.01757810	0.0000000	0.0000000		
19 SEELEIGSON, FRATES	NPRI	0.01757810	0.0000000	0.0000000		
20 SEELEIGSON, FRATES	NPRI	0.01757810	0.0000000	0.0000000		
21 SEELEIGSON, FRATES	NPRI	0.01406250	0.0014065	0.0000198		
22 SEELEIGSON, FRATES	NPRI	0.01406250	0.0234414	0.0003296		
23 SEELEIGSON, FRATES	NPRI	0.01757810	0.0002051	0.0000036		
24 SEELEIGSON, FRATES	NPRI	0.01757810	0.1037733	0.0018241		
25 SEELEIGSON, FRATES	NPRI	0.01757810	0.0016035	0.0000282		
26 SEELEIGSON, FRATES	NPRI	0.01757810	0.1231374	0.0021645		
27 SEELEIGSON, FRATES	NPRI	0.01435550	0.0318665	0.0004575		
28 SEELEIGSON, FRATES	NPRI	0.01757810	0.0260934	0.0004587		
29 SEELEIGSON, FRATES	NPRI	0.01435550	0.1503259	0.0021580		
30 SEELEIGSON, FRATES	NPRI	0.01435550	0.1163759	0.0016706		
31 SEELEIGSON, FRATES	NPRI	0.01757800	0.0084417	0.0001484		
32 SEELEIGSON, FRATES	NPRI	0.01757810	0.0897968	0.0015785		
33 SEELEIGSON, FRATES	NPRI	0.01435550	0.0021324	0.0000306		
34 SEELEIGSON, FRATES	NPRI	0.01757800	0.0308971	0.0005431		
35 SEELEIGSON, FRATES	NPRI	0.01757810	0.0088242	0.0001551		
TOTAL				0.0133976		
17 SILVERSTONE, ROBERT REX	OR	0.00073900	0.0420482	0.0000311		
17 STERN, H PETER	OR	0.00044340	0.0420482	0.0000186		
27 STONE, BEATRICE P B	NPRI	0.00520830	0.0318665	0.0001660		
29 STONE, BEATRICE P B	NPRI	0.00520830	0.1503259	0.0007829		
30 STONE, BEATRICE P B	NPRI	0.00520830	0.1163759	0.000661		
33 STONE, BEATRICE P B	NPRI	0.00520830	0.0021324	0.0000111		
TOTAL				0.0015661		
27 STONE, GROVER S JR	NPRI	0.00138890	0.0318665	0.0000443		
29 STONE, GROVER S JR	NPRI	0.00138890	0.1503259	0.0002088		
30 STONE, GROVER S JR	NPRI	0.00138890	0.1163759	0.0001616		
33 STONE, GROVER S JR	NPRI	0.00138890	0.0021324	0.0000030		
TOTAL				0.0004176		

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PART III
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TRACT #	OWNER	TYPE	NET INTEREST	TRACT 1 BOPD/WELL CUTOFF		PARTICIPATION UNIT PARTICIPATION
				1 BOPD/WELL CUTOFF	1 BOPD/WELL CUTOFF	
27	STONE, SANDRA J	NPRI	0.00138890	0.0318665	0.0000443	
29	STONE, SANDRA J	NPRI	0.00138890	0.1503259	0.0002088	
30	STONE, SANDRA J	NPRI	0.00138890	0.1163759	0.0001616	
33	STONE, SANDRA J	NPRI	0.00138890	0.0021324	0.0000030	
	TOTAL				0.0004176	
27	STONE, STEVEN L	NPRI	0.00138890	0.0318665	0.0000443	
29	STONE, STEVEN L	NPRI	0.00138890	0.1503259	0.0002088	
30	STONE, STEVEN L	NPRI	0.00138890	0.1163759	0.0001616	
33	STONE, STEVEN L	NPRI	0.00138890	0.0021324	0.0000030	
	TOTAL				0.0004176	
13	SWEENEY, BARBARA	OR	0.02734380	0.0267552	0.0007316	
23	TENNECO	RI	0.03125000	0.0002051	0.0000064	
24	TENNECO	RI	0.02343750	0.1037733	0.0024322	
25	TENNECO	RI	0.02343750	0.0016035	0.0000376	
27	TENNECO	RI	0.01171880	0.0318665	0.0003734	
28	TENNECO	RI	0.00625000	0.0260934	0.0001631	
31	TENNECO	RI	0.02968750	0.0084417	0.0002506	
31	TENNECO	OR (PP)	0.00156250	0.0084417	0.000132	
32	TENNECO (UV INDUSTRIES)	UNLEASED	0.03750000	0.0897968	0.00033674	
18	TENNECO (UV INDUSTRIES)	UNLEASED	0.12500000	0.0005888	0.00000736	
18A	TENNECO (UV INDUSTRIES)	UNLEASED	0.12500000	0.0000000	0.0000000	
19	TENNECO (UV INDUSTRIES)	UNLEASED	0.12500000	0.0003464	0.0000433	
20	TENNECO (UV INDUSTRIES)	RI	0.02343750	0.0000000	0.0000000	
21	TENNECO (UV INDUSTRIES)	RI	0.02343750	0.0014065	0.0000330	
	TOTAL				0.0067937	
17	WALSH, JOHN E JR	OR	0.00059120	0.0420482	0.0000249	
31	WATTS, DONALD R	OR	0.00520830	0.0084417	0.0000440	
32	WATTS, DONALD R	OR	0.00520830	0.0897968	0.0004677	
34	WATTS, DONALD R	OR	0.00520830	0.0308971	0.0001609	
	TOTAL				0.0006726	
17	WHITMAN, TANIA C TRUST	OR	0.00073900	0.0420482	0.0000311	
12	WINSTON, F S MARITAL TRUST	RI	0.00292960	0.0005594	0.0000016	
13	WINSTON, F S MARITAL TRUST	RI	0.00195310	0.0267552	0.0000523	
14	WINSTON, F S MARITAL TRUST	RI	0.00195310	0.001182	0.000002	
15	WINSTON, F S MARITAL TRUST	RI	0.00390630	0.0423152	0.0001653	

EXHIBIT "C"
PART III
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TRACT #	OWNER	TYPE	TRACT PARTICIPATION		
			NET INTEREST	1 BOPD/WELL CUTOFF	UNIT PARTICIPATION
16	WINSTON, F S	MARITAL TRUST	R1 0.00195310	0.0217479	0.0000425
17	WINSTON, F S	MARITAL TRUST	R1 0.00292960	0.0424482	0.0001232
18	WINSTON, F S	MARITAL TRUST	R1 0.00234380	0.0005988	0.000014
18A	WINSTON, F S	MARITAL TRUST	R1 0.00292970	0.0000000	0.0000000
19	WINSTON, F S	MARITAL TRUST	R1 0.00292970	0.0003464	0.000010
20	WINSTON, F S	MARITAL TRUST	R1 0.0000000	0.0000000	0.0000000
21	WINSTON, F S	MARITAL TRUST	R1 0.00234380	0.0014065	0.000033
22	WINSTON, F S	MARITAL TRUST	R1 0.00292970	0.0023414	0.0000549
23	WINSTON, F S	MARITAL TRUST	R1 0.00292970	0.0002051	0.000006
24	WINSTON, F S	MARITAL TRUST	R1 0.00292970	0.1037733	0.0003040
25	WINSTON, F S	MARITAL TRUST	R1 0.00292970	0.0016035	0.000047
26	WINSTON, F S	MARITAL TRUST	R1 0.00146480	0.1231374	0.0003608
27	WINSTON, F S	MARITAL TRUST	R1 0.00390630	0.0318665	0.0000467
28	WINSTON, F S	MARITAL TRUST	R1 0.00146480	0.0260934	0.0001019
29	WINSTON, F S	MARITAL TRUST	R1 0.00195310	0.1503259	0.0002202
30	WINSTON, F S	MARITAL TRUST	R1 0.00390630	0.1163759	0.0002273
31	WINSTON, F S	MARITAL TRUST	R1 0.00195310	0.0084417	0.0000330
32	WINSTON, F S	MARITAL TRUST	R1 0.00195310	0.0897968	0.0003508
33	WINSTON, F S	MARITAL TRUST	R1 0.00390620	0.0021324	0.000042
34	WINSTON, F S	MARITAL TRUST	R1 0.00292970	0.0308971	0.0001207
35	WINSTON, F S	MARITAL TRUST	R1 0.0000259	0.0088242	0.0000259
TOTAL				0.0024463	0.00022463
12	FRANCISCA, EST	TRUST	R1 0.00585940	0.0267552	0.000033
13	FRANCISCA, EST	TRUST	R1 0.00390630	0.0001182	0.0001045
14	FRANCISCA, EST	TRUST	R1 0.00781250	0.0423152	0.0003306
15	FRANCISCA, EST	TRUST	R1 0.00390630	0.0217479	0.0000850
16	FRANCISCA, EST	TRUST	R1 0.00585940	0.0420482	0.0002464
17	FRANCISCA, EST	TRUST	R1 0.00468760	0.0005888	0.000028
18	FRANCISCA, EST	TRUST	R1 0.00585940	0.0000000	0.0000000
18A	FRANCISCA, EST	TRUST	R1 0.00585940	0.0003464	0.000020
19	FRANCISCA, EST	TRUST	R1 0.0000000	0.0000000	0.0000000
20	FRANCISCA, EST	TRUST	R1 0.00468760	0.014065	0.000066
21	FRANCISCA, EST	TRUST	R1 0.00468760	0.0234414	0.0001099
22	FRANCISCA, EST	TRUST	R1 0.00585940	0.0002051	0.000012
23	FRANCISCA, EST	TRUST	R1 0.00585940	0.1037733	0.0006080
24	FRANCISCA, EST	TRUST	R1 0.00585940	0.0016035	0.000094
25	FRANCISCA, EST	TRUST	R1 0.00585940	0.1231374	0.0007215
26	FRANCISCA, EST	TRUST	R1 0.00292970	0.0318665	0.0000934
27	FRANCISCA, EST	TRUST	R1 0.00781250	0.0260934	0.0002039
28	FRANCISCA, EST	TRUST	R1 0.00292970	0.1503259	0.0004404
29	FRANCISCA, EST	TRUST	R1 0.00390630	0.1163759	0.0004546
30	FRANCISCA, EST	TRUST	R1 0.00781250	0.0084417	0.0000660
31	FRANCISCA, EST	TRUST	R1 0.00781250	0.0897968	0.0007015
32	FRANCISCA, EST	TRUST	R1 0.00390630	0.0021324	0.0000083
33	FRANCISCA, EST	TRUST	R1 0.00390630	0.0000259	0.00021324

**EXHIBIT "C"
PART III
TRACT & UNIT PARTICIPATION - ROYALTY OWNERSHIP BASIS
UNIT AGREEMENT**

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TRACT		PARTICIPATION 1 BOPD/WELL		UNIT CUTOFF		PARTICIPATION	
TRACT #	OWNER	TYPE	NET INTEREST	1	BOPD/WELL	CUTOFF	UNIT PARTICIPATION
34	WINSTON, FRANCISCA EST	TRUST	RI	0.00781250	0.0308971	0.0002414	0.0000517
35	WINSTON, FRANCISCA EST	TRUST	RI	0.00585940	0.0088242	0.0000517	0.0044927
TOTAL				0.00002460	0.0420482	0.0000010	0.0000155
17	WOOD, DONALD S	OR	RI	0.00292970	0.005594	0.000016	0.0000523
17	WYMAN, DAVID E JR	OR	RI	0.00195310	0.0267552	0.000002	0.0000002
12	WYMAN, J T TRUST	TRUST	RI	0.00195310	0.0011182	0.0001653	0.0000425
13	WYMAN, J T TRUST	TRUST	RI	0.00390630	0.0423152	0.0000425	0.0000425
14	WYMAN, J T TRUST	TRUST	RI	0.00195310	0.0217479	0.000014	0.000014
15	WYMAN, J T TRUST	TRUST	RI	0.00292970	0.0420482	0.00001232	0.00001232
16	WYMAN, J T TRUST	TRUST	RI	0.00234380	0.005888	0.000000	0.000000
17	WYMAN, J T TRUST	TRUST	RI	0.00292970	0.000000	0.000000	0.000000
18	WYMAN, J T TRUST	TRUST	RI	0.00292970	0.000000	0.000000	0.000000
18A	WYMAN, J T TRUST	TRUST	RI	0.00292970	0.000000	0.000000	0.000000
19	WYMAN, J T TRUST	TRUST	RI	0.00292970	0.000000	0.000000	0.000000
20	WYMAN, J T TRUST	TRUST	RI	0.00234380	0.014065	0.000033	0.000033
21	WYMAN, J T TRUST	TRUST	RI	0.00234380	0.0234414	0.0000549	0.0000549
22	WYMAN, J T TRUST	TRUST	RI	0.00292970	0.002051	0.000006	0.000006
23	WYMAN, J T TRUST	TRUST	RI	0.00292970	0.1037733	0.0000047	0.0000047
24	WYMAN, J T TRUST	TRUST	RI	0.00292970	0.016035	0.0003608	0.0003608
25	WYMAN, J T TRUST	TRUST	RI	0.00292970	0.1231374	0.000467	0.000467
26	WYMAN, J T TRUST	TRUST	RI	0.0146480	0.0318665	0.001019	0.001019
27	WYMAN, J T TRUST	TRUST	RI	0.0390630	0.0260934	0.0002202	0.0002202
28	WYMAN, J T TRUST	TRUST	RI	0.0146480	0.1503259	0.0002273	0.0002273
29	WYMAN, J T TRUST	TRUST	RI	0.01952310	0.163759	0.0003530	0.0003530
30	WYMAN, J T TRUST	TRUST	RI	0.0390630	0.084417	0.0003508	0.0003508
31	WYMAN, J T TRUST	TRUST	RI	0.0390630	0.087968	0.0004242	0.0004242
32	WYMAN, J T TRUST	TRUST	RI	0.01952310	0.021324	0.0001207	0.0001207
33	WYMAN, J T TRUST	TRUST	RI	0.0390630	0.0308971	0.0000259	0.0000259
34	WYMAN, J T TRUST	TRUST	RI	0.0292970	0.088B242	0.0022464	0.0022464
35	WYMAN, J T TRUST	TRUST	RI	0.000000	0.000000	0.000000	0.000000
TOTAL						0.1879721	0.1879721

UNIT OPERATING AGREEMENT
TWIN LAKES SAN ANDRES
CHAVES COUNTY, NEW MEXICO

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UNIT OPERATING AGREEMENT - TWIN LAKES SAN ANDRES UNIT
CHAVES COUNTY, NEW MEXICO

THIS AGREEMENT, entered into as of the 1st day of June, 1987, by the parties who have signed the original of this instrument, a counterpart thereof, or other instrument agreeing to be bound by the provisions hereof;

W I T N E S S E T H :

WHEREAS, the parties hereto as Working Interest Owners have executed, as of the date hereof, an agreement entitled, "Unit Agreement for the Development and Operation of the Twin Lakes San Andres Unit, Chaves County, New Mexico", herein referred to as "Unit Agreement", which, among other things, provides for a separate agreement to be entered into by Working Interest Owners pertaining to the development and operation of the Unit Area as therein defined;

NOW THEREFORE, in consideration of the mutual agreements herein set forth, it is agreed as follows:

ARTICLE 1
CONFIRMATION OF UNIT AGREEMENT AND ADOPTION OF DEFINITIONS

1.1 Confirmation of Unit Agreement. The Unit Agreement and all exhibits attached thereto or any revisions thereof are hereby confirmed and by reference made a part of this agreement. If there is any conflict between the Unit Agreement and this agreement, the Unit Agreement shall govern, except as otherwise provided in Article 12 hereof.

1.2 Adoption of Definitions. The definitions in the Unit Agreement and the following additional definitions are adopted for all purposes of this agreement:

(a) "Unit Operations" is defined as all operations conducted by Working Interest Owners or Unit Operator pursuant to this agreement for or on account of the development and operation of the Unitized Formation for the production of Unitized Substances.

(b) "Unit Equipment" is defined as all personal property, lease and well equipment, plants, and other facilities and equipment taken over or otherwise acquired for the joint account for use in Unit Operations.

(c) "Unit Expense" is defined as all cost, expense or

indebtedness incurred by Working Interest Owners or Unit Operator pursuant to this agreement as well as all necessary pre-unitization costs or expenses incurred for or on account of Unit Operations.

(d) "Tract Operator" is defined as the respective operator of each tract within the Unit Area prior to unitization.

ARTICLE 2 EXHIBITS

2.1 Exhibits. The following exhibits are incorporated herein by reference:

2.1.1 Exhibits "A", "B" and "C" of the Unit Agreement.

2.1.2 Exhibit "D", attached hereto, which is a schedule showing the Working Interest of each Working Interest Owner in each Tract listed in Exhibit "C", the percentage of total Unit Participation attributable to each such interest, and the total Unit Participation of each Working Interest Owner. Exhibit "D", or a revision thereof, shall not be conclusive as to the information therein, except it may be used as showing the Unit Participation of the Working Interest Owners for purposes of this agreement until shown to be in error or is revised as herein authorized.

2.1.3 Exhibit "E", attached hereto, which is the Accounting Procedure applicable to development and operation of the Unit Area. If there is any conflict between this agreement and Exhibit "E", this agreement shall govern.

2.1.4 Exhibit "F", attached hereto, which contains insurance provisions applicable to Unit Operations.

2.2 Revision of Exhibits. Whenever Exhibit "C" is revised, Exhibit "D" shall be revised accordingly and all such changes shall be effective as of the same date. Unit Operator shall also revise Exhibit "D" from time to time as required to conform to changes in ownership of which Unit Operator has been notified as provided in the Unit Agreement.

ARTICLE 3 SUPERVISION OF OPERATIONS BY WORKING INTEREST OWNERS

3.1 Overall Supervision. Working Interest Owners shall exercise overall supervision and control of all matters pertaining to Unit Operations pursuant to this agreement and the Unit Agreement. In the exercise of such authority, each Working Interest Owner shall act solely in

its own behalf in the capacity of an individual owner and not on behalf of the owners as an entirety.

3.2 Specific Authorities and Duties. The matters with respect to which the Working Interest Owners shall decide and take action shall include, but not be limited to, the following:

3.2.1 Method of Operation. The method of operation, including any type of pressure maintenance, secondary recovery, or other recovery program to be employed.

3.2.2 Drilling of Wells. The drilling of any well whether for production of Unitized Substances, for use as an injection well, or for other purposes.

3.2.3 Change of Well Status. The abandonment or the conversion of any producing well to an injection well or to a well to be used for any purpose other than production of Unitized Substances.

3.2.4 Expenditures. The making of any single expenditure in excess of Twenty Thousand Dollars (\$20,000.00), subject, however, to the provisions of Section 7.9 hereof; provided, that approval by Working Interest Owners of the drilling, reworking, deepening, or plugging back of any well shall include approval of all necessary expenditures required therefor, and for completing, testing and equipping the same, including necessary flow lines, separators and lease tankage.

3.2.5 Disposition of Unit Equipment. The Unit Operator shall have the right to sell or otherwise dispose of any item of surplus Unit Equipment.

3.2.6 Appearance Before a Court or Regulatory Agency. The designating of Unit Operator to appear before any court or regulatory agency in matters pertaining to Unit Operations; provided, however, that Working Interest Owners shall in the event Unit Operator is unable to appear designate an alternate representative; and provided, further, that such designation shall not prevent any Working Interest Owner from appearing in person or from designating another representative in its own behalf.

3.2.7 Audits. The auditing of the accounts of Unit Operator pertaining to Unit Operations hereunder; provided that, the audits shall:

(a) not be conducted more than once each year except upon the resignation or removal of Unit Operator and;

(b) be made upon the approval of the Owner or Owners of a majority of Working Interest other than that of Unit Operator, at the expense of all Working Interest Owners other than the Working Interest Owner designated as Unit Operator, or;

(c) be made at the expense of those Working Interest owners requesting such audit if owners of less than a majority of Working Interest, other than that of Unit Operator, request such audit, and;

(d) be made upon not less than thirty (30) days' written notice to Unit Operator.

3.2.8 Inventories. The taking of periodic inventories under the terms of Exhibit "E".

3.2.9 Technical Services. The authorizing of charges to the joint account for services by consultants or Unit Operator's technical personnel in excess of \$5000.00 and not covered by the overhead charges provided by Exhibit "E".

3.2.10 Assignments to Committees. The appointment of committees to study any problems in connection with Unit Operations.

3.2.11 The removal of Unit Operator and the selection of a successor.

3.2.12 The expansion of the Unit.

3.2.13 The adjustment of investments.

3.2.14 The termination of the Unit Agreement.

ARTICLE 4
MANNER OF EXERCISING SUPERVISION

4.1 Designation of Representatives. Not later than thirty (30) days after the effective date hereof, each Working Interest Owner shall inform Unit Operator in writing of the names and addresses of the representative and alternate who are authorized to represent and bind such Working Interest Owner with respect to Unit Operations. The representative or alternate may be changed from time to time by written notice to Unit Operator.

4.2 Meetings. All meetings of Working Interest Owners shall be called by Unit Operator upon its own motion or at the request of two or more Working Interest Owners having a total voting interest of not less than ten percent (10%). No meeting shall be called on less than fourteen (14) days' advance written notice, with agenda for the meeting attached. Working Interest Owners who attend the meeting shall not be prevented from amending items included in the agenda or from deciding the amended item or other items presented at the meeting. The representative of Unit Operator shall be chairman of each meeting.

4.3 Voting Procedure. Working Interest Owners shall decide all matters coming before them as follows:

4.3.1 Voting Interest. Each Working Interest Owner shall have a voting interest equal to its Unit Participation in effect at the time of the vote.

4.3.2 Vote Required - Generally. Unless otherwise provided herein or in the Unit Agreement, all matters shall be decided by an affirmative vote of seventy-five percent (75%) or more of the voting interest, said voting interest to include two or more Working Interest

Owners.

4.3.3 Vote at Meeting by Nonattending Working Interest Owner.

Any Working Interest Owner who is not represented at a meeting may vote by letter or telegram addressed to the representative of the Unit Operator if its vote is received prior to the actual vote taken at such meeting.

4.3.4 Poll Votes. Working Interest Owners may vote on and decide, by letter or telegram, any matter submitted in writing to Working Interest Owners. If a meeting is not requested, as provided in Section 4.2, within seven (7) days after a written proposal is sent to Working Interest Owners, the vote taken by letter or telegram shall become final. Unit Operator will give prompt notice of the results of such vote to all Working Interest Owners.

ARTICLE 5

INDIVIDUAL RIGHTS OF WORKING INTEREST OWNERS

5.1 Reservation of Rights. Working Interest Owners severally reserve to themselves all their rights, except as otherwise provided in this agreement and the Unit Agreement.

5.2 Specific Rights. Each Working Interest Owner shall have, among others, the following specific rights:

5.2.1 Access to Unit Area. Access to the Unit Area at all reasonable times to inspect Unit Operations, all wells, and the records and data pertaining thereto.

5.2.2 Reports. The right to receive from Unit Operator, upon written request, copies of all reports to any governmental agency. The cost of gathering and furnishing information not ordinarily furnished by Unit Operator to all Working Interest Owners shall be charged to the Working Interest Owner who requests the information.

ARTICLE 6

UNIT OPERATOR

6.1 Initial Unit Operator. Pelto Oil Company is hereby designated as Unit Operator.

6.2 Resignation or Removal - Selection of Successor. The resignation or removal of Unit Operator and the selection of a successor shall be governed by the provisions of the Unit Agreement.

ARTICLE 7
AUTHORITIES AND DUTIES OF UNIT OPERATOR

7.1 Exclusive Right to Operate Unit. Subject to the provisions of this agreement and to the orders, directions and limitations rightfully given or imposed by Working Interest Owners, Unit Operator shall have the exclusive right and shall be obligated to develop and operate the Unit Area for the production of Unitized Substances.

7.2 Workmanlike Conduct. Unit Operator shall conduct Unit Operations in a good and workmanlike manner as would a prudent operator under the same or similar circumstances. Unit Operator shall freely consult with Working Interest Owners and keep them informed of all matters which Unit Operator, in the exercise of its best judgment, considers important. Unit Operator shall not be liable to Working Interest Owners for damages, unless such damages result from its gross negligence or willful misconduct.

7.3 Liens and Encumbrances. Unit Operator shall endeavor to keep the lands and leases in the Unit Area free from all liens and encumbrances occasioned by Unit Operations, except the lien of Unit Operator granted hereunder.

7.4 Employees. The number of employees used by Unit Operator in conducting Unit Operations, their selection, hours of labor and compensation shall be determined by Unit Operator. Such employees shall be employees of Unit Operator.

7.5 Records. Unit Operator shall keep correct books, accounts and records of Unit Operations.

7.6 Reports to Working Interest Owners. Unit Operator shall furnish to Working Interest Owners periodic reports of Unit Operations.

7.7 Reports of Governmental Authorities. Unit Operator shall make all reports to governmental authorities that it has the duty to make as Unit Operator.

7.8 Engineering and Geological Information. Unit Operator shall furnish to each Working Interest Owner, upon its written request, a copy of the log and other engineering and geological data pertaining to wells drilled for Unit Operations.

7.9 Expenditures. Unit Operator is authorized to make single expenditures not in excess of Twenty Thousand Dollars (\$20,000.00) without prior approval of Working Interest Owners. If an emergency occurs, Unit Operator may immediately make or incur such expenditures as in its opinion are required to deal with the emergency. Unit Operator shall report to Working Interest Owners, as promptly as possible, the nature of the emergency and the action taken.

7.10 Wells Drilled by Unit Operator. All wells drilled by Unit Operator shall be at the usual rates prevailing in the area. Unit Operator may employ its own tools and equipment, but the charge therefor shall not exceed the prevailing rate in the area, and the work shall be performed by Unit Operator under the same terms and conditions as are usual in the area in contracts of independent contractors doing work of a similar nature.

7.11 Border Agreements. The Unit Operator, with the approval by formal vote of seventy-five percent (75%) of the Working Interest Owners, may enter into a border protection agreement or agreements with Working Interest Owners of the adjacent lands along the exterior boundary of the Unit Area with respect to any cooperative operations in the border area for the proper protection of the parties and interests.

ARTICLE 8

TAXES

8.1 Ad Valorem Taxes. Unit Operator shall, beginning with the first calendar year after the Unit Agreement becomes effective, make and file all necessary ad valorem tax renditions and returns with the proper taxing authorities covering all real and personal property of each Working Interest Owner used or held by Unit Operator in Unit Operations. Unit Operator shall settle assessments arising therefrom. All such ad valorem taxes shall be paid by Unit Operator and charged to the joint account.

8.2 Other Taxes. Unit Operator shall pay or cause to be paid on behalf of each Working Interest Owners all production, severance, gathering, and other taxes imposed upon or in respect of the production or handling of its share of Unitized Substances.

ARTICLE 9

INSURANCE

9.1 Insurance. Unit Operator, with respect to Unit Operations and at Unit Expense, shall do the following:

9.1.1 Comply with the Workmen's Compensation Act of the State of New Mexico.

9.1.2 Carry Employer's Liability and other insurance as required by the laws of the State of New Mexico.

9.1.3 Provide other insurance as set forth in Exhibit "F".

ARTICLE 10
ADJUSTMENT OF INVESTMENTS

10.1 Personal Property Taken Over. Upon the effective date hereof, Working Interest Owners shall deliver to Unit Operator the following:

10.1.1 Wells. All wells completed in the Unitized Formation, together with the casing therein.

10.1.2 Well and Lease Equipment. The casing and tubing in each such well, all subsurface equipment therein including sucker rods and pumps, the wellhead connections thereon, and all other well and lease equipment that is used in the operation of such wells which Unit Operator determines is necessary or desirable for conducting Unit Operations. Unit Operator shall have up to six (6) months after the effective date in which to make such determination, and all such property that is determined to be surplus shall be returned in the same condition less usual depreciation to each Tract Operator who was responsible for delivery same to Unit Operator. There shall be no charge to the Unit for the use of any such surplus property during this six (6) month period. The individual Tract Operators shall have ninety (90) days from the date of notification in which to remove the surplus property returned to them. Surplus property shall then be disposed of by each Tract Operator in accordance with the respective joint operating agreement which governs each Tract. If the surplus property has not been removed from the Unit Area within the ninety (90) day period, then Unit Operator shall have the right to dispose of the property in a good and workmanlike manner as would a prudent operator under the same or similar circumstances. Any proceeds received upon disposition, in excess of removal and clean-up costs, will be disbursed to the Working Interest Owners in the specific Tract. Any costs in excess of proceeds received upon disposition will be charged to the Working Interest Owners in the specific Tract.

10.1.3 Records. A copy of all production and well records that pertain to such wells.

10.2 Inventory and Evaluation of Personal Property. The Working Interest Owners shall appoint an inventory committee which shall, as of the effective date hereof or as soon thereafter as feasible, cause to be taken under the supervision of the Unit Operator at Unit Expense, joint physical inventories of lease and well equipment within the Unit Area, which inventories shall be used as a basis for determining the controllable items of equipment to be taken over by the Unit Operator hereunder.

In the absence of an inventory committee Unit Operator shall engage at Unit Expense a qualified independent firm to serve in place of an inventory committee. Such inventories shall include and be limited to those items of equipment normally considered controllable by operators of oil and gas properties except that certain items of equipment normally considered noncontrollable, such as sucker rods, subsurface pumps and other items as determined by the Working Interest Owners may be included in the inventories in order to insure a more equitable adjustment of investment. All other noncontrollable items of lease and well equipment installed within the Unit Area, although excluded from the inventories, which the Unit Operator decides are necessary and usable in Unit Operations, shall nevertheless be taken over by the Unit Operator. After the determination by Unit Operator as to surplus property, such inventories covering equipment taken over by the Unit Operator under Subsection 10.1.2 and retained for Unit Operations, shall be priced in accordance with the provisions of Exhibit "E", Accounting Procedure, attached hereto and made a part hereof, or at an appraised value as determined by the inventory committee; such pricing shall be performed under the supervision of, by the personnel of, and in the offices of the Unit Operator, with the inventory committee furnishing such additional pricing help as may be available and necessary. Casing shall be included in the inventory for record purposes but shall be excluded from pricing and investment adjustment.

10.3. Investment Adjustment. Upon approval by Working Interest Owners of the inventory and evaluation, investments shall be adjusted as follows:

10.3.1 Initial Adjustment of Investments. Each Working Interest Owner shall be credited with the value, as determined in accordance with Section 10.2 above, of its interest in all personal property taken over by Unit Operator under Section 10.1.2 and charged with an amount equal to that obtained by multiplying the total value of all such personal property taken over by Unit Operator under Section 10.1.2 by such Working Interest Owner's Unit Participation, as shown on Exhibit "C". If the charge against any Working Interest Owner is greater than the amount credited to such Working Interest Owner, the resulting net charge shall be paid and in all other respects be treated as any other item of Unit Expense chargeable against such Working Interest Owner. If the credit to any Working Interest Owner is greater than the amount charged against such Working Interest Owner, the resulting net credit shall be paid to such Working Interest Owner by Unit Operator out of funds received by it in settlement of the net charges described above.

10.4. General Facilities. The acquisition of general facilities which service more than one lease and which are necessary for Unit Operations

shall be by negotiation between the owners thereof and Unit Operator, subject to the approval of Working Interest Owners. There shall be no adjustment for lease roads or appurtenances thereto. General facilities which are owned one-hundred percent (100%) by the Unit Operator shall be acquired by negotiation between the Unit Operator and the Working Interest Owners. General facilities owned one-hundred (100%) by the Unit Operator and which are deemed to be necessary for Unit Operations are listed as follows:

(a) General Facilities Located Within the Unit Area

Warehouse Building and Yard
Office Building and furnishings
Warehouse Stock (Including Tools)
Shop Building
Lease Automatic Custody Transfer (L.A.C.T.)
Rolling Stock
Communication Equipment

(b) General Facilities Located Outside the Unit Area

Natural Gas Pipeline - Approximately three and four-tenths (3.4) miles of polymer pipeline with a starting point at the outlet of the compressor station and extending to a tie-in with a pipeline owned by Stevens Operating Corporation.

Source Water System - The source water system has not been constructed. The planned system consists of existing Ogalla water rights acquired by Unit Operator in addition to two wells, pump sites and rights-of-way from the water source to Twin Lakes Field. Such system will pipe water a distance of approximately 27 miles. As soon as practicable following the effective date hereof, Unit Operator will submit an AFE to construct the source water system for approval by the Working Interest Owners.

10.5 Exchange of Interest in and Ownership of Personal Property and Facilities. Each Working Interest Owner hereby exchanges, and agrees to exchange, its interest in all of the personal property and facilities described in Section 10.1.2 above for its proportionate interest, as shown on Exhibit C, from and after the time the same may hereafter become effective, in all such personal property and facilities described in Section 10.1.2. Each Working Interest Owner, individually, shall by virtue hereof own an undivided interest in all personal property and facilities taken over or otherwise acquired by Unit Operator pursuant to this agreement.

ARTICLE 11
DEVELOPMENT AND OPERATING COSTS

11.1 Basis of Charge to Working Interest Owners. Unit Operator initially shall pay and discharge all costs and expenses incurred in Unit Operations including all pre-unitization expenses required for organization and/or formation of the unit. Each Working Interest Owner shall reimburse Unit Operator for its share of Unit Expense in proportion to the respective Unit Participation of the parties hereto. All charges, credits, and accounting for Unit Expense shall be in accordance with Exhibit "E".

11.2 Budgets. Before or as soon as practical after the Effective Date hereof, Unit Operator shall prepare a budget of estimated Unit Expense for the remainder of the calendar year, and, on or before the first day of each September thereafter, shall prepare such a budget for the ensuing calendar year. A budget shall set forth the estimated Unit Expense by quarterly periods. Budgets shall be estimates only, and shall be adjusted or corrected whenever an adjustment or correction is proper. A copy of each budget and adjusted budget shall promptly be furnished to each Working Interest Owner.

11.3 Advance Billings. Unit Operator shall have the right without prejudice to any other rights or remedies, at its option to require Working Interest Owners to advance their respective proportions of such costs and expenses by submitting to Working Interest Owners, on or before the 15th day of any month, an itemized estimate of such costs and expenses for the succeeding two months with a request for payment in advance. If such advance is requested as to operating costs and expenses, the Working Interest Owners' proportionate shares thereof shall be deemed to be the same as for the preceding month, with an adjustment to be made on the basis of their actual proportionate shares thereof as determined at the end of the period for which such advance was requested. Within fifteen (15) days thereafter, each Working Interest Owner shall pay to Unit Operator its proportionate part of such estimate. Adjustment between estimates and the actual costs shall be made by Unit Operator at the close of each calendar month, and the accounts of the Working Interest Owners shall be adjusted accordingly.

11.4 Commingling of Funds. No funds received by Unit Operator under this agreement need be segregated or maintained by it as a separate fund, but may be commingled with its own funds.

11.5 Lien of Unit Operator. Effective as of the date this Unit Operating Agreement is filed for record in Chaves County, New Mexico, each Working Interest Owner grants to Unit Operator a lien upon its Working Interest in each Tract, its share of Unitized Substances when produced, and its interest in all Unit Equipment, as security for payment of its share of Unit Expense to the full extent allowed by State and Federal Statutes.

together with interest thereon at the prime rate charged by Chase Manhattan Bank of New York plus two percent (2%) per annum. To the extent that Unit Operator has a security interest under the Uniform Commercial Code, Unit Operator shall be entitled to exercise the rights and remedies of a secured party under the Code. Unit Operator shall have the right to bring suit to enforce collection of such indebtedness with or without seeking foreclosure of the lien. In addition, upon default by any Working Interest Owner in the payment of its share of Unit Expense, Unit Operator shall have the right to collect from the purchaser the proceeds from the sale of such Working Interest Owner's share of Unitized Substances until the amount owed by such Working Interest Owner, plus interest as aforesaid, has been paid. Each purchaser shall be entitled to rely upon Unit Operator's written statement concerning the amount of any default. Unit Operator grants a like lien and security interest to the Working Interest Owners.

11.6 Unpaid Unit Expense. If any Working Interest Owner fails to pay its share of Unit Expense within sixty (60) days after rendition of a statement therefor by Unit Operator, each Working Interest Owner agrees, upon request by Unit Operator, to pay its proportionate part of the unpaid share of Unit Expense of the defaulting Working Interest Owner. The Working Interest Owners that pay the share of Unit Expense of a defaulting Working Interest Owner shall be reimbursed by the Unit Operator for the amount so paid, plus any interest collected thereon, upon receipt by Unit Operator of any past due amount collected from the defaulting Working Interest Owner. Any Working Interest Owner so paying a defaulting Working Interest Owner's share of Unit Expenses shall be subrogated to the lien and rights herein granted Unit Operator.

11.7 Rentals and Minimum Royalties. The Working Interest Owner in each Tract shall, at its own expense, pay any and all rentals required to continue its lease in force, and any and all minimum royalties payable thereunder. Upon request of Unit Operator, each such Working Interest Owner shall furnish Unit Operator satisfactory evidence as to the payment of each such rental not less than thirty (30) days prior to the rental payment date and as to the payment of such minimum royalty payment when same is due. Unit Operator shall have the right, but shall be under no obligation, to pay any and all such rentals and minimum royalties on behalf of each such Working Interest Owner, and any and all amounts so paid by Unit Operator shall be charged solely to the account of such Working Interest Owner. In the event the Working Interest Owner in any Tract fails to pay any rental required to continue its lease in force as to such Tract or any minimum royalties payable under such lease and as a result said lease terminates or is cancelled as to such Tract, the termination or

cancellation of said lease as to such Tract shall be considered for all purposes of this agreement and the Unit Agreement to be a failure of title to said lease for reasons other than Unit Operations.

ARTICLE 12
OPERATION OF NON-UNITIZED FORMATIONS

12.1 Right to Operate in Non-Unitized Formations. Any Working Interest Owner now having, or hereafter acquiring, the right to drill for and produce oil, gas or other minerals, other than Unitized Substances, within the Unit Area shall have the full right to do so notwithstanding this agreement or the Unit Agreement. In exercising said right, however, such Working Interest Owner shall exercise every reasonable precaution to prevent unreasonable interference with Unit operations hereunder. No Working Interest Owner (other than Unit Operator) shall produce Unitized Substances through any well within the Unit Area drilled or operated by it. If any Working Interest Owner drills any well into or through the Unitized Formation, the Unitized Formation shall be protected during drilling operations by a drilling fluid satisfactory to Unit Operator, and following drilling operations, the Unitized Formation shall be protected by cement or by casing and cement and shall otherwise be protected in such a manner that the Unitized Formation and the production of Unitized Substances will not be adversely affected.

12.2 Multiple Completions. No well now or hereafter completed in Unitized Formation shall ever be completed as a multiple completion with any other formation or formations without the unanimous consent of Working Interest Owners.

ARTICLE 13
TITLES

13.1 Warranty and Indemnity. Each Working Interest Owner represents and warrants that it is the owner of the respective working interests set forth opposite its name in Exhibit "C" of the Unit Agreement and hereby agrees to indemnify and hold harmless the other Working Interest Owners from any loss due to failure, in whole or in part, of its title to any such interest, except failure of title arising out of Unit Operations; provided that, such indemnity shall be limited to an amount equal to the net value that has been received from the sale or receipt of Unitized Substances attributed to the Interest as to which title failed. Each failure of title will be deemed to be effective, insofar as this agreement is concerned, as of the first day of the calendar month in which such failure is finally determined, and there shall be no retroactive adjustment of Unit Expense, or retroactive allocation of Unitized Substances or the proceeds therefrom, as a result of title failure.

ARTICLE 14
LIABILITY, CLAIMS AND SUITS

14.1 Individual Liability. The duties, obligations and liabilities of Working Interest Owners shall be several and not joint or collective; and nothing herein contained shall ever be construed as creating a partnership of any kind, joint venture, association, or trust among Working Interest Owners.

14.2 Settlements. Unit Operator may settle any single damage claim or suit involving Unit Operations but not involving an expenditure in excess of Seven Thousand Five Hundred Dollars (\$7,500.00) provided the payment is in complete settlement of such claim or suit. If the amount required for settlement exceeds the above specified amount, Unit Operator shall notify Working Interests Owners and shall continue handling the claim or suit unless such authority is expressly denied by Working Interest Owners after notification. All costs and expense of handling, settling, or otherwise discharging such claim or suit shall be an item of Unit Expense. If a claim is made against any Working Interest Owner or if any Working Interest Owner is sued on account of any matter arising from Unit Operations and over which such Working Interest Owner individually has no control because of the rights given Working Interest Owners and Unit Operator by this agreement and the Unit Agreement, the Working Interest Owner shall immediately notify the Unit Operator, and the claim or suit shall be treated as any other claim or suit involving Unit Operations.

ARTICLE 15
INTERNAL REVENUE PROVISION

15.1 Internal Revenue Provision. Notwithstanding any provisions herein that the rights and liabilities of the parties hereunder are several and not joint or collective or that this agreement and the operations hereunder shall not constitute a partnership, if for Federal income tax purposes this agreement and the operations hereunder are regarded as a partnership, then each of the parties hereto hereby elects to be excluded from the application of all of the provisions of Subchapter K, Chapter 1, Subtitle A, of the Internal Revenue Code of 1954, as permitted and authorized by Section 761 of said Code and the regulation promulgated thereunder. Unit Operator is hereby authorized and directed to execute on behalf of each of the parties hereto such evidence of this election as may be required by the Secretary of the Treasury of the United States or by the Federal Internal Revenue Service, including specifically, but not by way of limitation, all of the returns, statements, and the data required by Federal Regulations 1.761-1 (a). Should there be any requirement that each party hereto further evidence this election, each party hereto agrees to

execute such documents and furnish such other evidence as may be required by the Federal Internal Revenue Service or as may be necessary to evidence this election. 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 or states 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, provisions similar to those contained in Subchapter K. Chapter 1, Subtitle A, of the Internal Revenue Code of 1954, 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 or agrees to make such election as may be permitted by such laws. In making this election, each of the parties hereto hereby states that the income derived by it from the operations under this agreement can be adequately determined without the computation of partnership taxable income.

ARTICLE 16

NOTICES

16.1 Notices. All notices required hereunder shall be in writing and shall be deemed to have been properly served when sent by mail or telegram to the address of the representative of each Working Interest Owner as furnished to Unit Operator in accordance with Article 4.

ARTICLE 17

WITHDRAWAL OF WORKING INTEREST OWNER

17.1 Withdrawal. A Working Interest Owner may withdraw from this Agreement by transferring, without warranty of title, either express or implied, to the other Working Interest Owners, ("transferees"), all its Oil and Gas Rights, exclusive of Royalty Interests, together with its interest in all Unit Equipment and in all wells used in Unit Operations. The instrument of transfer may be delivered to Unit Operator for the transferees. Such transfer shall not relieve the Working Interest Owner from any obligation or liability incurred prior to the date of the delivery of the instrument of transfer; however, the tender has to be accepted unless Working Interest Owners decide within ninety (90) days to terminate the Unit. The interest transferred shall be owned by the transferees in proportion to their respective Unit Participations in effect. The transferees, in proportion to the respective interest so acquired, shall pay transferor for its interest in Unit Equipment the net salvage value thereof as determined by Working Interest Owners. In the event such withdrawing party's interest in the aforesaid fair salvage value after deducting the estimated cost of salvaging same is less than the withdrawing

party's share of estimated cost of plugging and abandoning the wells then being used or held for Unit Operations, then as condition precedent to its withdrawal, the withdrawing party shall pay in cash to the succeeding to its interest a sum equal to the deficiency. Within sixty (60) days after receiving delivery of the transfer, Unit Operator shall render a final statement to the withdrawing owner for its share of Unit Expense, including any deficiency in salvage value, as determined by Working Interest Owners, incurred as of the first day of the month following the date of receipt of the transfer. Provided all Unit Expense, including any deficiency hereunder, due from the withdrawing owner has been paid in full within thirty (30) days after the rendering of such final statement by the unit Operator, the transfer shall be effective the first day of the month following its receipt by Unit Operator and, as of such effective date, withdrawing owner shall be relieved from all further obligations and liabilities hereunder and under the Unit Agreement, and the rights of the withdrawing Working Interest Owner hereunder and under the Unit Agreement shall cease insofar as they existed by virtue of the interest transferred.

ARTICLE 18 INTEREST CARVED OUT BY WORKING INTEREST OWNER

18.1 Carved-out Interest Subject to This Agreement. In the event any Working Interest Owner shall, after this Agreement becomes effective or after executing this agreement, whichever is earlier, create an overriding royalty, production payment, net profits, or carried interest, or any other interest out of its Working Interest then subject to this agreement, such carved-out interest shall be subject to the terms and provisions of this agreement, specifically including, but without limitation, Section 11.5 hereof, entitled "Lien of Unit Operator". In the event the Working Interest Owner creating such carved-out interest (i) fails to pay any costs or expenses chargeable to such Working Interest Owner under this agreement and the production of Unitized Substances accruing to the credit of such Working Interest Owner is insufficient for that purpose, or (ii) withdraws from this agreement under the terms and provisions of Article 17 hereof, the carved-out interest shall be chargeable with a prorata portion of all costs and expenses incurred hereunder and Unit Operator shall have the right to enforce against such carved-out interest the lien and all other rights granted in said Section 11.5 for the purpose of collecting the costs and expenses chargeable to said carved-out interest.

ARTICLE 19 ABANDONMENT OF WELLS

19.1 Rights of Former Owners. If Working Interest Owners decide to abandon permanently any well within the Unit Area prior to termination of the Unit Agreement, Unit Operator shall give written notice thereof to the

Working Interest Owners of the Tract on which the well is located, and they shall have the option for a period of ninety (90) days after the sending of such notice to notify Unit Operator in writing of their election to take over and own the well. Within ten (10) days after the Working Interest Owners of the Tract have notified Unit Operator of their election to take over the well, they shall pay Unit Operator, for credit to the joint account, the amount estimated by Working Interest Owners to be the salvage value of the casing and equipment in and on the well, except the casing therein if casing and equipment in and on the well, except the casing therein if contributed by such Working Interest Owners of the Tract under Section 10.1.1, less salvage costs. The Working Interest Owners of the Tract, by taking over the well, agree to seal off effectively and protect the Unitized Formation, and upon abandonment to plug the well in compliance with applicable laws and regulations.

19.2 Plugging. If the Working Interest Owners of a Tract do not elect to take over a well located thereon which is proposed for abandonment, Unit Operator shall plug and abandon the well at Unit expense in compliance with applicable laws and regulations.

ARTICLE 20 EFFECTIVE DATE AND TERM

20.1 Effective Date. This agreement shall be binding on each party who executes or ratifies the same as of the date of execution or ratification by such party, but shall not become effective for the purpose of conducting Unit Operations hereunder until the effective date of said Unit Agreement, which date shall also be the effective date of this agreement.

20.2 Term. This agreement shall continue in full force and effect so long as the Unit Agreement remains in force and effect, and thereafter until (a) all Unit Wells have been abandoned and plugged or turned over to the the Working Interest Owners in accordance with Article 21, (b) all Unit Equipment and real property acquired for the joint account have been disposed of by the Unit Operator in accordance with instructions of the Working Interest Owners, and (c) there has been a final accounting.

ARTICLE 21 ABANDONMENT OF OPERATIONS

21.1 Termination. Upon termination of the Unit Agreement, the following will occur:

21.1.1 Oil and Gas Rights. The oil and gas rights in and to each separate Tract shall no longer be affected by this agreement, and thereafter the parties shall be governed by the terms and provisions of the leases, contracts, and other instruments affecting the separate Tracts.

21.1.2 Right to Operate. Working Interest Owners of any Tract that desire to take over and continue to operate wells located thereon may do so by paying Unit Operator, for credit to the joint account, the net salvage value of the casing and equipment in and on the wells taken over, except the casing therein if contributed by such Working Interest Owners under Section 10.1.1 less salvage costs as estimated by Working Interest Owners, and by agreeing to plug properly each well at such time as it is abandoned.

21.1.3 Salvaging Wells. Unit Operator shall salvage as much of the casing and equipment in or on wells not taken over by Working Interest Owners of separate Tracts as can economically and reasonably be salvaged, and shall cause the wells to be plugged and abandoned properly.

21.1.4 Cost of Salvaging & Distribution of Assets. Working Interest Owners shall share the cost of salvaging and abandonment as well as distribution of assets and properties used in Unit Operation in proportion to their respective Unit Participations.

ARTICLE 22

EXCISE TAX PROVISIONS

22.1 Crude Oil Excise Tax. For the period during which excise taxes are payable under the Crude Oil Windfall Profit Tax Act of 1980 on any party's Unitized Substances, the first crude oil allocated to any Tract after distribution of any incremental stripper crude as hereinafter provided shall be the tax tier type of crude oil actually produced or considered to have been produced during the base period under I.R.C. regulations but not to exceed its Tract Participation share or the amount of such tax tier type of crude oil currently available. Any excess of a tax tier type of crude oil currently available. Any excess of a tax tier type of crude oil existing after the foregoing specific identification allocation shall be allocated to the remaining Tracts in the unit which have an underallocation of crude oil in proportion to the amount of their relative underallocations of crude oil. Anything hereinabove notwithstanding, any incremental stripper oil as defined under I.R.C. Section 4993 shall be allocated to each Tract in accordance with its Tract Participation prior to any other allocation of tax tier type of crude oil under this Article 21.1. In no case shall the sum of the different tax tier types of crude oil allocated to any Tract exceed the total amount of crude oil allocable under its Tract Participation.

ARTICLE 23
EXECUTION

23.1 Execution by Separate Counterparts or Ratifications. This agreement may be executed in any number of counterparts, and each executed counterpart shall have the same force and effect as an original instrument and as if all parties to the aggregate counterparts had signed the same instrument, or may be ratified by a separate instrument in writing referring to this agreement, each such ratification having the force and effect of an executed counterpart hereof and in effect incorporating by reference all of the provisions hereof.

ARTICLE 24
SUCCESSORS AND ASSIGNS

24.1 Successors and Assigns. This agreement shall constitute a covenant running with the lands and leases covered hereby, and shall be binding upon and inure to the benefit of the heirs, devisees, legal representatives, successors, and assigns of the parties hereto, respectively. Each assignment or other transfer of Working Interest by any party hereto shall be made expressly subject to this agreement and shall provide expressly that the transferee shall assume and be bound by all obligations accruing hereunder in respect to the Working Interest transferred from and after the assignment or other transfer.

24.2. Notice of Transfer. An assignment or other transfer of Working Interest that is subject to this agreement shall not be binding upon Unit Operator and shall not relieve the transferor of obligations accruing hereunder, until the first day of the calendar month next succeeding receipt by Unit Operator of written notice of such assignment or transfer accompanied by certified copy of the recorded instrument evidencing the transfer.

24.3 Six or More Owners. In the event that any Tract or Tracts subject to this agreement is owned or hereafter becomes owned by six (6) or more Working Interest Owners, then, in such event, said Working Interest Owners agree, upon request, to furnish Unit Operator with a recordable instrument executed by all such Working Interest Owners designating an agent to receive and be responsible for all costs, expenses, and credits related to Unit Operations and attributable to all such Working Interest Owners.

25.1 Governmental Regulations. Working Interest Owners agree to release Unit Operator from any and all losses, damages, injuries, claims and causes of action arising out of, incident to or resulting directly or indirectly from Unit Operator's interpretation or application of rules,

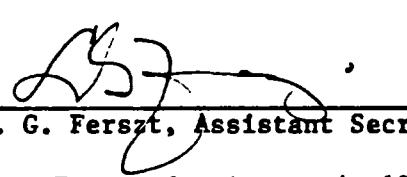
regulations or orders of any governmental agency or predecessor agencies to the extent Unit Operator's interpretation or application of such rules, rulings, regulations or orders were made in good faith. Working Interest Owners further agree to reimburse Unit Operator for their proportionate share of any amounts Unit Operator may be required to refund, rebate or pay as a result of an incorrect interpretation or application of the above noted rules, rulings, regulations or orders, together with their proportionate part of interest and penalties owing by Unit Operator as a result of such incorrect interpretation or application of such rules, ruling, regulations or orders.

IN WITNESS WHEREOF, the parties hereto have executed this agreement on the dates opposite their respective signatures.

UNIT OPERATOR AND WORKING INTEREST OWNER

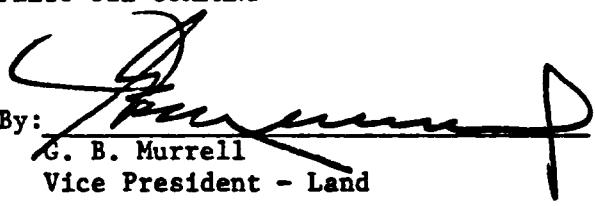
PELTO OIL COMPANY

ATTEST:



L. G. Ferszt, Assistant Secretary

Date Executed: August 4, 1987



By: _____
G. B. Murrell
Vice President - Land

Address: One Allen Center, Suite 1800
500 Dallas Street
Houston, Texas 77002

OTHER WORKING INTEREST OWNERS

ATTEST:

By: _____

Its: _____

Date Executed: _____

Address: _____

ATTEST:

By: _____

Its: _____

Date Executed: _____

Address: _____

J47/5

EXHIBIT "D"
TRACT & UNIT PARTICIPATION - TRACT BASIS
UNIT OPERATING AGREEMENT

TRACT #	LEASE/WELLS	OWNER	TYPE	GROSS WI	NET INTEREST 1 WI	TRACT PARTICIPATION 1 BOPD/WELL CUTOFF		UNIT PARTICIPATION (EXPENSE)		UNIT PARTICIPATION (REVENUE)
						1 BOPD/WELL CUTOFF	TRACT PARTICIPATION 1 BOPD/WELL CUTOFF	UNIT PARTICIPATION (EXPENSE)	UNIT PARTICIPATION (REVENUE)	
1	CITGO STATE 1	IPOC TRINIDAD PETROLEUM CORP HARBERT ENERGY CORP, AGENT COMM. OF PUBLIC LANDS W LEE HARVARD (BORN BY TRINIDAD & HARBERT ONLY)	WI WI WI WI OR	0.51500000 0.20989870 0.27510130 0.12500000 0.01000000	0.45062500 0.17933350 0.23504150 0.0160189 0.0160189	0.0160189 0.0160189 0.0160189 0.0160189 0.0160189	0.0082497 0.0033623 0.0044068 0.0000000 0.0000000	0.0072185 0.0028727 0.0037651 0.0020024 0.0001602	0.0045754 0.0007213 0.0004733 0.0057700 0.0160189	0.0045754 0.0007213 0.0004733 0.0057700 0.0160189
2	CITGO STATE 2 & 6	IPOC COMM. OF PUBLIC LANDS CITIES SERVICE	WI RI OR	1.00000000 1.00000000 1.00000000	0.79296880 0.12500000 0.08203120 1.00000000	0.0057700 0.0057700 0.0057700 1.00000000	0.0057700 0.0057700 0.0057700 0.0057700	0.0057700 0.0000000 0.0000000 0.0000000	0.0045754 0.0007213 0.0004733 0.0057700	0.0045754 0.0007213 0.0004733 0.0057700
3	CITGO STATE 3	IPOC TRINIDAD PETROLEUM CORP HARBERT ENERGY CORP, AGENT COMM. OF PUBLIC LANDS CITIES SERVICE	WI WI RI OR	0.75750000 0.10494940 0.13755060 1.00000000	0.58706250 0.08133580 0.10660170 0.12500000 0.10000000	0.0008767 0.0008767 0.0008767 1.00000000	0.0008767 0.0008767 0.0008767 1.00000000	0.0008767 0.0000920 0.0001206 0.0000000	0.0005147 0.0000713 0.0000935 0.0000877	0.0005147 0.0000713 0.0000935 0.0000877
4	CITGO STATE 4,5,7	IPOC W G STRODECKER MARION WEEKS B & R WINTHER COMM. OF PUBLIC LANDS CITIES SERVICE	WI WI WI WI RI OR	0.84250000 0.07500000 0.07500000 0.00750000 1.00000000	0.65293750 0.05812500 0.05812500 0.05812500 0.12500000 0.10000000	0.0218646 0.0218646 0.0218646 0.0218646 0.0218646 0.0218646	0.0184209 0.0016398 0.0016398 0.0016400 0.0000000 0.0000000	0.0142762 0.0012709 0.0012709 0.0001271 0.0027331 0.0021865	0.004045 0.0000000 0.0000000 0.0000000 0.0000000 0.0000000	0.004045 0.0000000 0.0000000 0.0000000 0.0000000 0.0000000
5	CITGO A STATE 1	IPOC COMM. OF PUBLIC LANDS CITIES SERVICE ROBERT L HAYNIE LEN MAYER GEORGE E CONLEY	WI RI OR OR OR OR	1.00000000 1.00000000 0.05203120 0.05000000 0.02000000 1.00000000	0.79296880 0.12500000 0.004045 0.004045 0.004045 1.00000000	0.004045 0.004045 0.004045 0.004045 0.004045 1.00000000	0.004045 0.004045 0.004045 0.004045 0.004045 1.00000000	0.004045 0.0000000 0.0000000 0.0000000 0.0000000 0.0000000	0.004045 0.0000000 0.0000000 0.0000000 0.0000000 0.0000000	0.004045 0.0000000 0.0000000 0.0000000 0.0000000 0.0000000
6	CITGO A STATE 2	IPOC TRINIDAD PETROLEUM CORP COMM. OF PUBLIC LANDS ROBERT L HAYNIE LEN MAYER GEORGE E CONLEY	WI WI RI RI OR OR OR	0.50000000 0.50000000 0.12500000 0.05000000 0.02000000 1.00000000	0.42250000 0.42250000 0.0122048 0.0122048 0.0122048 1.00000000	0.0122048 0.0122048 0.0122048 0.0122048 0.0122048 1.00000000	0.0061024 0.0061024 0.0061024 0.0061024 0.0061024 0.0122048	0.0051565 0.0051565 0.0015256 0.0000610 0.0000610 0.0122048	0.0051565 0.0051565 0.0015256 0.0000610 0.0000610 0.0122048	

TRACT & UNIT PARTICIPATION - TRACT BASIS
TRACT OPERATING AGREEMENT

TRACT #	LEASE/WELLS	OWNER	TYPE	GROSS WI	NET INTEREST	TRACT PARTICIPATION 1 BOPD/WELL CUTOFF		UNIT PARTICIPATION (EXPENSE)		UNIT PARTICIPATION (REVENUE)	
						TRACT PARTICIPATION 1 BOPD/WELL	UNIT PARTICIPATION (EXPENSE)	TRACT PARTICIPATION 1 BOPD/WELL	UNIT PARTICIPATION (REVENUE)	TRACT PARTICIPATION 1 BOPD/WELL	UNIT PARTICIPATION (REVENUE)
7	CITGO A STATE 3	POC TRINIDAD PETROLEUM CORP HARBERT ENERGY CORP, AGENT COMM. OF PUBLIC LANDS ROBERT L HAYNIE LEN MAYER GEORGE E CONLEY	WI WI RI OR OR OR	0. 51500000 0. 20989870 0. 27510130	0. 43517500 0. 1773440 0. 23246060 0. 12500000 0. 05000000 0. 02000000	0. 0186278 0. 0186278 0. 0186278 0. 0186278 0. 0186278 0. 0186278	0. 0095933 0. 0039100 0. 0051245 0. 0186278 0. 0000000 0. 0000000	0. 0186278 0. 0186278 0. 0186278 0. 0186278 0. 0186278 0. 0186278	0. 0081064 0. 0033039 0. 0043302 0. 0023285 0. 0000931 0. 0000931 0. 00003726	0. 0033039 0. 0043302 0. 0023285 0. 0000931 0. 0000931 0. 00003726	0. 0033039 0. 0043302 0. 0023285 0. 0000931 0. 0000931 0. 00003726
8	CITGO A STATE 5	POC HARBERT ENERGY CORP, AGENT COMM. OF PUBLIC LANDS ROBERT L HAYNIE LEN MAYER GEORGE E CONLEY H LEE HARVARD	WI WI RI OR OR OR OR	0. 52500000 0. 47500000	0. 44362500 0. 39137500 0. 12500000 0. 05000000 0. 05000000 0. 02000000 0. 01000000	0. 0144380 0. 0144380 0. 0144380 0. 0144380 0. 0144380 0. 0144380 0. 0144380	0. 0075800 0. 0068580 0. 0000000 0. 0000000 0. 0000000 0. 0000000 0. 0000000	0. 0075800 0. 0068580 0. 0000000 0. 0000000 0. 0000000 0. 0000000 0. 0000000	0. 0064051 0. 0056507 0. 0018048 0. 0000722 0. 0000722 0. 0002888 0. 0001444	0. 0064051 0. 0056507 0. 0018048 0. 0000722 0. 0000722 0. 0002888 0. 0001444	0. 0064051 0. 0056507 0. 0018048 0. 0000722 0. 0000722 0. 0002888 0. 0001444
9	CITGO A STATE 6,7,8	POC WG STROECKER MARION WEEKS B & R WINTHERR COMM. OF PUBLIC LANDS CITIES SERVICE ROBERT L HAYNIE LEN MAYER GEORGE E CONLEY	WI WI WI WI RI OR OR OR OR	0. 84250000 0. 07500000 0. 07500000 0. 07500000 RI OR OR OR	0. 65293750 0. 05812500 0. 05812500 0. 05812500 0. 12500000 0. 07000000 0. 05000000 0. 05000000	0. 0476502 0. 0476502 0. 0476502 0. 0476502 0. 0476502 0. 0476502 0. 0476502 0. 0476502 0. 0476502	0. 0476502 0. 0476502 0. 0476502 0. 0476502 0. 0476502 0. 0476502 0. 0476502 0. 0476502 0. 0476502	0. 0401453 0. 035738 0. 0035738 0. 0035738 0. 003574 0. 0000000 0. 0000000 0. 0000000 0. 0000000	0. 0311126 0. 0027697 0. 0027697 0. 0002770 0. 0059563 0. 0033355 0. 0002383 0. 0002383 0. 00009530	0. 0311126 0. 0027697 0. 0027697 0. 0002770 0. 0059563 0. 0033355 0. 0002383 0. 0002383 0. 00009530	0. 0311126 0. 0027697 0. 0027697 0. 0002770 0. 0059563 0. 0033355 0. 0002383 0. 0002383 0. 00009530
10	STATE CH 1	POC COMM. OF PUBLIC LANDS CITIES SERVICE ROBERT L HAYNIE LEN MAYER GEORGE E CONLEY	WI RI OR OR OR OR	1. 00000000	1. 00000000	0. 00000000	0. 00000000	0. 0476502	0. 0476502	0. 0476502	0. 0476502
10A	STATE CH 2	POC COMM. OF PUBLIC LANDS CITIES SERVICE ROBERT L HAYNIE LEN MAYER GEORGE E CONLEY	WI RI OR OR OR OR	1. 00000000	1. 00000000	0. 80531250 0. 12500000 0. 05468750 0. 00250000 0. 00250000 0. 01000000	0. 0001050 0. 0001050 0. 0001050 0. 0001050 0. 0001050 0. 0001050	0. 0001050 0. 0001050 0. 0001050 0. 0001050 0. 0001050 0. 0001050	0. 0000846 0. 0000131 0. 000057 0. 000003 0. 000003 0. 000003	0. 0000846 0. 0000131 0. 000057 0. 000003 0. 000003 0. 000003	0. 0000846 0. 0000131 0. 000057 0. 000003 0. 000003 0. 000003

TLPARTD.WR1
9-1-87EXHIBIT "D"
TRACT & UNIT PARTICIPATION - TRACT BASIS
UNIT OPERATING AGREEMENT

TRACT #	LEASE/WELLS	OWNER	TYPE	GROSS WI	NET INTEREST	TRACT PARTICIPATION 1 BOPD/WELL		UNIT PARTICIPATION (EXPENSE)		UNIT PARTICIPATION (REVENUE)	
						1 BOPD/WELL CUTOFF	TRACT PARTICIPATION 1 BOPD/WELL	UNIT PARTICIPATION (EXPENSE)	UNIT PARTICIPATION (REVENUE)	UNIT PARTICIPATION (REVENUE)	UNIT PARTICIPATION (REVENUE)
11	STATE CH 3	POC W G STROECKER MARION WEEKS B & R WINTHER COMM. OF PUBLIC LANDS CITIES SERVICE ROBERT L HAYNIE LEN MAYER GEORGE E CONLEY	WI WI WI WI OR OR OR OR	0.84250000 0.07500000 0.07500000 0.07500000	0. 67847580 0.06039840 0.06039840 0.06039900	0.0030963 0.0030963 0.0030963 0.0030963 0.0030963 0.0030963 0.0030963 0.0030963	0.0026086 0.0002322 0.0002322 0.000232	0.0021008 0.0001870 0.0001870 0.0001870	0.0021008 0.0001870 0.0001870 0.0001870	0.0021008 0.0001870 0.0001870 0.0001870	
12	O'BRIEN B 2	POC MARSHALL & WINSTON MOON CO. J T WYMAN TRUST P W PARKER TRUST FRANCISCA WINSTON EST. TRUST F S WINSTON MARITAL TRUST CHARLES A KELLY MURRAY C MCKINNON TRUST EM NOMINEE PTSP CO FRATES SEELIGSON	WI RI RI RI RI RI RI RI NPRI	1.00000000	0. 85937500 0.0585940 0.08203130 0.0292970 0.00585940 0.0292970 0.0146480 0.02343750 0.01171870	0.0005594 0.0005594 0.0005594 0.0005594 0.0005594 0.0005594 0.0005594 0.0005594 0.0005594	0.0005594 0.0000000 0.0000000 0.0000000 0.0000000 0.0000000 0.0000000 0.0000000 0.0000000	0.0004807 0.0000333 0.0000459 0.0000166 0.0000166 0.0000333 0.0000166 0.0000088 0.0000131 0.0000666	0.0004807 0.0000333 0.0000459 0.0000166 0.0000166 0.0000333 0.0000166 0.0000088 0.0000131 0.0000666	0.0004807 0.0000333 0.0000459 0.0000166 0.0000166 0.0000333 0.0000166 0.0000088 0.0000131 0.0000666	0.0004807 0.0000333 0.0000459 0.0000166 0.0000166 0.0000333 0.0000166 0.0000088 0.0000131 0.0000666
13	O'BRIEN C #2,3,5,6,7	POC MARSHALL & WINSTON MOON CO. J T WYMAN TRUST P W PARKER TRUST FRANCISCA WINSTON EST. TRUST F S WINSTON MARITAL TRUST CHARLES A KELLY MURRAY C MCKINNON TRUST EM NOMINEE PTSP CO BARBARA SWEENEY FRATES SEELIGSON	WI RI RI RI RI RI RI RI OR NPRI	1.00000000	0. 84765620 0.0390630 0.08203120 0.00195310 0.00390630 0.00195310 0.00097650 0.00097660 0.01562500 0.02734380 0.01171880	0.0005594 0.0000000 0.0000000 0.0000000 0.0000000 0.0000000 0.0000000 0.0000000 0.0000000 0.0000000 0.0000000	0.0267552 0.0267552 0.0267552 0.0267552 0.0267552 0.0267552 0.0267552 0.0267552 0.0267552 0.0267552 0.0267552	0.0226792 0.0001045 0.0021948 0.0000523 0.0000523 0.0000523 0.0000523 0.0000523 0.0000261 0.0000261	0.0226792 0.0001045 0.0021948 0.0000523 0.0000523 0.0000523 0.0000523 0.0000523 0.0000261 0.0000261	0.0226792 0.0001045 0.0021948 0.0000523 0.0000523 0.0000523 0.0000523 0.0000523 0.0000261 0.0000261	0.0226792 0.0001045 0.0021948 0.0000523 0.0000523 0.0000523 0.0000523 0.0000523 0.0000261 0.0000261
					1.00000000				1.00000000		0.0267552

EXHIBIT "D"
TRACT & UNIT PARTICIPATION - TRACT BASIS
UNIT OPERATING AGREEMENT

TLPARTD.WR1
9-1-B7

TRACT #	LEASE/WELLS	OWNER	TYPE	GROSS WI	NET INTEREST	TRACT PARTICIPATION 1 BOPD/WELL CUTOFF		UNIT PARTICIPATION (EXPENSE)		UNIT PARTICIPATION (REVENUE)	
						1 BOPD/WELL CUTOFF	1 BOPD/WELL CUTOFF	1 BOPD/WELL CUTOFF	1 BOPD/WELL CUTOFF	1 BOPD/WELL CUTOFF	1 BOPD/WELL CUTOFF
14	O'BRIEN E #9	POC W G STROECKER MARION WEEKS B & R WINTHIER MARSHALL & WINSTON MOON CO. J T WYMAN TRUST P W PARKER TRUST F S WINSTON MARITAL TRUST CHARLES A KELLY MURRAY C MCKINNON TRUST EM NOMINEE PTSP CO FRANCISCA WINSTON EST TRUST FRATES SEELIGSON	WI WI WI RI RI RI RI RI RI RI NPRI	0.84250000 0.07500000 0.07500000 0.00750000	0.73718750 0.06562500 0.06562500 0.03906300	0.0001182 0.0001182 0.0001182 0.08203120	0.0001182 0.0001182 0.0001182 0.0001182	0.0001182 0.0001182 0.0001182 0.0001182	0.0001182 0.0001182 0.0001182 0.0001182	0.0000996 0.000089 0.000089 0.000000	
15	O'BRIEN D #2 - #6	POC TENNECO W G STROECKER MARION WEEKS B & R WINTHIER MARSHALL & WINSTON MOON CO. J T WYMAN TRUST P W PARKER TRUST FRANCISCA WINSTON EST TRUST F S WINSTON MARITAL TRUST CHARLES A KELLY MURRAY C MCKINNON TRUST FRATES SEELIGSON	WI WI WI RI RI RI RI RI RI RI NPRI	1.00000000	1.00000000	0.73718750 0.12500000 0.06562500 0.06562500	0.59238280 0.12500000 0.05273440 0.05273440	0.0423152 0.0423152 0.0423152 0.0423152	0.0423152 0.0423152 0.0423152 0.0423152	0.0311942 0.0052894 0.0027769 0.0027769	0.0250668 0.0052894 0.0022315 0.0022315
16	O'BRIEN E #1 - #8	POC W G STROECKER MARION WEEKS B & R WINTHIER MARSHALL & WINSTON MOON CO. J T WYMAN TRUST P W PARKER TRUST F S WINSTON MARITAL TRUST CHARLES A KELLY MURRAY C MCKINNON TRUST EM NOMINEE PTSP CO FRANCISCA WINSTON EST TRUST FRATES SEELIGSON	WI WI WI RI RI RI RI RI RI RI NPRI	1.00000000	1.00000000	0.84250000 0.07500000 0.07500000 0.00750000	0.73718750 0.06562500 0.06562500 0.03906300	0.0217479 0.0217479 0.0217479 0.0217479	0.0217479 0.0217479 0.0217479 0.0217479	0.0183226 0.0016311 0.0016311 0.0000000	0.0160323 0.0014272 0.0014272 0.0000425
											1.00000000
											0.0217479

EXHIBIT "D"
TRACT & UNIT PARTICIPATION - TRACT BASIS
UNIT OPERATING AGREEMENT

TRACT #	LEASE/WELLS	OWNER	TYPE	GROSS W1	NET INTEREST	TRACT 1 BOPD/WELL CUTOFF		UNIT PARTICIPATION (EXPENSE)		UNIT PARTICIPATION (REVENUE)	
						TRACT PARTICIPATION 1 BOPD/WELL CUTOFF	UNIT PARTICIPATION (EXPENSE)	UNIT PARTICIPATION (REVENUE)	TRACT PARTICIPATION 1 BOPD/WELL CUTOFF	UNIT PARTICIPATION (REVENUE)	TRACT PARTICIPATION 1 BOPD/WELL CUTOFF
17	10' BRIEN FEE 25 #1-#4	HARLOW CORP	WI	0.62500000	0.48156250	0.0420482	0.0262801	0.0202488	0.0420482	0.0031536	0.0026017
	ADAMS & MCGAHEY	JW ADAMS & JUNE ADAMS EST	WI	0.07500000	0.06187500	0.0420482	0.001536	0.001536	0.0420482	0.001536	0.001536
	JW ADAMS	JW ADAMS	WI	0.07500000	0.06187500	0.0420482	0.0013009	0.0013009	0.0420482	0.0013009	0.0013009
	NABOB PROD CO	NABOB PROD CO	WI	0.03750000	0.03093750	0.0420482	0.0065043	0.0065043	0.0420482	0.0065043	0.0065043
	MOON CO	MOON CO	WI	0.18750000	0.08203130	0.0420482	0.0034493	0.0034493	0.0420482	0.0034493	0.0034493
	EM NOMINEE PTSP CO	EM NOMINEE PTSP CO	WI	0.02500000	0.02292960	0.0420482	0.0010512	0.0010512	0.0420482	0.0010512	0.0010512
	MARSHALL & WINSTON	MARSHALL & WINSTON	WI	0.00585940	0.00585940	0.0420482	0.0002464	0.0002464	0.0420482	0.0002464	0.0002464
	FRANCISCA WINSTON EST TRUST	FRANCISCA WINSTON EST TRUST	WI	0.00585940	0.00585940	0.0420482	0.0002464	0.0002464	0.0420482	0.0002464	0.0002464
	F S WINSTON MARITAL TRUST	F S WINSTON MARITAL TRUST	WI	0.00292960	0.00292960	0.0420482	0.0001232	0.0001232	0.0420482	0.0001232	0.0001232
	P W PARKER TRUST	P W PARKER TRUST	WI	0.00146480	0.00073250	0.0420482	0.0001232	0.0001232	0.0420482	0.0001232	0.0001232
	P J T WYMAN TRUST	P J T WYMAN TRUST	WI	0.00073240	0.00073240	0.0420482	0.0001232	0.0001232	0.0420482	0.0001232	0.0001232
	CHARLES A KELLY	CHARLES A KELLY	WI	0.01061750	0.00750000	0.0420482	0.0001232	0.0001232	0.0420482	0.0001232	0.0001232
	MURRAY C MCKINNON TRUST	MURRAY C MCKINNON TRUST	WI	0.00750000	0.00750000	0.0420482	0.0001232	0.0001232	0.0420482	0.0001232	0.0001232
	DOUGLAS A MCKINNON	DOUGLAS A MCKINNON	WI	0.00014780	0.00014780	0.0420482	0.0001232	0.0001232	0.0420482	0.0001232	0.0001232
	W V HARLOW, JR	W V HARLOW, JR	OR	0.00295610	0.00000000	0.0420482	0.0001232	0.0001232	0.0420482	0.0001232	0.0001232
	AVIVA LTD PTSP	AVIVA LTD PTSP	OR	0.00073900	0.00000000	0.0420482	0.0001232	0.0001232	0.0420482	0.0001232	0.0001232
	C H KIMBRO	C H KIMBRO	OR	0.00036950	0.00000000	0.0420482	0.0001232	0.0001232	0.0420482	0.0001232	0.0001232
	J E ABRAM	J E ABRAM	OR	0.00014780	0.00000000	0.0420482	0.0001232	0.0001232	0.0420482	0.0001232	0.0001232
	SALLY FELDMAN	SALLY FELDMAN	OR	0.000036950	0.00000000	0.0420482	0.0001232	0.0001232	0.0420482	0.0001232	0.0001232
	JACK W FLECK	JACK W FLECK	OR	0.000036950	0.00000000	0.0420482	0.0001232	0.0001232	0.0420482	0.0001232	0.0001232
	WM J HARBECK	WM J HARBECK	OR	0.000036950	0.00000000	0.0420482	0.0001232	0.0001232	0.0420482	0.0001232	0.0001232
	ROBERT T JACKSON	ROBERT T JACKSON	OR	0.000036950	0.00000000	0.0420482	0.0001232	0.0001232	0.0420482	0.0001232	0.0001232
	JACKIE H JOHNSON	JACKIE H JOHNSON	OR	0.000036950	0.00000000	0.0420482	0.0001232	0.0001232	0.0420482	0.0001232	0.0001232
	JOHN G LEONDUKAS	JOHN G LEONDUKAS	OR	0.000036950	0.00000000	0.0420482	0.0001232	0.0001232	0.0420482	0.0001232	0.0001232
	RALPH E LOWENBERG	RALPH E LOWENBERG	OR	0.000036950	0.00000000	0.0420482	0.0001232	0.0001232	0.0420482	0.0001232	0.0001232
	DAVID L PETERSON	DAVID L PETERSON	OR	0.000036950	0.00000000	0.0420482	0.0001232	0.0001232	0.0420482	0.0001232	0.0001232
	CHARLES I PETSCHEK	CHARLES I PETSCHEK	OR	0.000036950	0.00000000	0.0420482	0.0001232	0.0001232	0.0420482	0.0001232	0.0001232
	LEE E SCHLESSMAN	LEE E SCHLESSMAN	OR	0.000036950	0.00000000	0.0420482	0.0001232	0.0001232	0.0420482	0.0001232	0.0001232
	ROBERT REX SILVERSTONE	ROBERT REX SILVERSTONE	OR	0.000036950	0.00000000	0.0420482	0.0001232	0.0001232	0.0420482	0.0001232	0.0001232
	H PETER STERN	H PETER STERN	OR	0.000044340	0.00000000	0.0420482	0.0001232	0.0001232	0.0420482	0.0001232	0.0001232
	JOHN E WALSH, JR	JOHN E WALSH, JR	OR	0.000051120	0.00000000	0.0420482	0.0001232	0.0001232	0.0420482	0.0001232	0.0001232
	DONALD S WOOD	DONALD S WOOD	OR	0.00002460	0.00000000	0.0420482	0.0001232	0.0001232	0.0420482	0.0001232	0.0001232
	TANIA C WHITMAN TRUST	TANIA C WHITMAN TRUST	OR	0.000073900	0.00000000	0.0420482	0.0001232	0.0001232	0.0420482	0.0001232	0.0001232
	1029 PLUS ONE INVESTORS	1029 PLUS ONE INVESTORS	OR	0.00014780	0.00000000	0.0420482	0.0001232	0.0001232	0.0420482	0.0001232	0.0001232
	MILDRED M MILLER	MILDRED M MILLER	OR	0.00036950	0.00000000	0.0420482	0.0001232	0.0001232	0.0420482	0.0001232	0.0001232
	DAVID E WYMAN, JR	DAVID E WYMAN, JR	OR	0.00036950	0.00000000	0.0420482	0.0001232	0.0001232	0.0420482	0.0001232	0.0001232
	FRATES SEELIGSON	FRATES SEELIGSON	NPRI	0.01171880	1.00000000	0.0420482	1.00000000	1.00000000	0.0420482	1.00000000	1.00000000

EXHIBIT "D"
TRACT & UNIT PARTICIPATION - TRACT BASIS
UNIT OPERATING AGREEMENT

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 9-1-87

TRACT #	LEASE/WELLS	OWNER	TYPE	GROSS WI	NET INTEREST	PARTICIPATION (EXPENSE)		UNIT PARTICIPATION (CUTOFF)		PARTICIPATION (REVENUE)	
						TRACT 1 BOPD/WELL CUTOFF	PARTICIPATION 1 BOPD/WELL	CUTOFF	0.0004961	0.0003689	
18	O'BRIEN F #6	POC W G STROECKER MARION WEEKS B & R WINTHIER MARSHALL & WINSTON MOON CO. J T WYMAN TRUST P W PARKER TRUST F S WINSTON MARITAL TRUST CHARLES A KELLY MURRAY C MCKINNON TRUST FRANCISCA WINSTON EST TRUST FRATES SEELOGSON TENNeco (UV INDUSTRIES)	WI WI WI WI WI RI RI RI RI RI RI RI NPRI UNLEASED	WI WI WI WI WI RI RI RI RI RI RI RI NPRI UNLEASED	0.84250000 0.07500000 0.07500000 0.07500000 0.05578110 0.05578110 0.0468760 0.09843750 0.00234380 0.00234380 0.00117190 0.00468760 0.01406250 0.12500000	0.62660930 0.0005888 0.0005888 0.0005888 0.0005888 0.0005888 0.0005888 0.0005888 0.0005888 0.0005888 0.0005888 0.0005888 1.00000000	0.0005888 0.0005888 0.0005888 0.0005888 0.0005888 0.0005888 0.0005888 0.0005888 0.0005888 0.0005888 0.0005888 0.0005888 1.00000000	0.0004961 0.000442 0.000442 0.000442 0.00014 0.00014 0.00007 0.00007 0.00007 0.00007 0.00007 0.00007 0.0005888	0.0003689 0.000328 0.000328 0.000328 0.00014 0.00014 0.00007 0.00007 0.00007 0.00007 0.00007 0.00007 0.0005888		
18A		POC W G STROECKER MARION WEEKS B & R WINTHIER MOON CO. FRATES SEELOGSON TENNeco (UV INDUSTRIES) FRANCISCA WINSTON EST TRUST F S WINSTON MARITAL TRUST CHARLES A KELLY P W PARKER TRUST J T WYMAN TRUST MARSHALL & WINSTON MURRAY C MCKINNON TRUST	WI WI WI WI WI RI NPRI UNLEASED RI RI RI RI RI RI RI RI	WI WI WI WI WI RI NPRI UNLEASED RI RI RI RI RI RI RI RI	0.84250000 0.07500000 0.07500000 0.07500000 0.05332030 0.05332030 0.12304690 0.1757810 0.12500000 0.00585940 0.00146480 0.00292970 0.00292970 0.00585940	0.59896490 0.0000000 0.0000000 0.0000000 0.0000000 0.0000000 0.0000000 0.0000000 0.0000000 0.0000000 0.0000000 0.0000000 1.00000000	0.0000000 0.0000000 0.0000000 0.0000000 0.0000000 0.0000000 0.0000000 0.0000000 0.0000000 0.0000000 0.0000000 0.0000000 1.00000000	0.0000000 0.0000000 0.0000000 0.0000000 0.0000000 0.0000000 0.0000000 0.0000000 0.0000000 0.0000000 0.0000000 0.0000000 0.0000000	0.0000000 0.0000000 0.0000000 0.0000000 0.0000000 0.0000000 0.0000000 0.0000000 0.0000000 0.0000000 0.0000000 0.0000000 0.0000000	0.0000000 0.0000000 0.0000000 0.0000000 0.0000000 0.0000000 0.0000000 0.0000000 0.0000000 0.0000000 0.0000000 0.0000000 0.0000000	0.0000000 0.0000000 0.0000000 0.0000000 0.0000000 0.0000000 0.0000000 0.0000000 0.0000000 0.0000000 0.0000000 0.0000000 0.0000000
19	O'BRIEN F #7	POC W G STROECKER MARION WEEKS B & R WINTHIER MARSHALL & WINSTON MOON CO. J T WYMAN TRUST P W PARKER TRUST F S WINSTON MARITAL TRUST CHARLES A KELLY MURRAY C MCKINNON TRUST FRANCISCA WINSTON EST TRUST FRATES SEELOGSON TENNeco (UV INDUSTRIES)	WI WI WI WI WI RI RI RI RI RI NPRI UNLEASED	WI WI WI WI WI RI RI RI RI RI NPRI UNLEASED	0.84250000 0.07500000 0.07500000 0.07500000 0.05332030 0.05332030 0.05332030 0.05332030 0.05332030 0.05332030 0.00146480 0.00585940 0.01757810 0.01406250 0.12500000	0.59896490 0.0000000 0.0000000 0.0000000 0.0000000 0.0000000 0.0000000 0.0000000 0.0000000 0.0000000 0.0000000 0.0000000 1.00000000	0.0003464 0.0003464 0.0003464 0.0003464 0.0003464 0.0003464 0.0003464 0.0003464 0.0003464 0.0003464 0.0003464 0.0003464 1.00000000	0.0002918 0.0002918 0.0002918 0.0002918 0.0002918 0.0002918 0.0002918 0.0002918 0.0002918 0.0002918 0.0002918 0.0002918 1.00000000	0.0002075 0.0002075 0.0002075 0.0002075 0.0002075 0.0002075 0.0002075 0.0002075 0.0002075 0.0002075 0.0002075 0.0002075 0.0002075		

EXHIBIT "D"
TRACT & UNIT PARTICIPATION - TRACT BASIS
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TRACT #	LEASE / WELLS	OWNER	TYPE	GROSS WI	NET INTEREST	TRACT PARTICIPATION		UNIT PARTICIPATION		
						1 BOPD/WELL CUTOFF	(EXPENSE)	(EXPENSE)	(REVENUE)	
20		POC W G STROECKER MARION WEEKS B & R WINTHERR MOON CO. TENNECO (UV INDUSTRIES) FRATES SEELOGSON FRANCISCA WINSTON EST TRUST F S WINSTON MARITAL TRUST CHARLES A KELLY P W PARKER TRUST J T WYMAN TRUST MARSHALL & WINSTON MURRAY C MCKINNON TRUST	WI WI WI RI NPRI RI RI RI RI RI RI RI RI RI RI RI	0.84250000 0.07500000 0.07500000 0.00750000 0.02343750 0.01757810 0.00585940 0.00292970 0.00146480 0.00292970 0.00585940 0.00146480	0.68453120 0.06093750 0.06093750 0.00609380 0.00000000 0.00000000 0.00000000 0.00000000 0.00000000 0.00000000 0.00000000 0.00000000	0.00000000 0.00000000 0.00000000 0.00000000 0.00000000 0.00000000 0.00000000 0.00000000 0.00000000 0.00000000 0.00000000 0.00000000	0.00000000 0.00000000 0.00000000 0.00000000 0.00000000 0.00000000 0.00000000 0.00000000 0.00000000 0.00000000 0.00000000 0.00000000	0.00000000 0.00000000 0.00000000 0.00000000 0.00000000 0.00000000 0.00000000 0.00000000 0.00000000 0.00000000 0.00000000 0.00000000	0.00000000 0.00000000 0.00000000 0.00000000 0.00000000 0.00000000 0.00000000 0.00000000 0.00000000 0.00000000 0.00000000 0.00000000	
21	O'BRIEN F #5	POC W G STROECKER MARION WEEKS B & R WINTHERR MARSHALL & WINSTON MOON CO. J T WYMAN TRUST P W PARKER TRUST F S WINSTON MARITAL TRUST CHARLES A KELLY MURRAY C MCKINNON TRUST FRANCISCA WINSTON EST TRUST TENNECO (UV INDUSTRIES) FRATES SEELOGSON	WI WI WI WI RI RI RI RI RI RI RI RI RI RI NPRI	0.84250000 0.07500000 0.07500000 0.00750000 0.02343800 0.00234380 0.00117190 0.00117190 0.00468760 0.02343750 0.01406250	0.71217570 0.06339830 0.06339830 0.00633980 0.00000000 0.00000000 0.00000000 0.00000000 0.00000000 0.00000000 0.00000000	0.0014065 0.0014065 0.0014065 0.0014065 0.00000000 0.00000000 0.00000000 0.00000000 0.00000000 0.00000000 0.00000000	0.0014065 0.0014065 0.0014065 0.0014065 0.00000000 0.00000000 0.00000000 0.00000000 0.00000000 0.00000000 0.00000000	0.00000000 0.00000000 0.00000000 0.00000000 0.00000000 0.00000000 0.00000000 0.00000000 0.00000000 0.00000000 0.00000000	0.00000000 0.00000000 0.00000000 0.00000000 0.00000000 0.00000000 0.00000000 0.00000000 0.00000000 0.00000000 0.00000000	0.00000000 0.00000000 0.00000000 0.00000000 0.00000000 0.00000000 0.00000000 0.00000000 0.00000000 0.00000000 0.00000000
22	O'BRIEN F #1 - 4	POC W G STROECKER MARION WEEKS B & R WINTHERR MARSHALL & WINSTON MOON CO. J T WYMAN TRUST P W PARKER TRUST F S WINSTON MARITAL TRUST CHARLES A KELLY MURRAY C MCKINNON TRUST FRANCISCA WINSTON EST TRUST EM NOMINEE PTSP CO FRATES SEELOGSON	WI WI WI WI RI RI RI RI RI RI RI RI NPRI	0.84250000 0.07500000 0.07500000 0.00750000 0.0234414 0.0234414 0.0234414 0.0234414 0.0234414 0.0234414 0.0234414 0.0234414 0.0234414 0.0234414 0.0234414 0.0234414 NPRI	0.71217570 0.06339830 0.06339830 0.00633980 0.00468760 0.00234380 0.00234380 0.00117190 0.00117190 0.00468760 0.02343750 0.01406250	0.0014065 0.0014065 0.0014065 0.0014065 0.00000000 0.00000000 0.00000000 0.00000000 0.00000000 0.00000000 0.00000000 0.00000000	0.0014065 0.0014065 0.0014065 0.0014065 0.00000000 0.00000000 0.00000000 0.00000000 0.00000000 0.00000000 0.00000000 0.00000000	0.00000000 0.00000000 0.00000000 0.00000000 0.00000000 0.00000000 0.00000000 0.00000000 0.00000000 0.00000000 0.00000000 0.00000000	0.00000000 0.00000000 0.00000000 0.00000000 0.00000000 0.00000000 0.00000000 0.00000000 0.00000000 0.00000000 0.00000000 0.00000000	0.00000000 0.00000000 0.00000000 0.00000000 0.00000000 0.00000000 0.00000000 0.00000000 0.00000000 0.00000000 0.00000000 0.00000000
									1.00000000	

EXHIBIT "D"
TRACT & UNIT PARTICIPATION - TRACT BASIS
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9-1-87

TRACT #	LEASE/WELLS	OWNER	TYPE	GROSS WI	NET INTEREST	UNIT PARTICIPATION (EXPENSE)		UNIT PARTICIPATION (REVENUE)			
						TRACT 1 BOPD/WELL CUTOFF	PARTICIPATION (%)	PARTICIPATION (%)	PARTICIPATION (%)		
23	O'BRIEN F #9	IPOC W G STROECKER MARION WEEKS B & R WINTHER MOON CO FRANCISCA WINSTON EST TRUST F S WINSTON MARITAL TRUST CHARLES A KELLY P W PARKER TRUST J T WYMAN TRUST MARSHALL & WINSTON MURRAY C MCKINNON TRUST TENNECO FRATES SEELIGSON	WI WI WI WI WI RI RI RI RI RI RI RI NPRI	0.84250000 0.07500000 0.07500000 0.00750000 0.00000000 0.00000000 0.00000000 0.00000000 0.00000000 0.00000000 0.00000000 0.00000000	0.67794930 0.06035150 0.06035150 0.00603520 0.12304690 0.00585940 0.00292970 0.00146480 0.00292970 0.00585940 0.00146480 0.03125000 0.01757810	0.0002051 0.0002051 0.0002051 0.0002051 0.0002051 0.0002051 0.0002051 0.0002051 0.0002051 0.0002051 0.0002051 0.0002051	0.0001728 0.000154 0.000154 0.00015 0.000012 0.000006 0.000003 0.000006 0.000006 0.000006 0.000003 0.000006 0.000006	0.0001390 0.000124 0.000124 0.00012 0.000012 0.000006 0.000003 0.000006 0.000006 0.000006 0.000003 0.000006 0.000006	0.00016035 0.00016035 0.00016035 0.00016035 0.00016035 0.00016035 0.00016035 0.00016035 0.00016035 0.00016035 0.00016035 0.00016035 0.00016035		
24	O'BRIEN I #1 - 8	IPOC W G STROECKER MARION WEEKS B & R WINTHER MARSHALL & WINSTON TENNECO MOON CO J T WYMAN TRUST P W PARKER TRUST FRANCISCA WINSTON EST TRUST F S WINSTON MARITAL TRUST CHARLES A KELLY MURRAY C MCKINNON TRUST FRATES SEELIGSON	WI WI WI WI WI RI RI RI RI RI RI RI NPRI	1.00000000 0.84250000 0.07500000 0.07500000 0.00750000 0.00000000 0.00000000 0.00000000 0.00000000 0.00000000 0.00000000 0.00000000 0.00000000	1.00000000 0.68453120 0.06093750 0.06093750 0.00609380 0.00585940 0.02343750 0.12304690 0.00292970 0.00585940 0.00292970 0.00146480 0.00146480 0.01757810	0.1037733 0.1037733 0.1037733 0.1037733 0.1037733 0.1037733 0.1037733 0.1037733 0.1037733 0.1037733 0.1037733 0.1037733 0.1037733	0.0874290 0.0077830 0.0077830 0.0077830 0.0077830 0.0000000 0.0000000 0.0000000 0.0000000 0.0000000 0.0000000 0.0000000 0.0000000	0.0710361 0.0063237 0.0063237 0.0063237 0.0063237 0.0000000 0.0000000 0.0000000 0.0000000 0.0000000 0.0000000 0.0000000 0.0000000	0.0002051 0.0002051 0.0002051 0.0002051 0.0002051 0.0000000 0.0000000 0.0000000 0.0000000 0.0000000 0.0000000 0.0000000 0.0000000	0.0002051 0.0002051 0.0002051 0.0002051 0.0002051 0.0000000 0.0000000 0.0000000 0.0000000 0.0000000 0.0000000 0.0000000 0.0000000	
25	O'BRIEN J 1	IPOC W G STROECKER MARION WEEKS B & R WINTHER MARSHALL & WINSTON TENNECO MOON CO J T WYMAN TRUST P W PARKER TRUST F S WINSTON MARITAL TRUST CHARLES A KELLY MURRAY C MCKINNON TRUST FRANCISCA WINSTON EST TRUST FRATES SEELIGSON	WI WI WI WI WI RI RI RI RI RI RI RI NPRI	1.00000000 0.84250000 0.07500000 0.07500000 0.00750000 0.00000000 0.00000000 0.00000000 0.00000000 0.00000000 0.00000000 0.00000000 0.00000000	1.00000000 0.68453120 0.06093750 0.06093750 0.00609380 0.00585940 0.02343750 0.12304690 0.00292970 0.00585940 0.00292970 0.00146480 0.00146480 0.01757810	0.1037733 0.0016035 0.0016035 0.0016035 0.0016035 0.0000000 0.0000000 0.0000000 0.0000000 0.0000000 0.0000000 0.0000000 0.0000000	0.0013509 0.0001203 0.0001203 0.0001203 0.0001203 0.0000000 0.0000000 0.0000000 0.0000000 0.0000000 0.0000000 0.0000000 0.0000000	0.0016035 0.00016035 0.00016035 0.00016035 0.00016035 0.0000000 0.0000000 0.0000000 0.0000000 0.0000000 0.0000000 0.0000000 0.0000000	0.1037733 0.0000000 0.0000000 0.0000000 0.0000000 0.0000000 0.0000000 0.0000000 0.0000000 0.0000000 0.0000000 0.0000000 0.0000000	0.1037733 0.0000000 0.0000000 0.0000000 0.0000000 0.0000000 0.0000000 0.0000000 0.0000000 0.0000000 0.0000000 0.0000000 0.0000000	0.0000000 0.0000000 0.0000000 0.0000000 0.0000000 0.0000000 0.0000000 0.0000000 0.0000000 0.0000000 0.0000000 0.0000000 0.0000000

**EXHIBIT "D"
TRACT & UNIT PARTICIPATION - TRACT BASIS
UNIT OPERATING AGREEMENT**

EXHIBIT "D"
TRACT & UNIT PARTICIPATION - TRACT BASIS
UNIT OPERATING AGREEMENT

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EXHIBIT "D"
TRACT & UNIT PARTICIPATION - TRACT BASIS
UNIT OPERATING AGREEMENT

EXHIBIT "D"
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TRACT #	LEASE/WELLS	OWNER	TYPE	GROSS WI	NET INTEREST	TRACT PARTICIPATION 1 BOPD/WELL CUTOFF		UNIT PARTICIPATION (EXPENSE)		UNIT PARTICIPATION (REVENUE)		
						1 BOPD/WELL CUTOFF	PARTICIPATION (EXPENSE)	PARTICIPATION (REVENUE)	PARTICIPATION (EXPENSE)	PARTICIPATION (REVENUE)		
34	MOONSHINE 1B #1-5	PDC SUN TENNECO MOON CO MURRAY C FRANCISCA WINSTON EST TRUST F S WINSTON MARITAL TRUST MARSHALL & WINSTON CHARLES A KELLY P W PARKER TRUST J T WYMAN TRUST DAVID I MILLER WILLIAM O DEWITT J T HOWARD DONALD R WATTS PDC FRATES SEELOGSON	WI WI WI WI WI WI WI WI WI WI WI WI WI NPRI	0.68750000 0.18750000 0.12500000	0.53484380 0.14812500 0.12500000 0.12304690 0.00195310 0.00781250 0.00390620 0.00781250 0.00195310 0.00390630 0.00750000 0.00093750 0.00260420 0.00520830 0.00390630 0.01757800	0.0308971 0.0308971 0.0308971 0.0308971 0.0308971 0.0308971 0.0308971 0.0308971 0.0308971 0.0308971 0.0308971 0.0308971 0.0308971	0.0212418 0.0045766 0.0038621 0.0038018 0.0000000 0.0000000 0.0000000 0.0000000 0.0000000 0.0000000 0.0000000 0.0000000 0.0000000	0.0057932 0.0038621 0.0038018 0.0000000 0.0000000 0.0000000 0.0000000 0.0000000 0.0000000 0.0000000 0.0000000 0.0000000 0.0000000	0.0165251 0.0045766 0.0038621 0.0038018 0.0000000 0.0000000 0.0000000 0.0000000 0.0000000 0.0000000 0.0000000 0.0000000 0.0000000	0.0045766 0.0038621 0.0038018 0.0000000 0.0000000 0.0000000 0.0000000 0.0000000 0.0000000 0.0000000 0.0000000 0.0000000 0.0000000		
35	O'BRIEN N #1 & #2Y	PDC TENNECO W G STROECKER MARION WEEKS B & R WINTHER MARSHALL & WINSTON MOON CO J T WYMAN TRUST P W PARKER TRUST FRANCISCA WINSTON EST TRUST F S WINSTON MARITAL TRUST CHARLES A KELLY MURRAY C MCKINNON TRUST FRATES SEELOGSON	WI WI WI WI WI WI WI WI WI WI WI WI NPRI	1.00000000	1.00000000	0.0308971	0.0308971	0.0088242	0.0088242	0.0088242	1.00000000	1.00000000

EXHIBIT "E"

Attached to and made a part of that certain Unit Operating Agreement
Twin Lakes San Andres Unit, County of Chaves, State of New
Mexico, dated June 1, 1987.

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.

"Joint Account" shall mean the account showing the charges paid and credits received in the conduct of the Joint Operations and which are to be shared by the Parties.

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

"Non-Operators" shall mean the parties to this agreement other than the Operator.

"Parties" shall mean Operator and Non-Operators.

"First Level Supervisors" shall mean those employees whose primary function in Joint Operations is the direct supervision of other employees and/or contract labor directly employed on the Joint Property in a field operating capacity.

"Technical Employees" shall mean those employees having special and specific engineering, geological or other professional skills, and whose primary function in Joint Operations is the handling of specific operating conditions and problems for the benefit of the Joint Property.

"Personal Expenses" shall mean travel and other reasonable reimbursable expenses of Operator's employees.

"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. Statement and Billings

Operator shall bill Non-Operators on or before the last day of each month for their proportionate share of the Joint Account for the preceding month. Such bills will be accompanied by statements which identify the authority for expenditure, lease or facility, and all charges and credits, summarized by appropriate classifications of investment and expense except that items of Controllable Material and unusual charges and credits shall be separately identified and fully described in detail.

3. Advances and Payments by Non-Operators

Unless otherwise provided for in the agreement, the Operator may require the Non-Operators to advance their share of estimated cash outlay for the succeeding month's operation. Operator shall adjust each monthly billing to reflect advances received from the Non-Operators.

Each Non-Operator shall pay its proportion of all bills within fifteen (15) days after receipt. If payment is not made within such time, the unpaid balance shall bear interest monthly at the rate of twelve percent (12%) per of UOA~~as defined in Article I~~ or the maximum contract rate permitted by the applicable usury laws in the state in which the Joint Property is located, whichever is the lesser, plus attorney's fees, court costs, and other costs in connection with the collection of unpaid amounts.

4. Adjustments

Payment of any such bills shall not prejudice the right of any Non-Operator 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 Controllable Material as provided for in Section V.

5. 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 Joint Account 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 adjustments of accounts as provided for in Paragraph 4 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. Operator shall bear no portion of the Non-Operators' audit cost incurred under this paragraph unless agreed to by the Operator.

6. Approval by Non-Operators

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

II. DIRECT CHARGES

Operator shall charge the Joint Account with the following items:

1. Rentals and Royalties

Lease rentals and royalties paid by Operator for the Joint Operations.

2. Labor

A. (1) Salaries and wages of Operator's field employees directly employed on the Joint Property in the conduct of Joint Operations.

(2) Salaries of First Level Supervisors in the field.

(3) Salaries and wages of Technical Employees directly employed on the Joint Property if such charges are excluded from the Overhead rates.

B. Operator's cost of holiday, vacation, sickness and disability benefits and other customary allowances paid to employees whose salaries and wages are chargeable to the Joint Account under Paragraph 2A of this Section II. Such costs 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. 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 costs chargeable to the Joint Account under Paragraphs 2A and 2B of this Section II.

D. Personal Expenses of those employees whose salaries and wages are chargeable to the Joint Account under Paragraph 2A of this Section II.

3. Employee Benefits

Operator's current costs 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 chargeable to the Joint Account under Paragraphs 2A and 2B of this Section II shall be Operator's actual cost not to exceed twenty-per-cent-(20%).twenty three percent (23%) or the percent most recently recommended by the Council of Petroleum Accountants Societies of North America.

4. Material

Material purchased or furnished by Operator for use on the Joint Property as provided under Section IV. Only such Material shall be purchased for or transferred to the Joint Property as may be required for immediate use and is reasonably practical and consistent with efficient and economical operations. 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, recognized barge terminal, or railway receiving point where like material is normally available, unless agreed to by the Parties.

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, recognized barge terminal, or railway receiving point unless agreed to by the Parties. No charge shall be made to the Joint Account for moving Material to other properties belonging to Operator, unless agreed to by the Parties.

C. In the application of Subparagraphs A and B above, there shall be no equalization of actual gross trucking cost of \$200 or less excluding accessorial charges.

6. Services

The cost of contract services, equipment and utilities provided by outside sources, except services excluded by Paragraph 9 of Section II and Paragraph 1. ii of Section III. The cost of professional consultant services and contract services of technical personnel directly engaged on the Joint Property if such charges are excluded from the Overhead rates. The cost of professional consultant services or contract services of technical personnel not directly engaged on the Joint Property shall not be charged to the Joint Account unless previously agreed to by the Parties.

7. Equipment and Facilities Furnished by Operator

A. Operator shall charge the Joint Account for use of Operator owned equipment and facilities at rates commensurate with costs of ownership and operation. Such rates shall include costs of maintenance, repairs, other operating expense, insurance, taxes, depreciation, and interest on investment not to exceed eight per cent (8%) per annum. Such rates shall not exceed average commercial rates currently prevailing in the immediate area of the Joint Property.

B.. In lieu of charges in Paragraph 7A above, Operator may elect to use average commercial rates prevailing in the immediate area of the Joint Property less 20%. For automotive equipment, Operator may elect to use rates published by the Petroleum Motor Transport Association.

8. 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 other cause, except those resulting from Operator's gross negligence or willful misconduct. Operator shall furnish Non-Operator written notice of damages or losses incurred as soon as practicable after a report thereof has been received by Operator.

9. Legal Expense

Expense of handling, investigating and settling litigation or claims, discharging of liens, payment of judgments and amounts paid for settlement of claims incurred in or resulting from operations under the agreement or necessary to protect or recover the Joint Property, except that no charge for services of Operator's legal staff or fees or expense of outside attorneys shall be made unless previously agreed to by the Parties. All other legal expense is considered to be covered by the overhead provisions of Section III unless otherwise agreed to by the Parties, except as provided in Section I, Paragraph 3.

10. 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.

11. Insurance

Net premiums paid for insurance required to be carried for the Joint Operations for the protection of the Parties. In the event Joint Operations are conducted in a state in which Operator may act as self-insurer for Workmen's Compensation and/or Employers Liability under the respective state's laws, Operator may, at its election, include the risk under its self-insurance program and in that event, Operator shall include a charge at Operator's cost not to exceed manual rates.

12. 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 in the necessary and proper conduct of the Joint Operations.

III. OVERHEAD

1. Overhead - Drilling and Producing Operations

i. As compensation for administrative, supervision, office services and warehousing costs, Operator shall charge drilling and producing operations on either:

- (X) Fixed Rate Basis, Paragraph 1A, or
() Percentage Basis, Paragraph 1B.

Unless otherwise agreed to by the Parties, such charge shall be in lieu of costs and expenses of all offices and salaries or wages plus applicable burdens and expenses of all personnel, except those directly chargeable under Paragraph 2A, Section II. 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 the above selected Paragraph of this Section III unless such cost and expense are agreed to by the Parties as a direct charge to the Joint Account.

ii. The salaries, wages and Personal Expenses of Technical Employees and/or the cost of professional consultant services and contract services of technical personnel directly employed on the Joint Property shall () shall not (X) be covered by the Overhead rates. or temporary contr or professional services employed for the benefit of the joint property

A. Overhead - Fixed Rate Basis

(1) Operator shall charge the Joint Account at the following rates per well per month:

Drilling Well Rate \$	4000.00
Injection of Water Source, /Producing Well Rate \$	400.00

(2) Application of Overhead - Fixed Rate Basis shall be as follows:

(a) Drilling Well Rate

- [1] Charges for onshore drilling wells shall begin on the date the 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 suspension of drilling operations for fifteen (15) or more consecutive days.
[2] Charges for offshore drilling wells shall begin on the date when drilling or completion equipment arrives on location and terminate on the date the drilling or completion equipment moves off location or rig is released, whichever occurs first, except that no charge shall be made during suspension of drilling operations for fifteen (15) or more consecutive days
[3] Charges for wells undergoing any type of workover or recompletion for a period of five (5) consecutive days or more shall be made at the drilling well rate. Such charges shall be applied for the period from date workover operations, with rig, commence through date of rig release, except that no charge shall be made during suspension of operations for fifteen (15) or more consecutive days.

(b) Producing Well Rates

- [1] An active well either produced or injected into for any portion of the month shall be considered as a one-well charge for the entire month. This shall include production from water-source as well as oil and gas wells.
[2] Each active completion in a multi-completed well in which production is not commingled down hole shall be considered as a one-well charge providing each completion is considered a separate well by the governing regulatory authority.
[3] An inactive gas well shut in because of overproduction or failure of purchaser to take the production shall be considered as a one-well charge providing the gas well is directly connected to a permanent sales outlet.
[4] A one-well charge may be made for the month in which plugging and abandonment operations are completed on any well.
[5] All other inactive wells (including but not limited to inactive wells covered by unit allowable, lease allowable, transferred allowable, etc.) shall not qualify for an overhead charge.

- (3) The well rates shall be adjusted as of the first day of April 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 calendar year preceding as shown by the index of average weekly earnings of Crude Petroleum and Gas Fields Production Workers as published by the United States Department of Labor, Bureau of Labor Statistics, or the equivalent Canadian index as published by Statistics Canada, as applicable. The adjusted rates shall be the rates currently in use, plus or minus the computed adjustment.

B. Overhead - Percentage Basis

(1) Operator shall charge the Joint Account at the following rates:

(a) Development

Percent (%) of the cost of Development of the Joint Property exclusive of costs provided under Paragraph 9 of Section II and all salvage credits.

(b) Operating

Percent (%) of the cost of Operating the Joint Property exclusive of costs provided under Paragraphs 1 and 9 of Section II, all salvage credits, the value of injected substances purchased for secondary recovery and all taxes and assessments which are levied, assessed and paid upon the mineral interest in and to the Joint Property.

(2) Application of Overhead - Percentage Basis shall be as follows:

For the purpose of determining charges on a percentage basis under Paragraph 1B of this Section III, development shall include all costs in connection with drilling, redrilling, deepening or any remedial operations on any or all wells involving the use of drilling crew and equipment; also, preliminary expenditures necessary in preparation for drilling and expenditures incurred in abandoning when the well is not completed as a producer, and original cost of construction or installation of fixed assets, the expansion of fixed assets and any other project clearly discernible as a fixed asset, except Major Construction as defined in Paragraph 2 of this Section III. All other costs shall be considered as Operating.

2. Overhead - Major Construction

To compensate Operator for overhead costs incurred in the construction and installation of fixed assets, the expansion of fixed assets, and any other project clearly discernible as a fixed asset required for the development and operation of the Joint Property, Operator shall either negotiate a rate prior to the beginning of construction, or shall charge the Joint Account for Overhead based on the following rates for any Major Construction project in excess of \$ 20,000.00:

- A. 5 % of total costs if such costs are more than \$ 20,000.00 but less than \$ 100,000.00; plus
- B. 3 % of total costs in excess of \$ 100,000.00 but less than \$1,000,000; plus
- C. 2 % of total costs in excess of \$1,000,000.

Total cost shall mean the 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 and workover wells shall be excluded.

3. Amendment of Rates

The Overhead rates provided for in this Section III may be amended from time to time only by mutual agreement between the Parties hereto if, in practice, the rates are found to be insufficient or excessive.

IV. PRICING OF JOINT ACCOUNT MATERIAL PURCHASES, TRANSFERS AND DISPOSITIONS

Operator is responsible for Joint Account Material and shall make proper and timely charges and credits for all material movements affecting the Joint Property. Operator shall provide all Material for use on the Joint Property; however, at Operator's option, such Material may be supplied by the Non-Operator. Operator shall make timely disposition of idle and/or surplus Material, such disposal being made either through sale to Operator or Non-Operator, division in kind, or sale to outsiders. Operator may purchase, but shall be under no obligation to purchase, interest of Non-Operators in surplus condition A or B Material. The disposal of surplus Controllable Material not purchased by the Operator shall be agreed to by the Parties.

1. Purchases

Material purchased shall be charged at the price paid by Operator after deduction of all discounts received. In case of Material found to be defective or returned to vendor for any other reason, credit shall be passed to the Joint Account when adjustment has been received by the Operator.

2. Transfers and Dispositions

Material furnished to the Joint Property and Material transferred from the Joint Property or disposed of by the Operator, unless otherwise agreed to by the Parties, shall be priced on the following bases exclusive of cash discounts:

A. New Material (Condition A)

(1) Tubular goods, except line pipe, shall be priced at the current new price in effect on date of movement on a maximum carload or barge load weight basis, regardless of quantity transferred, equalized to the lowest published price f.o.b. railway receiving point or recognized barge terminal nearest the Joint Property where such Material is normally available.

(2) Line Pipe

(a) Movement of less than 30,000 pounds shall be priced at the current new price, in effect at date of movement, as listed by a reliable supply store nearest the Joint Property where such Material is normally available.

(b) Movement of 30,000 pounds or more shall be priced under provisions of tubular goods pricing in Paragraph 2A (1) of this Section IV.

(3) Other Material shall be priced at the current new price, in effect at date of movement, as listed by a reliable supply store or f.o.b. railway receiving point nearest the Joint Property where such Material is normally available.

B. Good Used Material (Condition B)

Material in sound and serviceable condition and suitable for reuse without reconditioning:

(1) Material moved to the Joint Property

(a) At seventy-five percent (75%) of current new price, as determined by Paragraph 2A of this Section IV.

(2) Material moved from the Joint Property

(a) At seventy-five percent (75%) of current new price, as determined by Paragraph 2A of this Section IV, if Material was originally charged to the Joint Account as new Material, or

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- (b) at sixty-five percent (65%) of current new price, as determined by Paragraph 2A of this Section IV, if Material was originally charged to the Joint Account as good used Material at seventy-five percent (75%) of current new price.

The cost of reconditioning, if any, shall be absorbed by the transferring property.

C. Other Used Material (Condition C and D)

(1) Condition C

Material which is not in sound and serviceable condition and not suitable for its original function until after reconditioning shall be priced at fifty percent (50%) of current new price as determined by Paragraph 2A of this Section IV. The cost of reconditioning shall be charged to the receiving property, provided Condition C value plus cost of reconditioning does not exceed Condition B value.

(2) Condition D

All other Material, including junk, shall be priced at a value commensurate with its use or at prevailing prices. 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. Operator may dispose of Condition D Material under procedures normally utilized by the Operator without prior approval of Non-Operators.

D. Obsolete Material

Material which is serviceable and usable for its original function but condition and/or value of such Material is not equivalent to that which would justify a price as provided above may be specially priced as agreed to by the Parties. Such price should result in the Joint Account being charged with the value of the service rendered by such Material.

E. Pricing Conditions

- (1) Loading and unloading costs may be charged to the Joint Account at the rate of fifteen cents (15¢) per hundred weight on all tubular goods movements, in lieu of loading and unloading costs sustained, when actual hauling cost of such tubular goods are equalized under provisions of Paragraph 5 of Section II.
- (2) 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 published or listed prices 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 providing such Material, in making it suitable for use, and in moving it to the Joint Property; provided 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 ten 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.

V. INVENTORIES

The Operator shall maintain detailed records of Controllable Material.

1. Periodic Inventories, Notice and Representation

At reasonable intervals, Inventories shall be taken by Operator of the Joint Account Controllable Material. 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.

2. Reconciliation and Adjustment of Inventories

Reconciliation of a physical inventory with the Joint Account shall be made, and a list of overages and shortages shall be furnished to the Non-Operators within six months following the taking of the inventory. Inventory adjustments shall be made by Operator with the Joint Account for overages and shortages, but Operator shall be held accountable 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.

4. Expense of Conducting Periodic Inventories

The expense of conducting periodic Inventories shall not be charged to the Joint Account unless agreed to by the Parties.

EXHIBIT "F"

Attached to and made a part of that certain Unit Operating Agreement, Twin Lakes San Andres Unit, County of Chaves, State of New Mexico, dated June 1, 1987.

INSURANCE

Unit Operator and Unit Operator's contractors and subcontractors shall, during the drilling and completing of any and all well or wells drilled on the Unit Area and during the performance of all operations, carry the following described minimum insurance coverage on the Unit Area.

- A. Employer's Liability with limit of \$100,000 and Workmen's Compensation Insurance covering Operator's employees and the employees of Operator's contractors and subcontractors engaged in operations under this Agreement, in compliance with the laws of the State where the work is to be performed.
- B. General Public Liability Insurance covering the parties hereto in connection with all operations conducted by Operator or Operator's contractors and subcontractors with Bodily Injury or Death limit of not less than Two Hundred Fifty Thousand Dollars (\$250,000.00) for injury to or death of any one person; not less than Five Hundred Thousand Dollars (\$500,000.00) for injury to or death of more than one person resulting from any one accident and for Property Damage with a limit of not less than Two Hundred Fifty Thousand Dollars (\$250,000.00) for damage to property for each accident; and
- C. Automobile Public Liability and Property Damage Insurance covering the parties hereto in connection with all operations conducted by Operator or Operator's contractors and subcontractors with Bodily Injury or Death limit of not less than Two Hundred Fifty Thousand Dollars (\$250,000.00) for injury to or death of any one person; not less than Five Hundred Thousand Dollars (\$500,000.00) for injury to or death of more than one person resulting from any one accident and for Property Damage with a limit of not less than Two Hundred Fifty Thousand Dollars (\$250,000.00) for damage to property for each accident.
- D. Such additional insurance as may be required by law.

Unit operator shall require its contractors and subcontractors working and performing services on land committed hereto to carry insurance of the types specified above. All insurance coverage shall be carried at the joint expense and for the benefit of the parties hereto.

EXHIBIT " "

Commitment of Interests By Tract
Twin Lakes San Andres Unit
Chaves County, New Mexico

UNIT TRACT NO.	NAME	COMMITTED GROSS WORKING INTEREST	UNCOMMITTED GROSS WORKING INTEREST	COMMITTED TRACT	UNCOMMITTED TRACT	ROYALTY INTEREST	DATE OF COMMITMENT OR CURRENT STATUS
1	Pelto 011 Harbert Energy Trinidad Petroleum Comm. Public Lands <u>H. Lee Harvard</u>	0.5150000 0.2751013 --- --- ---	--- --- 0.2098987 --- ---	---	---	---	6-01-87 7-24-87 Negotiating Possible Purchase *Preliminary Approval No Response
	Sub-Total	0.7901013	0.2098987	0.1250000*	(92.5%)	0.0100000 (7.5%)	
2	Pelto Oil Comm. Public Lands Cities Service	1.0000000 --- ---	--- --- ---	---	0.1250000* 0.0820312	---	6-01-87 *Preliminary Approval 7-22-87
	Sub-Total	1.0000000	-0-	0.2070312*	(100%)	-0-	
3	Pelto 011 Harbert Energy Trinidad Petroleum Comm. Public Lands Cities Service	0.7575000 0.1375506 --- --- ---	--- --- 0.1049494 --- ---	---	---	---	6-01-87 7-24-87 Negotiating Possible Purchase *Preliminary Approval 7-22-87
	Sub-Total	0.8950506	0.1049494	0.2250000*	(100%)	-0-	

UNIT TRACT NO.	NAME	COMMITTED GROSS WORKING INTEREST	UNCOMMITTED GROSS WORKING INTEREST	COMMITTED TRACT ROYALTY INTEREST	UNCOMMITTED TRACT ROYALTY INTEREST	DATE OF COMMITMENT OR CURRENT STATUS
4	Pelto Oil W. G. Stroecker Marion Weeks Brenda & Rick Winther Comm. Public Lands Cities Service	0.8425000 0.0750000 0.0750000 ---	---	---	---	6-01-87 7-02-87 7-02-87 Awaiting Ratification *Preliminary Approval 7-22-87
	Sub-Total	0.9925000	0.0075000	0.2250000* (100%)	-0-	
5	Pelto Oil Comm. Public Lands Cities Service Robert L. Haynie Len Mayer George E. Conley	1.0000000 ---	---	---	0.1250000* 0.0520312 0.0050000 0.0050000 0.0200000	6-01-87 *Preliminary Approval 7-22-87 7-15-87 7-23-87 7-23-87
	Sub-Total	1.0000000	-0-	0.2070312*	(100%)	-0-
6	Pelto Oil Trinidad Petroleum Comm. Public Lands Robert L. Haynie Len Mayer George Conley	0.5000000 ---	0.5000000	---	0.1250000* 0.0050000 0.0050000 0.0200000	6-01-87 Negotiating Possible Purchase *Preliminary Approval 7-15-87 7-23-87 7-23-87
	Sub-Total	0.5000000	0.5000000	0.1550000*	(100%)	-0-

UNIT TRACT NO.	NAME	COMMITTED GROSS WORKING INTEREST	UNCOMMITTED GROSS WORKING INTEREST	COMMITTED TRACT ROYALTY INTEREST	UNCOMMITTED TRACT ROYALTY INTEREST	DATE OF COMMITMENT OR PURCHASE	CURRENT STATUS
7	Pelto 011 Herbert Energy Trinidad Petroleum	0.5150000 0.2751013 ---	---	---	---	6-01-87 7-24-87	Negotiating Possible Purchase
	Comm. Public Lands	---	0.2098987	---	---		*Preliminary Approval
	Robert L. Haynie	---	---	0.1250000*	---	7-15-87	
	Len Mayer	---	---	0.0050000	---	7-23-87	
	George Conley	---	---	0.0050000	---	7-23-87	
				0.0200000	---		
	Sub-Total	0.7901013	0.2098987	0.1550000*	(100%)	-0-	
8	Pelto 011 Herbert Energy Comm. Public Lands	0.5250000 0.4750000 ---	---	---	---	6-01-87 7-24-87	*Preliminary Approval
	Robert L. Haynie	---	---	0.1250000*	---	7-15-87	
	Len Mayer	---	---	0.0050000	---	7-23-87	
	George E. Conley	---	---	0.0050000	---	7-23-87	
	H. Lee Harvard	---	---	0.0200000	---		No Response
				---	0.0100000		
	Sub-Total	1.0000000	-0-	0.1550000*	(93.9%)	0.0100000 (6.1%)	
9	Pelto 011 W. G. Stroecker Marion Weeks	0.8425000 0.0750000 0.0750000	---	---	---	6-01-87 7-02-87 7-02-87	Awaiting Ratification
	Brenda & Rick Winther	---	0.0075000	---	---		*Preliminary Approval
	Comm. Public Lands	---	---	0.1250000*	---	7-22-87	
	Cities Service	---	---	0.0700000	---	7-15-87	
	Robert L. Haynie	---	---	0.0050000	---	7-23-87	
	Len Mayer	---	---	0.0050000	---		
	George E. Conley	---	---	0.0200000	---		
	Sub-Total	0.9925000	0.0075000	0.2250000*	(100%)	-0-	

UNIT TRACT NO.	NAME	COMMITTED GROSS WORKING INTEREST	UNCOMMITTED GROSS WORKING INTEREST	COMMITTED TRACT ROYALTY INTEREST	UNCOMMITTED TRACT ROYALTY INTEREST	DATE OF COMMITMENT OR CURRENT STATUS
10	Pelto Oil Comm. Public Lands Cities Service Robert L. Haynie Len Mayer George E. Conley	1.0000000 ---	---	0.1250000* 0.0546875 0.0025000 0.0025000 0.0100000	---	6-01-87 *Preliminary Approval 7-22-87 7-15-87 7-23-87 7-23-87
	Sub-Total	1.0000000	-0-	0.1946875* (100%)	-0-	
10A	Pelto Oil Comm. Public Lands Cities Service Robert L. Haynie Len Mayer George E. Conley	1.0000000 ---	---	0.1250000* 0.0546875 0.0025000 0.0025000 0.0100000	---	6-01-87 *Preliminary Approval 7-22-87 7-15-87 7-23-87 7-23-87
	Sub-Total	1.0000000	-0-	0.1946875* (100%)	-0-	
11	Pelto Oil W. G. Stroecker Marion Weeks Brenda & Rick Winther Comm. Public Lands Cities Service Robert L. Haynie Len Mayer George E. Conley	0.8425000 0.0750000 0.0750000 ---	0.0075000 ---	0.1250000* 0.0546875 0.0025000 0.0025000 0.0100000	---	6-01-87 7-02-87 7-02-87 Awaiting Ratification *Preliminary Approval 7-22-87 7-15-87 7-23-87 7-23-87
	Sub-Total	0.9925000	0.0075000	0.1946875* (100%)	-0-	

TRACT NO.	NAME	COMMITTED GROSS	UNCOMMITTED GROSS	WORKING INTEREST	WORKING INTEREST	COMMITTED TRACT	UNCOMMITTED TRACT	ROYALTY INTEREST	ROYALTY INTEREST	DATE OF COMMITMENT OR CURRENT STATUS
14 CONT.	Brenda & Rick Winther Marshall & Winston Moon Co.	---	0.0075000	---	---	0.0039063 0.0820312	---	---	---	Awaiting Ratification 7-14-87 7-17-87
	J. T. Wyman, Tr.	---	---	---	---	0.0019531	---	---	---	7-16-87
	P. W. Parker Trust	---	---	---	---	0.0019531	---	---	---	8-06-87
	F. S. Winston Mar. Trust	---	---	---	---	0.0019531	---	---	---	7-16-87
	Charles A. Kelly	---	---	---	---	0.0009765	---	---	---	7-17-87
	Murray C. McKinnon, Tr.	---	---	---	---	0.0009766	---	---	---	8-10-87
	Francisca Winston Est.	---	---	---	---	0.0039063	---	---	---	7-16-87
	E. M. Nominee Ptsp. Frates Seeligson	---	---	---	---	0.0156250 0.0117188	---	---	---	No Response Awaiting Ratification
	Sub-Total	0.9925000	0.0075000	0.1250000	(82.1%)	0.0273438	(17.9%)			

15	Pelto 011 Tenneco	0.7371875 ---	---	0.1250000 ---	---	6-01-87
	W. G. Stroecker	0.0656250	---	---	---	Negotiating Purchase of Interest
	Marion Weeks	0.0656250	---	---	---	7-02-87
	Brenda & Rick Winther	---	0.0065625	---	---	7-02-87
	Marshall & Winston Moon Co.	---	---	0.0078125 0.1230468 0.0039063	---	Awaiting Ratification
	J. T. Wyman, Tr.	---	---	---	---	7-14-87
	P. W. Parker Trust	---	---	0.0039063	---	7-17-87
	Francisca Winston Est.	---	---	0.0078125	---	7-16-87
	F. S. Winston Mar. Trust	---	---	0.0039063	---	7-16-87
	Charles A. Kelly	---	---	0.0019531	---	7-17-87
	Murray C. McKinnon, Tr.	---	---	0.0019531	---	8-10-87
	Fratess Seeligson	---	---	---	0.0175781	Awaiting Ratification
	Sub-Total	0.8684375	0.1315625	0.1542969 (88.8%)	0.0175781 (10.2%)	

UNIT TRACT NO.	NAME	COMMITTED GROSS WORKING INTEREST	UNCOMMITTED GROSS WORKING INTEREST	COMMITTED TRACT ROYALTY INTEREST	UNCOMMITTED TRACT ROYALTY INTEREST	DATE OF COMMITMENT OR CURRENT STATUS
16	Pelto Oil	0.8425000	---	---	---	6-01-87
	W. G. Stroecker	0.0750000	---	---	---	7-02-87
	Marion Weeks	0.0750000	---	---	---	7-02-87
	Brenda & Rick Winther	----	0.0075000	---	---	Awaiting Ratification
	Marshall & Winston	----	----	0.0039063	---	7-14-87
	Moon Co.	----	----	0.0820312	---	7-17-87
	J. T. Wyman, Tr.	----	----	0.0019531	---	7-16-87
	P. W. Parker Trust	----	----	0.0019531	---	8-06-87
	F. S. Winston Mar. Trust	----	----	0.0019531	---	7-16-87
	Charles A. Kelly	----	----	0.0009765	---	7-17-87
	Murray C. McKinnon, Tr.	----	----	0.0009766	---	8-10-87
	Francisca Winston Est.	----	----	0.0039063	---	7-16-87
	E. M. Nominee Ptsp.	----	----	0.0156250	---	No Response
	Frates Seeligson	----	----	0.0117188	---	Awaiting Ratification
	Sub-Total	0.9925000	0.0075000	0.0976562 (78.1%)	0.0273438 (21.9%)	
17	Harlow Corp.	---	0.6250000	---	---	Negotiating Possible Purchase
	Adams & McGahey	---	0.7500000	---	---	Negotiating Possible Purchase
	J. W. & June Adams Est.	---	0.0750000	---	---	Negotiating Possible Purchase
	J. W. Adams	---	0.0375000	---	---	Negotiating Possible Purchase
	Nabob Prod. Co.	0.1875000	---	---	---	7-17-87
	Moon Co.	----	0.0820313	---	---	7-17-87
	E. M. Nominee Ptsp.	----	----	0.0250000	0.0250000	No Response
	Marshall & Winston	----	0.0058594	---	---	7-14-87
	Francisca Winston Est.	----	0.0058594	---	---	7-16-87
	F. S. Winston Mar. Trust	----	0.0029296	---	---	7-16-87
	P. W. Parker Trust	----	0.0029296	---	8-06-87	
	J. T. Wyman, Tr.	----	0.0029297	---	7-16-87	
	Charles A. Kelly	----	0.0014648	---	7-17-87	

UNIT TRACT NO.	NAME	COMMITTED GROSS WORKING INTEREST	UNCOMMITTED GROSS WORKING INTEREST	COMMITTED TRACT ROYALTY INTEREST	UNCOMMITTED TRACT ROYALTY INTEREST	DATE OF COMMITMENT OR Purchase of Working Interest	CURRENT STATUS
17 CONT.	Murray C. McKinnon, Tr. Douglas A. McKinnon W. V. Harlow, Jr.	---	---	0.0007325 0.0007324	---	8-10-87 8-18-87	
		---	---	---	0.0375000	Waiting on Possible Purchase of Working Interest	
						Awaiting Ratification 7-16-87	
						8-14-87	
						7-16-87	
						7-22-87	
						7-29-87	
						Ratified But Failed to Notarize - Awaiting New Ratification 7-31-87	
						No Response 7-14-87	
						No Response 8-15-87	
						8-20-87	
						No Response 7-16-87	
						8-14-87	
						7-14-87	
						7-28-87	
						8-13-87	
						7-22-87	
						7-15-87	
						Awaiting Ratification 0.0117188	
						0.0871272 (41%)	
	Sub-Total	0.1875000	0.8125000	0.1252609 (59%)			

UNIT TRACT NO.	NAME	COMMITTED GROSS WORKING INTEREST	UNCOMMITTED GROSS WORKING INTEREST	COMMITTED TRACT	UNCOMMITTED TRACT	ROYALTY INTEREST	ROYALTY INTEREST	DATE OF COMMITMENT OR CURRENT STATUS
18	Pelto Oil	0.7371875	---	---	---	---	---	6-01-87
	W. G. Stroecker	0.0656250	---	---	---	---	---	7-02-87
	Marion Weeks	0.0656250	---	---	---	---	---	7-02-87
	Brenda & Rick Winther	---	0.0065625	---	---	---	---	Awaiting Ratification Unleased, Negotiating Purchase of Interest
	Tenneco	---	0.1250000	---	---	0.1250000	0.1250000	7-14-87
	Marshall & Winston Moon Co.	---	---	0.0046876	---	0.0984375	0.0984375	7-17-87
	J. T. Wyman, Tr.	---	---	---	---	0.0023438	0.0023438	7-16-87
	P. W. Parker Trust	---	---	---	---	0.0023438	0.0023438	8-06-87
	F. S. Winston Mar. Trust	---	---	---	---	0.0023438	0.0023438	7-16-87
	Charles A. Kelly	---	---	---	---	0.0011719	0.0011719	7-17-87
	Murray C. McKinnon, Tr.	---	---	---	---	0.0011719	0.0011719	8-10-87
	Francisca Winston Est.	---	---	0.0046876	---	0.0046876	0.0046876	7-16-87
	Frates Seeligson	---	---	---	---	0.0140625	0.0140625	Awaiting Ratification
	Sub-Total	0.8684375	0.1315625	0.1171879 (45.7%)	0.1390625 (54.3%)			
18A	Pelto Oil	0.7371875	---	---	---	---	---	6-01-87
	W. G. Stroecker	0.0656250	---	---	---	---	---	7-02-87
	Marion Weeks	0.0656250	---	---	---	---	---	7-02-87
	Brenda & Rick Winther	---	0.0065625	---	---	0.1250000	0.1250000	Awaiting Ratification Unleased, Negotiating Possible Purchase of Interest
	Tenneco	---	0.1250000	---	---	0.1250000	0.1250000	7-14-87
	Moon Co.	---	---	0.1230469	---	0.0058594	0.0058594	7-17-87
	Marshall & Winston	---	---	---	---	0.0029297	0.0029297	7-16-87
	J. T. Wyman, Tr.	---	---	---	---	0.0029297	0.0029297	8-06-87
	P. W. Parker Trust	---	---	---	---	0.0058594	0.0058594	7-16-87
	Francisca Winston Est.	---	---	---	---	0.0029297	0.0029297	7-16-87
	F. S. Winston Mar. Trust	---	---	---	---	0.0014648	0.0014648	7-17-87
	Charles A. Kelly	---	---	---	---	0.0014648	0.0014648	8-10-87
	Murray C. McKinnon, Tr.	---	---	---	---	0.0175781	0.0175781	Awaiting Ratification
	Sub-Total	0.8684375	0.1315625	0.1464844 (50.7%)	0.1425781 (49.3%)			

UNIT TRACT NO.	NAME	COMMITTED GROSS INTEREST	UNCOMMITTED GROSS INTEREST	WORKING INTEREST	ROYALTY INTEREST	UNCOMMITTED TRACT ROYALTY INTEREST	COMMITTED TRACT ROYALTY INTEREST	DATE OF COMMITMENT OR CURRENT STATUS
19	Pelto Oil	0.7371875	---	---	---	---	---	6-01-87
	W. G. Stroecker	0.0656250	---	---	---	---	---	7-02-87
	Marion Weeks	0.0656250	---	---	---	---	---	7-02-87
	Brenda & Rick Winther	---	0.0065625	---	---	---	---	Awaiting Ratification Unleased, Negotiating Possible Purchase of Interest
	Tenneco	---	0.1250000	---	0.1250000	0.1250000	0.1250000	7-14-87
	Moon Co.	---	---	0.1230469	0.1230469	---	---	7-17-87
	Marshall & Winston	---	---	0.0058594	0.0058594	---	---	7-16-87
	J. T. Wyman, Tr.	---	---	0.0029297	0.0029297	---	---	8-06-87
	P. W. Parker Trust	---	---	0.0029297	0.0029297	---	---	7-16-87
	F. S. Winston Mar. Trust	---	---	0.0029297	0.0029297	---	---	7-16-87
	Francisca Winston Est.	---	---	0.0058594	0.0058594	---	---	7-16-87
	Charles A. Kelly	---	---	0.0014648	0.0014648	---	---	7-17-87
	Murray C. McKinnon, Tr.	---	---	0.0014648	0.0014648	---	---	8-10-87
	Frates Seeligson	---	---	---	0.0175781	0.0175781	0.0175781	Awaiting Ratification
	Sub-Total	0.8684375	0.1315625	0.1464844	(50.7%)	0.1425781	(49.3%)	
20	Pelto Oil	0.8425000	---	---	---	---	---	6-01-87
	W. G. Stroecker	0.0750000	---	---	---	---	---	7-02-87
	Marion Weeks	0.0750000	---	---	---	---	---	7-02-87
	Brenda & Rick Winther	---	0.0075000	---	---	0.00234375	0.00234375	Awaiting Ratification Negotiating Possible Purchase
	Tenneco	---	---	---	---	---	---	7-14-87
	Moon Co.	---	---	0.1230469	0.1230469	---	---	7-17-87
	Marshall & Winston	---	---	0.0058594	0.0058594	---	---	7-16-87
	J. T. Wyman, Tr.	---	---	0.0029297	0.0029297	---	---	8-06-87
	P. W. Parker Trust	---	---	0.0029297	0.0029297	---	---	7-16-87
	F. S. Winston Mar. Trust	---	---	0.0029297	0.0029297	---	---	7-16-87
	Francisca Winston Est.	---	---	0.0058594	0.0058594	---	---	7-17-87
	Charles A. Kelly	---	---	0.0014648	0.0014648	---	---	8-10-87
	Murray C. McKinnon, Tr.	---	---	0.0014648	0.0014648	---	---	
	Frates Seeligson	---	---	0.0175781	0.0175781	0.0175781	0.0175781	Awaiting Ratification
	Sub-Total	0.9925000	0.0075000	0.1464844	(78.1%)	0.0410156	(21.9%)	

UNIT TRACT NO.	NAME	COMMITTED GROSS WORKING INTEREST	UNCOMMITTED GROSS WORKING INTEREST	COMMITTED TRACT	UNCOMMITTED TRACT	ROYALTY INTEREST	ROYALTY INTEREST	DATE OF COMMITMENT OR PURCHASE	CURRENT STATUS
21	Pelto Oil	0.8425000	---	---	---	---	---	6-01-87	
	W. G. Stroecker	0.0750000	---	---	---	---	---	7-02-87	
	Marion Weeks	0.0750000	---	---	---	---	---	7-02-87	
	Brenda & Rick Winther	---	0.0075000	---	---	---	0.0234375	Awaiting Ratification Negotiating Possible	
	Tenneco	---	---	---	---	0.0984375	7-14-87		
	Moon Co.	---	---	---	---	0.0046876	---	7-17-87	
	Marshall & Winston	---	---	---	---	0.0023438	---	7-16-87	
	J. T. Wyman, Tr.	---	---	---	---	0.0023438	---	8-06-87	
	P. W. Parker Trust	---	---	---	---	0.0023438	---	7-16-87	
	F. S. Winston Mar. Trust	---	---	---	---	0.0046876	---	7-16-87	
	Francisca Winston Est.	---	---	---	---	0.0011719	---	7-17-87	
	Charles A. Kelly	---	---	---	---	0.0011719	0.0140625	8-10-87	
	Murray C. McKinnon, Tr.	---	---	---	---	0.0011719	0.0140625	Awaiting Ratification	
	Frates Seeligson	---	---	---	---	0.1171879 (75.8%)	0.0375000 (24.2%)		
	Sub-Total	0.9925000	0.0075000						
22	Pelto Oil	0.8425000	---	---	---	---	---	6-01-87	
	W. G. Stroecker	0.0750000	---	---	---	---	---	7-02-87	
	Marion Weeks	0.0750000	---	---	---	---	0.0984375	Awaiting Ratification No Response	
	Brenda & Rick Winther	---	0.0075000	---	---	0.0046876	7-14-87		
	E. M. Nominee Ptsp. Moon Co.	---	---	---	---	0.0023438	7-17-87		
	Marshall & Winston	---	---	---	---	0.0046876	7-16-87		
	J. T. Wyman, Tr.	---	---	---	---	0.0023438	8-06-87		
	P. W. Parker Trust	---	---	---	---	0.0023438	7-16-87		
	F. S. Winston Mar. Trust	---	---	---	---	0.0046876	7-16-87		
	Francisca Winston Est.	---	---	---	---	0.0011719	7-17-87		
	Charles A. Kelly	---	---	---	---	0.0011719	8-10-87		
	Murray C. McKinnon, Tr.	---	---	---	---	0.0011719	0.0140625	Awaiting Ratification	
	Frates Seeligson	---	---	---	---	0.1171879 (75.8%)	0.0375000 (24.2%)		
	Sub-Total	0.9925000	0.0075000						

UNIT TRACT NO.	NAME	COMMITTED GROSS WORKING INTEREST	UNCOMMITTED GROSS WORKING INTEREST	COMMITTED TRACT ROYALTY INTEREST	UNCOMMITTED TRACT ROYALTY INTEREST	DATE OF COMMITMENT OR CURRENT STATUS
23	Pelto Oil 11 W. G. Stroecker Marion Weeks Brenda & Rick Winther Tenneco	0.8425000 0.0750000 0.0750000 --- ---	---- ---- ---- 0.0075000 ---	---- ---- ---- ---- ---	---- ---- ---- 0.0312500 ---	6-01-87 7-02-87 7-02-87 Awaiting Ratification Negotiating Possible Purchase
	Moon Co. Marshall & Winston Francisca Winston Est. J. T. Wyman, Tr. P. W. Parker Trust F. S. Winston Mar. Trust Charles A. Kelly Murray C. McKinnon, Tr. Frates Seeligson	---	---	0.1230469 0.0058594 0.0058594 0.0029297 0.0029297 0.0029297 0.0014648 0.0014648 ---	---	7-17-87 7-14-87 7-16-87 7-16-87 8-06-87 7-16-87 7-17-87 8-10-87 Awaiting Ratification
	Sub-Total	0.9925000	0.0075000	0.1464844 (75%)	0.0488281 (25%)	
24	Pelto Oil 11 W. G. Stroecker Marion Weeks Brenda & Rick Winther Tenneco	0.8425000 0.0750000 0.0750000 --- ---	---- ---- ---- 0.0075000 ---	---- ---- ---- ---- ---	0.0234375 0.1230469 0.0058594 0.0029297 0.0029297 0.0014648 0.0014648 ---	6-01-87 7-02-87 7-02-87 Awaiting Ratification Negotiating Possible Purchase
	Moon Co. Marshall & Winston Francisca Winston Est. J. T. Wyman, Tr. P. W. Parker Trust F. S. Winston Mar. Trust Charles A. Kelly Murray C. McKinnon, Tr. Frates Seeligson	---	---	0.1230469 0.0058594 0.0029297 0.0029297 0.0029297 0.0014648 0.0014648 ---	---	7-17-87 7-14-87 7-16-87 7-16-87 8-06-87 7-16-87 7-17-87 8-10-87 Awaiting Ratification
	Sub-Total	0.9925000	0.0075000	0.1464844 (78.1%)	0.0410156 (21.9%)	

UNIT TRACT NO.	NAME	COMMITTED GROSS INTEREST	UNCOMMITTED GROSS INTEREST	WORKING INTEREST	TRACT ROYALTY INTEREST	TRACT ROYALTY INTEREST	UNCOMMITTED TRACT ROYALTY INTEREST	DATE OF COMMITMENT OR PURCHASE	CURRENT STATUS
25	Pelto Oil	0.8425000	---	---	---	---	---	6-01-87	
	W. G. Stroecker	0.0750000	---	---	---	---	---	7-02-87	
	Marion Weeks	0.0750000	---	---	---	---	---	7-02-87	
	Brenda & Rick Winther	---	0.0075000	---	---	---	---	Awaiting Ratification	
	Tenneco	---	---	---	0.0234375	0.0234375	0.0234375	Negotiating Possible	
	Moon Co.	---	---	0.1230469	0.1230469	0.1230469	0.1230469	7-17-87	
	Marshall & Winston	---	---	0.0058594	0.0058594	0.0058594	0.0058594	7-14-87	
	Francisca Winston Est.	---	---	0.0058594	0.0058594	0.0058594	0.0058594	7-16-87	
	J. T. Wyman, Tr.	---	---	0.0029297	0.0029297	0.0029297	0.0029297	7-16-87	
	P. W. Parker Trust	---	---	0.0029297	0.0029297	0.0029297	0.0029297	8-06-87	
	F. S. Winston Mar. Trust	---	---	0.0029297	0.0029297	0.0029297	0.0029297	7-16-87	
	Charles A. Kelly	---	---	0.0014648	0.0014648	0.0014648	0.0014648	7-17-87	
	Murray C. McKinnon, Tr.	---	---	0.0014648	0.0014648	0.0014648	0.0014648	8-10-87	
	Frates Seeligson	---	---	---	0.0175781	0.0175781	0.0175781	Awaiting Ratification	
	Sub-Total	0.9925000	0.0075000	0.1464844	(78.1%)	0.0410156	(21.9%)		
26	Pelto Oil	0.7371875	---	---	---	---	---	6-01-87	
	W. G. Stroecker	0.0656250	---	---	---	---	---	7-02-87	
	Marion Weeks	0.0656250	---	---	---	---	---	7-02-87	
	Brenda & Rick Winther	---	0.0065625	---	---	---	---	Awaiting Ratification	
	Tenneco	---	0.1250000	---	0.1250000	0.1250000	0.1250000	Negotiating Possible	
	Moon Co.	---	---	0.1230469	0.1230469	0.1230469	0.1230469	7-17-87	
	Marshall & Winston	---	---	0.0058594	0.0058594	0.0058594	0.0058594	7-14-87	
	Francisca Winston Est.	---	---	0.0058594	0.0058594	0.0058594	0.0058594	7-16-87	
	J. T. Wyman, Tr.	---	---	0.0029297	0.0029297	0.0029297	0.0029297	7-16-87	
	P. W. Parker Trust	---	---	0.0029297	0.0029297	0.0029297	0.0029297	8-06-87	
	F. S. Winston Mar. Trust	---	---	0.0029297	0.0029297	0.0029297	0.0029297	7-16-87	
	Charles A. Kelly	---	---	0.0014648	0.0014648	0.0014648	0.0014648	7-17-87	
	Murray C. McKinnon, Tr.	---	---	---	---	0.0175781	0.0175781	Awaiting Ratification	
	Frates Seeligson	---	---	---	---	---	---		
	Sub-Total	0.8684375	0.1315625	0.1464844	(50.7%)	0.1425781	(49.3%)		

UNIT TRACT NO.	NAME	WORKING INTEREST	GROSS UNCOMMITTED	COMMITTED TRACT	UNCOMMITTED TRACT	ROYALTY INTEREST	ROYALTY INTEREST	DATE OF COMMITMENT OR CURRENT STATUS
27	Pelto Oil W. G. Stroecker Marion Weeks Columbia Gas	0.3989843 0.0257813 0.0257813 0.2187500	---	---	---	---	---	6-01-87 7-02-87 7-02-87 Verbally Committed to Join 9-4-87
	TXO Harlow Corp.	---	0.2187500 0.1093750	---	---	---	---	No Response Negotiating Possible Purchase
	Brenda & Rick Winther Moon Co.	---	0.0025781	---	---	0.1004884 0.0029297	---	Awaiting Ratification 7-17-87
	Marshall & Winston Francisca Winston Est.	---	---	---	---	0.0029297	---	7-14-87
	J. T. Wyman, Tr.	---	---	---	---	0.0014648	---	7-16-87
	P. W. Parker Trust	---	---	---	---	0.0014648	---	7-16-87
	F. S. Winston Mar. Trust	---	---	---	---	0.0014648	---	8-06-87
	Charles A. Kelly	---	---	---	---	0.0007324	---	7-16-87
	Murray C. McKinnon, Tr.	---	---	---	---	0.0007324	---	7-17-87
	Tenneco	---	---	---	---	0.0117188	---	8-10-87 Negotiating Possible Purchase
	J. M. Huber	---	---	---	---	0.0437500	---	No Response
	Frates Seeligson	---	---	---	---	0.0143555	---	Awaiting Ratification 8-04-87
	Nancy E. Carlock	---	---	0.0011718	---	0.0011718	---	7-21-87
	Victor E. Carlock	---	---	0.0011718	---	0.0011718	---	7-16-87
	Beatrice P. B. Stone	---	---	0.0052083	---	0.0052083	---	No Response No Response No Response
	Grover S. Stone, Jr.	---	---	---	---	0.0013889	---	7-23-87
	Steven L. Stone	---	---	---	---	0.0013889	---	8-13-87
	Sandra J. Stone	---	---	---	---	0.0013889	---	8-19-87
	Margaret E. B. Daniels	---	---	0.0052083	---	0.0052083	---	7-14-87
	Dianne E. Daniels	---	---	0.0013889	---	0.0013889	---	7-29-87
	June A. D. Grothe	---	---	0.0013889	---	0.0013889	---	
	Charles W. Daniels	---	---	0.0013889	---	0.0013889	---	
	John D. Briscoe	---	---	0.0281250	---	0.0281250	---	
	Sub-Total	0.6692969	0.3307031	0.1572589 (68%)			0.0739910 (32%)	
28	Pelto Oil W. G. Stroecker Marion Weeks	0.5792188 0.0515625 0.0515625	---	---	---	---	---	6-01-87 7-02-87 7-02-87

UNIT TRACT NO.	NAME	WORKING INTEREST	GROSS INTEREST	UNCOMMITTED	COMMITTED TRACT	ROYALTY INTEREST	ROYALTY INTEREST	DATE OF COMMITMENT OR PURCHASE	CURRENT STATUS
28 CONT.	Brenda & Rick Winther Tenneco	---	0.0051562 0.1250000	---	---	---	0.1250000	Awaiting Ratification Negotiating Possible Purchase No Response	7-17-87 7-14-87 7-16-87
	TXO Moon Co.	---	0.1875000	---	0.1230469	---	---		
	Marshall & Winston	---	---	---	0.0078125	---	---		
	Francisca Winston Est.	---	---	---	0.0078125	---	---		
	J. T. Wyman, Tr.	---	---	---	0.0039063	---	---		
	P. W. Parker Trust	---	---	---	0.0039063	---	---		
	F. S. Winston Mar. Trust	---	---	---	0.0039063	---	---		
	Charles A. Kelly	---	---	---	0.0019531	---	---		
	Murray C. McKinnon, Tr.	---	---	---	0.0019531	---	0.0731250	No Response Verbally Committed to Join 9-4-87	8-10-87
	J. M. Huber Corp.	---	---	---	0.0351563	---	---		
	Columbia Gas	---	---	---	---	---	0.0175781	Awaiting Ratification	
	Frates Seeligson	---	---	---	---	---	---		
	Sub-Total	0.6823438	0.3176562	0.1894533	(46.8%)	0.2157031	(53.2%)		
29	Pelto Oil W. G. Stroecker Marion Weeks Brenda & Rick Winther Tenneco	0.7898437 0.0703125 0.0703125 ---	---	---	---	---	---	6-01-87 7-02-87 7-02-87	
	Moon Co.	---	0.1004882	---	---	---	---	7-17-87	
	Marshall & Winston	---	0.0039063	---	---	---	---	7-14-87	
	Francisca Winston Est.	---	0.0029297	---	---	---	---	7-16-87	
	J. T. Wyman, Tr.	---	0.0014648	---	---	---	---	7-16-87	
	P. W. Parker Trust	---	0.0014648	---	---	---	---	8-06-87	
	F. S. Winston Mar. Trust	---	0.0014648	---	---	---	---	7-16-87	
	Charles A. Kelly	---	0.0009766	---	---	---	---	7-17-87	
	Murray C. McKinnon, Tr.	---	0.0009766	---	---	---	---	8-10-87	
	Beatrice P. B. Stone	---	0.0052083	---	---	---	---	7-16-87	
	Grover S. Stone, Jr.	---	0.0013889	---	---	---	0.0013889	No Response	
	Steven L. Stone	---	0.0013889	---	---	---	0.0013889	No Response	
	Sandra J. Stone	---	0.0013889	---	---	---	0.0013889	No Response	
	Margaret E. B. Daniels	---	0.0052083	---	---	---	7-23-87		
	Dianne E. Daniels	---	0.0013889	---	---	---	8-13-87		

UNIT TRACT NO.	NAME	WORKING INTEREST	GROSS INTEREST	UNCOMMITTED GROSS	COMMITTED TRACT	ROYALTY INTEREST	UNCOMMITTED TRACT	ROYALTY INTEREST	DATE OF COMMITMENT OR RATIFICATION	CURRENT STATUS
29	June A. D. Grothe	---	---	---	0.0013889	---	---	---	8-19-87	
CONT.	Charles W. Daniels	---	---	0.0013889	---	---	---	---	7-14-87	
	John D. Briscoe	---	---	0.0281250	---	---	---	---	7-29-87	
	Nancy E. Carlock	---	---	0.0011719	---	---	---	---	8-04-87	
	Victor E. Carlock	---	---	0.0011719	---	---	---	---	7-21-87	
	Frates Seeligson	---	---	---	0.0143555	---	---	---	Awaiting Ratification	
	Sub-Total	0.9304687	0.0695312	0.1587239	(89.6%)	0.0185222	(10.4%)			
30	Pelto Oil	0.7898437	---	---	---	---	---	---	6-01-87	
	W. G. Stroecker	0.0703125	---	---	---	---	---	---	7-02-87	
	Marion Weeks	0.0703125	---	---	---	---	---	---	7-02-87	
	Brenda & Rick Winther	---	0.0070312	---	0.0019531	0.0625000	---	0.0625000	Awaiting Ratification	
	Tenneco	---	0.0625000	---	0.0019531	0.0009766	---	0.0009766	Negotiating Possible	
	Moon Co.	---	---	0.1004884	0.0039063	0.0039063	---	0.0039063	Purchase	
	Marshall & Winston	---	---	0.0039063	0.0019531	0.0019531	---	0.0019531	7-17-87	
	Francisca Winston Est.	---	---	0.0039063	0.0019531	0.0019531	---	0.0019531	7-14-87	
	J. T. Wyman, Tr.	---	---	0.0019531	0.0019531	0.0019531	---	0.0019531	7-16-87	
	P. W. Parker Trust	---	---	0.0019531	0.0009766	0.0009766	---	0.0009766	8-06-87	
	F. S. Winston Mar. Trust	---	---	0.0019531	0.0009766	0.0009766	---	0.0009766	7-16-87	
	Charles A. Kelly	---	---	0.0019531	0.0009766	0.0009766	---	0.0009766	7-17-87	
	Murray C. McKinnon, Tr.	---	---	0.0019531	0.0009766	0.0009766	---	0.0009766	8-10-87	
	Beatrice P. B. Stone	---	---	0.0052083	0.0052083	0.0052083	---	0.0052083	7-16-87	
	Grover S. Stone, Jr.	---	---	0.0013889	0.0013889	0.0013889	---	0.0013889	No Response	
	Steven L. Stone	---	---	0.0013889	0.0013889	0.0013889	---	0.0013889	No Response	
	Sandra J. Stone	---	---	0.0013889	0.0013889	0.0013889	---	0.0013889	No Response	
	Margaret E. B. Daniels	---	0.0052083	0.0052083	0.0052083	0.0052083	---	0.0052083	7-23-87	
	Dianne E. Daniels	---	0.0013889	0.0013889	0.0013889	0.0013889	---	0.0013889	8-13-87	
	June A. D. Grothe	---	0.0013889	0.0013889	0.0013889	0.0013889	---	0.0013889	8-19-87	
	Charles W. Daniels	---	0.0013889	0.0013889	0.0013889	0.0013889	---	0.0013889	7-14-87	
	Frates Seeligson	---	---	0.0143555	0.0143555	0.0143555	---	0.0143555	Awaiting Ratification	
	John D. Briscoe	---	0.0281250	0.0281250	0.0281250	0.0281250	---	0.0281250	7-29-87	
	Nancy E. Carlock	---	0.0011718	0.0011718	0.0011718	0.0011718	---	0.0011718	8-04-87	
	Victor E. Carlock	---	---	---	---	---	---	---	7-21-87	
	Sub-Total	0.9304687	0.0695312	0.1611654	(66.5%)	0.0810222	(33.5%)			

UNIT TRACT NO.	NAME	COMMITTED GROSS WORKING INTEREST	UNCOMMITTED GROSS WORKING INTEREST	COMMITTED TRACT ROYALTY INTEREST	UNCOMMITTED TRACT ROYALTY INTEREST	DATE OF COMMITMENT OR NEGOTIATING POSSIBLE PURCHASE	CURRENT STATUS
31	Pelto Oil Sun	0.7500000 0.2500000	---	0.0051564 ---	---	6-01-87 Sun's Interest Acquired By Pelto 9-1-87	
	Tenneco	---	---	---	0.0312500	Negotiating Possible	
	Moon Co.	---	---	0.1230468	---	7-17-87	
	Marshall & Winston	---	---	0.0078125	---	7-14-87	
	Francisca Winston Est.	---	---	0.0078125	---	7-16-87	
	J. T. Wyman, Tr.	---	---	0.0039063	---	7-16-87	
	P. W. Parker Trust	---	---	0.0039063	---	8-06-87	
	F. S. Winston Mar. Trust	---	---	0.0039063	---	7-16-87	
	Charles A. Kelly	---	---	0.0019531	---	7-17-87	
	Murray C. McKinnon, Tr.	---	---	0.0009766	---	8-10-87	
	Douglas A. McKinnon	---	---	0.0009766	---	8-18-87	
	David I. Miller	---	---	0.0075000	---	7-20-87	
	William O. Dewitt	---	---	0.0009375	---	7-15-87	
	J. T. Howard	---	---	0.0026041	---	7-17-87	
	Donald R. Watts	---	---	0.0052083	---	7-15-87	
	Frates Seeligson	---	---	---	0.0175780	Awaiting Ratification	
	Sub-Total	1.0000000	-0-	0.1757033 (78.3%)	0.0488280 (21.7%)		
32	Pelto Oil Sun	0.6875000 0.1875000	---	0.0039062 ---	---	6-01-87 Sun's Interest Acquired By Pelto 9-1-87	
	Tenneco	---	0.1250000	---	0.1250000	Negotiating Possible	
	Moon Co.	---	---	0.1230468	---	7-17-87	
	Marshall & Winston	---	---	0.0078125	---	7-14-87	
	Francisca Winston Est.	---	---	0.0078125	---	7-16-87	
	J. T. Wyman, Tr.	---	---	0.0039063	---	7-16-87	
	P. W. Parker Trust	---	---	0.0039063	---	8-06-87	
	F. S. Winston Mar. Trust	---	---	0.0039063	---	7-16-87	
	Charles A. Kelly	---	---	0.0019531	---	7-17-87	
	Murray C. McKinnon, Tr.	---	---	0.0019531	---	8-10-87	

UNIT TRACT NO.	NAME	COMMITTED GROSS WORKING INTEREST	UNCOMMITTED GROSS WORKING INTEREST	COMMITTED TRACT	UNCOMMITTED TRACT	ROYALTY INTEREST	ROYALTY INTEREST	DATE OF COMMITMENT OR CURRENT STATUS
32	David I. Miller	---	---	0.0075000	---	---	---	7-20-87
CONT.	William O. Dewitt	---	---	0.0009375	---	---	---	7-15-87
	J. T. Howard	---	---	0.0026042	---	---	---	7-17-87
	Donald R. Watts	---	---	0.00052083	---	---	0.0175781	7-15-87 Awaiting Ratification
	<u>Frates Seeligson</u>	---	---	---	---	---	---	
	Sub-Total	0.8750000	0.1250000	0.1744631	(55%)	0.1425781	(45%)	
33	Pelto Oil	0.7898437	---	---	---	---	---	6-01-87
	W. G. Stroecker	0.0703125	---	---	---	---	---	7-02-87
	Marion Weeks	0.0703125	---	---	---	---	---	7-02-87
	Brenda & Rick Winther	---	0.0070312	---	---	0.0625000	0.0625000	Awaiting Ratification Negotiating Possible Purchase
	<u>Tenneco</u>	---	0.0625000	---	---	0.1004884	---	
	Moon Co.	---	---	0.0039063	---	---	---	7-17-87
	Marshall & Winston	---	---	0.0039063	---	---	---	7-14-87
	Francisca Winston Est.	---	---	0.0019531	---	---	---	7-16-87
	J. T. Wyman, Tr.	---	---	0.0019531	---	---	---	7-16-87
	P. W. Parker Trust	---	---	0.0019531	---	---	---	8-06-87
	F. S. Winston Mar. Trust	---	---	0.0019531	---	---	---	7-16-87
	Charles A. Kelly	---	---	0.0009766	---	---	---	7-17-87
	Murray C. McKinnon, Tr.	---	---	0.0009766	---	---	---	8-10-87
	Beatrice P. B. Stone	---	---	0.0052083	---	---	---	7-16-87
	Grover S. Stone, Jr.	---	---	---	0.0013889	0.0013889	No Response	
	<u>Steven L. Stone</u>	---	---	---	0.0013889	0.0013889	No Response	
	<u>Sandra J. Stone</u>	---	---	---	0.0013889	0.0013889	No Response	
	Margaret E. B. Daniels	---	---	0.0052083	---	---	7-23-87	
	Dianne E. Daniels	---	---	0.0013889	---	---	8-13-87	
	June A. D. Grothe	---	---	0.0013889	---	---	8-19-87	
	Charles W. Daniels	---	---	0.0013889	---	---	7-14-87	
	John D. Briscoe	---	---	0.0281250	---	---	7-29-87	
	Nancy E. Carlock	---	---	0.0011718	---	---	8-04-87	
	Victor E. Carlock	---	---	0.0011718	---	0.0143555	0.0143555	7-21-87 Awaiting Ratification
	<u>Frates Seeligson</u>	---	---	---	---	---	---	
	Sub-Total	0.9304687	0.0695312	0.1611654	(66.5%)	0.0810222	(33.5%)	

UNIT TRACT NO.	NAME	COMMITTED GROSS WORKING INTEREST	UNCOMMITTED GROSS WORKING INTEREST	COMMITTED TRACT	UNCOMMITTED TRACT	ROYALTY INTEREST	ROYALTY INTEREST	DATE OF COMMITMENT OR Purchase	CURRENT STATUS
34	Pelto 011 Sun	0.6875000 0.1875000	---	0.0039063	---	---	---	6-01-87 Sun's Interest Acquired By Pelto 9-1-87	
	Tenneco	---	0.1250000	---	0.1250000	0.1250000	0.1250000	Negotiating Possible	
	Moon Co.	---	---	0.1230469	---	---	---	7-17-87	
	Marshall & Winston	---	---	0.0078125	---	---	---	7-14-87	
	Francisca Winston Est.	---	---	0.0078125	---	---	---	7-16-87	
	J. T. Wyman, Tr.	---	---	0.0039063	---	---	---	7-16-87	
	P. W. Parker Trust	---	---	0.0039063	---	---	---	8-06-87	
	F. S. Winston Mar. Trust	---	---	0.0039063	---	---	---	7-16-87	
	Charles A. Kelly	---	---	0.0019531	---	---	---	7-17-87	
	Murray C. McKinnon, Tr.	---	---	0.0019531	---	---	---	8-10-87	
	David I. Miller	---	---	0.0075000	---	---	---	7-20-87	
	William O. Dewitt	---	---	0.0009375	---	---	---	7-15-87	
	J. T. Howard	---	---	0.0026042	---	---	---	7-17-87	
	Donald R. Watts	---	---	0.0052083	---	---	0.0175780	7-15-87 Awaiting Ratification	
	Frates Seeligson	---	---	---	---	0.0175780	0.0175780	Awaiting Ratification	
	Sub-Total	0.8750000	0.1250000	0.1744533	(55%)	0.1425780	(45%)		
35	Pelto 011 W. G. Stroecker Marion Weeks	0.7371875 0.0656250 0.0656250	---	---	---	---	---	6-01-87 7-02-87	
	Brenda & Rick Winther	---	---	0.0065625	---	---	---	7-02-87	
	Tenneco	---	---	0.1250000	---	0.1250000	0.1250000	Negotiating Possible	
	Moon Co.	---	---	0.1230468	---	---	---	7-17-87	
	Marshall & Winston	---	---	0.0078126	---	---	---	7-14-87	
	Francisca Winston Est.	---	---	0.0058594	---	---	---	7-16-87	
	J. T. Wyman, Tr.	---	---	0.0029297	---	---	---	7-16-87	
	P. W. Parker Trust	---	---	0.0029297	---	---	---	8-06-87	
	F. S. Winston Mar. Trust	---	---	0.0029297	---	---	---	7-16-87	
	Charles A. Kelly	---	---	0.0019531	---	---	0.0175781	7-17-87 8-10-87 Awaiting Ratification	
	Murray C. McKinnon, Tr.	---	---	0.0019531	---	---	0.0175781	Awaiting Ratification	
	Frates Seeligson	---	---	---	---	0.0175781	0.0175781		
	Sub-Total	0.86684375	0.1315625	0.1494141	(51.2%)	0.1425781	(48.8%)		

STATUS OF WORKING INTEREST COMMITMENTS
TWIN LAKES SAN ANDRES UNIT
CHAVES COUNTY, NEW MEXICO

June 9, 1987

OWNER	TYPE	UNIT PARTICIPATION	UNIT	STATUS
Adams, J. W.	WI	0.0015768		Negotiating possible purchase
Adams, J. W. & June Estate	WI	0.0031536		Negotiating possible purchase
Adams & McGahey	WI	0.0031536		Negotiating possible purchase
Columbia Gas Development Corp.	WI	0.0069708		Columbia verbally committed to join 9-4-87
Harbert Energy Corporation	WI	0.0165100		Signed as of 7-24-87
Harlow Corporation	WI	0.0297655		Negotiating possible purchase
Nabob Production Company	WI	0.0078840		Signed as of 7-17-87
Pelto Oil Company	WI	0.7201465		Signed as of 6-1-87
Stroeker, W. G.	WI	0.0494445		Signed as of 7-2-87
Sun Exploration & Production Company	WI	0.0247405		Sun's interest acquired by Pelto 9-1-87
Tenneco Oil Company	WI	0.0569352		Negotiating possible purchase
Trinidad Petroleum Corporation	WI	0.0134667		Negotiating possible purchase
TXO Production Corporation	WI	0.0118633		No response
Weeks, Marion	WI	0.0494445		Signed as of 7-2-87
Winther, Brenda & Rick	WI	0.0049444		Awaiting ratification
		1.0000000		

SUMMARY AS OF 9-4-87

Committed Interest -	0.8751408*
Uncommitted Interest -	0.1248592
	<u>1.0000000</u>

*Includes Interest of Columbia and Sun

**PERCENTAGES OF OWNERSHIP
ROYALTY INTERESTS
TWIN LAKES SAN ANDRES UNIT
CHAVES COUNTY, NEW MEXICO**

Rev. 2/21/986
July 9, 1987

OWNER	TYPE	UNIT PARTICIPATION	OWNER ROYALTY EXPRESSED AS A % OF TOTAL ROYALTY	STATUS
1029 Plus One Investors	ORR	0.0000155	0.00825%	Signed as of 8-13-87
Abram, J. E.	ORR	0.0000062	0.00330%	Signed as of 8-14-87
Aviva Ltd. Partnership	ORR	0.0004464	0.2364%	Has not signed
Briscoe, John D.	NPRI	0.0084572	4.49918%	Signed as of 7-29-87
Carlock, Victor	NPRI	0.0003524	0.18747%	Signed as of 7-21-87
Carlock, Nancy E.	NPRI	0.0003524	0.18747%	Signed as of 8-4-87
Cities Service OG Corp.	ORR	0.0066055	3.51408%	Signed as of 7-22-87
Columbia Gas	ORR	0.0009173	0.48800%	Columbia verbally committed to join 9-4-87
Comm. Public Lands	RI	0.0183999	9.78863%	Preliminary approval
Conley, George E.	ORR	0.0019959	1.06181%	Signed as of 7-23-87
Daniels, Charles W.	NPRI	0.0004176	0.22216%	Signed as of 7-14-87
Daniels, Dianne E.	NPRI	0.0004176	0.22216%	Signed as of 8-13-87
Daniels, Margaret E. B.	NPRI	0.0015661	0.83316%	Signed as of 7-23-87
DeWitt, William O.	ORR	0.0001211	0.06442%	Signed as of 7-15-87
E M Nominee Partnership Co.	RI	0.0023734	1.26263%	No response
Feldman, Sally E.	ORR	0.0001244	0.06618%	Signed as of 7-16-87
Fleck, Jack W.	ORR	0.0000312	0.01660%	Signed as of 7-22-87
Grothe, June A. D.	NPRI	0.0004176	0.22216%	Signed as of 8-19-87
Harbeck, William J.	ORR	0.0000155	0.00825%	Signed as of 7-31-87
Harlow, W. V. Jr.	ORR	0.0005519	0.29361%	Awaiting ratification, pending purchase of WI
Harlow Corp.	ORR	0.0010249	0.54524%	Awaiting ratification, pending purchase of WI
Harvard, H. Lee	ORR	0.00003046	0.16204%	No response
Haynie, Robert L.	ORR	0.0004990	0.26546%	Signed as of 7-15-87
Howard, J. T.	ORR	0.0003363	0.17891%	Signed as of 7-17-87
J. M. Huber Corp.	ORR	0.0032289	1.71775%	Signed as of 7-31-87
Jackson, Robert T.	ORR	0.0000155	0.00825%	Signed as of 8-26-87
Jackson, Jackie H.	ORR	0.0000062	0.00330%	Signed as of 7-31-87
Kelly, Charles A.	RI	0.0011642	0.61935%	Signed as of 7-17-87
Kimbro, C. H.	ORR	0.0003154	0.16779%	Signed as of 7-17-87
Leondukais, John G.	ORR	0.0000249	0.01325%	No response
Lowenberg, Ralph E.	ORR	0.0000155	0.00825%	Signed as of 7-14-87
Marshall & Winston	RI	0.0046568	2.47739%	Signed as of 7-14-87
Mayer, Len	RI	0.0004990	0.26546%	Signed as of 7-23-87
McKinnon, Douglas A.	RI	0.0000390	0.02075%	Signed as of 8-18-87
McKinnon, Murray C.	RI	0.0000082	0.00436%	Signed as of 8-10-87
McKinnon, Murray C. Trust	RI	0.0011169	0.59418%	Signed as of 8-10-87

OWNER	TYPE	UNIT PARTICIPATION	OWNER ROYALTY EXPRESSED AS A % OF TOTAL ROYALTY	STATUS
Miller, David I.	ORR	0.0009685	0.51524%	Signed as of 7-20-87
Miller, Mildred	ORR	0.0000062	0.00330%	Signed as of 7-22-87
Moon Company, Trustee	RI	0.0937832	49.89209%	Signed as of 7-17-87
Parker, Pauline W. Trust	RI	0.0022464	1.19507%	Signed as of 8-6-87
Peterson, David L.	ORR	0.0000249	0.01325%	Unable to locate
Petschek, Charles I.	ORR	0.0000497	0.02644%	Signed as of 8-17-87
Pelto Oil Company	ORR	0.0005150	0.27398%	Signed as of 6-1-87
Schlessman, Lee E.	ORR	0.0000155	0.00825%	Signed as of 8-20-87
Seeligson, Frates	NPRI	0.0133976	7.12744%	Awaiting ratification
Silverstone, Robert Rex	ORR	0.0000312	0.01660%	No response
Stern, H. Peter	ORR	0.0000186	0.00989%	Signed as of 7-16-87
Stone, Beatrice P. B.	NPRI	0.0015661	0.83316%	Signed as of 7-16-87
Stone, Grover S. Jr.	NPRI	0.0004176	0.22216%	No response
Stone, Sandra J.	NPRI	0.0004176	0.22216%	No response
Stone, Steven L.	NPRI	0.0004176	0.22216%	No response
Sweeney, Barbara	ORR	0.0007316	0.38921%	Signed as of 7-16-87
Tenneco Oil Co.	RI & ORR	0.0067937	3.61421%	Negotiating possible purchase
Walsh, John E. Jr.	ORR	0.0000249	0.01325%	Signed as of 8-14-87
Watts, Donald R.	ORR	0.0006726	0.35782%	Signed as of 7-15-87
Whitman, Tania C. Trust	ORR	0.0000312	0.01660%	Signed as of 7-27-87
Winston, F. S. Marital Trust	RI	0.0022464	1.19507%	Signed as of 7-16-87
Winston, Francisca Est. Trust	RI	0.0044927	2.39009%	Signed as of 7-16-87
Wood, Donald S.	ORR	0.0000010	0.00053%	Signed as of 7-14-87
Wyman, David E.	ORR	0.0000155	0.00825%	Signed as of 7-15-87
Wyman, J. T. Trust	RI	0.0022464	1.19507%	Signed as of 7-16-87
			99.99908%	
		0.1879721		

SUMMARY AS OF 9-4-87

% Committed Interest 76.49570%
 % Uncommitted Interest 13.71567%
 % State Preliminary Approval 9.78863%

*Includes 0.488% Columbia Interest

J58/1



State of New Mexico

JUL 13 1987



Hinkle, Cox, Eaton, Coffield &
Santa Fe, New Mexico 87501

SLO REF NO. OG-239

W.R. HUMPHRIES
COMMISSIONER

Commissioner of Public Lands

P.O. BOX 1148
SANTA FE, NEW MEXICO 87504-1148

July 9, 1987

Hinkle, Cox, Eaton, Coffield & Hensley
ATTENTION: Mr. James Bruce
P. O. Box 2068
Santa Fe, New Mexico 87504-2068

Re: Proposed Twin Lakes San Andres
Unit, Chaves County, New Mexico

Gentlemen:

This office has reviewed the unexecuted copy of unit agreement for the proposed Twin Lakes San Andres Unit Area, Chaves County, New Mexico, which you have submitted on behalf of Peltro Oil Company. This agreement meets the general requirements of the Commissioner of Public Lands and has this date granted you preliminary approval as to form and content.

Preliminary approval shall not be construed to mean final approval of this agreement in any way and will not extend any short term leases, until final approval and an effective date have been given.

When submitting your agreement for final approval please submit the following:

1. Application for approval stating the Tracts which have been committed and the Tracts which have not been committed and their percentages.
2. As per our telephone conversation on Exhibit "B" Part I Please follow the sample form of Exhibits which have been enclosed. Tract No. 10 should be split up into two tracts one being the area covered by State Lease No. OG-4681-10 and the other being covered by K-6716-3. All State Tract Nos. should begin with the State lease numbers being listed in alphabetical order and there should also be a summary of all the lands in the unit and their percentage on an acreage basis.
3. Please submit a Re-Designation of all well names and numbers.
4. Order of the New Mexico Oil Conservation Division.

Hinkle, Cox, Eaton, Coffield & Hensley
July 9, 1987
Page 2

5. The filing fee for a unit agreement is thirty dollars (\$30.00) for every section or partial section thereof. Please submit a filing fee in the amount of \$420.00 Dollars.
6. Also, enclosed are comments regarding the presentation of the structure map.

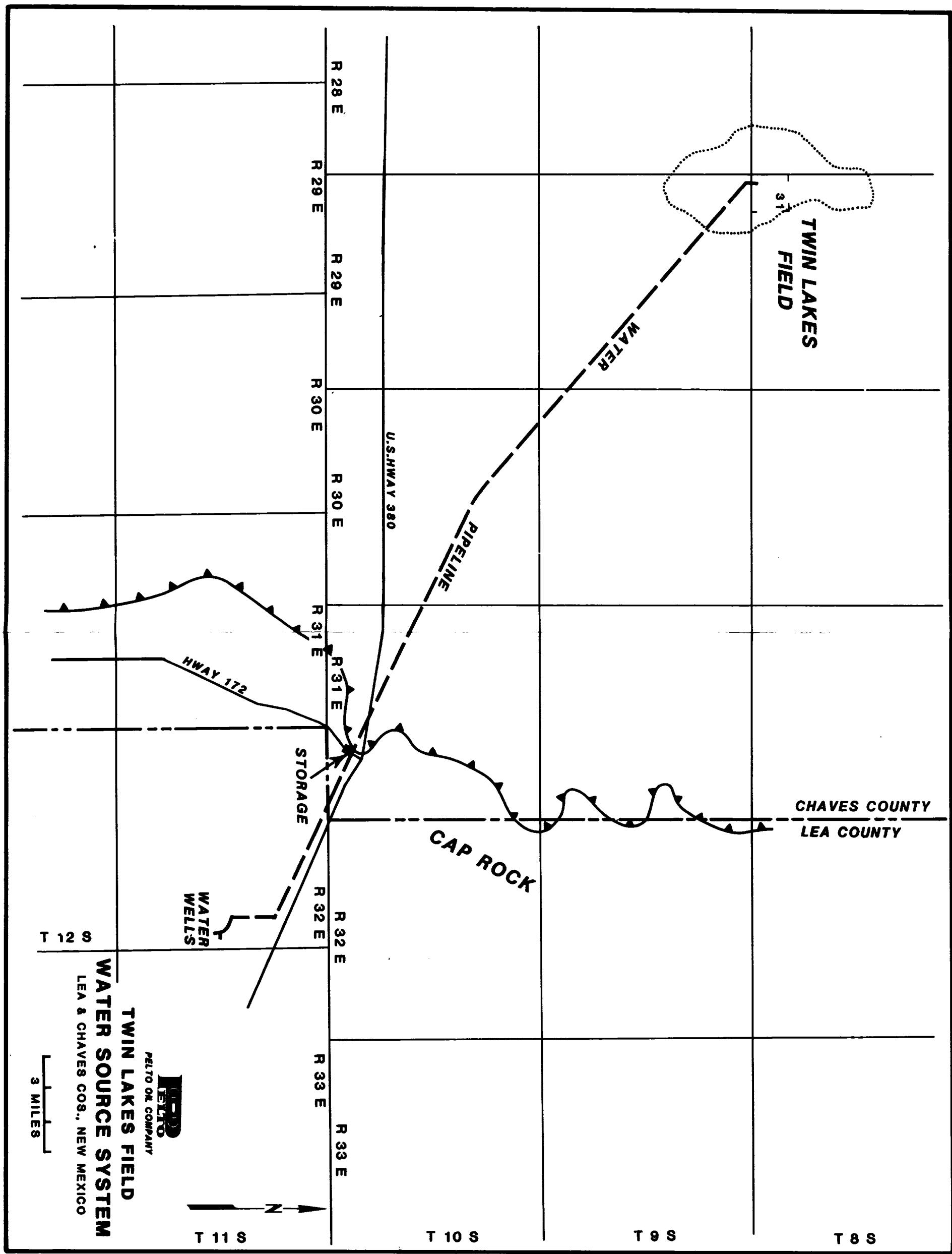
If we may be of further help please do not hesitate to call on us.

Very truly yours,

WILLIAM R. HUMPHRIES
COMMISSIONER OF PUBLIC LANDS
BY: *Floyd O. Prando*
FLOYD O. PRANDO, Director
Oil and Gas Division
(505) 827-5744

WRH/FOP/pm
encls.

cc: OCD-Santa Fe, New Mexico
Gulram





CERTIFIED MAIL - RETURN RECEIPT REQUESTED

August 20, 1987

TO: ALL INTEREST OWNERS (SEE ATTACHED LIST)

RE: Proposed Twin Lakes San Andres Unit & Waterflood
Chaves County, New Mexico

Dear Interest Owner:

Pelto Oil Company has applied to the New Mexico Oil Conservation Division for approval of statutory unitization of the above Unit Area, together with a secondary recovery waterflood project. Copies of the Applications are attached hereto without exhibits. Please contact my office if you desire copies of the exhibits. These two matters will be heard by the Oil Conservation Division in Santa Fe, New Mexico on September 9, 1987.

Very truly yours,

PELTO OIL COMPANY

G. B. Murrell
Vice President - Land

GBM:jm:J56/25
Enclosures



BEFORE THE NEW MEXICO OIL CONSERVATION DIVISION

APPLICATION OF PELTO OIL COMPANY
FOR AUTHORITY TO INSTITUTE A
WATER FLOOD PROJECT, CHAVES COUNTY,
NEW MEXICO.

No. _____

APPLICATION

Pelto Oil Company hereby applies to the New Mexico Oil Conservation Division for an order approving institution of a water flood project for secondary recovery of hydrocarbons in the proposed Twin Lakes San Andres Unit, Chaves County, New Mexico, and in support thereof, states:

1. Pelto Oil Company, in an accompanying application, has requested Division approval of statutory unitization and a unit for the proposed Twin Lakes San Andres Unit in Chaves County, New Mexico. The Unit Area, Unitized Formation, Unit Agreement, and Unit Operating Agreement are described in said application.
2. Pelto Oil Company proposes to institute a water flood project for the secondary recovery of oil and gas from the Unitized Formation within the Unit Area.
3. By converting certain presently producing wells, Pelto Oil Company proposes to inject fluids into the San Andres formation in the Twin Lakes San Andres Unit. Attached hereto as Exhibit No. 1 is a plat showing the location of all wells located within the Unit Area which are proposed to be used as producing wells or injection wells.
4. The water rights to be used for injection for the waterflood project have been acquired, and are located

approximately 27 miles to the southeast in Lea County. The water will be transported to the Unit Area by means of a pipeline to be constructed by the unit operator. This pipeline will belong to working interest owners of the Unit. Rights-of-way for the pipeline have already been acquired. Initially, 11,600 barrels of water per day will be injected, with an anticipated maximum injected volume of 21,800 barrels of water per day.

5. Water is to be injected at a surface pressure not to exceed 0.2 psi per foot of depth to top of injection zone, provided that surface pressure in excess of 0.2 psi per foot of depth to injection zone may be applied upon administrative approval as provided by Oil Conservation Division rules and regulations.

6. Approval of the water flood project will substantially increase recoverable reserves to be produced within the useful life of the new production facilities which will be installed, thereby preventing waste and protecting correlative rights.

7. A copy of Form C-108 relating to the proposed Twin Lakes San Andres Unit is attached hereto as Exhibit No. 2.

WHEREFORE, Pelto Oil Company requests that this application be set for hearing before the Division on September 9, 1987 and that the Division enter its order approving the water flood project.

Respectfully submitted,

HINKLE, COX, EATON,
COFFIELD & HENSLEY

By

A handwritten signature in black ink, appearing to read "James Bruce", is written over a horizontal line. The signature is fluid and cursive, with a large, stylized "J" at the beginning.

**James Bruce
Post Office Box 2068
Santa Fe, New Mexico 87504-2068
(505) 982-4554**

Attorneys for Peltz Oil Company



PELTO OIL COMPANY

WATERFLOOD FEASIBILITY AND UNITIZATION STUDY

PROPOSED

TWIN LAKES SAN ANDRES UNIT

CHAVES COUNTY, NEW MEXICO

DECEMBER, 1986





PELTO OIL COMPANY

WATERFLOOD FEASIBILITY

AND UNITIZATION STUDY

PROPOSED

TWIN LAKES SAN ANDRES UNIT

CHAVES COUNTY, NEW MEXICO

DECEMBER, 1986

PELTO OIL COMPANY
WATERFLOOD FEASIBILITY AND UNITIZATION STUDY
PROPOSED
TWIN LAKES SAN ANDRES UNIT
CHAVES COUNTY, NEW MEXICO

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O B J E C T

The object of this report is to determine the feasibility of waterflooding the San Andres Formation in the Twin Lakes Field, Chaves County, New Mexico and to present a proposed waterflood and unitization plan which will expedite concerted action in the near term.

CONCLUSIONS

1. Based on waterflood susceptibility core tests, field water injectivity tests, and analog field waterflood performances, the Twin Lakes San Andres formation can be successfully waterflooded.
2. Remaining primary oil recovery at 4-1-86 to an assumed tract cut-off of 1 BOPD per well is estimated to be 1.0 million barrels. Ultimate moveable primary recovery is 4.8 million barrels, or 9.3 percent of the 51.5 million barrels of oil originally in place in proposed unit area.
3. Since April 1, 1986, the proposed unit area has been operated at an overall loss. Therefore, oil reserves under primary operations have very little to no current value except to maintain leases for inclusion into a waterflood unit.
4. Estimated secondary oil recovery potential is in the range of 2.9 to 4.8 million barrels, representing secondary/primary ratios of 0.6 to 1.0. Corresponding ultimate moveable primary plus secondary recoveries are 7.7 to 9.6 million barrels which are 14.9 to 18.6 percent of O.O.I.P.
5. An adequate quantity of compatible (Ogallala) source water rights and necessary pipeline rights of way have been acquired. The water is located about 27 miles southeast of Twin Lakes Field.
6. Total cost of the proposed waterflood project is estimated to be \$8.3 million. This total consists of: (1) \$1.1 million pre-unitization expenses to evaluate floodability of San Andres, acquire water and right-of-ways, and to design water source pipeline system and field facilities; and (2) \$6.2 million to install a nominal 80-acre 5 spot waterflood and a water source

- pipeline; and (3) \$1.0 million future capital to install larger pumping units following waterflood response.
7. Waterflood economics, based on constant \$15/B0 and unescalated costs, show undiscounted profit increases over primary operations of \$17.7 to \$36.7 million (Sec./Pri. = 0.6 to 1.0) and \$3.6 to \$12.2 million increased profit discounted at 10%.
 8. Unitization is the most efficient and economical method of enhancing remaining primary reserves and recovering secondary reserves in the Twin Lakes Field.
 9. A single cost/revenue factor for unit participation should be based upon ultimate primary recoveries for both working and royalty interests.
 10. Due to the advanced stage of primary depletion and marginal economics of continued non-unitized primary operations, unitization should proceed as rapidly as possible.

RECOMMENDATION

It is recommended that unitization proceed in the main part of Twin Lakes Field as quickly as possible to recover additional oil and maximize future net revenue. Declining oil production and prices, and high operating costs have seriously eroded operating profits. Unitization will be the most economical and efficient method to recover remaining primary and future secondary oil reserves.

HISTORY

The Twin Lakes field is located in the West Central portion of Chaves County, New Mexico, and is on the westerly portion of an east-west fairway of San Andres Fields starting with the giant Slaughter-Levelland Field 70 miles east in Texas (Figure #1). O'Brien C#2, originally drilled to the Siluro-Devonian formation, discovered the Twin Lakes San Andres field in November, 1964. The well was recompleted from the Devonian to the San Andres at a depth of 2684' and flowed 20 barrels per day of 21° API gravity, sour crude. Development on 40 acre spacing began in 1967 in the northwest section of the field and progressed slowly reaching 15 producers by the end of 1977 (See Figure 2 for field production performance).

The rate of development increased between 1978 and 1982, and primary production reached a peak of 86,000 BOPM, 60,000 MCFPM, and 21,000 BWPM from one hundred and six producers during 1981 (Figure #2). In March, 1986 116 wells produced 14,947 BOPM, 28,699 MCFPM and 22,047 BWPM. Forty-two producers were below their mid-1986 economic limit and are shut-in. Cumulative production as of March, 1986, was 3.983 million barrels oil, 4.128 billion cubic feet gas and 2.046 million barrels water.

A total of 169 wells have been drilled in the field with 19 being dry or completed in other than the San Andres reservoir. Five Devonian wells have been drilled in the field with one still producing.

Four 20-acre infill producers have been drilled. Citgo State #6 and #7 were drilled on the west side of the field in July, 1981 and June, 1982 respectively. O'Brien L#15 and L#16 were drilled on the east side of the field in December, 1984. These infill wells established

that the reservoir had been adequately drained, indicating good zone continuity.

Gamma ray - neutron porosity logs were run in over seventy-five percent of the wells and nineteen wells had compensated neutron-compensated density logs. Whole cores were taken in six wells throughout the field and were utilized in determining log-core petrophysical relationships. Drill cuttings were taken on several wells but only a few samples were available to Pelet for analysis.

In general, 4-1/2" production casings were set through the P₁ and P₂ pay zones and cemented with 200 sacks. Acid stimulations through perforations ranged from 4,000 - 10,000 gallons of 28% HCL and many wells responded by flowing initially.

GEOLOGY

Oil is produced from two major zones designated P₁ and P₂ in the San Andres formation in the Twin Lakes field as seen on Figure #3. These zones represent a major depositional cycle separated by dense anhydrite. Within each major cycle several minor cycles can be identified which represent relatively minor fluctuations in sea level. The boundaries between subzones are shaly limey dolomitic mudstones and anhydrite rich dolomitic mudstones. In certain areas of the field these zone boundaries are possible barriers to vertical fluid movements. San Andres Zone P₃ is not productive in the field.

Figure #4 is a structure map on top of zone P₁ and shows a structure strike essentially north-south with an eastward dip at 60 to 200 feet per mile. The east flank dip is relatively steep with the origin of its steepening not known. The downdip limits of the field have not been clearly established since a free water level has not yet been

encountered. Minor structural closure of 25 to 30 feet occurs on the western part of the field where production data indicates a small initial gas cap. Sub zone continuities are seen on dip cross section A-A' (Figure #5) and strike cross-section B-B' (Figure #6).

Examination of core samples and the limited ditch cuttings indicate a spectrum of rock types encountered in a tidal flat environment. Overall rock quality is skewed somewhat to the finer grain rocks of lower permeability. Stratigraphy consists of porous dolomite, anhydritic dolomite and dolomitic anhydrite. Figure #7 portrays schematically the distribution of the rocks in cross section form where the line of section is at right angles to the facies strike. A local facies strike in a northeast to southwest directions is inferred in order to explain the oil trapping mechanism. To the northwest, seals are formed by dense anhydritic dolomites and anhydrites. Toward the southeast these rocks grade into very fine grain sucrosic dolomites of increasing reservoir quality and then into fine and coarse grain sucrosic dolomites of excellent reservoir quality. Although this trend is systematic and predictable on a regional scale, local non-systematic variations on a field development scale are to be anticipated and have been encountered in the Twin Lakes field.

PETROPHYSICS

One hundred and twenty-six (75%) of the 169 wells drilled in the Twin Lakes Field have a resistivity and porosity log (Figure #8). Twenty-eight other wells have only cased hole porosity logs available, while fifteen wells have no log data available or only an uncalibrated cased hole neutron log. Most of the forty-three wells with poor log coverage are located on the west side of the field. Two cored wells, O'Brien L#16 and Citgo State #7 have complete log suites. A comparison of log calculated grain density with core measured grain density, supplemented by core description of dolomitic reservoir rock, indicates a dolomite interpretation should be used.

Porosity, permeability, and dolomite crystal size correlations for the San Andres formation of the Permian Basin are shown in Figure #9. The reservoir rocks of Twin Lakes field cover most of the permeability range and are on the lower-mid range of the porosity scale. Many of the high permeability values from Twin Lakes whole core analyses reflect fracturing (either insitu or induced by coring).

Porosity and water saturation cut off values used to define three categories of pay and one category of wet reservoir rock are shown in Figure #10. The pay categories represent ranges of rock quality corresponding to the three porosity-permeability trends shown on Figure #9. The permeability of dolomites with 8 percent porosity (lower end of pay category) can vary from 0.1 md. to 10. md. depending upon crystal size. Rocks in the lower end of probable pay category (5 percent porosity) can have permeabilities from 0.1 md. with very fine crystals and up to 4. to 5. md. with coarse crystals. The possible pay category at 3 percent porosity show a range of permeability from less than 0.1 md. up to 2. md.

Water saturation values were determined using cementation (m) and saturation (n) exponents equal to 2.0. Ten core sample measurements from 2 wells showed values ranging from 1.92 to 2.68 for (m) and 1.77 to 3.58 for (n). Formation water resistivity (R_w) of 0.045 ohm-meters at reservoir temperature of 90°F was measured. No free water level has been encountered in either the P_1 and P_2 zones, which is characteristic of a stratigraphic trap analogous to several San Andres fields.

The original gas cap which was indicated by well production performance, could not be determined from available logs on the western, updip side of the field due to poor log coverage in early development wells in this area. Only three wells with complete log suites (Citgo State #6, Citgo State #7, and O'Brien E #9) were drilled in the early 1980's when much of the gas in the original gas cap could have already been produced and some oil migration taken place. It is estimated that the original gas cap contained less than 5 percent of the hydrocarbon filled pore space within the proposed unit area.

Core permeability data from 5 wells are shown on Figure #11 along with Dykstra-Parsons coefficients of permeability variations. The possible values of permeability variations range from zero to one with a completely uniform system having a value of zero. These calculated variations range from 0.66 to 0.93 indicating very heterogeneous rocks. O'Brien K-3 porosity and permeability data from whole core and plug analyses along with core descriptions indicate that some of the samples had fractures (either insitu or induced by coring) which influenced measured permeability values. When these fractured rock data points were removed, the average permeability (at 50% probability) dropped from 11.5 to 4.7 md. The overall weighted core data porosity is 7.3 percent and air permeability is 1.77 md. from all 5 wells.

These high coefficients of permeability variations are not unusual for San Andres dolomites and are rarely used to influence waterflood performance predictions.

Figure #12 is a net pay isopach map of the proposed unit area. Well production performances, infill data, and work over experiences support that both P_1 and P_2 pay and probable pay categories are contributing to production, and in some cases the possible pay category is too. As can be seen there is a general blanket distribution of net pay punctuated by discrete thicks and thins. Such definition is impossible in the northwestern portions of the main field area due to lack of log data. The boundaries of the proposed flood area are defined by poor well recoveries reflecting low permeability and/or porosity (see Figure #14).

Since all wells do not have open hole logs, the following procedure was used to estimate original-oil-in-place. In wells with open hole logs, net pay, porosity, water saturations and original-oil-in-place values (barrels per acre) were determined. In wells with only calibrated logs through casing, gross pay thicknesses were determined using porosity cut-offs. These were reduced to net pay values by using net-to-gross pay ratios in offset open hole logged wells. Water saturations for cased hole porosities were determined from nearby open hole log porosity vs water saturation relationships. Then original-oil-in-place values for cased hole logged wells were calculated. Oil-in-place values (barrels per acre) were assumed in wells without logs or with uncalibrated casing logs. Total original-oil-in-place in the proposed unit area is estimated to be 51.484 million barrels from isopaching individual well oil-in-place values.

Average values for Zones $P_1 + P_2$ (pay + probable pay categories) are:

Unit Area = 4863.8 acres
Net h = 25.6 feet
porosity = 8.2 percent
water saturation = 25.3 percent
Original F.V.F = 1.15
Original-oil-in-place = 51.484 million barrels

Inclusion of the possible pay category increases this 51.5 million barrels in place to 62.3 million barrels (+21 percent).

PRIMARY PERFORMANCE

Figure #13 shows production history of oil, gas and water from the proposed waterflood unit area outlined on Figure #8. Cumulative production to 4/1/86 from the proposed unit area has been 3.819 million barrels oil (95.9% of field total), 4.047 billion cubic feet gas (98.0% of field total) and 1.736 million barrels water (84.8% of field total).

During the six years from 1967 to early 1973 monthly production averaged 1940 BOPM, 5290 MCFPM (GOR = 2730 CF/B), and 220 BWPM (10% water cut). During the next 5 years, to late 1978, the average monthly production increased to 3510 BOPM, 1410 BWPM (29% water cut) and the average gas oil ratio dropped to 1620 CF/B. The rate of development then accelerated to 1982 with production reaching a peak in November, 1981 of 82,847 BOPM, 58,574 MCFPM (GOR = 710 CF/B) and 16,530 BWPM (17% water cut). The initial producing gas oil ratios of down dip wells averaged 400 CF/B (estimated original solution GOR = 300 CF/B). In March, 1986 production had declined to 14,947 BOPM, 28,699 MCFPM (GOR = 1920 CF/B) and 22,047 BWPM (60% water cut).

The average producing gas oil ratio has steadily increased from a low of 610 CF/B in early 1981 to the current 1920 CF/B. The original bottom hole pressure is estimated to be 900 psig at +1250' datum. This

indicates an underpressured (0.33 psi/ft) accumulation. Reservoir pressures at datum, taken in 1985 in temporarily shut in producers, ranged from 69 to 862 psig. The lower pressures are in areas of large cumulative oil withdrawals, while the higher pressures are in tight fringe areas. Water production increased with accelerated development drilling and since early 1984 has been dropping. These data suggest mainly a solution gas drive producing mechanism with a slight gas cap expansion and some limited interstitial water production.

Figure #14 shows the distribution by well of the 3.983 million barrels of cumulative oil produced to 4/1/86. The proposed water flood unit area has produced 3.819 million barrels of oil or 95.9% of the field total. As can be seen there are wide variations in oil cumulatives which reflect time of drilling, reservoir quality and influence of gas cap.

Figure #15 shows cumulative gas production by well. Current producing GOR's from crestal wells above the +1400' P_1 datum average 8500 cubic feet per barrel, while the most down dip wells are producing around 1800 cubic feet per barrel.

Figure #16 reflects cumulative water production by well. The cumulative average water cut to date from wells within the proposed unit area is only 31 percent versus 67 percent from wells outside the unit area. There is an area of higher producing water cuts on the north and northeast portion of the proposed unit area. The source of this water is unknown; however, water production has declined with time which indicates no active water drive in this area.

Figure #17 illustrates how each tract's remaining primary oil reserves were consistently extrapolated. A combination of hyperbolic

and exponential declines were used to forecast remaining primary reserves. The hyperbolic curve which best fits early production decline histories is characterized by the exponent $b = 1.5$. This curve was fitted to the historical data of each tract and extrapolated into the future. The hyperbolic segment of the forecast was terminated at an instantaneous decline of 11% per year. Then an exponential decline of 11% per year (exhibited by older wells in Twin Lakes) was used for the remainder of the tract's producing life. A cut-off limit of 1 BOPD per well was assumed as a measure of ultimate moveable primary oil reflecting economics prior to the rapid drop in oil and gas prices starting in April, 1986. Based on these uniform assumptions, tract #29 on Figure #17 has cumulative oil production of 514.7M barrels to 4/1/86, primary reserves of 210.0 M barrels, and an ultimate primary recovery of 724.8 M barrels or 45.3 M barrels per well and 1139 barrels per acre.

The sum of individual tract predictions of remaining primary oil reserves total 1.002 million barrels for a total primary ultimate of 4.821 million barrels or 9.4% of original oil in place. Figure #18 shows the proposed unit area primary oil production history and forecast.

At current low oil and gas prices, the actual economic limit is approximately 4 BOPD per well. This higher cut-off results in a forecast of 0.391 million barrels of remaining primary oil reserves and a primary ultimate of 4.210 million barrels or 8.2% of original oil in place. (See Figure #19).

Table 1 lists pertinent geological, petrophysical, reservoir and production data for the proposed unit area.

SECONDARY PERFORMANCE

Moveable Oil

Waterflood susceptibility tests were run on Core samples taken in 1983 in Citgo State #7 and in 1985 in O'Brien L #16 cores (See Figure #20). Oil/water viscosity ratios of 11 and 3 were used in Citgo State #7 and O'Brien L #16 flooding tests respectively. In general these data show oil being moved with rapid water breakthrough and increasing water cuts. Recoveries of 41-52% of oil in place were obtained after 1.5 pore volumes of water throughput and producing water cuts of 96-98%. The capillary pressure curve on Sample #10 in Citgo State #7 shows it to be a poor rock type which explains its low oil recovery efficiency of 13.6%.

A slightly unfavorable average mobility ratio of 2.0 is calculated for the field from end point core relative permeability measurements and current insitu fluid viscosities.

Even though there is no convincing method to accurately relate core analyses saturations from conventional cores to insitu values of residual oil remaining after a waterflood, it appears, on a microscopic scale, that significant amounts of oil can be removed from these rocks by water injection.

Attempts were made to determine insitu residual oil saturations from drilling mud filtrate invasion during the initial open hole log run. The results of this log moveable oil technique were mixed. However, the moveable oil values (Sio-Sor) from waterflood core tests in Citgo State #7 and O'Brien L #16 compare favorably to the moveable oil ranges determined from logs.

The current average oil saturation of 61.3% presents a large secondary oil recovery potential.

Oil Saturation Calculation:

$$So = \left[1 - \frac{N_p}{O.O.I.P.} \right] \times \frac{FVF_n}{FVF_o} \times \left[1 - Sw_c \right]$$

Where:
 N_p = volume oil produced to 4/1/86 - MBO
 O.O.I.P. = Original stock tank barrels in place - MBO
 FVF_n = 1.02 - Current formation volume factor
 FVF_o = 1.15 - Original formation volume factor
 Sw_c = .253 - Average water saturation

Average current oil saturation:

$$So = \left[1 - \frac{3819}{51484} \right] \times \frac{1.02}{1.15} \times \left[1 - .253 \right] = 0.613$$

Secondary Recovery Oil Volumes

Since the ratio of secondary recovery to primary ultimate is an industry accepted method of estimating water flood recoveries from comparable reservoirs, a review was made of analog San Andres fields under water flood. Three San Andres fields (Chaveroo, Flying M and Milnesand) having the same depositional environment, ranges of net pay, porosity and permeability and oil gravity as Twin Lakes were selected as analogs. Estimation of secondary to primary ratios of these analog fields varied from 0.6 to 1.4 with the low end reflecting inefficient injection patterns and rates. From this review a range of Secondary/Primary ultimate recovery ratios of 0.6 to 1.0 appear reasonable for the Twin Lakes Field.

Ultimate primary and secondary recovery estimates are shown below:

Total Gross MMBLS Oil	Recovery Efficiency As % of 51.484 MMBOOIP In Unit Area
Cumulative Production to 4/1/86	3819
Primary Reserves @ 4/1/86 (1B/D/Well)	<u>1002</u>
Total Primary	4821
Secondary Reserves (Sec/Pri=1.0)	4821
Secondary Reserves (Sec/Pri=0.6)	2893

These total (Primary + Secondary) recovery efficiencies of 14.9% to 18.6% are believed to be reasonable low side and high side estimates. The low side estimate recognizes problematic reservoir discontinuities on 80-acre-five-spot spacing patterns and insitu fracturing.

Injectivity Tests

During January - July, 1986, water injectivity tests using field Santa Rosa compatible water were made in two T.A.'s wells scheduled for injectors in the proposed full scale waterflood. O'Brien L #3 took 42.4 MBLS water at an average rate of 555 BWPD with 0 psig tubing pressure. Prior to injection it had produced 53.7 MBO, 61.6 MMCF gas and 1.5 MBW.

O'Brien J #3 took 14.4 MBLS water at an average rate of 510 BWPD also on a vacuum. Prior to injection it had produced 60.7 MBO, 37.4 MMCF gas and 2.2 MBW.

These early injectivity profiles showed fair to good vertical sweeps, and no early responses were seen in offset wells. These tests indicate that the planned average water injection rates of 350 to 400 BPD per well during the approximate one year fill up period can reasonably be expected.

Oil Production Forecasts

The high recovery case (secondary/primary = 1.0) shown on Figure #21 portrays an assumed peak oil production of 48.6M barrels per month (1600 BPD) to be reached by 1991 assuming water injection begins July 1987. This peak is 60% of the primary peak of 2672 BOPD reached in 1981, and is only 8% of the anticipated unit water injection rate. The low recovery case (secondary/primary = 0.6) has a peak of 33.4 MB per month (1100 BPD) also reached in 1991, and is 41% of the primary production peak and 5% of the anticipated water injection rate. Because of the planned immediate full scale injection rates in primarily closed five-spot patterns in Twin Lakes, these peak oil rates are somewhat higher than observed in the analog fields.

FLOOD PATTERN

The design of this flood, based upon analog fields, is predominantly five-spot patterns as illustrated on Figure #22. The unit area encompasses wells with 95.9 percent of the field total oil cumulative and 95.5 percent of the field primary oil ultimate. The unit outline was drawn around forty-acre locations with a producer, around recommended and probable undrilled locations, and around some open undrilled spots to protect the unit. Dry holes and poor performing peripheral wells were excluded. The northern boundary follows a break in well performances in Sections 25 and 30 as seen on Figures #12 and #14.

The overall average primary oil recovery in the area north of the unit is estimated to be 162 barrels per acre versus 991 barrels per acre within in the unit area. Producing water cuts from the north area have been high, averaging 55 percent initially and 67% cumulative to 4/1/86.

The main portion of the field has a cumulative water cut of only 31 percent. Also, the drilled locations in the north area make it difficult to install efficient waterflooding patterns without excessive drilling. These facts lead to the conclusion that there is too high of a risk associated with waterflooding the north area of the Twin Lakes Field.

Consistent with analog performances, eighty-acre five-spot patterns were selected to provide maximum sweep efficiencies with the desired oil production and injection capacities at minimal costs. Also, they provide the flexibility for selective 20 acre infilling or converting to normal 9 spots if flood performance dictates. Injectors are arranged in a northeast to southwest direction in order to parallel natural formation fracture trends which might exist. Poor producers, eccentric drilling patterns, and the need to inject into the original gas cap to prevent oil migration result in irregular patterns on the west and southwest side of the main area. Three injectors are proposed to be drilled to complete four important five spots on the northeastern and eastern edges of the proposed unit. Four edge wells are shown as producers shut in for future utility as alternate producers or injectors as the need arises. The two injectors located outside the northern boundary are included to show the possibility of needing an injection line agreement.

WATER SOURCE

An adequate, dependable and compatible source of water is required in order to profitably waterflood the Twin Lakes Field. Dump or intermittent flooding with limited water has caused water flooding failures in some of the analog fields that were studied. Chemically incompatible water not only would retard injection and oil displacement but also would significantly increase operating costs.

Limited water flood susceptibility tests on cores indicate approximately 3.0 floodable pore volumes of water will need to be injected to effect removal of oil to economically irreducible saturation levels (98 to 99% producing water cuts). The floodable portion of the proposed unit area contains approximately 36.6 million barrels of floodable pore space. Assuming 75% injection efficiency, 146 million barrels of water would be injected over life.

Twin Lakes Field is unfortunately located in an area remote from required source water. An investigation of subsurface reservoirs, surface waters and commercial water sources over a forty to fifty mile radius revealed that the closest, acceptable source was the Ogallala formation in Lea County. The Santa Rosa formation under portions of the Twin Lakes Field was tested by Stevens Oil Company at three locations and proved adequate only for limited injectivity testing.

Pelto has acquired Ogallala water rights approximately 27 miles Southeast of the Twin Lakes Field (see Figure #23). Some 1030 acre-feet per year (21,892 BBls/day) have been appropriated for waterflooding purposes along with necessary pipeline easements and right-of-ways. This compatible source water alone would supply the 146 million barrels in +/- 18 years. Recycling of the produced water will reduce the volume

of source water required and/or provide increased water for injection as the flood matures.

On March 12, 1984 Stevens Oil Company filed application for permit to appropriate the Ogallala water. The application drew several protests, and protesting landowners would not grant necessary rights of way unless certain conditions were met. After intensive negotiation these issues were finally settled. The State Engineer granted the right to divert the source water in March 1985, and the New Mexico State Land Office granted right of easement in March 1986.

Two source water wells located in Section 24, T11S, R32E have been acquired and briefly tested at a combined rate of 45,000 barrels of water per day.

The water source system, designed by John West Engineering Company, is estimated to cost \$1.5 million (see cost estimate - page 19). The field facilities are designed to treat and selectively inject produced water without surface mixing with source water.

FIELD FACILITIES

A preliminary design and cost estimate of the proposed Twin Lakes San Andres waterflood unit facilities has been made by West Texas Consultants, Inc. under Pelt's direction. These facilities include a new central battery, main injection station, five satellites for 58 producers (initially) and 58 injectors at an estimated total gross cost of \$3.5 million. See Figure #24 and Figure #25 for production and injection system layouts.

The Central production facilities include a free water knockout, heater treater, storage tanks and a lease automatic custody transfer. Central injection facilities contain filters, storage tank and vertical

turbine pumps designed to deliver up to 22,000 BWPD (or 380 BWPD per injector) at 1200 psig. Initially, surface injection pressures are limited to 540 psig until such time as well fracturing gradients can be demonstrated to be higher than New Mexico State requirements of 0.2 psi/ft of depth. All materials are designed to withstand corrosive effects of produced fluids. Ogallala and produced waters are kept separate on the surface, and the system is capable of using either or both sources.

Each satellite is equipped with well production test facilities and separate manifolds to distribute water to each injector.

PROJECT COST ESTIMATES

The total cost of the proposed waterflood project is estimated to be \$8.30 million. This total consists of \$1.10 million pre-unitization expenses, \$6.20 million initial installation capital, and \$1.00 million future capital to install larger pumping units during peak well responses.

I. PRE-UNITIZATION EXPENSE: This is the summation of costs incurred and pre-paid for by Pelto prior to unitization for activities uniquely required to evaluate floodability of the San Andres reservoir, to acquire water rights and rights-of-way for a water source pipeline, to design the waterflood and facilities, and to determine the costs to install the waterflood. Pre-unitization expense will be further defined in the Unit Agreement and approved by unit working interests participants.

	<u>8/8ths Costs M\$</u>	<u>Date</u>
1. <u>Consultant and Legal Fees</u>		
Source Water Acquisition	80	
Acquiring Rights-of-way & Surface Leases	21	
Petrophysical Analysis	75	
Geological Analysis	55	
Reservoir Analysis - Analog Fields	15	
Water Source System Design & Bid Preparation	103	
Facilities Design & Bid Preparation	108	
Surveying for Facilities & Water Source System	4	
Land Title, Division Orders & Unitization Procedures	<u>2</u>	
Subtotal	463	
2. <u>Acquisition of Source Water</u>		
Source water acquisition	42	
Water Source Pipeline Rights-of-way	90	
Water Source Facilities Surface Leases & Easements	2	
Field Central Facilities Surface Lease	<u>0</u>	
Subtotal	134	
3. <u>Infill Drilling, Coring and Testing</u>		
Drill and Complete O'Brien L-15 and L-16	360	
L-16 Coring and Core Analyses	28	
Convert J-3 and L-3 to Injectors	36	
Facilities, Water Source and Analysis for Injectivity Tests	48	
Bottom Hole Pressure Test Program	<u>2</u>	
Subtotal	474	
4. Total Costs Already Incurred (1,2,3 above)	1071	
Anticipated Additional Costs	<u>29</u>	
GRAND TOTAL PRE-UNITIZATION EXPENSES	\$1100	1987

II. WATER FLOOD INSTALLATION: These expenditures will be authorized by AFE's after unitization.

	<u>8/8ths Costs M\$</u>	<u>Date</u>
1. <u>Facilities</u>		
Central Injection Facilities	586	
Central Production Facilities	113	
Central Battery and Injection Station Site	158	
Satellite Trunk Lines	565	
Satellite Production and Injection Facilities	1,655	
Rebuild Electrical Distribution System	108	
State Taxes and Contingencies	<u>315</u>	
Subtotal	3,500	
2. <u>Water Supply System</u>		
Pipe	740	
Tank, Valves, Meters, Pumps, Motors	99	
Electrical Materials & Installation	153	
Construction	448	
Contingency	<u>60</u>	
Subtotal	1,500	
3. <u>Convert 55 Wells to Injection</u>	900	
4. <u>Drill 3 Injectors</u>	<u>300</u>	
Total Initial Capital	\$6,200	1987
III. <u>PURCHASE LARGER PUMPING UNITS:</u> These future capital costs will be made during peak well responses		
	300	1990
	350	1991
	<u>350</u>	1992
Subtotal	\$1,000	
IV. <u>GRAND TOTAL PROPOSED WATERFLOOD COSTS</u>	\$8,300	

OPERATING COSTS

Remaining primary direct field operating cost estimates, excluding overheads, were based on continuing non-unitized operations. Two cost categories, fixed and variable, were used. Fixed costs include labor, surface facilities repairs, road maintenance insurance, communications, etc. The variable category includes electric power, subsurface maintenance, prime mover repairs, salt water disposal, etc. Estimates for 1987:

<u>Producer</u>	<u>\$/Well/Month</u>	<u>Total \$/Month</u>
Fixed	625	
Variable	<u>530</u>	
		\$1,155/w/mo. x 82 producers = 94,710

Under unitized secondary recovery operations there will be less labor costs, less surface facilities repairs, and lower salt water disposal costs resulting in the following average costs.

<u>Producer</u>	<u>\$/Well/Month</u>	
Fixed	470	
Variable	<u>480</u>	
		\$ 950/w/mo. x 58 producers = 55,100
<u>Injection</u>		
Variable	\$550/w/mo x 58 injectors	= 31,900
Water handling		= <u>15,400</u>
Subtotal		\$102,400 = \$883/w/mo for total wells

Water handling is based upon 20,300 B/D (350 B/D/W x 58W) and \$0.025/injected barrel for water source, injection plant and distribution system expenses.

For profitability purposes, the above costs were adjusted over life to account for reduced labor (wells shut in), and increased power and produced water handling costs with anticipated increasing oil and water volumes under secondary recovery operations.

ECONOMICS

Economic runs for the proposed unit area (see tables #2, thru #4) were made for continued primary alone and primary plus secondary. All cases shown have no future escalations of costs or oil/gas prices nor federal income tax burdens.

Other Assumptions:

Working Interest:	1.000
Average Net Revenue Interest:	.812
Oil price:	\$15.00/Bbl
Gas price:	\$1.50/Mcf
Severance/Conservation taxes:	0.0375 x oil value + \$0.163/Mcf
Advalorem/School taxes:	0.0443 x [oil + gas revenues]
Operating Costs:	As per previous discussion
Abandonment Costs:	None, assume offset by salvage
Project Investments:	As per previous discussion
As of Date:	1/1/87
Base discount rate:	10%

Results:

The economic run on table 2 shows the remaining primary oil forecast from Figure #19 which reflects tract cut-off of 4 BOPD per well (the current economic limit). This run shows an operating profit from continued primary production. However, the proposed unit area is currently being operated at an overall loss due to wells being produced below their economic limit in order to preserve leaseholds for inclusion into the waterflood unit.

Two remaining primary + secondary cases are shown. (1) Table #3 is a high recovery case with secondary oil volume equal to primary ultimate (Sec./Pri. = 1.0). Where primary ultimate ties to the forecast using tract cut-off of 1 BOPD per well. (2) Table #4 is a low recovery case with secondary oil volume equal to 60% of primary ultimate (Sec./Pri. = 0.6). Again primary ultimate ties to the forecast using tract cut-off of 1 BOPD per well.

Comparative Economics Summary:

	Continued <u>Primary</u>	<u>Primary + Secondary</u>	
	<u>Sec/Pri = 1.0</u>	<u>Sec/Pri = 0.6</u>	
Total gross oil reserves - MB	298	5,713	3,784
Total gross gas reserves - MMcf	652	1,932	1,826
Net oil reserves - MB	242	4,639	3,073
Net gas reserves - MMcf	530	1,569	1,483
Net equivalent bbls (6 Mcf/Be) MBe	330	4,900	3,320
Ultimate Capital - \$M	0	8,300	8,300
Ultimate Capital - \$/Be	0	1.69	2.50
Undiscounted payout - years	---	4.7	5.9
Undiscounted profit - M\$	1,248	37,994	18,984
Discounted 10% profit - M\$	1,069	13,282	4,678
Rate of Return - %	---	26.7	17.5
Undiscounted Profit Index	---	4.6	2.3

UNITIZATION PARAMETERS

Thirty-six individual tracts have been set up to form the proposed Twin Lakes (San Andres) Waterflood Unit as outlined on Figure #26. Parameters that are used in various units to determine participation are shown on Tables #5, 6 and 7.

Net pay and oil-in-place values were not determined by tract due to insufficient open hole log coverage and the lack of consistent correlation between well performance and net pay.

A forecast date of 4/1/86 was assumed in order to minimize effects of the early 1986 rapid drop in oil/gas prices on current production, revenue and estimated future reserves.

Working interest, royalty interest, and overriding royalty interest data were gathered from division orders. All production numbers are from New Mexico's Annual Production and monthly C-115 reports.

The following parameters are listed by tract and operator:

1. Acres
2. Current (3 months oil production) - 1/1/86 to 4/1/86
3. Current (3 months oil & gas Revenue) - 1/1/86 to 4/1/86 using weighted oil price of \$16.98/BOPD and an average weighted gas price of 89¢/Mcf net after gas gathering fees.
4. Current (1 year oil production) - 4/1/85 to 4/1/86
5. Cumulative Oil Production to 4/1/86
6. Primary Reserves as of 4/1/86 - with tract cut-offs of 1 BOPD per well and 4 BOPD per well.
7. Primary Ultimate Recovery with tract cut-offs of 1 BOPD per well and 4 BOPD per well.

The use of acres in determining unit participation is not appropriate since the proposed unit area is essentially fully developed with only a few undrilled locations.

Since April 1, 1986, the proposed unit area has been operated at an overall loss. Therefore, remaining primary oil reserves have little to no current value except to maintain leases for inclusion into a waterflood unit. Tract current production effects the extrapolation used to determine remaining moveable primary oil reserves. These reserves, when added to cumulative production, give ultimate primary oil recovery for each tract which is the best measure of anticipated oil recovery under waterflood operations.

The most equitable formulae for determining working and royalty interests unit participation is a single cost/revenue factor based upon ultimate moveable primary oil recoveries.

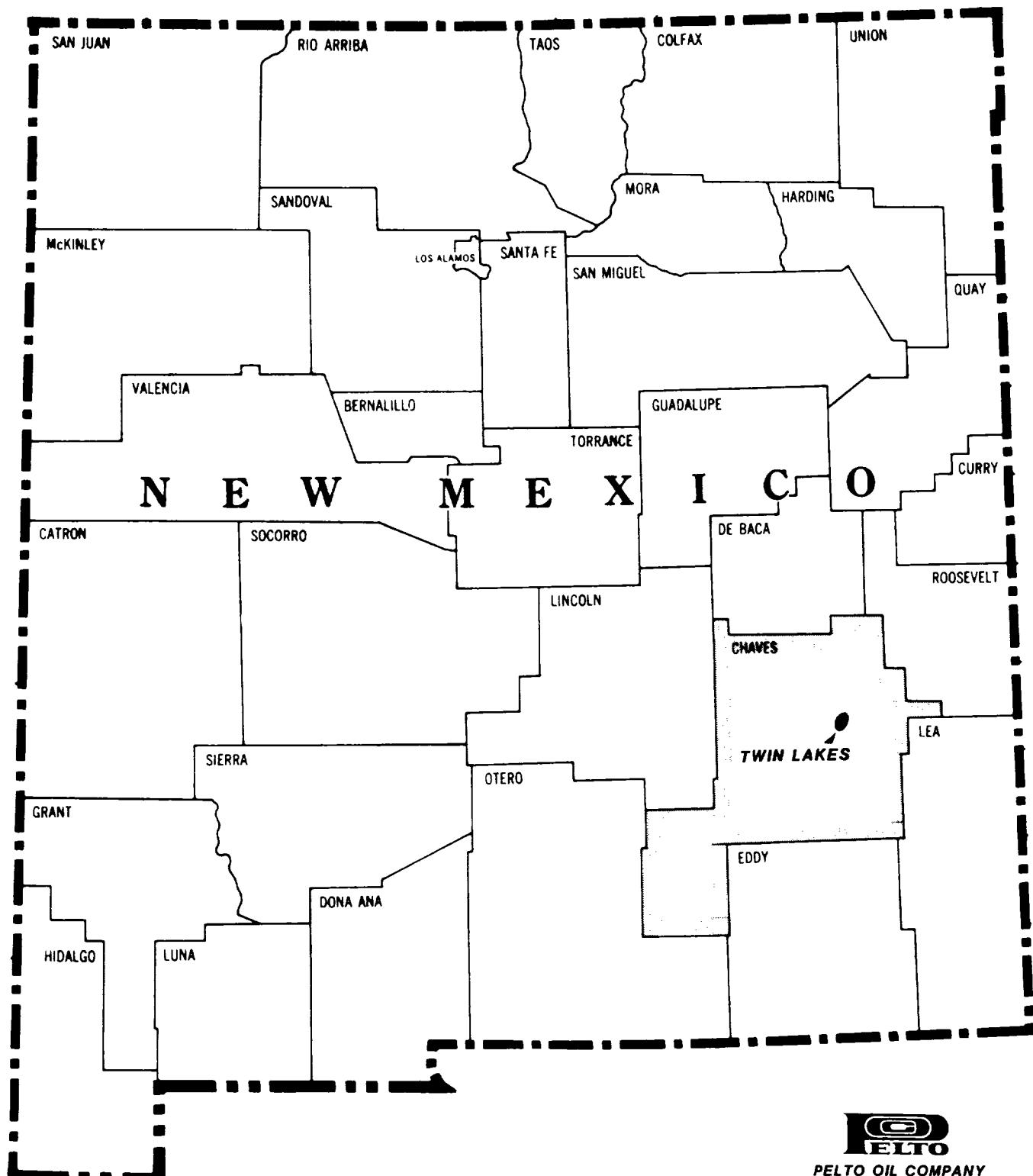
Table #8 is a tract index showing each owner, the type and percentage of interest in each tract.

ACKNOWLEDGEMENTS

This report is the result of the efforts of many professional technical, clerical and drafting people. Pelto Oil Company wishes to express appreciation to those outside the company who have rendered special technical assistance.

TO:

1. J. Dennis Loren and John T. Kulha, Loren and Associates, Inc. for their petrophysical study.
2. Robert M. Sneider, Sneider Exploration, Inc., for his geological interpretations.
3. Russ Long, Williamson Petroleum Consultants, Inc. for his decline curve extrapolation technique and review of analog fields.
4. George Donaldson, Gruy Engineering Corporation, for his independent waterflood oil reserve determinations and review of analog fields.
5. Sherman E. Galloway, Hydrologist, for his studies of source waters.
6. Personnel of John West Engineering Company for their design and cost estimates of the source water delivery system.
7. Personnel of West Texas Consultants, Inc. for their design and cost estimates of the field waterflood facilities.




PELTO
PELTO OIL COMPANY

INDEX MAP

FIGURE 1

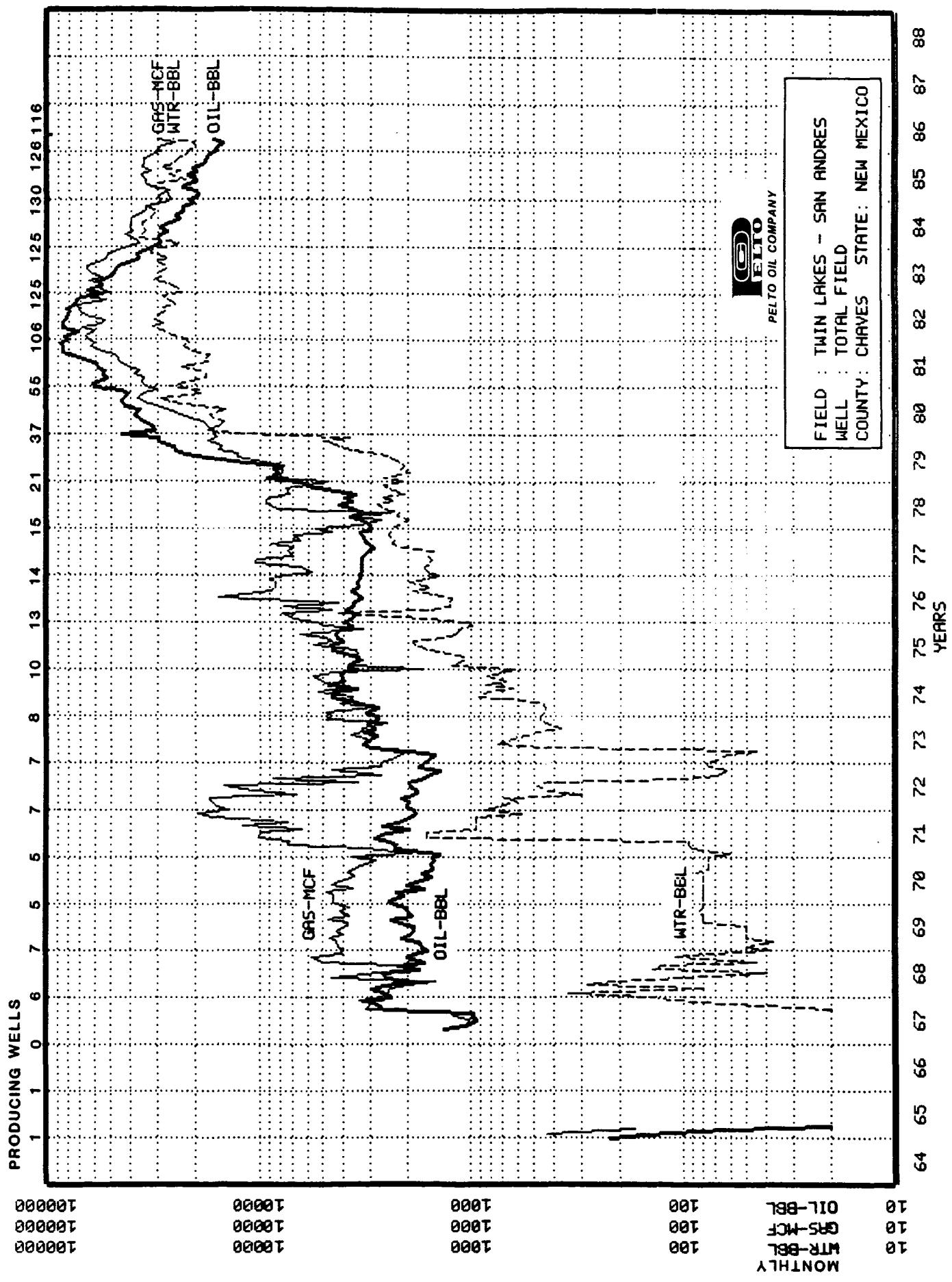


FIGURE 2

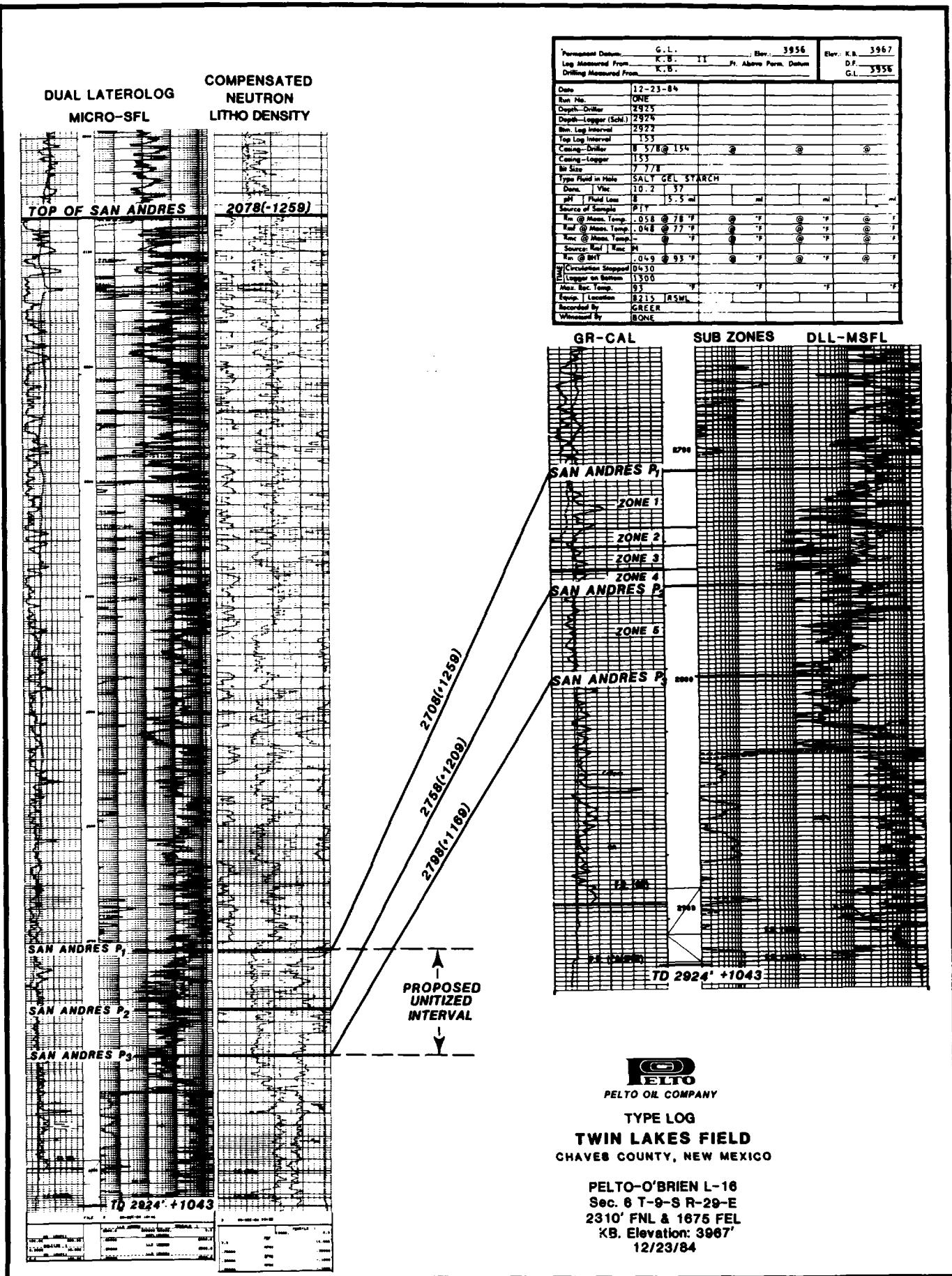


FIGURE 3

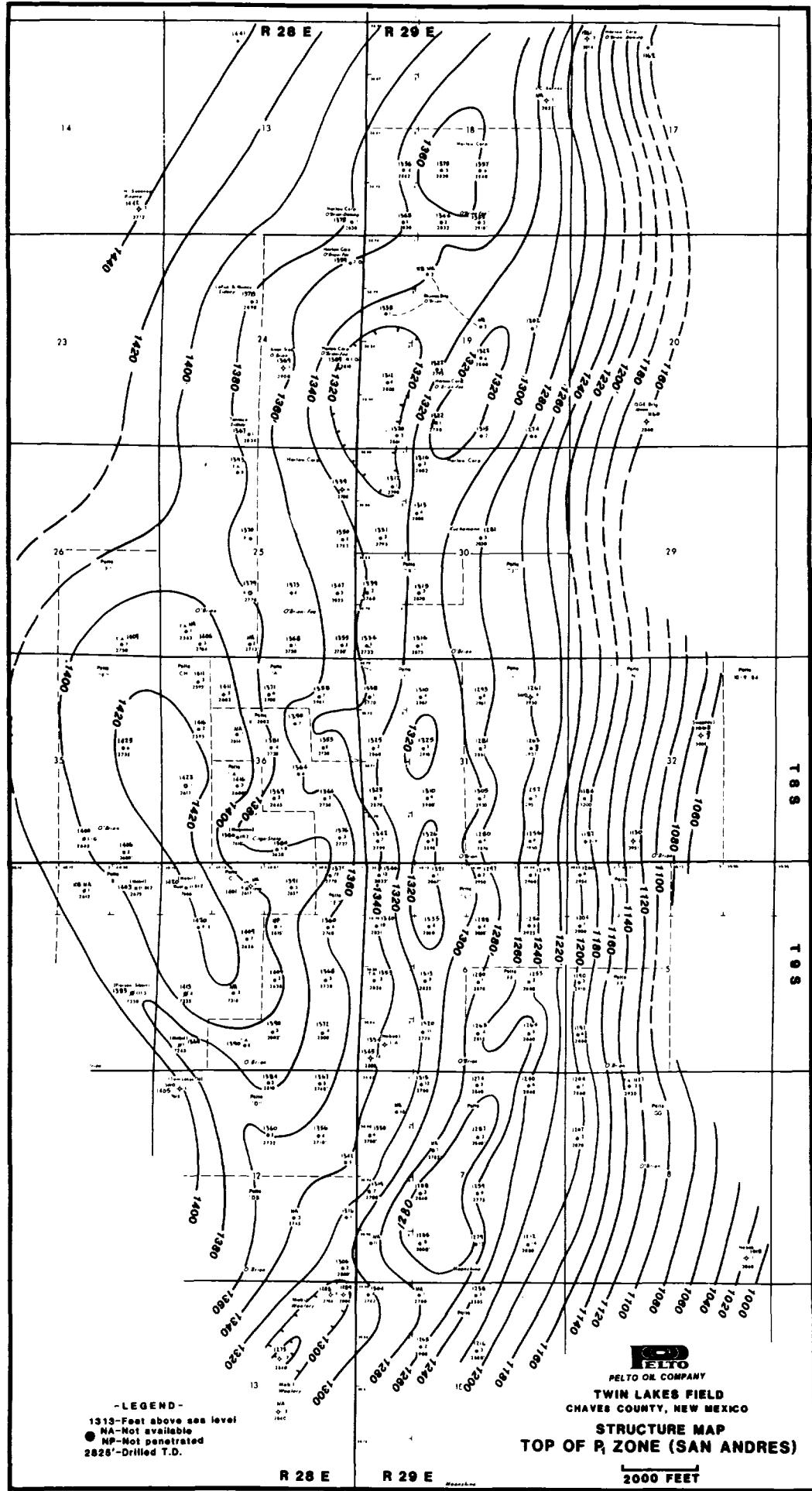
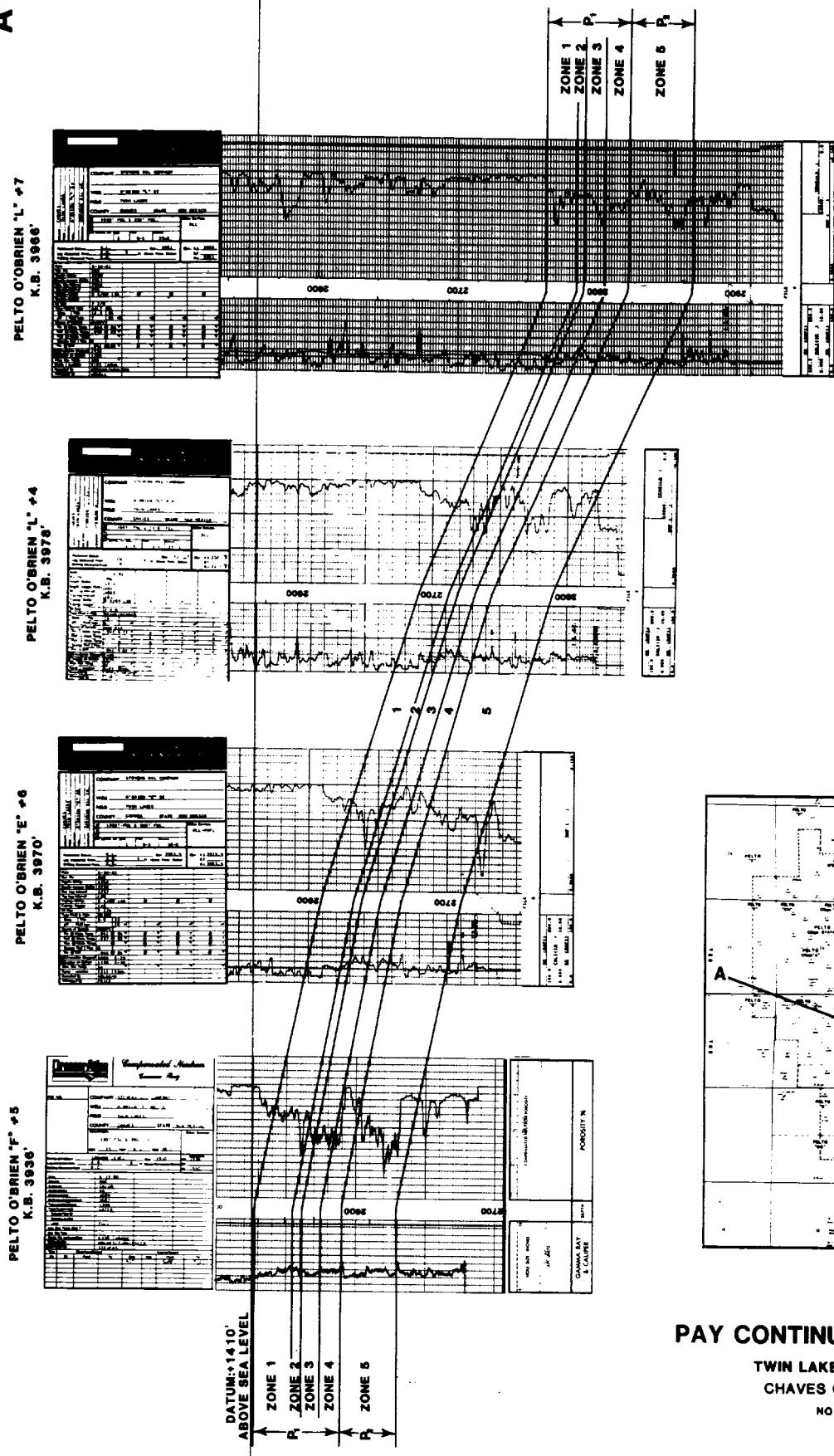
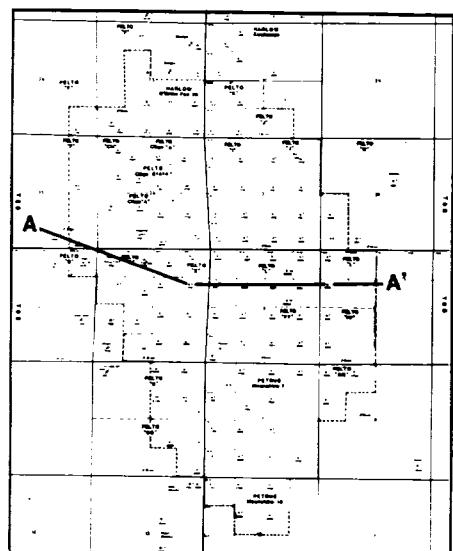


FIGURE 4

A'



INDEX MAP



PELTO
PELTO OIL COMPANY

PAY CONTINUITY CROSS SECTION

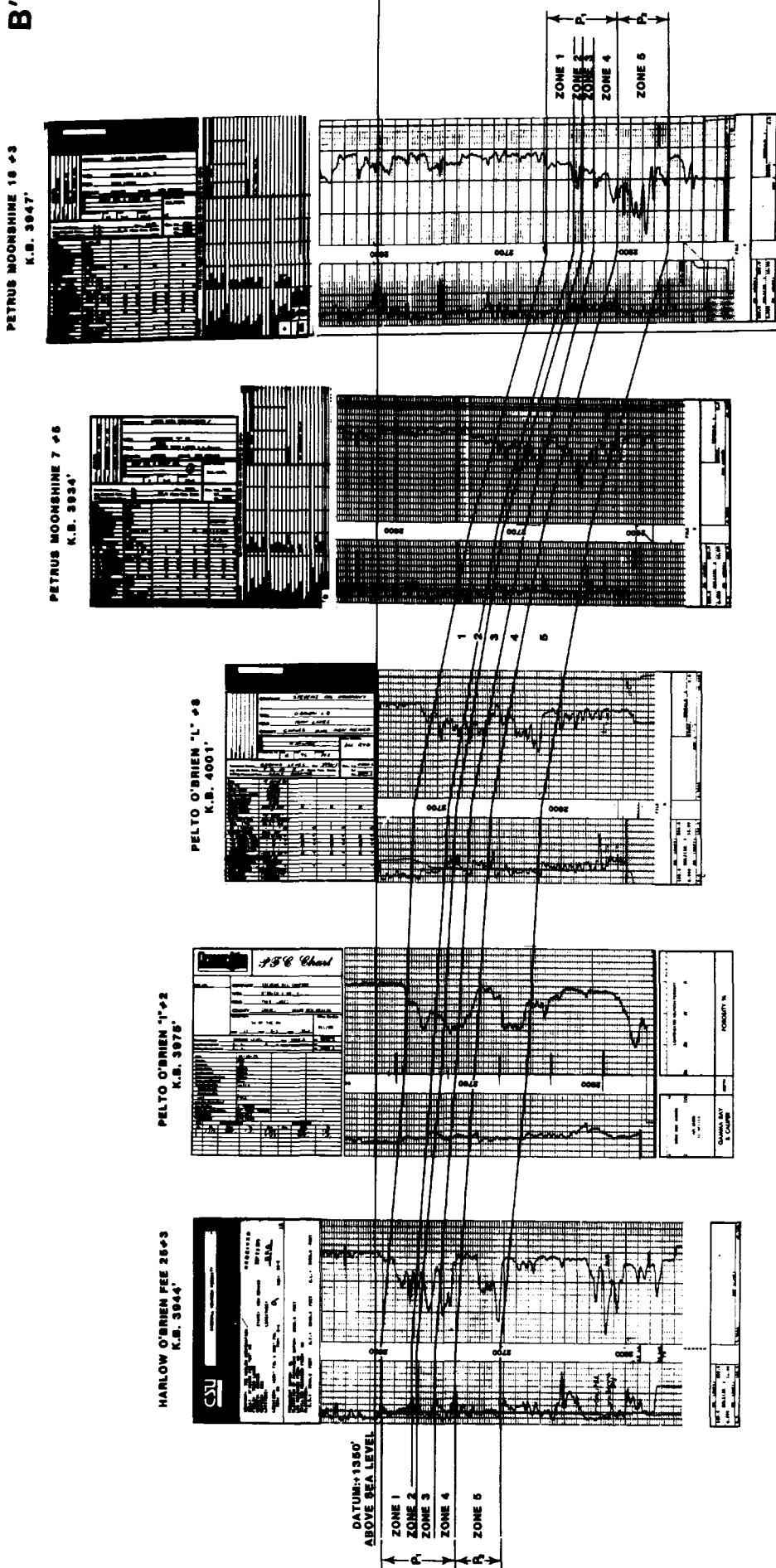
TWIN LAKES (SAN ANDRES) FIELD
CHAVES COUNTY, NEW MEXICO
NO HORIZONTAL SCALE

A

FIGURE 5

2

2



PAY CONTINUITY CROSS SECTION
TWIN LAKES (SAN ANDRES) FIELD
CHAVES COUNTY, NEW MEXICO
NO HORIZONTAL SCALE

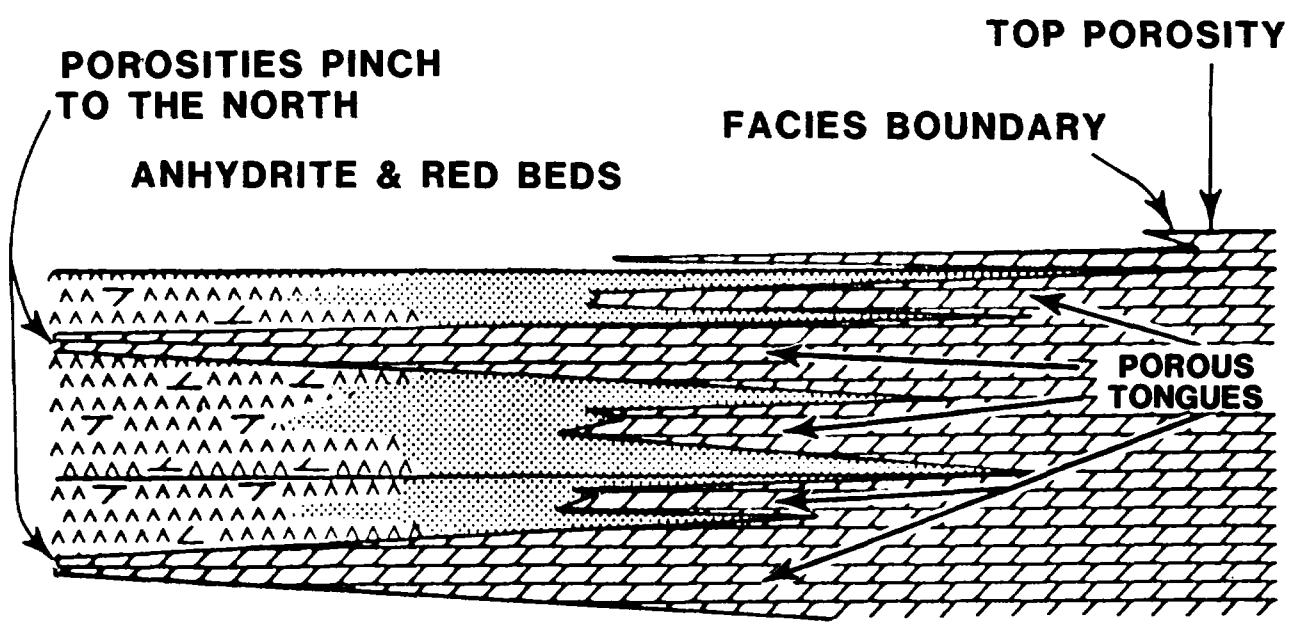
FIGURE 6

SCHEMATIC CROSS SECTION
TWIN LAKES FIELD
CHAVES COUNTY, NEW MEXICO

N-NW

TIME LINE DATUM

S-SE



DOLOMITIC ANHYDRITE



ANHYDRITIC DOLOMITE



POROUS DOLOMITE

FIGURE 7

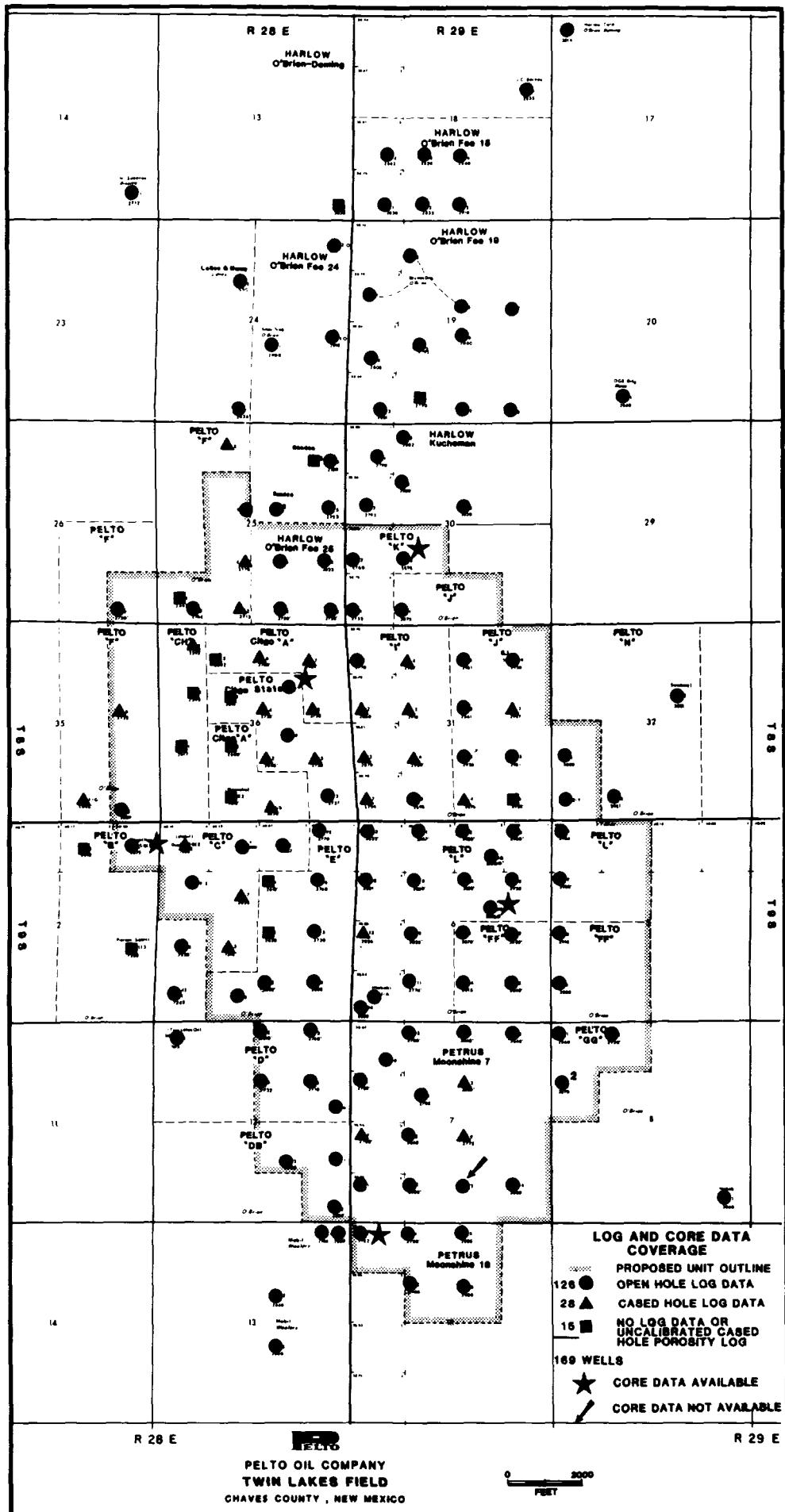


FIGURE 8



TWIN LAKES FIELD
CHAVES COUNTY, NEW MEXICO

POROSITY-PERMEABILITY RELATIONSHIP FOR VARIOUS DOLOMITE PORE NETWORKS

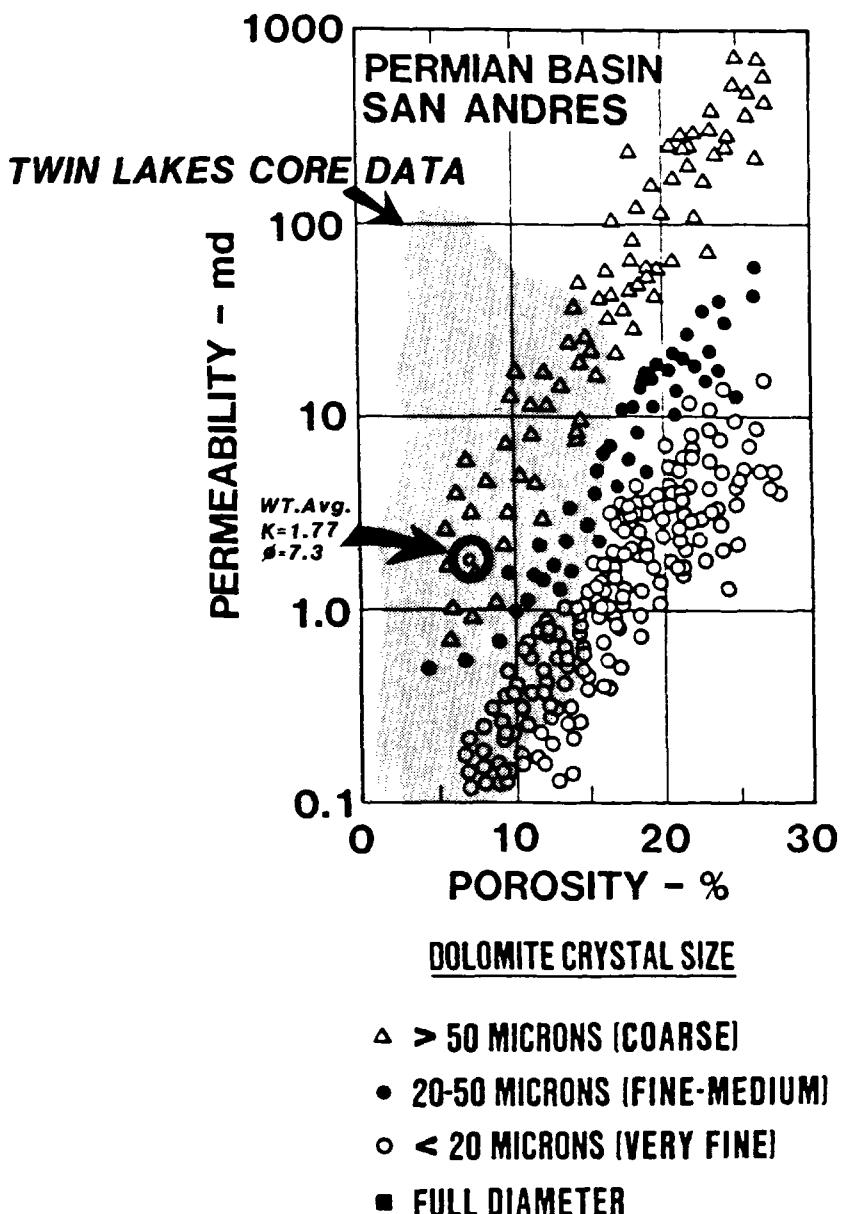


FIGURE 9



TWIN LAKES FIELD
CHAVES COUNTY, NEW MEXICO

PAY CATEGORY DEFINITIONS

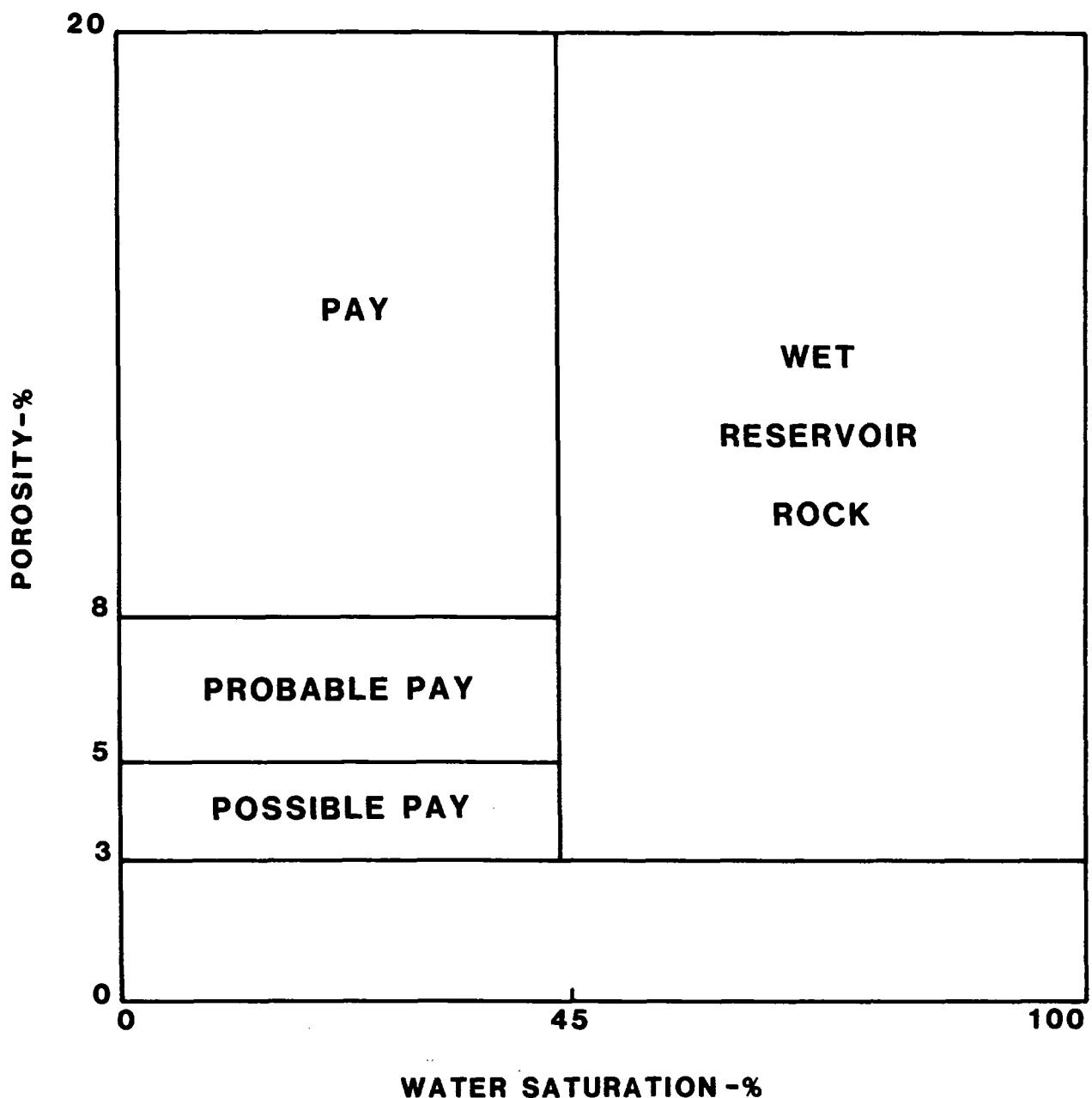


FIGURE 10

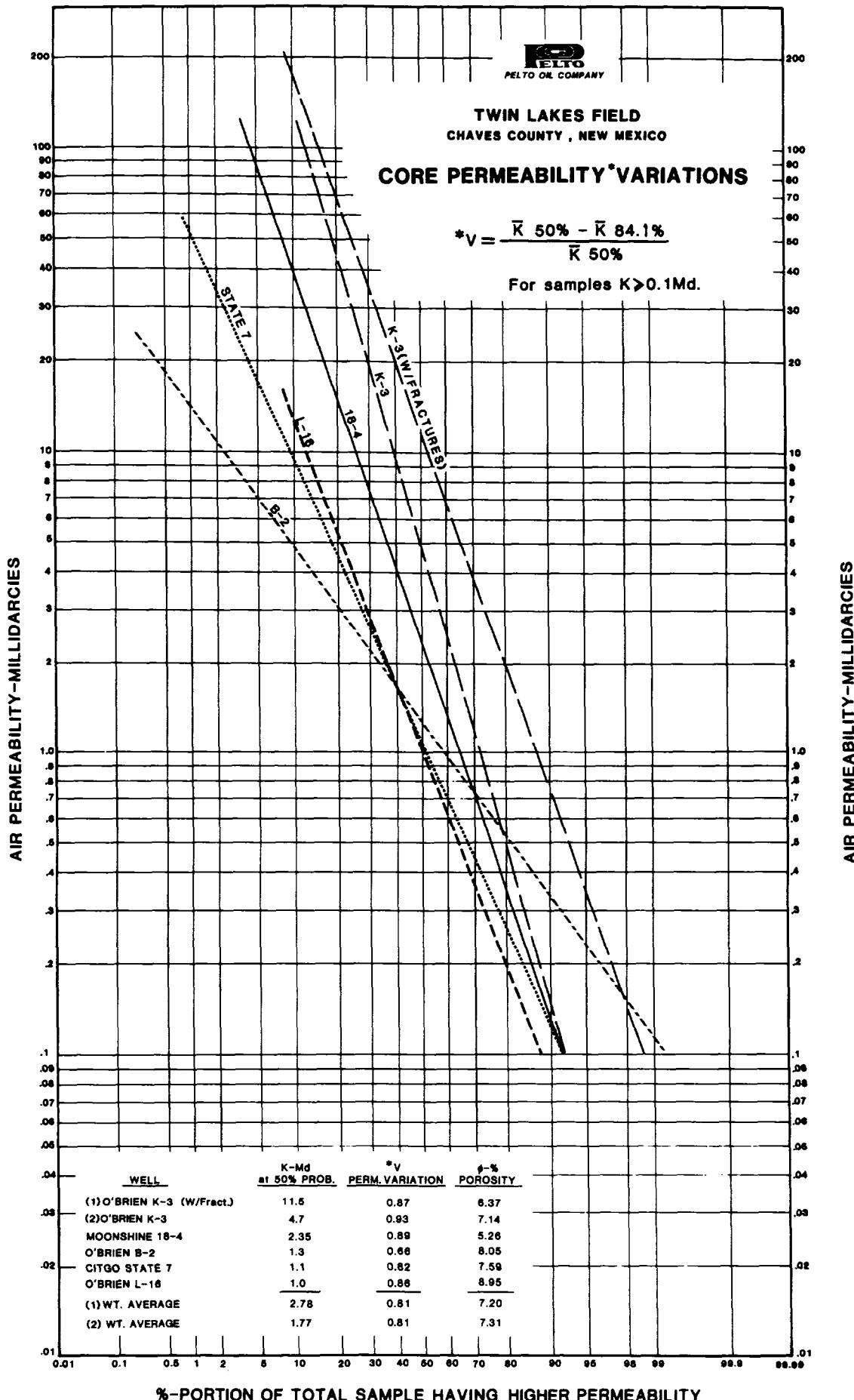


FIGURE 11

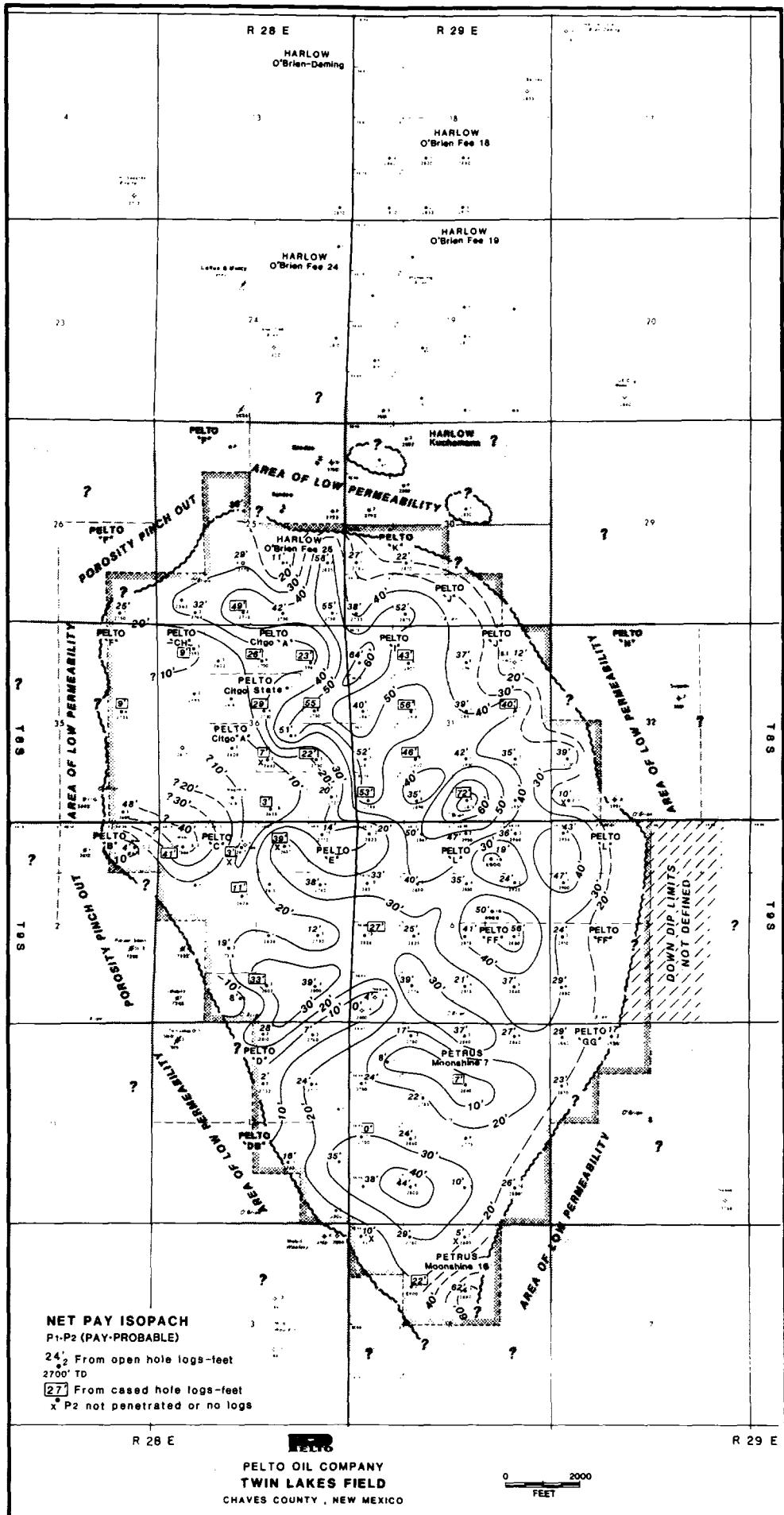


FIGURE 12

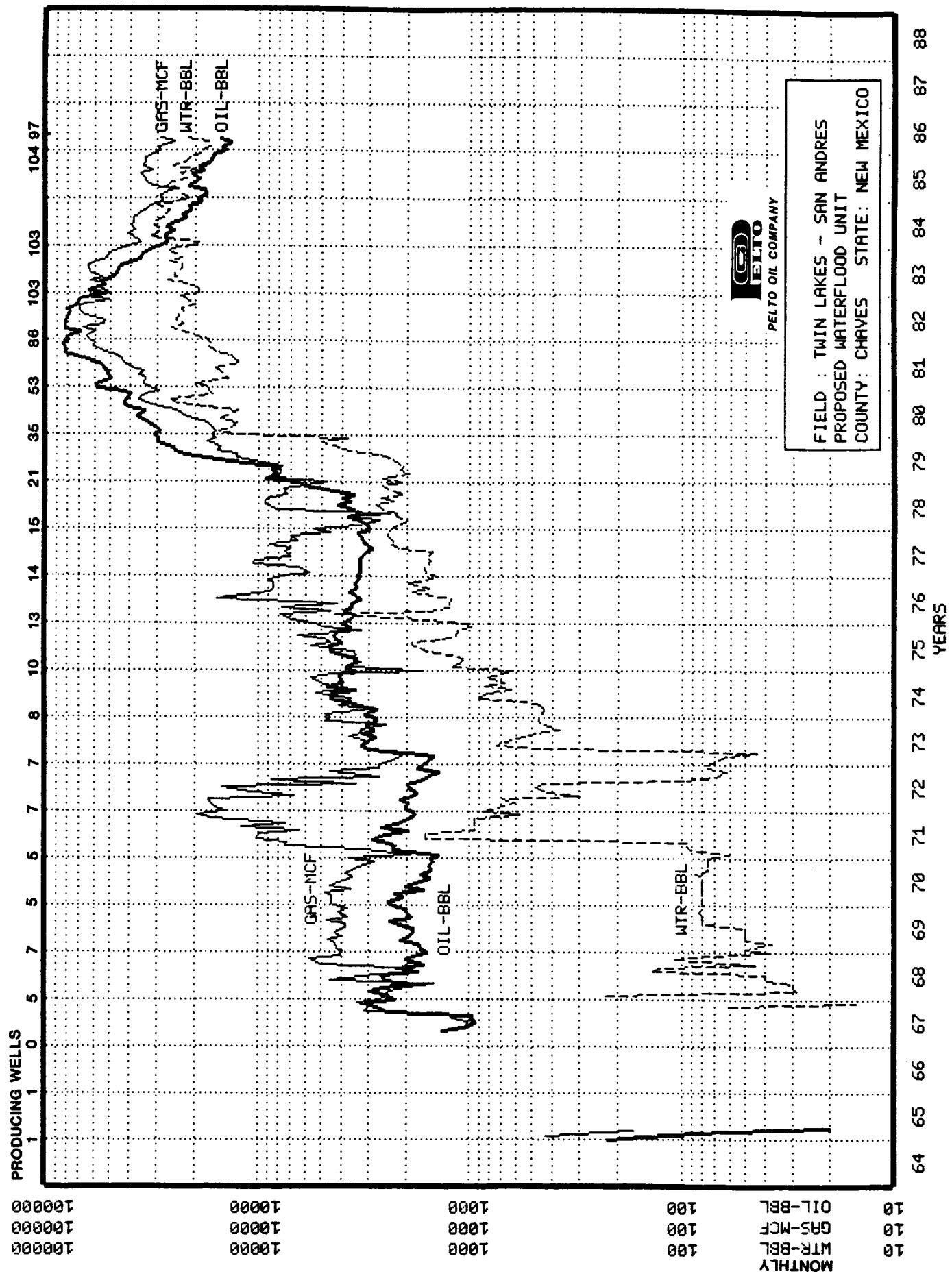


FIGURE 13

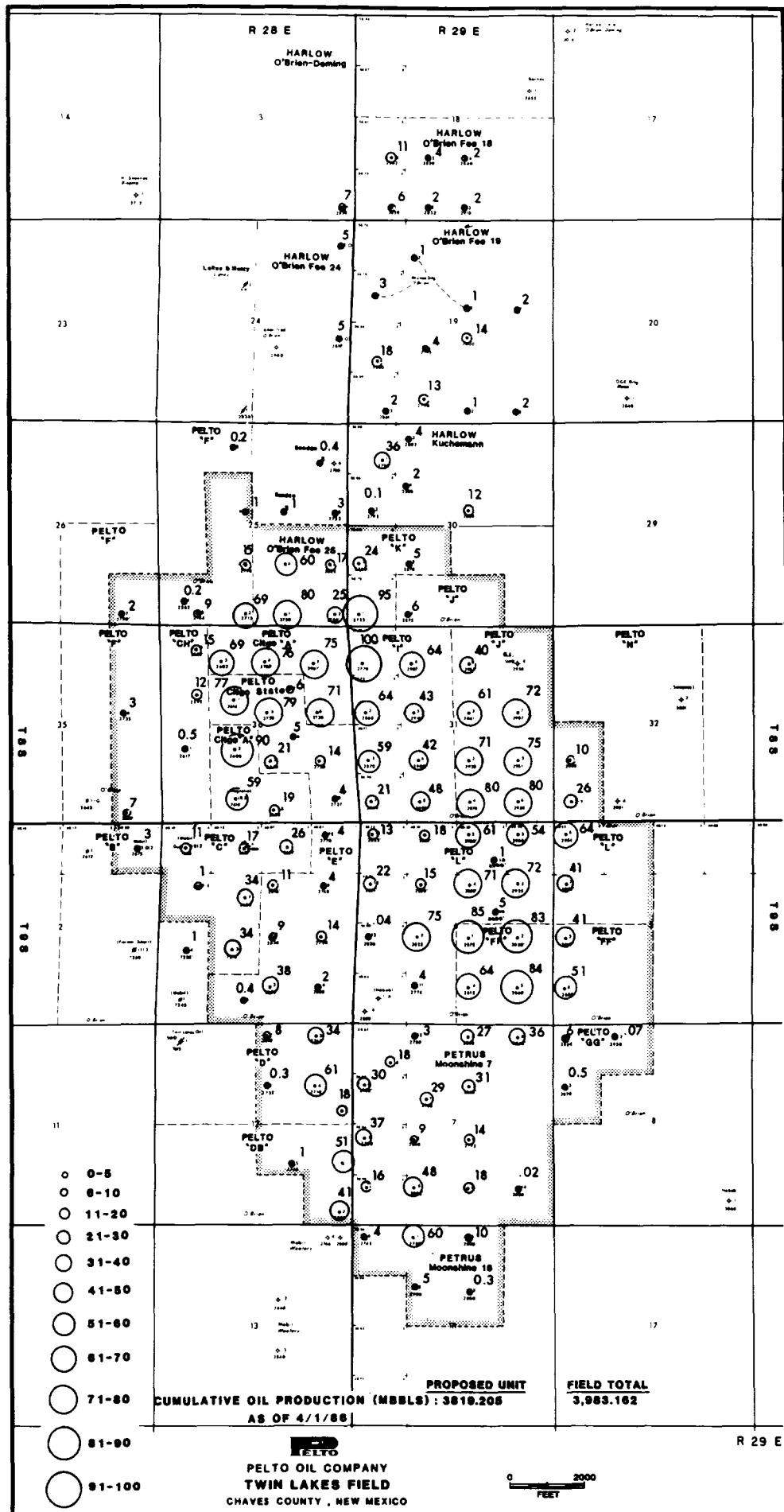


FIGURE 14

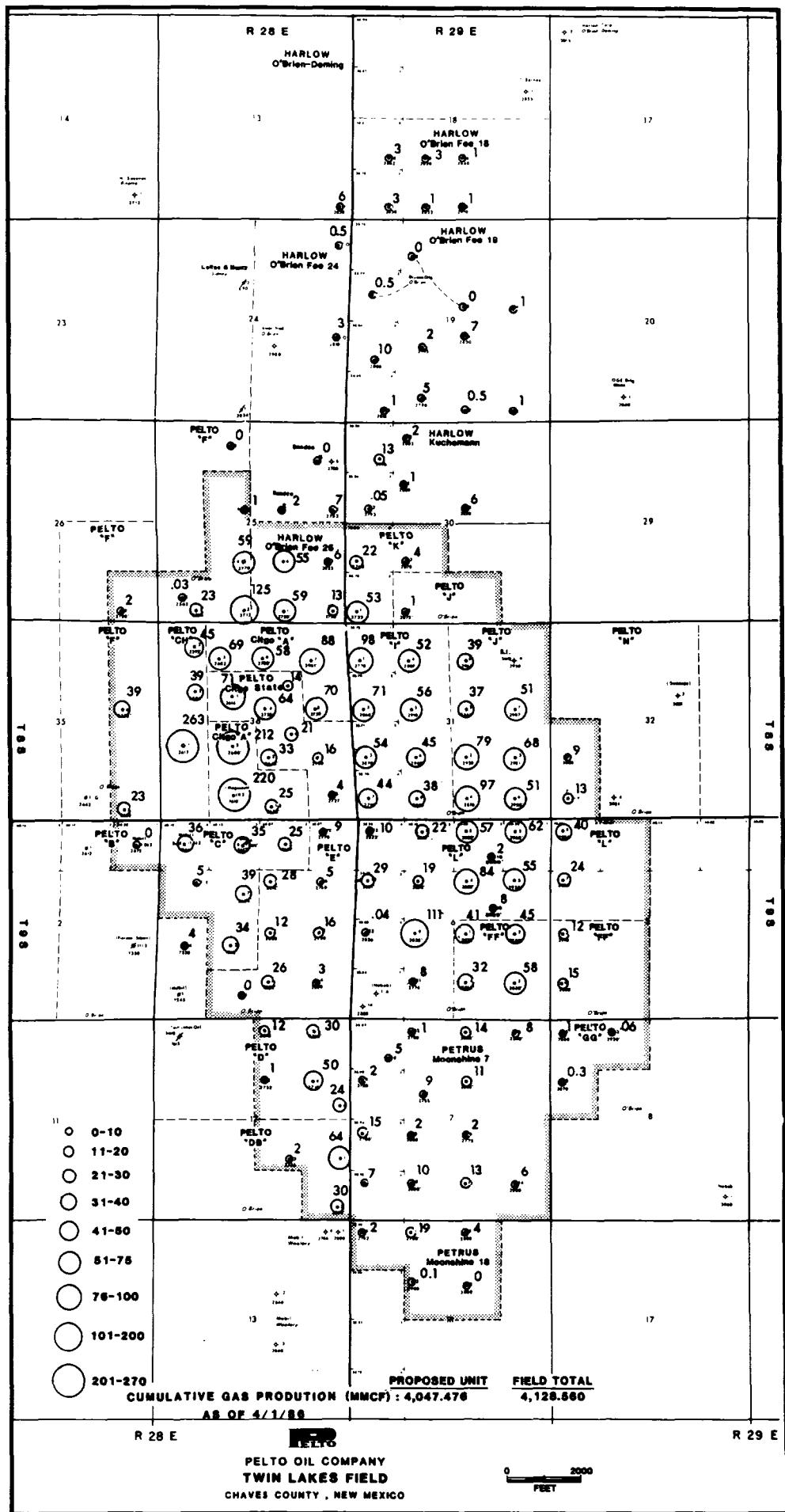


FIGURE 15

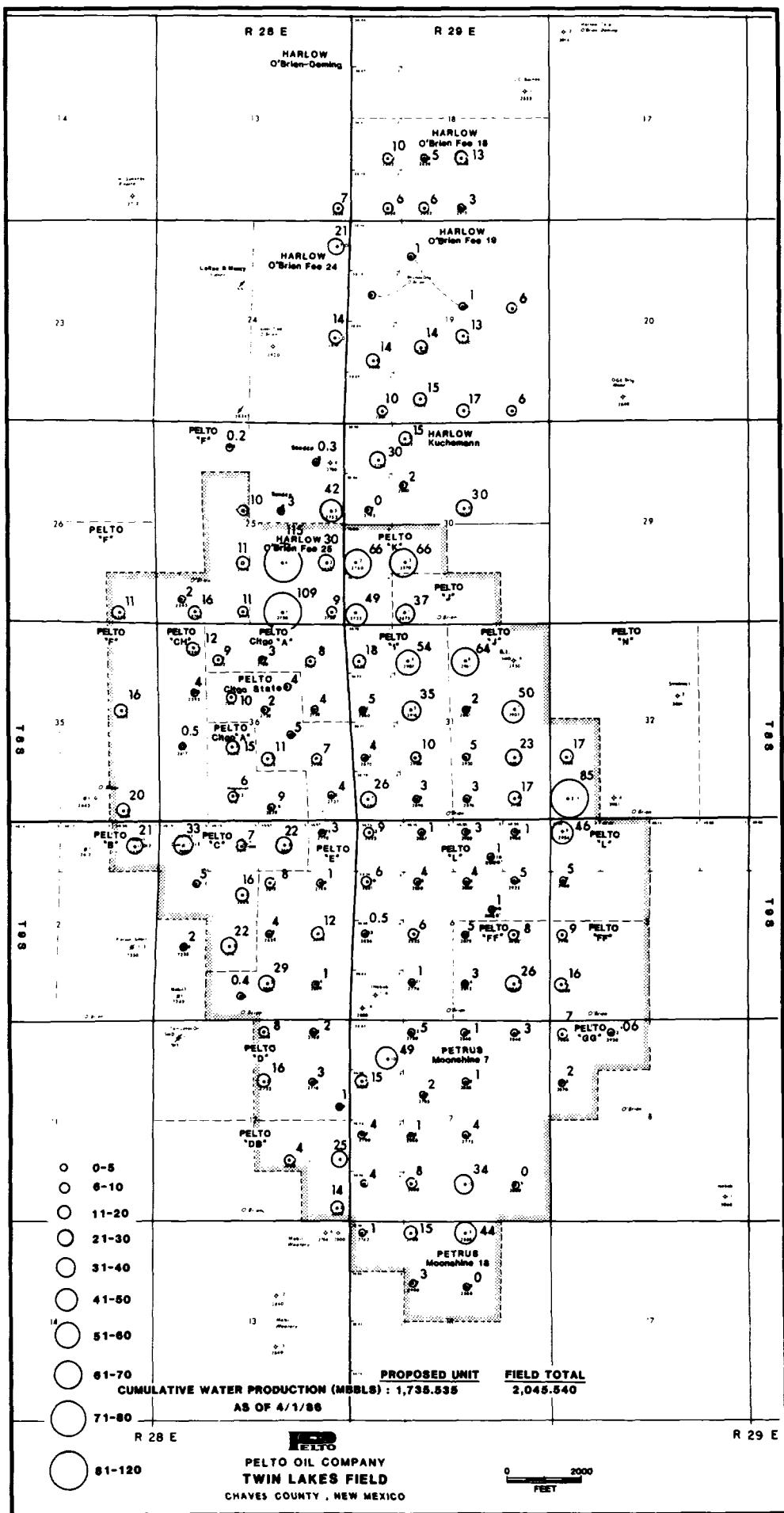


FIGURE 16

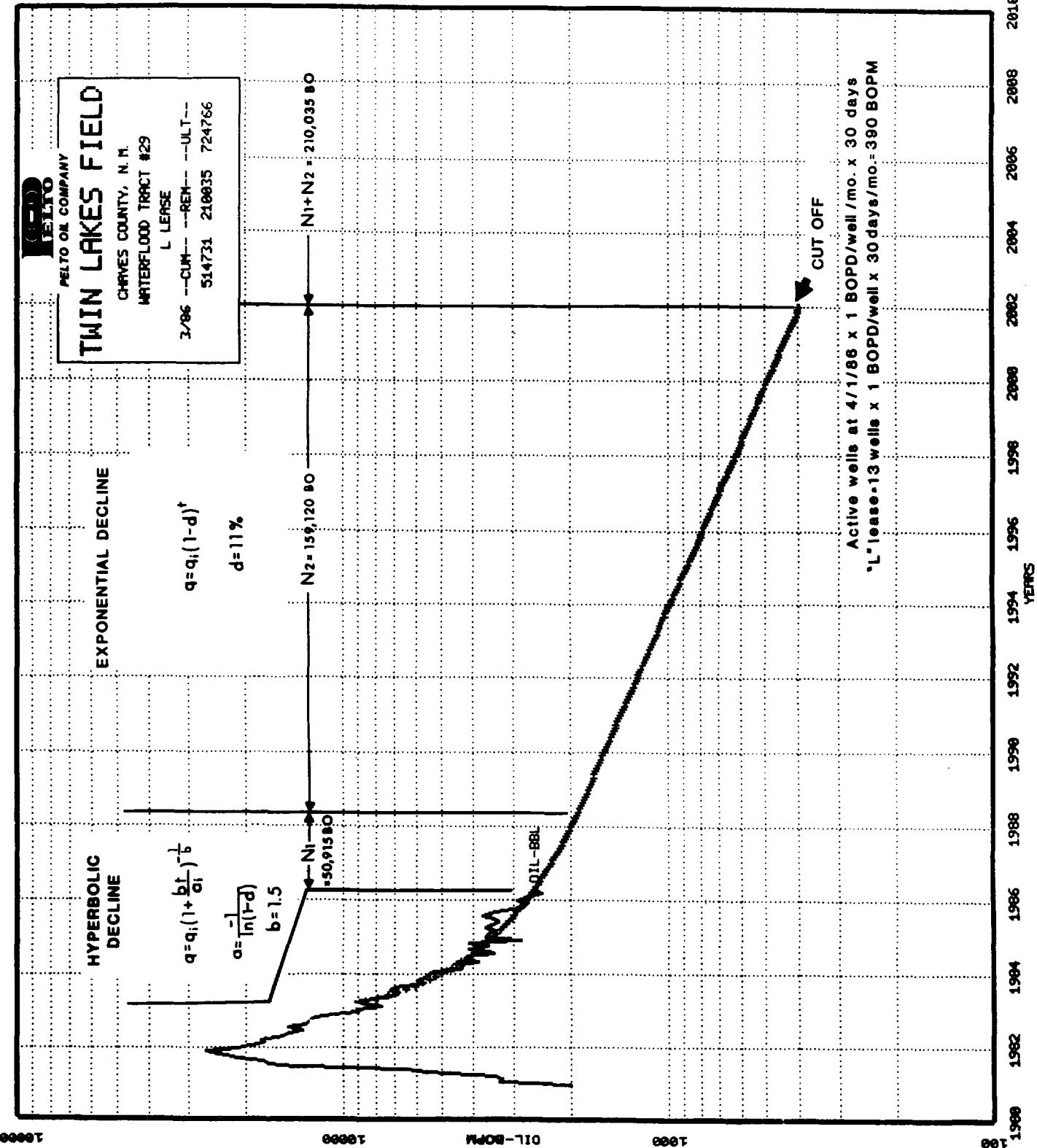


FIGURE 17

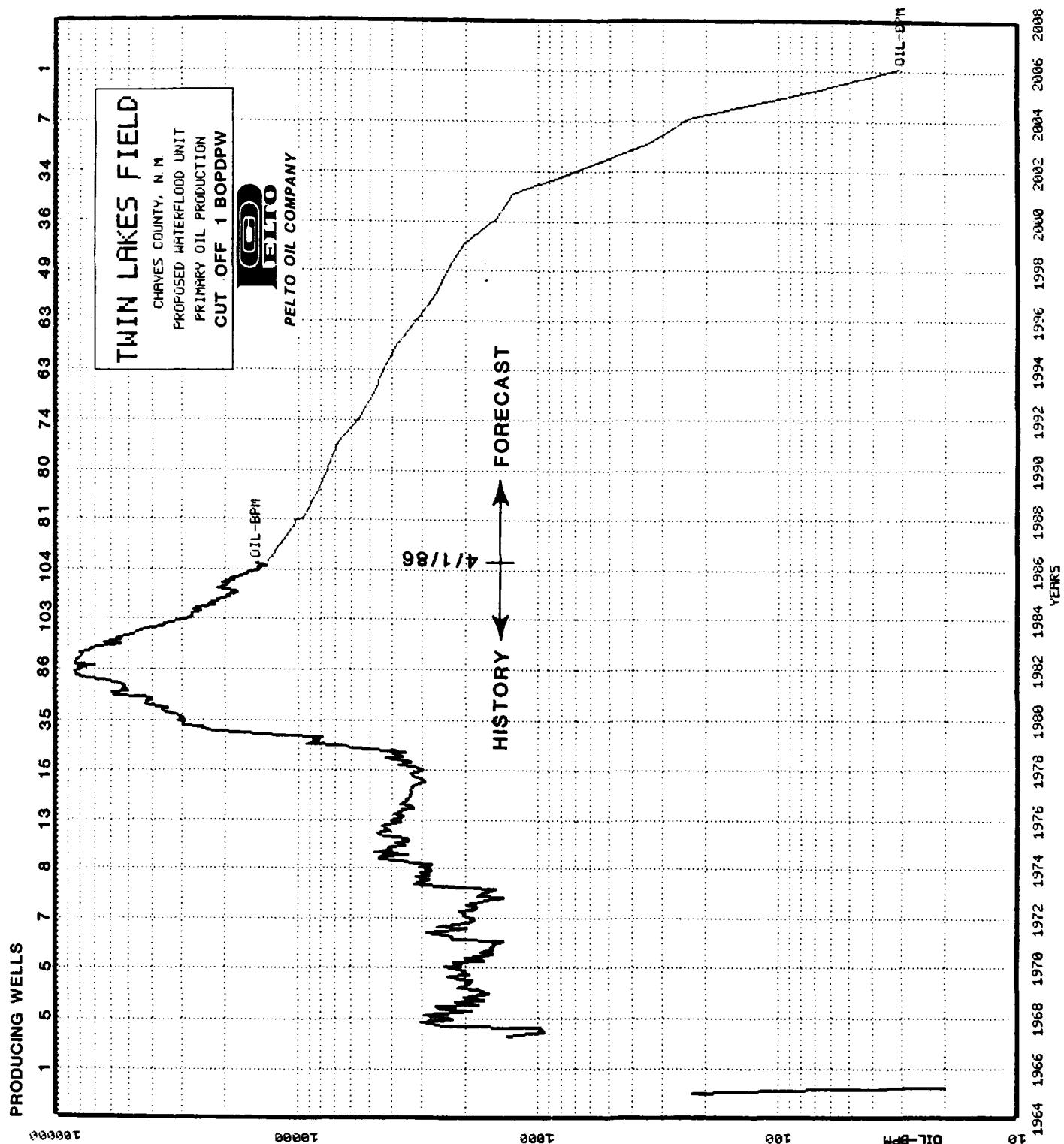


FIGURE 18

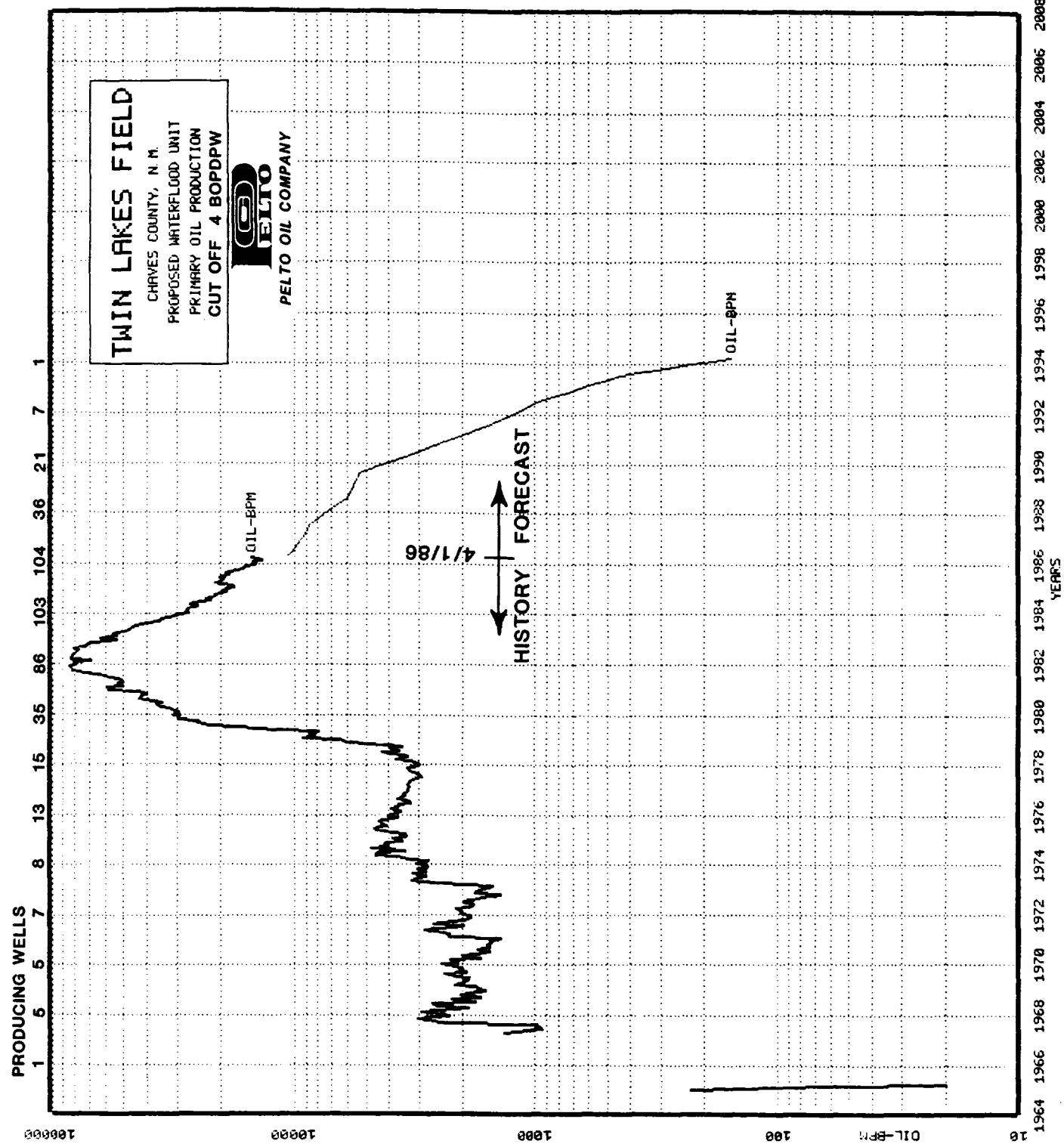
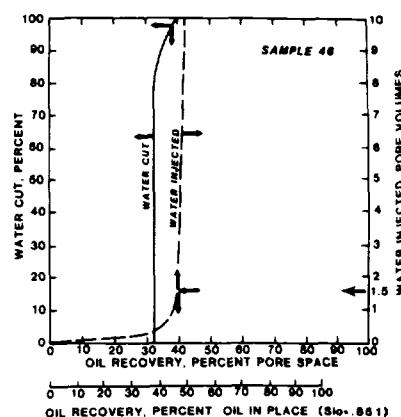
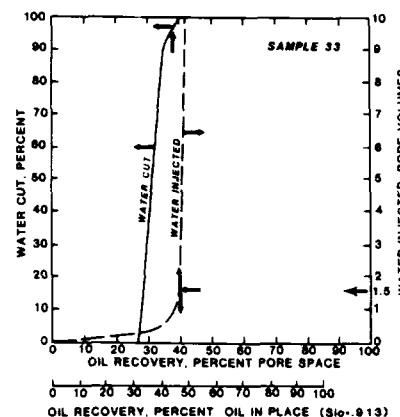
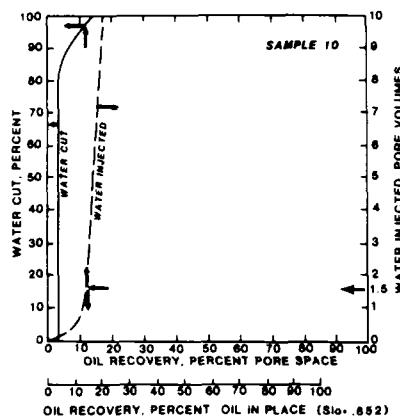


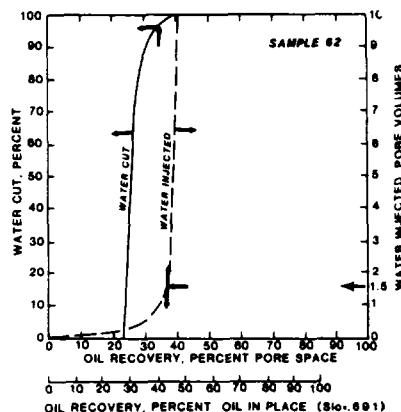
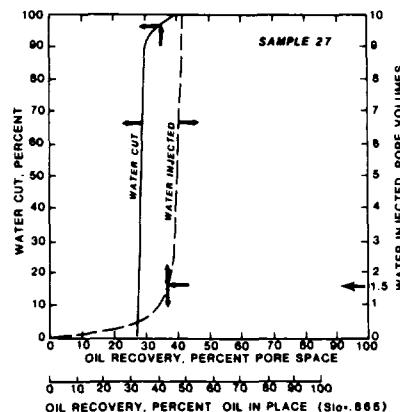
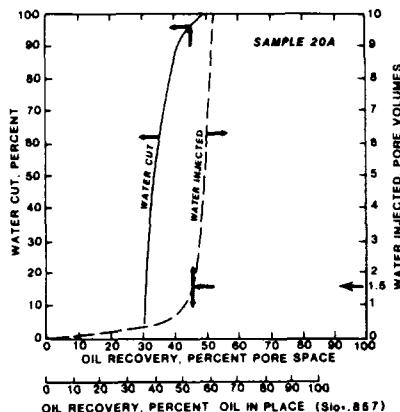
FIGURE 19

TWIN LAKES FIELD
CHAVES COUNTY, NEW MEXICO

WATER FLOOD SUSCEPTIBILITY TESTS
SAN ANDRES FORMATION



CITGO STATE 7



O'BRIEN L-16

	SAMPLE	DEPTH	ϕ	K (air)	AT 1.5 PORE VOLUMES INJECTED		
					% RECOVERY EFFICIENCY	PROD WATER	
	NO.	FEET	%	Md.	PORE SPACE	OIL IN PLACE (Sio)	CUT %
CITGO STATE 7	10	2605	10.3	2.5	11.6	13.6 (.852)	98
CITGO STATE 7	33	2628	12.9	11.0	39.4	43.2 (.913)	98
CITGO STATE 7	46	2641	17.6	53.0	39.5	46.4 (.851)	98
O'BRIEN L-16	20A	2721	16.8	13.0	44.6	52.0 (.857)	96
O'BRIEN L-16	27	2738	7.6	0.86	35.2	40.7 (.865)	96
O'BRIEN L-16	62	2795	11.7	0.41	35.6	51.5 (.691)	98

FIGURE 20



PELTO OIL COMPANY
TWIN LAKES FIELD
CHAVES COUNTY, NEW MEXICO

PROPOSED WATERFLOOD UNIT OIL FORECASTS

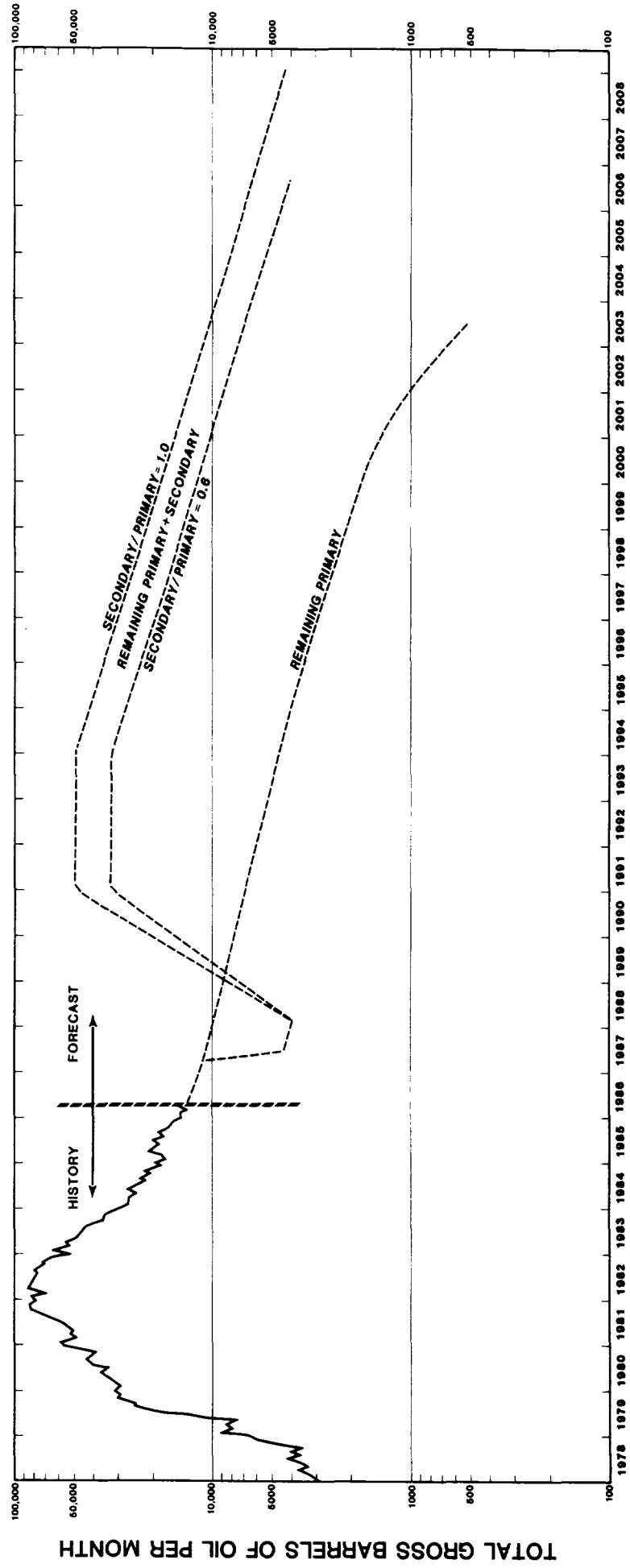


FIGURE 21

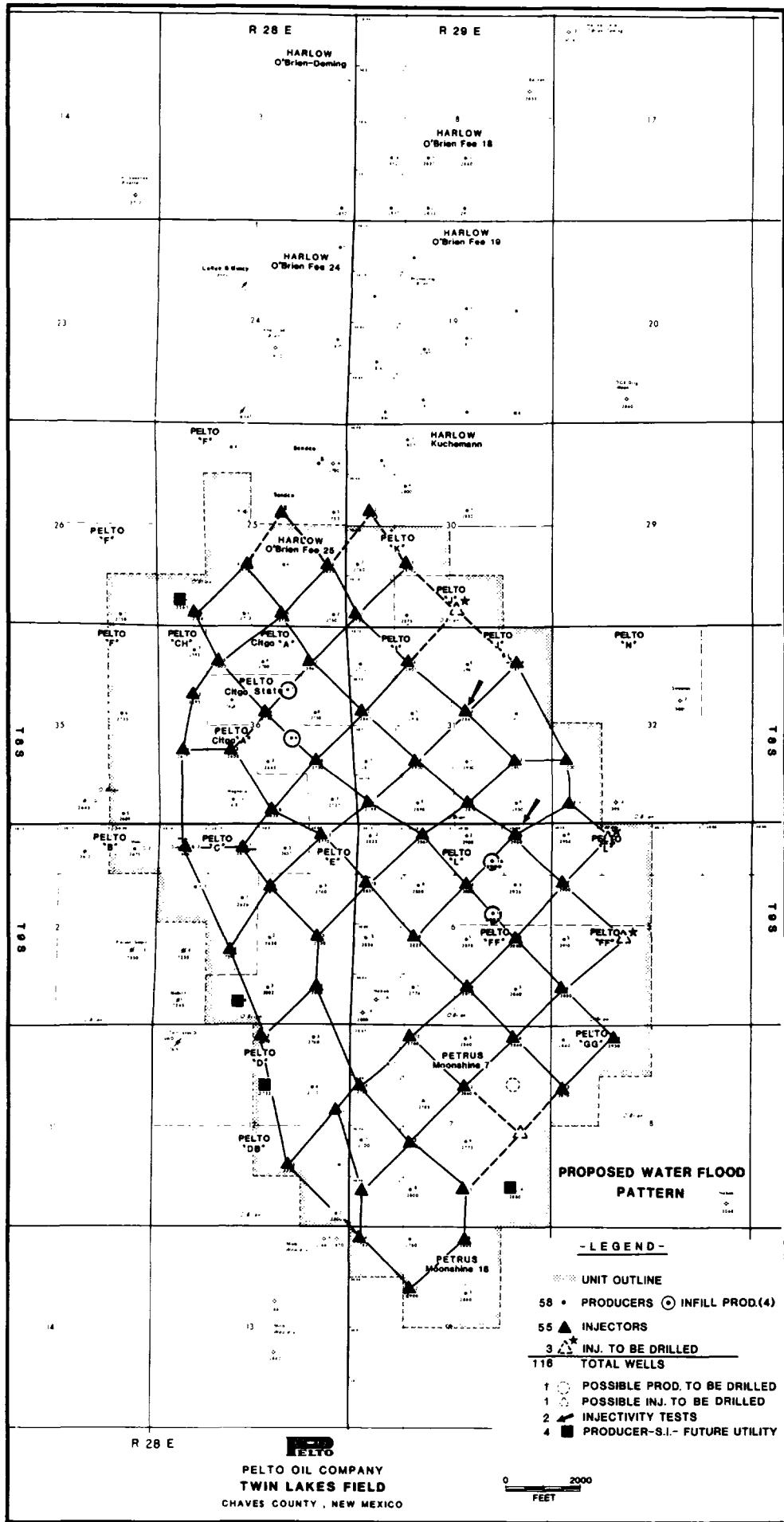


FIGURE 22

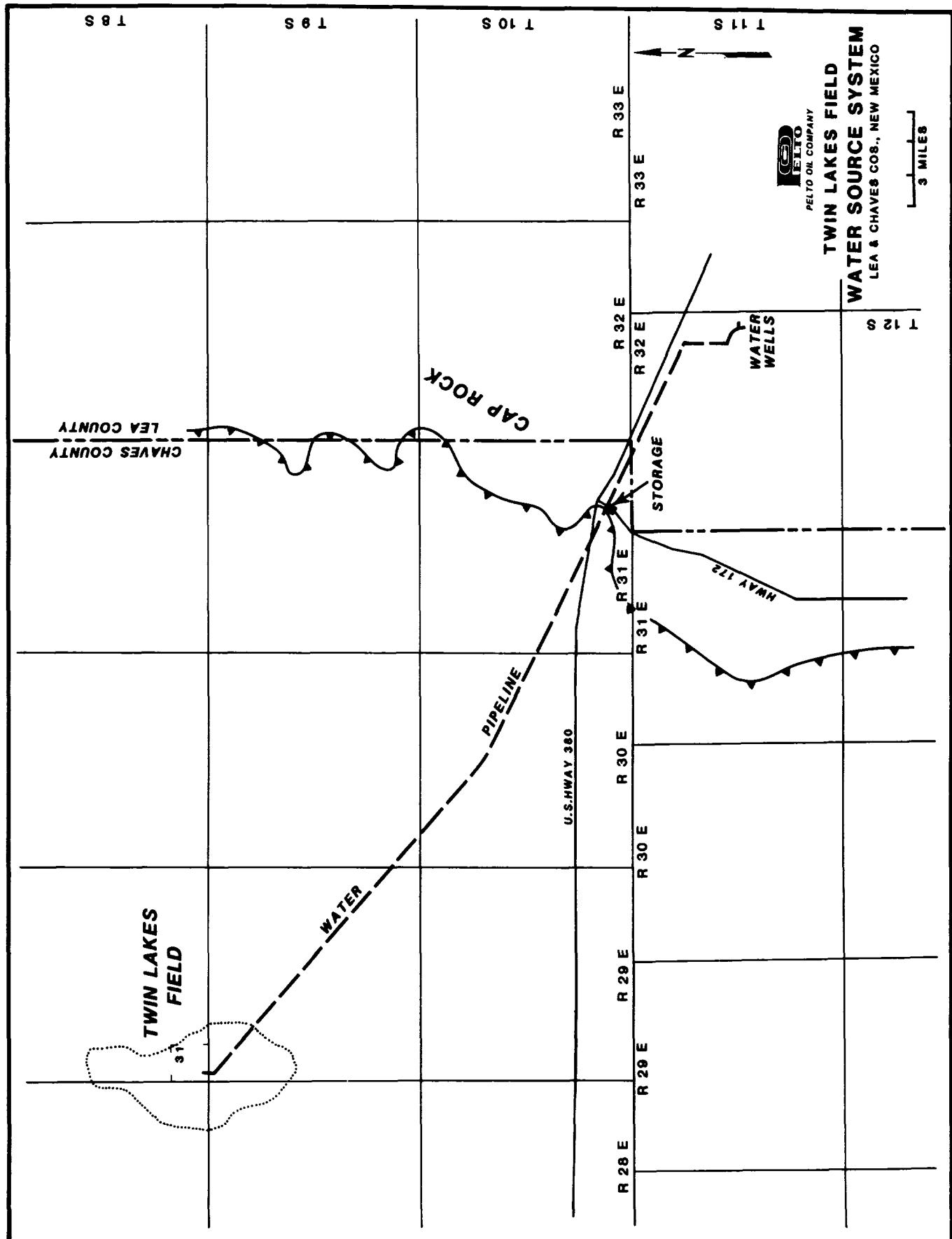


FIGURE 23

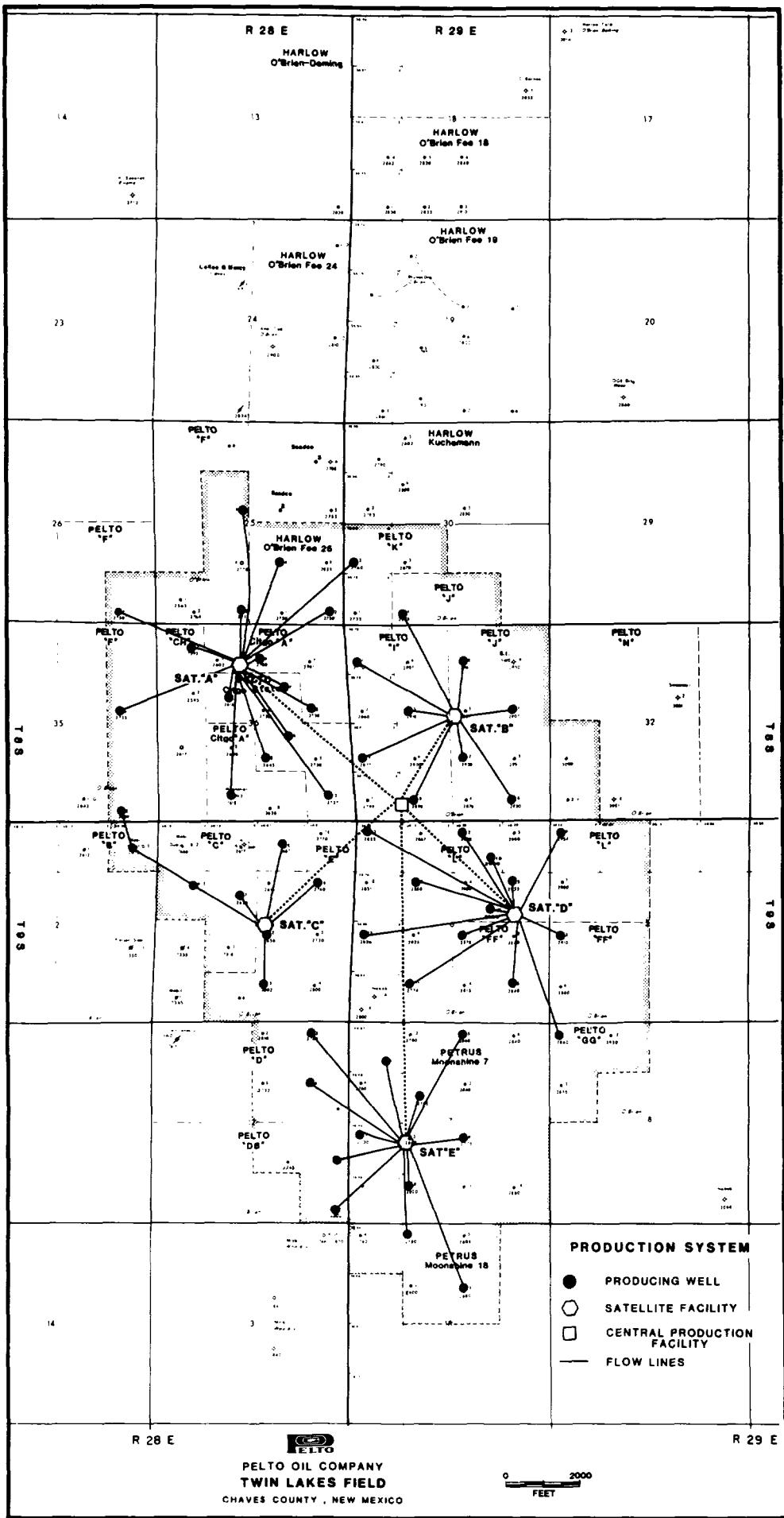


FIGURE 24

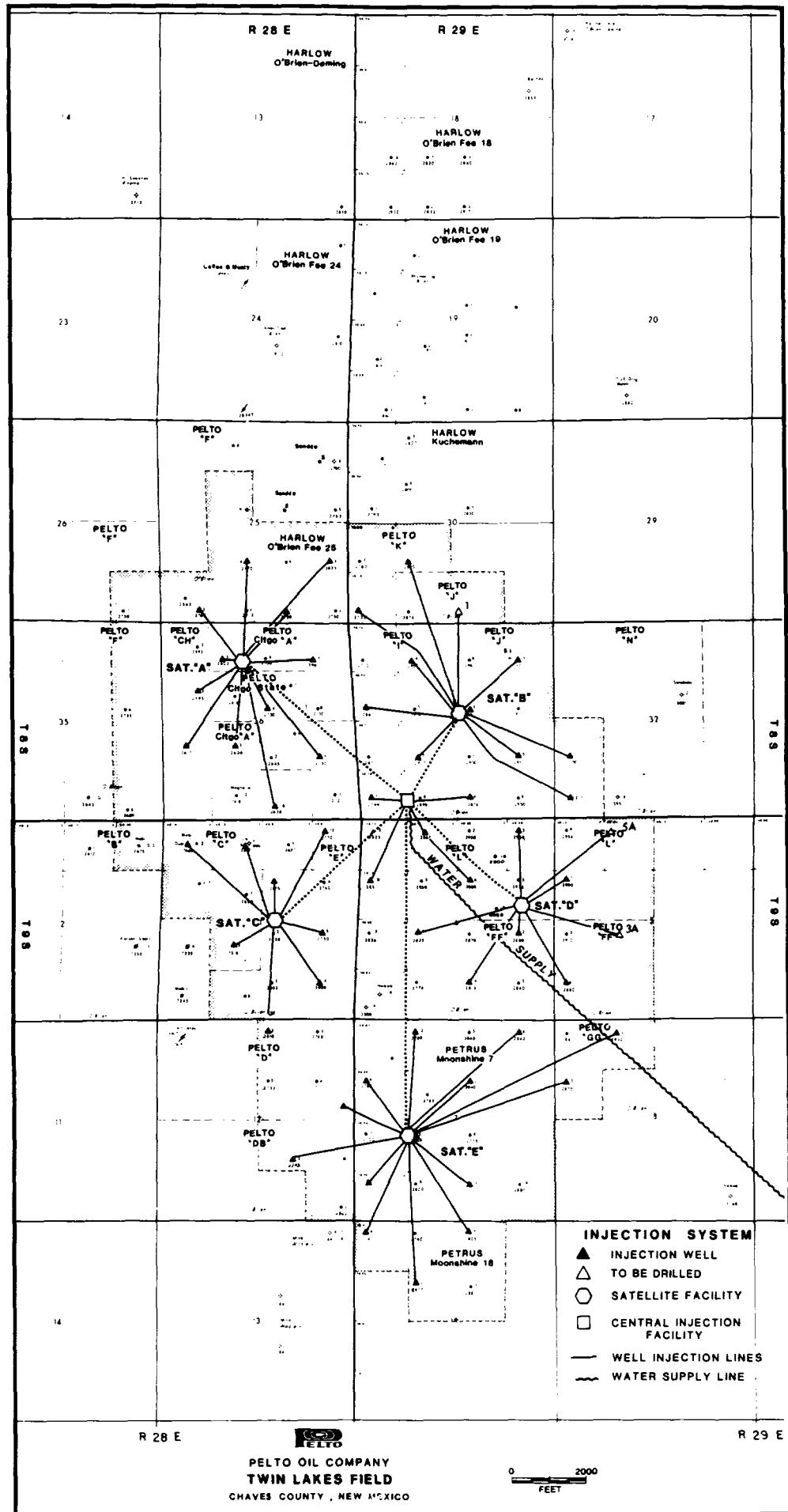


FIGURE 25

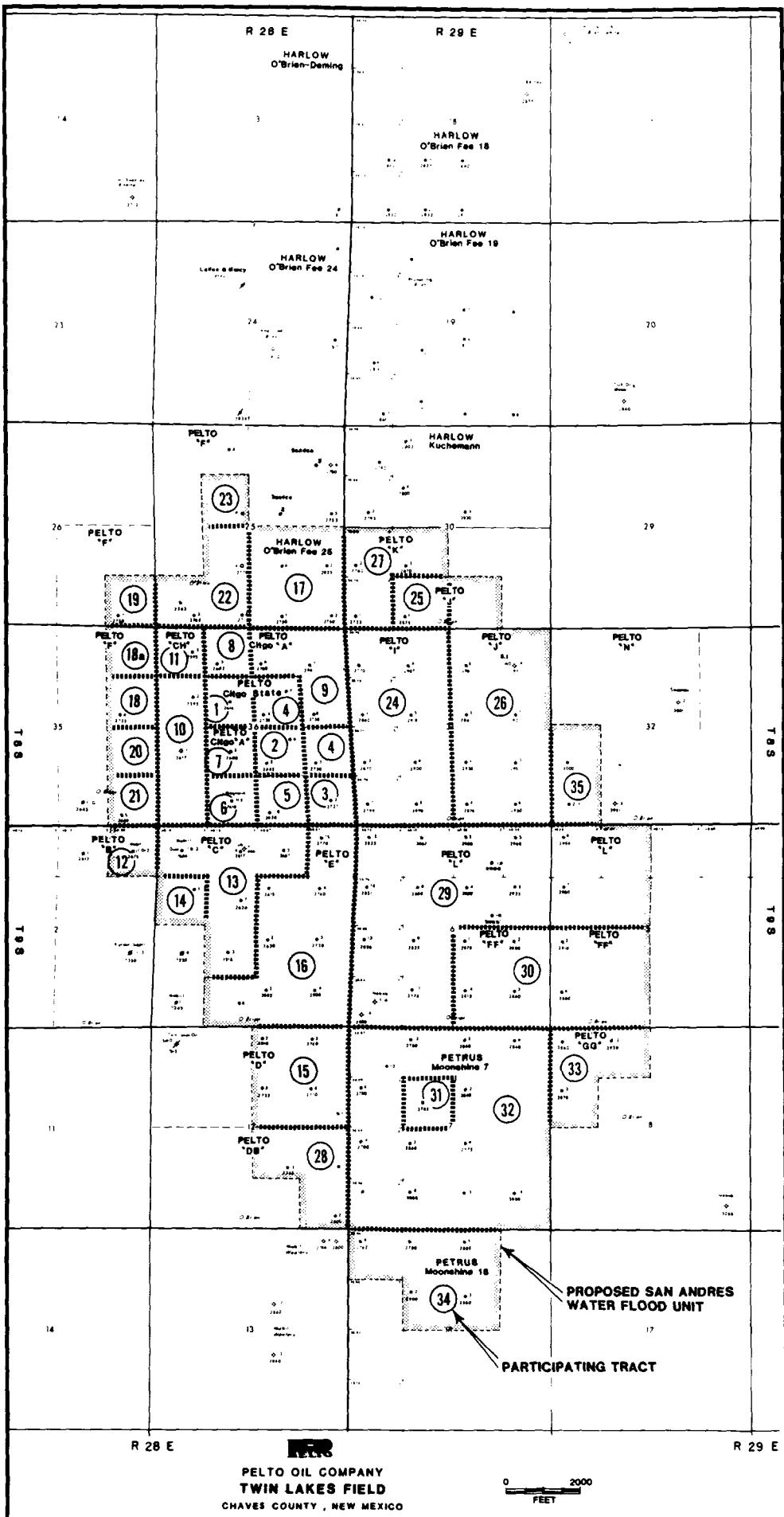


FIGURE 26

TWIN LAKES FIELD
PROPOSED UNIT AREA
GEOLOGICAL - PETROPHYSICAL - RESERVOIR DATA

1. Reservoir:	<u>San Andres</u>	1.
2. Zones:	<u>P-1 + P-2</u>	2.
3. Rock Type	<u>Dolomite</u>	3.
4. Average depth (Bottom P2) - feet	<u>2,736</u>	4.
5. Proposed Unit Area - Acres	<u>4,863.8</u>	5.
6. Average $P_1 + P_2$ (Pay + Probable)		6.
6a. Net pay - feet	<u>25.6</u>	6a.
6b. Saturation exponent - n	<u>2.0</u>	6b.
6c. Cementation exponent - m	<u>2.0</u>	6c.
6d. Porosity - %	<u>8.2</u>	6d.
6e. Water Saturation - %	<u>25.3</u>	6e.
6f. Core permeability (air) - Md	<u>1.77</u>	6f.
7. Net reservoir volume - Acre-ft	<u>124,518</u>	7.
8. Pore volume ($7758 \times \emptyset \times \text{Ac-ft}$) - Bbls	<u>79,212,872</u>	8.
9. Original oil in place - Stock tank Bbls	<u>51,484,000</u>	9.
10. Estimated original G.O.C.-(P_1 zone) above sea level - ft	<u>+ 1400</u>	10.
11. Estimated free water level - above sea level - ft	<u>None</u>	11.
12. Original reservoir pressure - psia	<u>915</u>	12.
13. Oil saturation pressure - psia	<u>915</u>	13.
14. Current reservoir pressure - psia	<u>115 est.</u>	14.
15. Oil gravity - API	<u>21-25 (Sour)</u>	15.
16. Reservoir temperature - °F	<u>90</u>	16.
17. Original solution GOR - CF/B	<u>300</u>	17.
18. Current solution GOR - CF/B	<u>50</u>	18.
19. Gas gravity	<u>0.9</u>	19.
20. Original formation volume factor	<u>1.15</u>	20.
21. Current formation volume factor	<u>1.02</u>	21.
22. Oil viscosity at original pressure - Cp	<u>4.1</u>	22.
23. Oil viscosity at current pressure - Cp	<u>8.3</u>	23.
24. Formation water resistivity at 90°F - ohm meters	<u>.045</u>	24.
25. Formation water - ppm NaCl	<u>155,000</u>	25.
26. Formation water specific gravity	<u>1.15</u>	26.
27. Oil compressibility - vol/vol/psi	<u>6.5×10^{-6}</u>	27.
28. Rock compressibility - vol/vol/psi	<u>5.2×10^{-6}</u>	28.
29. Water compressibility - vol/vol/psi	<u>3.3×10^{-6}</u>	29.
30. Cumulative production to 4-1-86		30.
30a. Oil - MBBLS	<u>3819.2</u>	30a.
30b. Gas - MMCF	<u>4047.5</u>	30b.
30c. Water - MMBLS	<u>1735.5</u>	30c.
31. Average current production (J-F-M 1986)		31.
31a. BOPD	<u>477</u>	31a.
31b. MCF/D	<u>916</u>	31b.
31c. BWPD	<u>618</u>	31c.
32. Current number of producing wells	<u>97</u>	32.

TABLE 1

TWIN LAKES (SAN ANDRES) FIELD
CHAVES COUNTY, NEW MEXICO

REM. PRIMARY (C.O. = 4 B/D/W)
SEC CASE @ \$15/BBL & \$1.50/MCF
W.I. = 100%, N.R.I. = 81.2%

FILE: TWINE
FILE: TLSECDAT
PROJ: 4

RESERVES AND ECONOMICS

AS OF DATE: 1/1/1987

-END- MO-YR	GROSS OIL & COND PROD	GROSS GAS PRODUCTION	NET OIL & COND PROD	NET GAS PRODUCTION	NET OIL & COND PRICE	NET GAS PRICE	NET OIL & COND SALES	NET GAS SALES	TOTAL NET SALES
	MBBLs	Mmcf	MBBLs	Mmcf	\$/BBL	\$/Mcf	M\$	M\$	M\$
12-87	101.183	222.603	82.161	180.754	15.000	1.500	1232.489	271.130	1503.540
12-88	71.354	156.979	57.939	127.467	15.000	1.500	869.092	191.200	1060.292
12-89	63.162	138.956	51.289	112.832	15.000	1.500	769.313	169.248	938.561
12-90	32.798	72.156	26.632	58.591	15.000	1.500	399.480	87.886	487.366
12-91	18.037	37.878	14.646	38.757	15.000	1.500	219.691	46.135	265.826
12-92	11.381	23.900	9.241	19.407	15.000	1.500	138.621	29.110	167.731
12-93									
12-94									
12-95									
12-96									
12-97									
12-98									
12-99									
12-0									
12-1									
12-2									
12-3									
12-4									
12-5									
12-6									
S TOT	297.915	652.472	241.907	529.807	15.000	1.500	3628.605	794.711	4423.316
AFTER	.000	.000	.000	.000	.000	.000	.000	.000	.000
TOTAL	297.915	652.472	241.907	529.807	15.000	1.500	3628.605	794.711	4423.316
-END- MO-YR	TOTAL NET SALES	NET PROD. TAXES	NET ADVAL. TAXES	NET OPER EXPENSE	NET TOTAL EXPENSE	TOTAL INVESTMENT	FUTURE NET PROFIT	CUMULATIVE PROFIT	CUM. PROFIT DISCOUNT
	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$
12-87	1503.540	75.678	63.183	861.428	1000.281	.000	503.258	503.258	478.919
12-88	1060.292	53.368	44.556	635.040	732.964	.000	327.328	830.586	760.781
12-89	938.561	47.241	39.441	587.520	674.202	.000	264.360	1094.946	966.763
12-90	487.366	24.531	20.480	352.800	397.811	.000	89.554	1184.500	1029.982
12-91	265.826	13.252	11.176	201.600	226.028	.000	39.798	1224.298	1055.292
12-92	167.731	8.362	7.052	128.520	143.934	.000	23.797	1248.095	1069.029
12-93									
12-94									
12-95									
12-96									
12-97									
12-98									
12-99									
12-0									
12-1									
12-2									
12-3									
12-4									
12-5									
12-6									
S TOT	4423.316	222.431	185.889	2766.900	3175.220	.000	1248.095	1248.095	1069.029
AFTER	.000	.000	.000	.000	.000	.000	.000	.000	.000
TOTAL	4423.316	222.431	185.889	2766.900	3175.220	.000	1248.095	1248.095	1069.029
OIL		GAS					P.W. %	P.W. M\$	
GROSS WELLS-1987	49	0							
GROSS RES., MB, MMCF	297.915	652.472							
NET RES., MB, MMCF	241.907	529.807							
INITIAL PRICE, \$/B, \$/MMCF	15.00	1.50							
	BPO	APD							
WORKING INTEREST	100.0000	100.0000							
NET REVENUE INTEREST	81.2000	81.2000							
REVERSION @ YEAR	.000								
NET RESERVES, MBD						330.200			
INVESTMENT/BE						.00	5.00	1152.974	
LIFE, YEARS						6.00	10.00	1069.029	
BASE DISCOUNT %						10.00	15.00	994.629	
PAYOUT DISCOUNTED, YEARS						.00	20.00	928.414	
PAYOUT UNDISCOUNTED, YEARS						.00	25.00	869.200	
PROFIT INDEX, UNDISC.						.000	30.00	816.137	
PROFIT INDEX, DISC.						.000	35.00	768.369	
P.V. INVESTMENTS, M\$.000	50.00	650.540	
RATE OF RETURN %						N.A.	60.00	588.433	
							70.00	536.166	

DEFINE: PROFIT = REVENUE - EXPENSES - CAPITAL

PROFITABILITY INDEX = PROFIT / CAPITAL

TABLE 2

TWIN LAKES (SAN ANDRES) UNIT
 CHAVES COUNTY, NEW MEXICO
 REMAINING PRIMARY + SECONDARY
 SECONDARY/PRIMARY = 1.0
 S.E.C. @ \$15/BBL & \$1.50/MCF
 W.I. = 100%, N.R.I. = 81.2%

FILE: TWINI
 FILE: TLSECDAT
 PROJ: 2

RESERVES AND ECONOMICS

AS OF DATE: 1/1/1987

-END- MO-YR	GROSS OIL & COND PROD	GROSS GAS PRODUCTION	NET OIL & COND PROD	NET GAS PRODUCTION	NET OIL & COND PRICE	NET GAS PRICE	NET OIL & COND SALES	NET GAS SALES	TOTAL NET SALES
	MBBLs	MMCF	MBBLs	MMCF	\$/BBL	\$/MCF	M\$	M\$	M\$
12-87	77.079	169.574	62.588	137.694	15.000	1.500	938.822	206.541	1145.363
12-88	69.050	124.290	56.069	100.923	15.000	1.500	841.029	151.385	992.414
12-89	166.700	233.380	135.360	189.505	15.000	1.500	2030.406	284.257	2314.663
12-90	401.600	281.120	326.099	228.269	15.000	1.500	4891.488	342.404	5233.892
12-91	579.600	260.820	470.635	211.786	15.000	1.500	7059.528	317.679	7377.206
12-92	579.600	202.860	470.635	164.722	15.000	1.500	7059.528	247.083	7306.613
12-93	579.600	144.900	470.635	117.659	15.000	1.500	7059.528	176.488	7236.018
12-94	534.957	106.991	434.385	86.877	15.000	1.500	6515.780	130.315	6646.095
12-95	454.720	68.208	369.233	55.385	15.000	1.500	5538.488	83.077	5621.565
12-96	386.517	57.978	313.852	47.978	15.000	1.500	4707.779	70.617	4778.396
12-97	328.544	49.282	266.778	40.017	15.000	1.500	4001.666	60.025	4061.692
12-98	279.266	41.890	226.764	34.015	15.000	1.500	3401.463	51.022	3452.485
12-99	237.380	35.607	192.752	28.913	15.000	1.500	2891.283	43.369	2934.652
12-0	201.775	30.266	163.842	24.576	15.000	1.500	2457.624	36.864	2494.488
12-1	171.511	25.727	139.267	20.890	15.000	1.500	2089.009	31.335	2120.344
12-2	145.787	21.868	118.379	17.757	15.000	1.500	1775.681	26.635	1802.317
12-3	123.920	18.588	100.623	15.093	15.000	1.500	1509.350	22.640	1531.990
12-4	105.334	15.800	85.531	12.830	15.000	1.500	1282.965	19.244	1302.209
12-5	89.535	13.430	72.782	10.965	15.000	1.500	1090.535	16.358	1106.893
12-6	76.106	11.416	61.798	9.270	15.000	1.500	926.967	13.905	940.872
S TOT	5588.581	1913.995	4537.928	1554.164	15.000	1.500	68068.910	2331.246	70400.170
AFTER	123.988	18.060	100.678	14.665	15.000	1.500	1510.176	21.997	1532.173
TOTAL	5712.569	1932.855	4638.607	1568.829	15.000	1.500	69579.090	2353.243	71932.340

-END- MO-YR	TOTAL NET SALES	NET PROD. TAXES	NET ADVAL. TAXES	NET OPER EXPENSE	NET TOTAL EXPENSE	TOTAL INVESTMENT	FUTURE NET PROFIT	CUMULATIVE PROFIT	CUM. PROFIT DISCOUNT
	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$
12-87	1145.363	57.650	48.131	1047.819	1153.600	7300.000	-7308.237	-7308.237	-7167.707
12-88	992.414	47.989	41.791	1229.238	1319.018	.000	-326.604	-7634.841	-7448.945
12-89	2314.663	107.829	97.688	1229.238	1433.955	.000	890.708	-6754.133	-6762.722
12-90	5233.892	220.639	221.836	1270.998	1713.473	300.000	3220.419	-3533.714	-4582.940
12-91	7377.206	299.253	313.199	1284.918	1897.371	350.000	5129.836	1596.122	-1241.635
12-92	7306.613	291.582	310.415	1298.838	1900.835	350.000	5055.776	6651.898	1666.635
12-93	7236.018	283.911	307.631	1312.758	1904.299	.000	5331.716	11983.610	4451.638
12-94	6646.895	258.503	282.651	1326.678	1867.832	.000	4778.263	16761.880	6710.886
12-95	5621.565	216.721	239.164	1270.555	1726.440	.000	3895.124	20657.000	8375.961
12-96	4778.396	184.215	203.292	1151.553	1539.061	.000	3239.335	23896.340	9629.559
12-97	4861.692	156.585	172.801	1041.144	1370.530	.000	2691.162	26587.500	10571.930
12-98	3452.485	133.099	146.883	959.549	1239.531	.000	2212.954	28800.450	11273.130
12-99	2934.652	113.136	124.852	863.775	1101.763	.000	1832.889	38633.340	11798.640
12-0	2494.488	96.167	106.126	726.781	929.074	.000	1565.414	32198.750	12204.760
12-1	2120.344	81.743	90.208	651.320	823.271	.000	1297.073	33495.830	12509.250
12-2	1802.317	69.482	76.678	566.065	712.225	.000	1090.091	34585.920	12740.800
12-3	1531.990	59.061	65.177	515.758	639.996	.000	891.994	35477.910	12912.250
12-4	1302.209	50.202	55.401	480.410	586.814	.000	716.195	36194.110	13036.810
12-5	1106.893	42.673	47.092	430.503	520.267	.000	586.625	36788.730	13129.130
12-6	940.872	36.272	40.029	389.988	466.289	.000	474.583	37255.320	13196.710
S TOT	70400.170	2805.913	2991.045	19847.890	24844.840	8300.000	37255.320	37255.320	13196.710
AFTER	1532.173	59.022	65.187	718.807	843.016	.000	689.157	37944.470	13281.790
TOTAL	71932.340	2864.935	3056.232	19766.700	25687.860	8300.000	37944.470	37944.470	13281.790

PROD. INJ.	GAS	NET RESERVES, M\$	P.W. %
GROSS WELLS MID-1987	58 58 0	4900.079	5.00
GROSS RES., MB, MMCF	5712.569 1932.055	1.69	22647.770
NET RES., MB, MMCF	4638.608 1568.826	22.17	13281.790
NET REVENUE, M\$	69579.080 2333.245	10.00	7299.198
INITIAL PRICE, \$/B, \$/MCF	15.00 1.50	5.43	3341.975
	BPD API	PAYOUT UNDISCOUNTED, YEARS	20.00
		PAYOUT DISCOUNTED, YEARS	4.69
		PROFIT INDEX, UNDISC.	25.00
		PROFIT INDEX, DISC.	30.00
WORKING INTEREST	100.0000 100.0000	4.572	-1224.743
NET REVENUE INTEREST	81.2000 81.2000	1.696	35.00
REVERSION @ YEAR	.000	P.V. INVESTMENTS, M\$	-2550.186
		7829.077	50.00
		RATE OF RETURN %	26.73
			60.00
			-5318.419
			70.00
			-5644.241

DEFINE: PROFIT = REVENUE - EXPENSES - CAPITAL

PROFITABILITY INDEX = PROFIT / CAPITAL

TABLE 3

TWIN LAKES (SAN ANDRES) UNIT
 CHAVES COUNTY, NEW MEXICO
 REMAINING PRIMARY + SECONDARY
 SECONDARY/PRIMARY = 0.6
 S.E.C. @ \$15/BBL & \$1.50/MCF
 W.I. = 100%, N.R.I. = 81.2%

FILE: TWINI
 FILE: TLSECDAT
 PROJ: 3

RESERVES AND ECONOMICS

AS OF DATE: 1/1/1987

END-MO-YR	GROSS OIL & COND PROD	GROSS GAS PRODUCTION	NET OIL & COND PROD	NET GAS PRODUCTION	NET OIL & COND PRICE	NET GAS PRICE	NET OIL & COND SALES	NET GAS SALES	TOTAL NET SALES
	MBBLs	MMCF	MBBLs	MMCF	\$/BBL	\$/MCF	M\$	M\$	M\$
12-87	77.095	169.574	62.681	137.694	15.000	1.500	939.017	206.541	1145.558
12-88	63.800	114.848	51.896	93.250	15.000	1.500	777.084	139.875	916.959
12-89	132.500	185.500	107.590	150.626	15.000	1.500	1613.850	225.939	1839.789
12-90	278.900	237.005	226.467	192.448	15.000	1.500	3397.002	288.672	3685.674
12-91	386.400	231.840	313.757	188.254	15.000	1.500	4706.352	282.381	4988.733
12-92	386.400	193.200	313.757	156.878	15.000	1.500	4706.352	235.318	4941.670
12-93	386.400	164.220	313.757	133.347	15.000	1.500	4706.352	200.020	4906.372
12-94	356.636	135.522	289.589	110.044	15.000	1.500	4343.828	165.866	4588.893
12-95	303.140	98.521	246.150	79.999	15.000	1.500	3692.243	119.999	3812.241
12-96	257.668	77.300	209.226	62.768	15.000	1.500	3138.397	94.151	3232.548
12-97	219.017	54.754	177.842	44.460	15.000	1.500	2667.629	66.690	2734.320
12-98	186.164	41.887	151.165	34.012	15.000	1.500	2267.478	51.018	2318.497
12-99	158.239	31.648	128.490	25.698	15.000	1.500	1927.351	38.547	1965.898
12-0	134.503	23.538	109.216	19.113	15.000	1.500	1638.243	28.669	1666.912
12-1	114.327	17.149	92.833	13.925	15.000	1.500	1392.502	20.887	1413.390
12-2	97.178	14.576	78.368	11.836	15.000	1.500	1183.623	17.754	1201.377
12-3	82.601	12.390	67.072	10.061	15.000	1.500	1006.077	15.091	1021.167
12-4	70.210	10.532	57.011	8.552	15.000	1.500	855.162	12.828	867.990
12-5	59.679	8.952	48.459	7.269	15.000	1.500	726.886	10.904	737.789
12-6	33.190	3.319	26.950	2.695	15.000	1.500	404.256	4.843	408.299
S TOT	3784.047	1826.267	3072.646	1482.929	15.000	1.500	46089.680	2224.394	48314.070
AFTER	.000	.000	.000	.000	.000	.000	.000	.000	.000
TOTAL	3784.047	1826.267	3072.646	1482.929	15.000	1.500	46089.680	2224.394	48314.070

END-MO-YR	TOTAL NET SALES	NET PROD. TAXES	NET ADVAL. TAXES	NET OPER EXPENSE	NET TOTAL EXPENSE	TOTAL INVESTMENT	FUTURE NET PROFIT	CUMULATIVE NET PROFIT	CUM. PROFIT DISCOUNT
	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$	M\$
12-87	1145.558	57.657	48.140	1047.819	1153.616	7300.000	-7308.058	-7308.058	-7167.537
12-88	916.959	44.340	38.613	1229.238	1312.192	.000	-395.233	-7703.298	-7587.871
12-89	1839.789	85.071	77.546	1229.238	1391.956	.000	447.833	-7255.457	-7159.931
12-90	3685.674	158.757	156.866	1270.998	1585.821	300.000	1799.854	-5455.683	-5900.788
12-91	4988.733	207.174	211.584	1277.958	1696.716	350.000	2942.017	-2513.586	-4035.154
12-92	4941.670	202.059	209.728	1284.918	1696.705	350.000	2894.965	381.379	-2374.251
12-93	4906.372	198.224	208.336	1291.878	1698.437	.000	3207.335	3589.314	-698.597
12-94	4508.893	188.831	191.517	1199.589	1571.936	.000	2936.957	6526.271	689.557
12-95	3812.241	151.499	161.988	1075.066	1388.553	.000	2423.688	8949.959	1726.125
12-96	3232.548	127.921	137.380	942.744	1208.045	.000	2024.503	10974.460	2509.592
12-97	2734.320	107.283	116.246	832.095	1055.625	.000	1678.695	12653.168	3097.427
12-98	2318.497	90.574	98.586	751.548	940.708	.000	1377.788	14030.950	3533.991
12-99	1965.898	76.464	83.687	651.606	811.678	.000	1154.228	15185.178	3864.919
12-0	1666.912	64.550	70.905	576.339	711.793	.000	955.119	16140.280	4112.710
12-1	1413.390	54.489	60.131	514.991	629.611	.000	783.779	16924.060	4296.783
12-2	1201.377	46.315	51.111	471.690	569.117	.000	632.260	17556.320	4431.006
12-3	1021.167	39.368	43.445	424.263	507.075	.000	514.092	18070.410	4529.819
12-4	867.990	33.463	36.928	386.629	457.019	.000	416.971	18481.380	4601.295
12-5	737.789	28.443	31.389	348.995	408.827	.000	328.963	18810.350	4653.065
12-6	408.299	15.599	17.377	202.048	235.024	.000	173.275	18983.620	4678.149
S TOT	48314.070	1970.081	2050.722	17009.650	21030.450	8300.000	18983.620	18983.620	4678.149
AFTER	.000	.000	.000	.000	.000	.000	.000	18983.620	4678.149
TOTAL	48314.070	1970.081	2050.722	17009.650	21030.450	8300.000	18983.620	18983.620	4678.149

PROD. INJ.	GAS	NET RESERVES, MBE	P.W. %
		INVESTMENT/BE	
GROSS WELLS MID-1987	58 58 0	2.58	5.00
GROSS RES., MB, MMCF	3784.047 1826.267	19.67	10.00
NET RES., MB, MMCF	3072.645 1482.928	10.00	15.00
NET REVENUE, M\$	46089.710 2224.390	7.50	20.00
INITIAL PRICE, \$/B, \$/MCF	15.00 1.50	5.87	25.00
	BPO APO	PAYOUT DISCOUNTED, YEARS	-1134.461
		PAYOUT UNDISCOUNTED, YEARS	-2691.842
		PROFIT INDEX, UNDISC.	2.287
		PROFIT INDEX, DISC.	30.00
WORKING INTEREST	100.0000 100.0000	P.V. INVESTMENTS, M\$	35.00
NET REVENUE INTEREST	81.2000 81.2000	7829.077	50.00
REVERSION @ YEAR	.000	RATE OF RETURN %	-5640.106
			-5933.817
			70.00
			-6853.577

DEFINE: PROFIT = REVENUE - EXPENSES - CAPITAL

PROFITABILITY INDEX = PROFIT / CAPITAL

TABLE 4

TWIN LAKES
WORKING INTEREST OWNERS' PARAMETERS
PROPOSED TWIN LAKES UNIT

OWNER	ACRES FRACTION	OIL PROD 1/Bbl-4/Bbl FRACTION	OIL & GAS REVENUE 1/Bbl-4/Bbl FRACTION	OIL PROD 4/Bbl-4/Bbl FRACTION	CUM OIL PROD TO 4/1/86 FRACTION	PRIMARY RESERVES AS OF 4/1/86 FRACTION	PRIMARY ULTIMATE FRACTION	4 MOPD PER WELL CUT OFF	
								1 BOPD PER WELL CUT OFF	4 MOPD PER WELL CUT OFF
ADAMS & MCGANEY	0.00140348	0.00135186	0.00129342	0.00096061	0.00233001	0.00098211	0.0024985	0.0000000	0.00211348
ADAMS, J W	0.00060104	0.00067593	0.00064471	0.00048030	0.00116500	0.00049105	0.00102492	0.0000000	0.00105674
ADAMS, J W JUNE ADAMS EST	0.00140348	0.00135186	0.00129342	0.00096061	0.00233001	0.00098211	0.0024985	0.0000000	0.00211348
EDWARDS & LEACH OIL CO	0.01201077	0.01149150	0.00853464	0.02070121	0.00872545	0.01821213	0.0090000	0.01677744	
COLUMBIA GAS	0.00528905	0.00572961	0.00615755	0.0071358	0.00634664	0.00697080	0.0106420	0.00749976	
HARBERT ENERGY	0.009536248	0.001883121	0.00221262	0.00171198	0.02081997	0.00010284	0.01650999	0.0090000	0.01888057
HARLOW CORP	0.00505004	0.00487260	0.00179096	0.00151977	0.00706230	0.00464648	0.00553210	0.0092010	
HABOB PROD CO	0.00400920	0.003137965	0.00323354	0.00240152	0.00582502	0.00245527	0.00512462	0.0060000	0.00528370
MHM OPERATING CO LTD P PSP	0.00822400	0.00893263	0.00663290	0.00492620	0.01194875	0.00503645	0.01051205	0.0000000	0.01683835
PETRUS	0.03248587	0.04127393	0.03921904	0.04079881	0.0199691	0.0429138	0.0247053	0.03313904	0.02118721
PELTO OIL CO	0.71691089	0.68451763	0.69194460	0.69475465	0.69732995	0.68807342	0.68540537	0.69822313	0.69741276
STROECKER, W G	0.04582429	0.04895882	0.04922698	0.04982870	0.04927938	0.05807377	0.04944449	0.05389508	0.04708333
SUN	0.03248587	0.04127393	0.03921904	0.04079881	0.0199691	0.0429138	0.0247053	0.03313904	0.02118721
TENNECO	0.03275215	0.07513167	0.0725159	0.07399939	0.05122469	0.07867889	0.056931515	0.08797588	0.0564003
TRINIDAD PETROLEUM CORP	0.00842752	0.00156985	0.00282804	0.00135561	0.01700013	0.0000000	0.01346671	0.0090000	0.01542025
TXO	0.00991505	0.01319674	0.01306341	0.01299516	0.01717487	0.01242149	0.01186331	0.01774876	0.01227724
WEEKS, MARION	0.04582429	0.04895882	0.04922698	0.04982870	0.04927938	0.05807377	0.04944449	0.05389508	0.04708333
WINTHER, B R	0.00458243	0.00487658	0.00492269	0.00498287	0.00497294	0.00500737	0.00494445	0.00538950	0.0497076
	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000	1.00000000

TABLE 5

TWIN LAKES TRACT UTILIZATION PARAMETERS PROPOSED TWIN LAKES UNIT

PROPOSED TWIN LAKES UNIT													
TRACT A			WELL(S)		OIL PROD 1/86-4/86		GAS REVENUE 1/86-4/86		OIL PROD 4/85-4/86		GAS PROD 4/1/86		
ACRES	ACRES	FRACTION	MBO	FRACTION	MBO	FRACTION	MBO	FRACTION	MBO	FRACTION	MBO	FRACTION	
1 CIGO STATE #1	40.00	0.0082240	0.055 0.0012817	1252 0.0015627	0.286	0.0014124	77.232	0.0202220	0.000	0.0000000	77.232	0.0183427	
2 CIGO STATE #2 & #6	40.00	0.0082240	0.220 0.0051267	4538 0.0056440	0.894	0.0044151	26.703	0.0049918	1.116	0.0011137	27.819	0.0057700	
3 CIGO STATE #3	40.00	0.0082240	0.028 0.0006525	590 0.0007364	0.130	0.0006420	4.227	0.0010648	0.000	0.0000000	4.227	0.0010039	
4 CIGO STATE #4 & 5,7	80.00	0.0164480	0.356 0.0082959	6997 0.0082351	1.870	0.0082351	99.772	0.0202138	5.644	0.0055322	105.416	0.021846	
5 CIGO A STATE #1	40.00	0.0082240	0.000 0.0000000	0 0.0000000	0.000	0.0000000	19.307	0.0036552	0.000	0.0000000	19.307	0.0045854	
6 CIGO A STATE #2	40.00	0.0082240	0.081 0.0018875	2729 0.0034658	0.313	0.0015458	58.843	0.0153071	0.000	0.0000000	58.843	0.0139753	
7 CIGO A STATE #3	40.00	0.0082240	0.059 0.0013749	1511 0.0018859	0.215	0.0010518	87.810	0.0235154	0.000	0.0000000	87.810	0.0213300	
8 CIGO A STATE #5	40.00	0.0082240	0.096 0.0022371	1961 0.0024476	0.402	0.0019853	49.373	0.0181675	0.217	0.0002165	69.610	0.0144380	
9 CIGO A STATE #4,7,8	120.00	0.0246720	0.433 0.0147508	12123 0.0151311	2.657	0.0131217	211.888	0.0580980	7.848	0.0078316	229.756	0.0476502	
10 STATE CH #1 & 2	120.00	0.0246720	0.023 0.0053560	3560 0.0044434	0.477	0.0023557	12.766	0.003326	0.000	0.0000000	12.766	0.0032119	
11 STATE CH #3	40.00	0.0082240	0.145 0.00313789	3698 0.0044154	0.459	0.0022448	14.711	0.0038518	0.217	0.0002165	14.928	0.0030963	
12 B #2	40.20	0.0082240	0.071 0.00164545	1206 0.0015052	0.158	0.0007803	2.697	0.0007062	0.000	0.0000000	2.697	0.0005394	
13 C #2 & 3,5,6,7	200.39	0.0412001	0.603 0.0140517	13010 0.0162882	2.758	0.0136295	120.316	0.0315981	8.459	0.0086469	128.995	0.0267552	
14 E #9	40.00	0.0082240	0.000 0.0000000	0 0.0000000	0.000	0.0000000	0.570	0.0001692	0.000	0.0000000	0.570	0.0001354	
15 D #2 & 3,4,5,6	160.00	0.0328940	2.876 0.0670193	52532 0.0655919	13.443	0.06463988	122.203	0.0319970	81.811	0.0816490	204.014	0.0423152	
16 E #1 THRU #8	320.07	0.0658043	1.248 0.0299821	24048 0.0300401	5.510	0.0272114	82.642	0.0216385	22.211	0.0221646	104.853	0.0217479	
17 FEE 25 #1 THRU 4	160.00	0.0328940	1.190 0.0277035	21257 0.0265316	3.990	0.0197048	182.539	0.0479590	20.188	0.0201458	202.727	0.0420482	
18 F #6	40.00	0.0082240	0.000 0.0000000	0 0.0000000	0.021	0.0001037	2.837	0.0007433	0.000	0.0000000	2.837	0.0006743	
18A	40.00	0.0082240	0.000 0.0000000	0 0.0000000	0.000	0.0000000	0.000	0.0000000	0.000	0.0000000	0.000	0.0000000	
19 F #7	40.00	0.0082240	0.000 0.0000000	0 0.0000000	0.000	0.0000000	1.670	0.00040473	0.000	0.0000000	1.670	0.0003464	
20	40.00	0.0082240	0.000 0.0000000	0 0.0000000	0.000	0.0000000	0.000	0.0000000	0.000	0.0000000	0.000	0.0000000	
21 F #5	40.00	0.0082240	0.044 0.0010253	1461 0.00182735	0.550	0.0027162	6.781	0.0017753	0.000	0.0000000	6.781	0.0016105	
22 F #1 THRU #4	120.00	0.0246720	0.821 0.0191317	18892 0.0233501	4.886	0.0241297	92.456	0.0242405	20.362	0.0203195	113.018	0.0234414	
23 F #9	40.00	0.0082240	0.045 0.0010486	764 0.0009536	0.197	0.0009729	0.989	0.0002590	0.000	0.0000000	0.989	0.0002051	
24 I #1 THRU #8	314.88	0.0647372	2.730 0.0670460	53717 0.06470460	14.059	0.0894398	441.118	0.1155000	59.204	0.0590083	500.322	0.1037733	
25 J #1	40.00	0.0082240	0.107 0.0024734	1855 0.0023153	1.371	0.0067707	6.303	0.0016503	1.428	0.0014250	7.731	0.0014635	
26 J #2 THRU #9 & #10	340.00	0.0740159	4,980 0.11640487	95457 0.11880323	22.112	0.1092010	480.209	0.1257553	111.473	0.1132539	583.482	0.1231374	
27 K #1,2,3	117.60	0.0241785	1.124 0.0261925	20883 0.0268448	5.700	0.0281497	124.584	0.03216152	29.074	0.0290152	153.638	0.0318465	
28 D #1,2,3	120.00	0.0246720	1.709 0.0392448	31457 0.0392448	7.394	0.0344462	91.337	0.0424889	32.447	0.0323982	125.804	0.0426934	
29 L LEASE	636.13	0.1307881	7.634 0.1778948	161602 0.1767583	36.341	0.1794715	514.751	0.1347744	210.035	0.2095961	72.766	0.1503259	
30 FF #1 THRU #6	320.00	0.0657919	5,972 0.1391653	106777 0.1332720	29.591	0.1461363	448.039	0.1046897	153.044	0.1527242	561.083	0.1143759	
31 MOONSHINE 7 #1	40.00	0.0082240	0.466 0.0106592	8513 0.0106524	1.957	0.0096647	28.837	0.0075505	11.863	0.0118382	40.700	0.0084417	
32 MOONSHINE 7 #2-#14	595.69	0.1224737	6,201 0.1445017	10890 0.1359967	28.395	0.1402298	288.336	0.0754963	144.601	0.1442988	452.837	0.0891885	
33 GG #1,2,3	120.00	0.0246720	0.344 0.0080162	5801 0.0078078	1.581	0.0078078	7.053	0.0018467	3.228	0.0012123	10.281	0.0021242	
34 MOONSHINE 18 #1-#5	198.86	0.0408856	4,774 0.0590043	13.056	0.0444776	79.862	0.020159	69.082	0.0489376	148.764	0.0308671	31.203	0.0797445
35 N #1-#27	80.00	0.0164480	0.428 0.0099737	7591 0.0094746	1.726	0.0085239	36.222	0.01094842	6.322	0.0043088	42.544	0.0088242	
36 TOWNS	480.53 82	1.0000000	42,913 1.0000000	80,1194 1.0000000	202.489	1.0000000	3819.205	1.0000000	1002.094	1.0000000	481.299	1.0000000	
37 TOWNS	372.843	0.9764758	372.843	0.9764758	372.843	0.9764758	463.961	1.1634419	7.053	0.0016751	111.085	0.0263829	

TWIN LAKES
WORKING INTEREST OWNERS PARAMETERS
PROPOSED TWIN LAKES UNIT

OWNER	TRACT #	TRACT WI FRACTION	ACRES FRACTION	OIL PROD 1/86-7/86 FRACTION	GAS REVENUE 1/86-7/86 FRACTION	CUM OIL PROD 10/4/786 FRACTION	CUM GAS PROD 10/4/786 FRACTION	1 BOPD PER WELL CUT OFF		4 BOPD PER WELL CUT OFF	
								PRIMARY RESERVES AS OF 4/1/86	PRIMARY ULTIMATE FRACTION	PRIMARY RESERVES AS OF 4/1/86	PRIMARY ULTIMATE FRACTION
ADAMS & MCNAMEY	17	0.04875000	0.00160368	0.001515186	0.00129342	0.00096641	0.00233001	0.00098211	0.00204985	0.00000000	0.00211348
ADAMS, J W	17	0.02437500	0.00060184	0.00064671	0.00064671	0.000448039	0.00116300	0.0009105	0.001024972	0.00000000	0.00105874
ADAMS, JN & JUNE ADAMS EST	17	0.04875000	0.00160368	0.001515186	0.00129342	0.000966061	0.00233001	0.00098211	0.00204985	0.00000000	0.00211348
EDWARDS & LENCH OIL CO	17	0.43312500	0.014248988	0.01201077	0.01149150	0.005533464	0.02070121	0.00827565	0.01821213	0.00000000	0.01877744
COLUMBIA GAS	27	0.21875000	0.005289705	0.005272841	0.00570168	0.00615775	0.00713458	0.00644664	0.00670880	0.01106420	0.00749976
HARBERT ENERGY	8	0.47500000	0.00370640	0.001016262	0.00111261	0.00094302	0.00863051	0.00010284	0.00685805	0.00000000	0.00782848
HARBERT ENERGY	7	0.27510130	0.00226243	0.00097824	0.00051881	0.00029210	0.000446912	0.00000000	0.00512453	0.00000000	0.00587971
HARBERT ENERGY	3	0.13755000	0.00113122	0.00068975	0.00010129	0.00068831	0.00015224	0.00000000	0.00012059	0.00000000	0.00138079
HARBERT ENERGY	1	0.27510130	0.00226243	0.00068975	0.00010129	0.00064990	0.00035855	0.00000000	0.00044682	0.00000000	0.00504610
TOTAL		0.00956248	0.00198321	0.00221262	0.00171198	0.02981497	0.00010284	0.01630999	0.00000000	0.01888657	
HARLOW CORP	17	0.07312500	0.00240552	0.00227779	0.00190112	0.00144091	0.00349501	0.00147316	0.00307477	0.00000000	0.00317022
HARLOW CORP	27	0.10937500	0.00264452	0.0028480	0.00265084	0.00307087	0.003527	0.00317332	0.00348540	0.0053210	0.00379988
TOTAL		0.00505004	0.00497240	0.00479096	0.00451979	0.00706230	0.00444648	0.00656017	0.00653210	0.00692010	
HABOB PROD CO	17	0.12187500	0.00440920	0.00433795	0.00432354	0.00240152	0.00582502	0.0025527	0.00512462	0.00000000	0.00528370
NON OPERATING CO LTD PTSP	17	0.25000000	0.008822400	0.006633263	0.006633290	0.004963290	0.004963290	0.005633645	0.01051205	0.00000000	0.01083835
PETRUS	31	0.25000000	0.00205600	0.00214800	0.00214800	0.00205600	0.00226312	0.00180763	0.0025955	0.00211043	0.00165160
PETRUS	32	0.18750000	0.02298382	0.02709407	0.02709407	0.02549738	0.02287309	0.01155320	0.02755633	0.01683970	0.01653334
PETRUS	33	0.18750000	0.00756805	0.01145056	0.01145056	0.01030331	0.01268935	0.00392173	0.0129580	0.00579321	0.01494679
TOTAL		0.01249587	0.04127393	0.039721904	0.040779881	0.01994491	0.04294138	0.02474053	0.03313904	0.02118921	
PELTO OIL CO	9	0.84250000	0.02078616	0.01242755	0.012474795	0.01105503	0.04894757	0.00459812	0.04044529	0.00000000	0.04339874
PELTO OIL CO	10	0.52500000	0.00431740	0.00117448	0.00121740	0.00121740	0.0051228	0.000528499	0.00061346	0.00000000	0.00486253
PELTO OIL CO	11	0.51500000	0.00421534	0.00121740	0.00121740	0.00121740	0.0051483	0.01211043	0.00000000	0.00000000	0.01098492
PELTO OIL CO	12	0.00000000	0.00411290	0.00043575	0.000182790	0.000182790	0.00707535	0.000077290	0.00170512	0.00000000	0.00689745
PELTO OIL CO	13	1.00000000	0.008822400	0.006633263	0.006633290	0.006633290	0.006633290	0.00000000	0.00000000	0.00000000	0.01993388
PELTO OIL CO	14	0.84250000	0.0385744	0.006689750	0.007373719	0.007373719	0.0078957	0.00220930	0.00494513	0.01842973	0.00000000
PELTO OIL CO	15	0.77218750	0.01212574	0.007052529	0.006924550	0.006924550	0.006924550	0.006499163	0.004505077	0.004505079	0.00000000
PELTO OIL CO	16	0.50000000	0.020494290	0.020494290	0.020494290	0.020494290	0.020494290	0.01457925	0.01446880	0.013987225	0.0139145
PELTO OIL CO	17	0.76994375	0.01948702	0.0061355	0.00573828	0.00573828	0.00616894	0.0143980	0.02544452	0.00000000	0.00133079
PELTO OIL CO	18	0.7984375	0.01948702	0.0061355	0.00573828	0.00573828	0.00616894	0.01437815	0.0248940	0.00000000	0.00333790
PELTO OIL CO	19	0.75700000	0.00622958	0.00094927	0.000757982	0.000757982	0.00681716	0.0022716	0.01202825	0.00000000	0.00313020
PELTO OIL CO	20	0.78994375	0.010309176	0.010309176	0.010309176	0.010309176	0.01417344	0.01043072	0.016354817	0.01801779	0.01132669
PELTO OIL CO	21	0.84250000	0.02364777	0.02364777	0.0227164	0.0227164	0.01121191	0.01415347	0.01876623	0.01745844	0.01475844
PELTO OIL CO	22	0.84250000	0.0062872	0.00050540	0.001059454	0.001059454	0.01212129	0.01301295	0.02641417	0.02064417	0.01347927
PELTO OIL CO	23	0.84250000	0.0062872	0.00050540	0.001059454	0.001059454	0.01212129	0.01301295	0.02641417	0.02064417	0.01347927
PELTO OIL CO	24	0.84250000	0.0062872	0.00050540	0.001059454	0.001059454	0.01212129	0.01301295	0.02641417	0.02064417	0.01347927
PELTO OIL CO	25	0.84250000	0.0062872	0.00050540	0.001059454	0.001059454	0.01212129	0.01301295	0.02641417	0.02064417	0.01347927
PELTO OIL CO	26	0.84250000	0.0062872	0.00050540	0.001059454	0.001059454	0.01212129	0.01301295	0.02641417	0.02064417	0.01347927
PELTO OIL CO	27	0.84250000	0.0062872	0.00050540	0.001059454	0.001059454	0.01212129	0.01301295	0.02641417	0.02064417	0.01347927
PELTO OIL CO	28	0.84250000	0.0062872	0.00050540	0.001059454	0.001059454	0.01212129	0.01301295	0.02641417	0.02064417	0.01347927
PELTO OIL CO	29	0.84250000	0.0062872	0.00050540	0.001059454	0.001059454	0.01212129	0.01301295	0.02641417	0.02064417	0.01347927
PELTO OIL CO	30	0.84250000	0.0062872	0.00050540	0.001059454	0.001059454	0.01212129	0.01301295	0.02641417	0.02064417	0.01347927
PELTO OIL CO	31	0.84250000	0.0062872	0.00050540	0.001059454	0.001059454	0.01212129	0.01301295	0.02641417	0.02064417	0.01347927
PELTO OIL CO	32	0.84250000	0.0062872	0.00050540	0.001059454	0.001059454	0.01212129	0.01301295	0.02641417	0.02064417	0.01347927
PELTO OIL CO	33	0.84250000	0.0062872	0.00050540	0.001059454	0.001059454	0.01212129	0.01301295	0.02641417	0.02064417	0.01347927
PELTO OIL CO	34	0.84250000	0.0062872	0.00050540	0.001059454	0.001059454	0.01212129	0.01301295	0.02641417	0.02064417	0.01347927
PELTO OIL CO	35	0.84250000	0.0062872	0.00050540	0.001059454	0.001059454	0.01212129	0.01301295	0.02641417	0.02064417	0.01347927
PELTO OIL CO	36	0.84250000	0.0062872	0.00050540	0.001059454	0.001059454	0.01212129	0.01301295	0.02641417	0.02064417	0.01347927
PELTO OIL CO	37	0.84250000	0.0062872	0.00050540	0.001059454	0.001059454	0.01212129	0.01301295	0.02641417	0.02064417	0.01347927
PELTO OIL CO	38	0.84250000	0.0062872	0.00050540	0.001059454	0.001059454	0.01212129	0.01301295	0.02641417	0.02064417	0.01347927
PELTO OIL CO	39	0.84250000	0.0062872	0.00050540	0.001059454	0.001059454	0.01212129	0.01301295	0.02641417	0.02064417	0.01347927
PELTO OIL CO	40	0.84250000	0.0062872	0.00050540	0.001059454	0.001059454	0.01212129	0.01301295	0.02641417	0.02064417	0.01347927
PELTO OIL CO	41	0.84250000	0.0062872	0.00050540	0.001059454	0.001059454	0.01212129	0.01301295	0.02641417	0.02064417	0.01347927
PELTO OIL CO	42	0.84250000	0.0062872	0.00050540	0.001059454	0.001059454	0.01212129	0.01301295	0.02641417	0.02064417	0.01347927
PELTO OIL CO	43	0.84250000	0.0062872	0.00050540	0.001059454	0.001059454	0.01212129	0.01301295	0.02641417	0.02064417	0.01347927
PELTO OIL CO	44	0.84250000	0.0062872	0.00050540	0.001059454	0.001059454	0.01212129	0.01301295	0.02641417	0.02064417	0.01347927
PELTO OIL CO	45	0.84250000	0.0062872	0.00050540	0.001059454	0.001059454	0.01212129	0.01301295	0.02641417	0.02064417	0.01347927
PELTO OIL CO	46	0.84250000	0.0062872	0.00050540	0.001059454	0.001059454	0.01212129	0.01301295	0.02641417	0.02064417	0.01347927
PELTO OIL CO	47	0.84250000	0.0062872	0.00050540	0.001059454	0.001059454	0.01212129	0.01301295	0.02641417	0.02064417	0.01347927
PELTO OIL CO	48	0.84250000	0.0062872	0.00050540	0.001059454	0.00					

TWIN LAKES
WORKING INTEREST OWNERS PARAMETERS
PROPOSED TWIN LAKES UNIT

OWNER	TRACT #	TRACT WI FRACTION	ACRES FRACTION	OIL PROD 1/86-4/86 FRACTION	GAS REVENUE 1/86-4/86 FRACTION	OIL & GAS REVENUE 1/86-4/86 FRACTION	1 BOPD PER WELL CUT OFF		4 BOPD PER WELL CUT OFF	
							CUM OIL PROD 4/85-4/86 FRACTION	CUM OIL PROD 10/41-86 FRACTION	PRIMARY RESERVES AS OF 4/1/86 FRACTION	PRIMARY ULTIMATE FRACTION
PELTO OIL CO	1	0.51500000	0.00423536	0.000464008	0.00088477	0.000104133	0.00000000	0.00000000	0.00044649	0.00000000
TOTAL		0.716910859	0.686351743	0.69194460	0.0011483	0.000084113	0.00435735	0.00058737	0.69807313	0.69741276
STRECKER, G	9	0.07500000	0.00185040	0.0010431	0.00053219	0.000055405	0.00065263	0.00066240	0.00000000	0.00395224
STRECKER, G	4	0.07500000	0.00123540	0.00062177	0.00065452	0.000062177	0.00053938	0.00066230	0.00000000	0.00054556
STRECKER, G	35	0.06562500	0.00173470	0.00056364	0.0005261	0.00051261	0.00051899	0.00061402	0.00000000	0.00011778
STRECKER, G	33	0.07011250	0.00446259	0.0007856	0.0007856	0.000931049	0.000931049	0.00075210	0.000123812	0.00000000
STRECKER, G	39	0.07011250	0.00191934	0.00258923	0.00258923	0.01242691	0.01242691	0.00947432	0.01471723	0.01056979
STRECKER, G	29	0.07011250	0.00127215	0.00253475	0.00253475	0.00204448	0.00204448	0.00188029	0.00167658	0.00134544
STRECKER, G	28	0.02578130	0.00062335	0.00067528	0.00067528	0.00067198	0.00067198	0.000772574	0.00067198	0.00000000
STRECKER, G	27	0.06562500	0.004862729	0.00071570	0.00071570	0.0077587	0.0077587	0.00825138	0.00825138	0.00000000
STRECKER, G	26	0.07500000	0.0011480	0.000511480	0.000511480	0.00017345	0.00017345	0.00012327	0.00016638	0.00000000
STRECKER, G	24	0.07500000	0.0048554	0.0007128	0.0007128	0.00502685	0.00502685	0.005207780	0.005207780	0.00000000
STRECKER, G	23	0.07500000	0.00161680	0.00061680	0.00061680	0.00061680	0.00061680	0.00866250	0.00443192	0.00000000
STRECKER, G	22	0.07500000	0.00185040	0.0013488	0.0013488	0.00061752	0.00061752	0.00007297	0.001538	0.00000000
STRECKER, G	21	0.07500000	0.00011480	0.00062177	0.00062177	0.00013676	0.00013676	0.0018973	0.0018973	0.00000000
STRECKER, G	20	0.07500000	0.00061680	0.00061680	0.00061680	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000
STRECKER, G	19	0.07500000	0.00061680	0.00061680	0.00061680	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000
STRECKER, G	18A	0.07500000	0.00061680	0.00061680	0.00061680	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000
STRECKER, G	18B	0.07500000	0.00413537	0.00218116	0.00218116	0.00223501	0.00223501	0.00204088	0.00162289	0.00164215
STRECKER, G	16	0.07500000	0.00421580	0.00215880	0.00215880	0.00430447	0.00430447	0.0035677	0.00209980	0.00260449
STRECKER, G	15	0.07500000	0.00215880	0.00215880	0.00215880	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000
STRECKER, G	14	0.07500000	0.00061680	0.00061680	0.00061680	0.00036347	0.00036347	0.00017001	0.00028888	0.00000000
STRECKER, G	11	0.07500000	0.045852929	0.048616582	0.048616582	0.049222698	0.049222698	0.04982870	0.049222698	0.04944449
TOTAL										0.04944449
SUM										0.04979833
SUM										0.05389508
SUM										0.04979833
TOTAL										
TEENCO	28	0.12500000	0.03598400	0.00497810	0.02709407	0.02549938	0.02629309	0.01415356	0.01683690	0.01437671
TEENCO	15	0.12500000	0.04112000	0.00271480	0.00271480	0.00256335	0.00241618	0.00188743	0.0025955	0.01846570
TEENCO	26	0.12500000	0.009275199	0.014504609	0.014504609	0.01345013	0.01699959	0.01571691	0.0145449	0.0159515
TEENCO	32	0.12500000	0.015309721	0.01806221	0.01806221	0.01752873	0.01698570	0.01847304	0.0122460	0.0110356
TEENCO	32	0.12500000	0.00511070	0.00511070	0.00737554	0.00695670	0.00626149	0.00841720	0.0183725	0.00984806
TEENCO	34	0.12500000	0.00250600	0.00250600	0.00124671	0.00118433	0.00105549	0.00118553	0.0010503	0.00101975
TEENCO	35	0.12500000	0.06250000	0.06250000	0.01110414	0.01121697	0.00844240	0.006467742	0.00727349	0.01562328
TEENCO	29	0.06250000	0.06250000	0.06250000	0.0089783	0.00832950	0.0091352	0.009495357	0.0097928	0.00894532
TEENCO	39	0.06250000	0.04111983	0.004111983	0.0089783	0.00832950	0.0091352	0.009495357	0.0097928	0.00894532
TEENCO	33	0.06250000	0.0154260	0.00060501	0.00060501	0.00045535	0.00048799	0.00011542	0.0002013	0.0001328
TOTAL										
TRINIDAD PETROLEUM CORP	6	0.5000000	0.00411200	0.00093475	0.00182790	0.00052963	0.000772260	0.007701555	0.00000000	0.00698745
TRINIDAD PETROLEUM CORP	1	0.2089970	0.00122621	0.00028863	0.00032801	0.00037593	0.000292646	0.0012457	0.00000000	0.00345501
TRINIDAD PETROLEUM CORP	7	0.0789870	0.0012621	0.00028863	0.00032801	0.00037593	0.000292646	0.0012457	0.00000000	0.00447714
TRINIDAD PETROLEUM CORP	3	0.10494490	0.000686310	0.000686310	0.00067728	0.00066738	0.00066738	0.00011616	0.00000000	0.00000536
TOTAL										
TXO	27	0.21875000	0.00528905	0.00528905	0.0070168	0.01360341	0.01299516	0.01700013	0.01346471	0.01104240
TXO	28	0.18750000	0.00462560	0.00462560	0.00746715	0.01360341	0.01299516	0.017117487	0.01242149	0.01184331
TOTAL										
WEEKS, MARION	9	0.07500000	0.001185040	0.00110631	0.0013483	0.00098413	0.00435735	0.0058737	0.00000000	0.00357521
WEEKS, MARION	4	0.07500000	0.001213340	0.00120219	0.00045405	0.00061390	0.00195927	0.00024247	0.00000000	0.00177750
WEEKS, MARION	15	0.06562500	0.00119740	0.00054552	0.00061767	0.00055938	0.000625240	0.00044793	0.00000000	0.00056456
WEEKS, MARION	33	0.07031250	0.00113475	0.00051364	0.00051899	0.000501965	0.00052550	0.0001778	0.00000000	0.0001778
WEEKS, MARION	39	0.07031250	0.00442599	0.009731049	0.009731049	0.009731049	0.009731049	0.009731049	0.009731049	0.00847437
WEEKS, MARION	29	0.07031250	0.001242691	0.01242691	0.01242691	0.01242691	0.01242691	0.01242691	0.01242691	0.01634322
WEEKS, MARION	28	0.05154250	0.002055347	0.002055347	0.002055347	0.002055347	0.002055347	0.002055347	0.002055347	0.00183776

TABLE 7b

TWIN LAKES WORKING INTEREST OWNERS PARAMETERS PROPOSED TWIN LAKES UNIT

TABLE 7c

TWIN LAKES DIVISION OF INTEREST
PROPOSED TWIN LAKES UNIT

TRACT #	LEASE/WELLS	OWNER	TYPE	GROSS WI	NET INTEREST
1	CITGO STATE 1	POC TRINIDAD PETROLEUM CORP HARBERT ENERGY CORP, AGENT COMM. OF PUBLIC LANDS H LEE HARVARD (BORN BY TRINIDAD & HARBERT ONLY)	WI WI WI RI OR	0.51500000 0.20989870 0.27510130 0.12500000 0.01000000	0.45062500 0.17933350 0.23504150 0.12500000 0.01000000
2	CITGO STATE 2 & 6	POC COMM. OF PUBLIC LANDS CITIES SERVICE	WI RI OR	1.00000000 0.12500000 0.08203120	0.79296880 0.12500000 0.08203120
3	CITGO STATE 3	POC TRINIDAD PETROLEUM CORP HARBERT ENERGY CORP, AGENT COMM. OF PUBLIC LANDS CITIES SERVICE	WI WI WI RI OR	0.75750000 0.10494940 0.13755060 0.12500000 0.10000000	0.58706250 0.08133580 0.10660170 0.12500000 0.10000000
4	CITGO STATE 4,5,7	POC W G STROECKER MARION WEEKS B & R WINTHER COMM. OF PUBLIC LANDS CITIES SERVICE	WI WI WI WI RI OR	0.84250000 0.07500000 0.07500000 0.00750000 0.12500000 0.10000000	0.65293750 0.05812500 0.05812500 0.00581250 0.12500000 0.10000000
5	CITGO A STATE 1	POC COMM. OF PUBLIC LANDS CITIES SERVICE ROBERT L HAYNIE LEN MAYER GEORGE E CONLEY	WI RI OR OR OR OR	1.00000000 0.12500000 0.05203120 0.00500000 0.00500000 0.02000000	0.79294880 0.12500000 0.05203120 0.00500000 0.00500000 0.02000000
6	CITGO A STATE 2	POC TRINIDAD PETROLEUM CORP COMM. OF PUBLIC LANDS ROBERT L HAYNIE LEN MAYER GEORGE E CONLEY	WI WI RI OR OR OR	0.50000000 0.50000000 0.12500000 0.00500000 0.00500000 0.02000000	0.42250000 0.42250000 0.12500000 0.00500000 0.00500000 0.02000000
7	CITGO A STATE 3	POC TRINIDAD PETROLEUM CORP HARBERT ENERGY CORP, AGENT COMM. OF PUBLIC LANDS ROBERT L HAYNIE LEN MAYER GEORGE E CONLEY	WI WI WI RI OR OR OR	0.51500000 0.20989870 0.27510130 0.12500000 0.00500000 0.00500000 0.02000000	0.43517500 0.17736440 0.23246060 0.12500000 0.00500000 0.00500000 0.02000000
8	CITGO A STATE 5	POC HARBERT ENERGY CORP, AGENT COMM. OF PUBLIC LANDS ROBERT L HAYNIE LEN MAYER GEORGE E CONLEY H LEE HARVARD (BORN BY HARBERT ONLY)	WI WI RI OR OR OR OR	0.52500000 0.47500000 0.12500000 0.00500000 0.00500000 0.02000000 0.01000000 1.00000000	0.44362500 0.39137500 0.12500000 0.00500000 0.00500000 0.02000000 0.01000000 1.00000000
9	CITGO A STATE 6,7,8	POC W G STROECKER MARION WEEKS B & R WINTHER COMM. OF PUBLIC LANDS CITIES SERVICE ROBERT L HAYNIE LEN MAYER GEORGE E CONLEY	WI WI WI WI RI OR OR OR	0.84250000 0.07500000 0.07500000 0.00750000 0.12500000 0.07000000 0.00500000 0.00500000 0.02000000	0.65293750 0.05812500 0.05812500 0.00581250 0.12500000 0.07000000 0.00500000 0.00500000 0.02000000

TABLE 8a

TWIN LAKES DIVISION OF INTEREST
PROPOSED TWIN LAKES UNIT

TRACT #	LEASE/WELLS	OWNER	TYPE	GROSS WI	NET INTEREST
10	STATE CH 1 & 2	POC COMM. OF PUBLIC LANDS CITIES SERVICE ROBERT L HAYNIE LEN MAYER GEORGE E CONLEY	WI RI OR OR OR OR	1.00000000 0.12500000 0.05468750 0.00250000 0.00250000 0.01000000	0.80531250 0.12500000 0.05468750 0.00250000 0.00250000 0.01000000
				1.00000000	1.00000000
11	STATE CH 3	POC W G STROECKER MARION WEEKS B & R WINther COMM. OF PUBLIC LANDS CITIES SERVICE ROBERT L HAYNIE LEN MAYER GEORGE E CONLEY	WI WI WI WI RI OR OR OR OR	0.84250000 0.07500000 0.07500000 0.00750000 0.12500000 0.05468750 0.00250000 0.00250000 0.01000000	0.67847580 0.06039840 0.06039840 0.00603990 0.12500000 0.05468750 0.00250000 0.00250000 0.01000000
				1.00000000	1.00000000
12	O'BRIEN B 2	POC MARSHALL & WINSTON MOON CO. J T WYMAN TRUST P W PARKER TRUST FRANCISCA WINSTON EST TRUST F S WINSTON MARITAL TRUST CHARLES A KELLY MURRAY C MCKINNON TRUST EM NOMINEE PTSP CO FRATES SEELIGSON	WI RI RI RI RI RI RI RI RI NPRI	1.00000000 0.00585940 0.08203130 0.00292970 0.00292970 0.00585940 0.00292970 0.00146480 0.00146480 0.02343750 0.01171870	0.85937500 0.00585940 0.08203130 0.00292970 0.00292970 0.00585940 0.00292970 0.00146480 0.00146480 0.02343750 0.01171870
				1.00000000	1.00000000
13	O'BRIEN C #2,3,5,6,7	POC MARSHALL & WINSTON MOON CO. J T WYMAN TRUST P W PARKER TRUST FRANCISCA WINSTON EST TRUST F S WINSTON MARITAL TRUST CHARLES A KELLY MURRAY C MCKINNON TRUST EM NOMINEE PTSP CO BARBARA SWEENEY FRATES SEELIGSON	WI RI RI RI RI RI RI RI RI OR NPRI	1.00000000 0.00390630 0.08203120 0.00195310 0.00195310 0.00390630 0.00195310 0.00097650 0.00097660 0.01562500 0.02734380 0.01171880	0.84765620 0.00390630 0.08203120 0.00195310 0.00195310 0.00390630 0.00195310 0.00097650 0.00097660 0.01562500 0.02734380 0.01171880
				1.00000000	1.00000000
14	O'BRIEN E #9	POC W G STROECKER MARION WEEKS B & R WINther MARSHALL & WINSTON MOON CO. J T WYMAN TRUST P W PARKER TRUST F S WINSTON MARITAL TRUST CHARLES A KELLY MURRAY C MCKINNON TRUST EM NOMINEE PTSP CO FRANCISCA WINSTON EST TRUST FRATES SEELIGSON	WI WI WI WI RI RI RI RI RI RI RI NPRI	0.84250000 0.07500000 0.07500000 0.00750000 0.00390630 0.08203120 0.00195310 0.00195310 0.00195310 0.00097650 0.00097660 0.01562500 0.00390630 0.01171880	0.73718750 0.06562500 0.06562500 0.00456250 0.00390630 0.08203120 0.00195310 0.00195310 0.00195310 0.00097650 0.00097660 0.01562500 0.00390630 0.01171880
				1.00000000	1.00000000
15	O'BRIEN D #2 - #6	POC TENNECO W G STROECKER MARION WEEKS B & R WINther MARSHALL & WINSTON MOON CO. J T WYMAN TRUST P W PARKER TRUST FRANCISCA WINSTON EST TRUST F S WINSTON MARITAL TRUST	WI WI WI WI WI RI RI RI RI RI	0.73718750 0.12500000 0.06562500 0.06562500 0.00656250 0.00781250 0.12304680 0.00390630 0.00390630 0.00781250 0.00390630	0.59238280 0.12500000 0.05273440 0.05273440 0.00527340 0.00781250 0.12304680 0.00390630 0.00390630 0.00781250 0.00390630

TABLE 8b

TWIN LAKES DIVISION OF INTEREST
PROPOSED TWIN LAKES UNIT

TRACT #	LEASE/WELLS	OWNER	TYPE	GROSS WI	NET INTEREST
	CHARLES A KELLY	RI		0.00195310	
	MURRAY C MCKINNON TRUST	RI		0.00195310	
	FRATES SEELIGSON	NPRI		0.01757810	
				1.00000000	1.00000000
16	O'BRIEN E #1 - #8	POC	WI	0.84250000	0.73718750
	W G STROECKER	WI	0.07500000	0.06562500	
	MARION WEEKS	WI	0.07500000	0.06562500	
	B & R WINTHROP	WI	0.00750000	0.00636250	
	MARSHALL & WINSTON	RI		0.00390630	
	MOON CO.	RI		0.08203120	
	J T WYMAN TRUST	RI		0.00195310	
	P W PARKER TRUST	RI		0.00195310	
	F S WINSTON MARITAL TRUST	RI		0.00195310	
	CHARLES A KELLY	RI		0.00097650	
	MURRAY C MCKINNON TRUST	RI		0.00097660	
	EM NOMINEE PTSP CO	RI		0.01562500	
	FRANCISCA WINSTON EST TRUST	RI		0.00390630	
	FRATES SEELIGSON	NPRI		0.01171880	
				1.00000000	1.00000000
17	O'BRIEN FEE 25 #1-#4	HARLOW CORP	WI	0.07312500	0.06032810
	EDWARDS & LEACH OIL CO	WI	0.43312500	0.34092270	
	ADAMS & MCGAHEY	WI	0.04875000	0.04021870	
	JW ADAMS & JUNE ADAMS EST	WI	0.04875000	0.04021870	
	JW ADAMS	WI	0.02437500	0.02010940	
	NABOB PROD CO	WI	0.12187500	0.10054690	
	NRM OPERATING CO, LTD PTSP	WI	0.25000000	0.19406250	
	MOON CO	RI		0.08203120	
	EM NOMINEE PTSP CO	RI		0.02500000	
	MARSHALL & WINSTON	RI		0.00585940	
	FRANCISCA WINSTON EST TRUST	RI		0.00585940	
	F S WINSTON MARITAL TRUST	RI		0.00292970	
	P W PARKER TRUST	RI		0.00292970	
	J T WYMAN TRUST	RI		0.00292970	
	CHARLES A KELLY	RI		0.00146480	
	MURRAY C MCKINNON TRUST	RI		0.00146480	
	W V HARLOW, JR	OR		0.01312500	
	HARLOW CORP	OR		0.02437500	
	AVIVA LTD PTSP	OR		0.00796320	
	C H KIMBRO	OR		0.00750000	
	J E ABRAM	OR		0.00011090	
	SALLY FIELDMAN	OR		0.00221710	
	JACK W FLECK	OR		0.00055350	
	WM J HARBECK	OR		0.00027710	
	ROBERT T JACKSON	OR		0.00027710	
	JACKIE H JOHNSON	OR		0.00011090	
	JOHN G LEONDUKAS	OR		0.00044340	
	RALPH E LOWENBERG	OR		0.00027710	
	DAVID L PETERSON	OR		0.00044340	
	CHARLES I PETSCHEK	OR		0.00088680	
	LEE S SCHLESSMAN	OR		0.00027710	
	ROBERT REX SILVERSTONE	OR		0.00055420	
	H PETER STERN	OR		0.00033250	
	JOHN E WALSH, JR	OR		0.00044340	
	DONALD S WOODS	OR		0.00001850	
	TANIA C WHITMAN TRUST	OR		0.00055420	
	1029 PLUS ONE INVESTORS	OR		0.00027710	
	MILDRED MILLER	OR		0.00011090	
	DAVID E WYMAN, JR	OR		0.00027710	
	FRATES SEELIGSON	NPRI		0.01171880	
				1.00000000	1.00000000
18	O'BRIEN F #6	POC	WI	0.84250000	0.62660930
	W G STROECKER	WI	0.07500000	0.05578110	
	MARION WEEKS	WI	0.07500000	0.05578110	
	B & R WINTHROP	WI	0.00750000	0.00557810	
	MARSHALL & WINSTON	RI		0.00468760	
	MOON CO.	RI		0.09843750	
	J T WYMAN TRUST	RI		0.00234380	
	P W PARKER TRUST	RI		0.00234380	
	F S WINSTON MARITAL TRUST	RI		0.00234380	
	CHARLES A KELLY	RI		0.00117190	

TABLE 8c

TWIN LAKES DIVISION OF INTEREST
PROPOSED TWIN LAKES UNIT

TRACT #	LEASE/WELLS	OWNER	TYPE	GROSS WI	NET INTEREST
	MURRAY C MCKINNON TRUST	RI		0.00117190	
	FRANCISCA WINSTON EST TRUST	RI		0.00468760	
	FRATES SEELIGSON	NPRI		0.01406250	
	TENNECO (UV INDUSTRIES)	UNLEASED		0.12500000	
				1.00000000	1.00000000
18A	POC	WI	0.84250000	0.53709370	
	W G STROECKER	WI	0.07500000	0.04781250	
	MARION WEEKS	WI	0.07500000	0.04781250	
	B & R WINTHER	WI	0.00750000	0.00478130	
	MOON CO.	RI		0.09843750	
	FRATES SEELIGSON	NPRI		0.01406250	
	TENNECO (UV INDUSTRIES)	UNLEASED		0.12500000	
	FRANCISCA WINSTON EST TRUST	UNLEASED		0.03125000	
	F S WINSTON MARITAL TRUST	UNLEASED		0.01562500	
	CHARLES A KELLEY	UNLEASED		0.00781250	
	P W PARKER TRUST	UNLEASED		0.01562500	
	J T WYMAN TRUST	UNLEASED		0.01562500	
	MARSHALL & WINSTON	UNLEASED		0.03125000	
	MURRAY C MCKINNON TRUST	UNLEASED		0.00781250	
				1.00000000	1.00000000
19	O'BRIEN F #7	POC	WI	0.84250000	0.62660930
	W G STROECKER	WI	0.07500000	0.05578110	
	MARION WEEKS	WI	0.07500000	0.05578110	
	B & R WINTHER	WI	0.00750000	0.00557810	
	MARSHALL & WINSTON	RI		0.00468760	
	MOON CO.	RI		0.09843750	
	J T WYMAN TRUST	RI		0.00234380	
	P W PARKER TRUST	RI		0.00234380	
	F S WINSTON MARITAL TRUST	RI		0.00234380	
	CHARLES A KELLEY	RI		0.00117190	
	MURRAY C MCKINNON TRUST	RI		0.00117190	
	FRANCISCA WINSTON EST TRUST	RI		0.00468760	
	FRATES SEELIGSON	NPRI		0.01406250	
	TENNECO (UV INDUSTRIES)	UNLEASED		0.12500000	
				1.00000000	1.00000000
20	POC	WI	0.84250000	0.59896490	
	W G STROECKER	WI	0.07500000	0.05332030	
	MARION WEEKS	WI	0.07500000	0.05332030	
	B & R WINTHER	WI	0.00750000	0.00533200	
	MOON CO.	RI		0.12304690	
	TENNECO (UV INDUSTRIES)	RI		0.02343750	
	FRATES SEELIGSON	NPRI		0.01757810	
	FRANCISCA WINSTON EST TRUST	UNLEASED		0.03125000	
	F S WINSTON MARITAL TRUST	UNLEASED		0.01562500	
	CHARLES A KELLEY	UNLEASED		0.00781250	
	P W PARKER TRUST	UNLEASED		0.01562500	
	J T WYMAN TRUST	UNLEASED		0.01562500	
	MARSHALL & WINSTON	UNLEASED		0.03125000	
	MURRAY C MCKINNON TRUST	UNLEASED		0.00781250	
				1.00000000	1.00000000
21	O'BRIEN F #5	POC	WI	0.84250000	0.71217570
	W G STROECKER	WI	0.07500000	0.06339830	
	MARION WEEKS	WI	0.07500000	0.06339830	
	B & R WINTHER	WI	0.00750000	0.00633980	
	MARSHALL & WINSTON	RI		0.00468760	
	MOON CO.	RI		0.09843750	
	J T WYMAN TRUST	RI		0.00234380	
	P W PARKER TRUST	RI		0.00234380	
	F S WINSTON MARITAL TRUST	RI		0.00234380	
	CHARLES A KELLEY	RI		0.00117190	
	MURRAY C MCKINNON TRUST	RI		0.00117190	
	FRANCISCA WINSTON EST TRUST	RI		0.00468760	
	TENNECO (UV INDUSTRIES)	RI		0.02343750	
	FRATES SEELIGSON	NPRI		0.01406250	
				1.00000000	1.00000000
22	O'BRIEN F #1 - 4	POC	WI	0.84250000	0.71217570
	W G STROECKER	WI	0.07500000	0.06339830	
	MARION WEEKS	WI	0.07500000	0.06339830	

TABLE 8d

TWIN LAKES DIVISION OF INTEREST
PROPOSED TWIN LAKES UNIT

TRACT #	LEASE/WELLS	OWNER	TYPE	GROSS WI	NET INTEREST
	B & R WINther	WI	0.00750000	0.00633980	
	MARSHALL & WINSTON	RI		0.00468760	
	MOON CO.	RI		0.09843750	
	J T WYMAN TRUST	RI		0.00234380	
	P W PARKER TRUST	RI		0.00234380	
	F S WINSTON MARITAL TRUST	RI		0.00234380	
	CHARLES A KELLY	RI		0.00117190	
	MURRAY C MCKINNON TRUST	RI		0.00117190	
	FRANCISCA WINSTON EST TRUST	RI		0.00468760	
	EN NOMINEE PTSP CO	RI		0.02343750	
	FRATES SEELIGSON	NPRI		0.01406250	
				1.00000000	1.00000000
23	O'BRIEN F #9	POC	WI	0.84250000	0.67794930
	W G STROECKER	WI	0.07500000	0.06035150	
	MARION WEEKS	WI	0.07500000	0.06035150	
	B & R WINther	WI	0.00750000	0.00603520	
	MOON CO	RI		0.12304690	
	FRANCISCA WINSTON EST TRUST	RI		0.00585940	
	F S WINSTON MARITAL TRUST	RI		0.00292970	
	CHARLES A KELLEY	RI		0.00146480	
	P W PARKER TRUST	RI		0.00292970	
	J T WYMAN TRUST	RI		0.00292970	
	MARSHALL & WINSTON	RI		0.00585940	
	MURRAY C MCKINNON TRUST	RI		0.00146480	
	TENNECO	RI		0.03125000	
	FRATES SEELIGSON	NPRI		0.01757810	
				1.00000000	1.00000000
24	O'BRIEN I #1 - 8	POC	WI	0.84250000	0.68453120
	W G STROECKER	WI	0.07500000	0.06093750	
	MARION WEEKS	WI	0.07500000	0.06093750	
	B & R WINther	WI	0.00750000	0.00609380	
	MARSHALL & WINSTON	RI		0.00585940	
	TENNECO	RI		0.02343750	
	MOON CO	RI		0.12304690	
	J T WYMAN TRUST	RI		0.00292970	
	P W PARKER TRUST	RI		0.00292970	
	FRANCISCA WINSTON EST TRUST	RI		0.00585940	
	F S WINSTON MARITAL TRUST	RI		0.00292970	
	CHARLES A KELLY	RI		0.00146480	
	MURRAY C MCKINNON TRUST	RI		0.00146480	
	FRATES SEELIGSON	NPRI		0.01757810	
				1.00000000	1.00000000
25	O'BRIEN J 1	POC	WI	0.84250000	0.68453120
	W G STROECKER	WI	0.07500000	0.06093750	
	MARION WEEKS	WI	0.07500000	0.06093750	
	B & R WINther	WI	0.00750000	0.00609380	
	MARSHALL & WINSTON	RI		0.00585940	
	TENNECO	RI		0.02343750	
	MOON CO	RI		0.12304690	
	J T WYMAN TRUST	RI		0.00292970	
	P W PARKER TRUST	RI		0.00292970	
	F S WINSTON MARITAL TRUST	RI		0.00292970	
	CHARLES A KELLY	RI		0.00146480	
	MURRAY C MCKINNON TRUST	RI		0.00146480	
	FRANCISCA WINSTON EST TRUST	RI		0.00585940	
	FRATES SEELIGSON	NPRI		0.01757810	
				1.00000000	1.00000000
26	O'BRIEN J 2-8	POC	WI	0.73718750	0.59896490
	TENNECO	WI	0.12500000	0.12500000	
	W G STROECKER	WI	0.06562500	0.05332030	
	MARION WEEKS	WI	0.06562500	0.05332030	
	B & R WINther	WI	0.00656250	0.00533200	
	MARSHALL & WINSTON	RI		0.00585940	
	MOON CO	RI		0.12304690	
	J T WYMAN TRUST	RI		0.00292970	
	P W PARKER TRUST	RI		0.00292970	
	FRANCISCA WINSTON EST TRUST	RI		0.00585940	
	F S WINSTON MARITAL TRUST	RI		0.00292970	
	CHARLES A KELLY	RI		0.00146480	

TABLE 8e

TWIN LAKES DIVISION OF INTEREST
PROPOSED TWIN LAKES UNIT

TABLE 8f

TWIN LAKES DIVISION OF INTEREST
PROPOSED TWIN LAKES UNIT

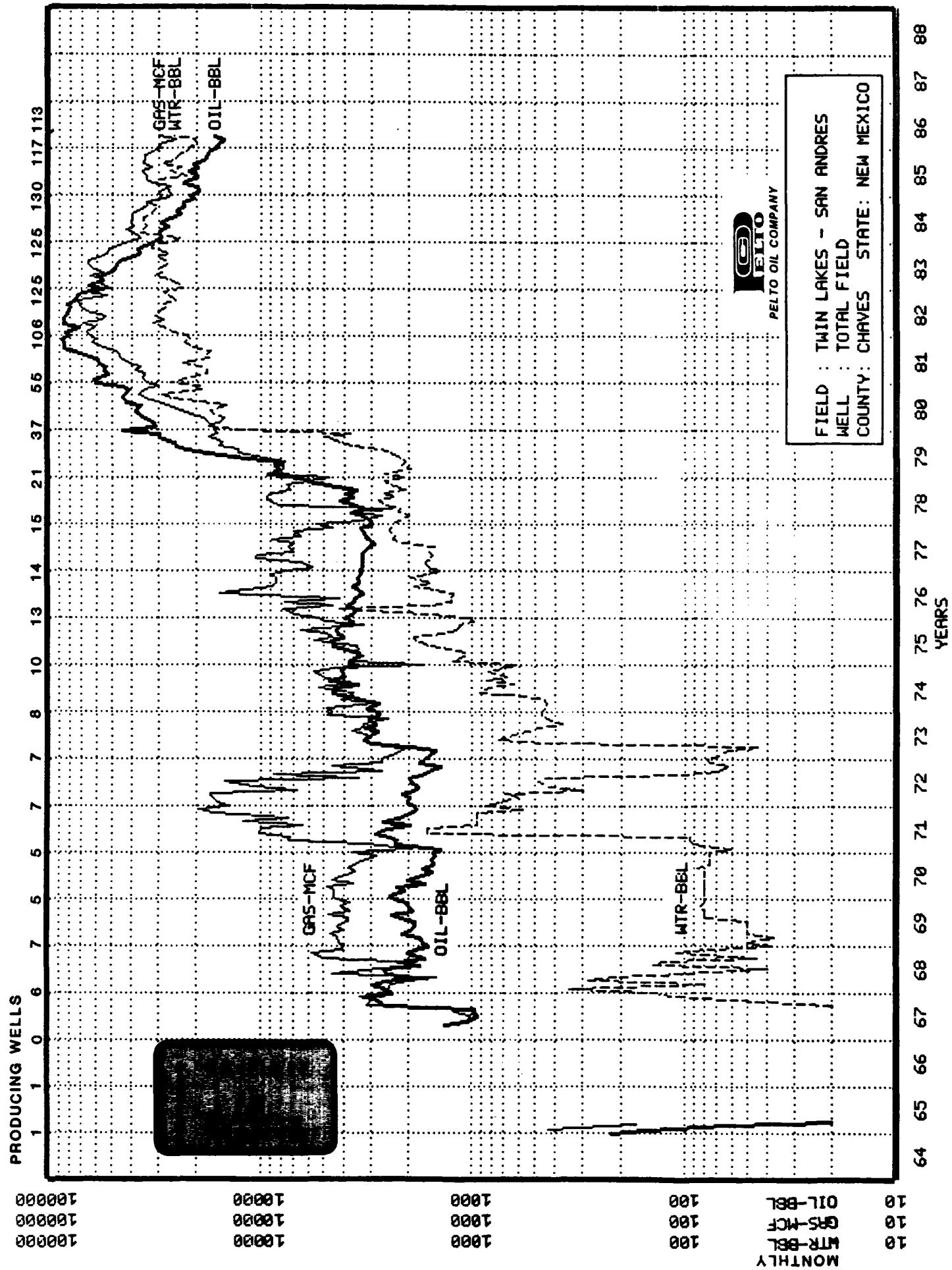
TRACT #	LEASE/WELLS	OWNER	TYPE	GROSS WI	NET INTEREST
	DIANNE E DANIELS	NPRI		0.00138890	
	JUNE A D GROTHE	NPRI		0.00138890	
	CHARLES W DANIELS	NPRI		0.00138890	
	JOHN D BRISCOE	NPRI		0.02812500	
	NANCY E CARLOCK	NPRI		0.00117190	
	VICTOR E CARLOCK	NPRI		0.00117190	
	FRATES SEELIGSON	NPRI		0.01435550	
				1.00000000	1.00000000
30	O'BRIEN FF #1 - #6	POC	WI	0.78984375	0.63845700
	TENNECO	WI	0.06250000	0.06250000	
	W G STROECKER	WI	0.07031250	0.05683590	
	MARION WEEKS	WI	0.07031250	0.05683590	
	B & R WINTHER	WI	0.00703125	0.00568360	
	MARSHALL & WINSTON	RI		0.00390630	
	MOON CO.	RI		0.10048840	
	J T WYMAN TRUST	RI		0.00195310	
	P W PARKER TRUST	RI		0.00195310	
	FRANCISCA WINSTON EST TRUST	RI		0.00390630	
	F S WINSTON MARITAL TRUST	RI		0.00195310	
	CHARLES A KELLY	RI		0.00097660	
	MURRAY C MCKINNON TRUST	RI		0.00097660	
	BEATRICE P B STONE	NPRI		0.00520830	
	GROVER S STONE, JR	NPRI		0.00138890	
	STEVEN L STONE	NPRI		0.00138890	
	SANDRA J STONE	NPRI		0.00138890	
	MARGARET E B DANIELS	NPRI		0.00520830	
	DIANNE E DANIELS	NPRI		0.00138890	
	JUNE A D GROTHE	NPRI		0.00138890	
	CHARLES W DANIELS	NPRI		0.00138890	
	FRATES SEELIGSON	NPRI		0.01435550	
	JOHN D BRISCOE	NPRI		0.02812500	
	NANCY E CARLOCK	NPRI		0.00117180	
	VICTOR E CARLOCK	NPRI		0.00117180	
				1.00000000	1.00000000
31	MOONSHINE 7 #1	POC	WI	0.50000000	0.38609380
	PETRUS	WI	0.25000000	0.19468750	
	SUN	WI	0.25000000	0.19468750	
	MOON CO	RI		0.12304680	
	FRANCISCA WINSTON EST TRUST	RI		0.00781250	
	TENNECO	RI		0.02988750	
	MURRAY C MCKINNON TRUST	RI		0.00195310	
	MARSHALL & WINSTON	RI		0.00781250	
	F S WINSTON MARITAL TRUST	RI		0.00390630	
	CHARLES A KELLY	RI		0.00195310	
	P W PARKER TRUST	RI		0.00390630	
	J T WYMAN TRUST	RI		0.00390630	
	DAVID I MILLER	OR		0.00750000	
	WILLIAM O DEWITT	OR		0.00093750	
	J T HOWARD	OR		0.00260410	
	DONALD R WATTS	OR		0.00520830	
	TENNECO	OR (PP)		0.00156250	
	POC	OR		0.00515640	
	FRATES SEELIGSON	NPRI		0.01757800	
				1.00000000	1.00000000
32	MOONSHINE 7 #2-14	POC	WI	0.50000000	0.38671870
	TENNECO	WI	0.12500000	0.08750000	
	PETRUS	WI	0.18750000	0.14812500	
	SUN	WI	0.18750000	0.14812500	
	MOON CO	RI		0.12304690	
	FRANCISCA WINSTON EST TRUST	RI		0.00781250	
	F S WINSTON MARITAL TRUST	RI		0.00390630	
	CHARLES A KELLY	RI		0.00195310	
	P W PARKER TRUST	RI		0.00390630	
	J T WYMAN TRUST	RI		0.00390630	
	MARSHALL & WINSTON	RI		0.00781250	
	MURRAY C MCKINNON TRUST	RI		0.00195310	
	TENNECO	RI		0.03750000	
	DAVID I MILLER	OR		0.00750000	
	WILLIAM O DEWITT	OR		0.00093750	
	J T HOWARD	OR		0.00260420	

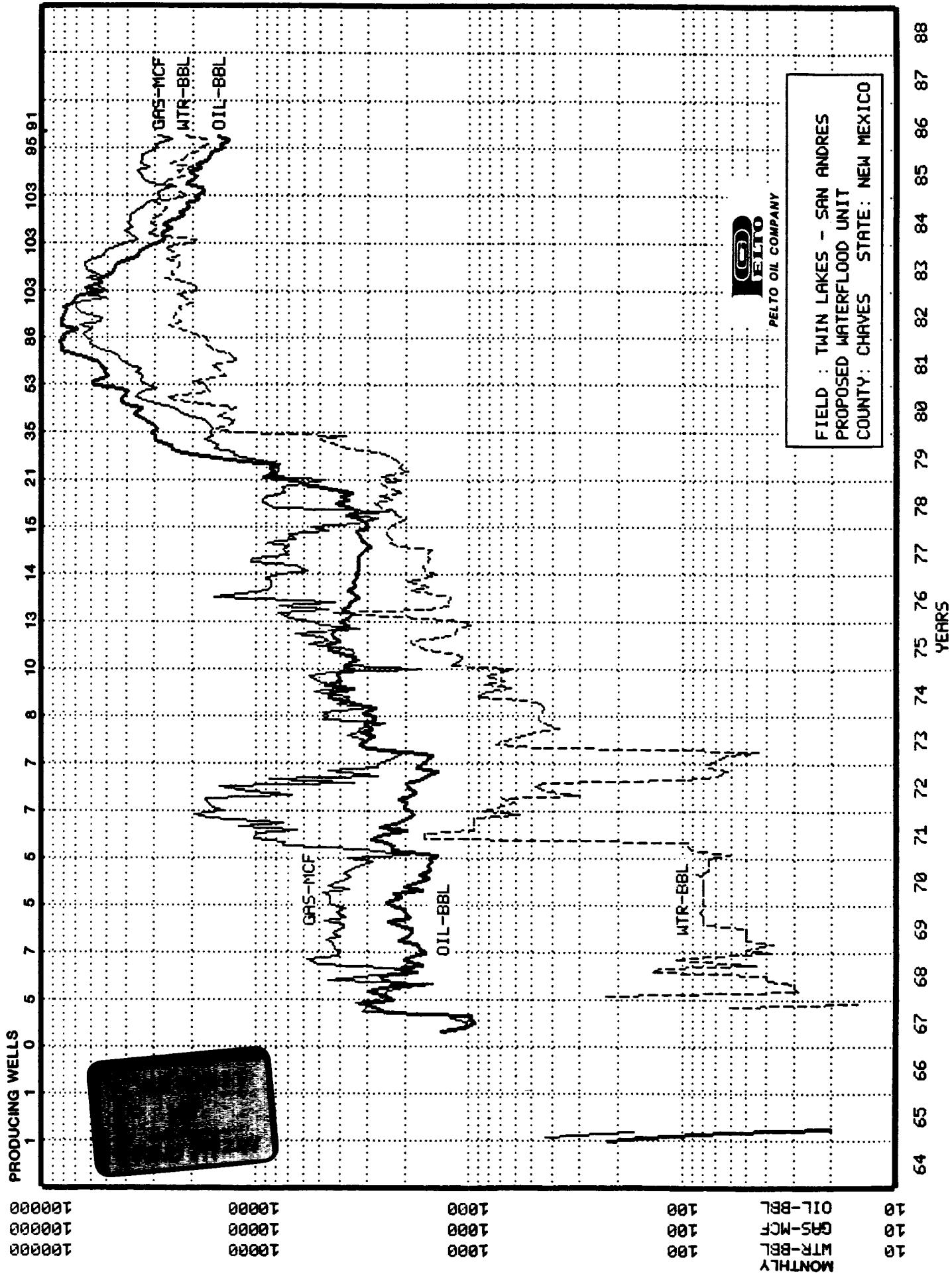
TABLE 8g

TWIN LAKES DIVISION OF INTEREST
PROPOSED TWIN LAKES UNIT

TRACT #	LEASE/WELLS	OWNER	TYPE	GROSS WI	NET INTEREST
	DONALD R WATTS		OR		0.00520830
	POC		OR		0.00390620
	FRATES SEELIGSON		NPRI		0.01757810
				1.00000000	1.00000000
33	O'BRIEN GG #1 - #3	POC	WI	0.78984375	0.63845700
	TENNECO		WI	0.06250000	0.06250000
	W G STROECKER		WI	0.07031250	0.05683590
	MARION WEEKS		WI	0.07031250	0.05683590
	B & R WINTHER		WI	0.00703125	0.00568360
	MARSHALL & WINSTON		RI		0.00390630
	MOON CO		RI		0.10048840
	J T WYMAN TRUST		RI		0.00195310
	P W PARKER TRUST		RI		0.00195310
	FRANCISCA WINSTON EST TRUST		RI		0.00390630
	MURRAY C MCKINNON TRUST		RI		0.00097660
	F S WINSTON MARITAL TRUST		RI		0.00195310
	CHARLES A KELLEY		RI		0.00097660
	BEATRICE P B STONE		NPRI		0.00520830
	GROVER S STONE, JR		NPRI		0.00138890
	STEVEN L STONE		NPRI		0.00138890
	SANDRA J STONE		NPRI		0.00138890
	MARGARET E B DANIELS		NPRI		0.00520830
	DIANNE E DANIELS		NPRI		0.00138890
	JUNE A D GROTHE		NPRI		0.00138890
	CHARLES W DANIELS		NPRI		0.00138890
	JOHN D BRISCOE		NPRI		0.02812500
	NANCY E CARLOCK		NPRI		0.00117180
	VICTOR E CARLOCK		NPRI		0.00117180
	FRATES SEELIGSON		NPRI		0.01435550
				1.00000000	1.00000000
34	MOONSHINE 1B #1-5	POC	WI	0.50000000	0.38671870
	PETRUS		WI	0.18750000	0.14812510
	SUN		WI	0.18750000	0.14812500
	TENNECO		WI	0.12500000	0.12500000
	MOON CO		RI		0.12304690
	MURRAY C MCKINNON TRUST		RI		0.00195310
	FRANCISCA WINSTON EST TRUST		RI		0.00781250
	F S WINSTON MARITAL TRUST		RI		0.00390620
	MARSHALL & WINSTON		RI		0.00781250
	CHARLES A KELLEY		RI		0.00195310
	P W PARKER TRUST		RI		0.00390630
	J T WYMAN TRUST		RI		0.00390630
	DAVID I MILLER		OR		0.00750000
	WILLIAM O DEWITT		OR		0.00093750
	J T HOWARD		OR		0.00260420
	DONALD R WATTS		OR		0.00520830
	POC		OR		0.00390630
	FRATES SEELIGSON		NPRI		0.01757800
				1.00000000	1.00000000
35	O'BRIEN N #1 & #2Y	POC	WI	0.73718750	0.59649650
	TENNECO		WI	0.12500000	0.12500000
	W G STROECKER		WI	0.06562500	0.05310060
	MARION WEEKS		WI	0.06562500	0.05310060
	B & R WINTHER		WI	0.00656250	0.00531010
	MARSHALL & WINSTON		RI		0.00781260
	MOON CO		RI		0.12304680
	J T WYMAN TRUST		RI		0.00292970
	P W PARKER TRUST		RI		0.00292970
	FRANCISCA WINSTON EST TRUST		RI		0.00585940
	F S WINSTON MARITAL TRUST		RI		0.00292970
	CHARLES A KELLEY		RI		0.00195310
	MURRAY C MCKINNON TRUST		RI		0.00195310
	FRATES SEELIGSON		NPRI		0.01757810
				1.00000000	1.00000000

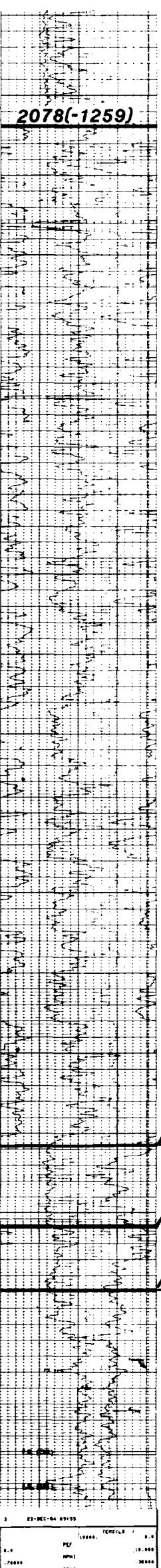
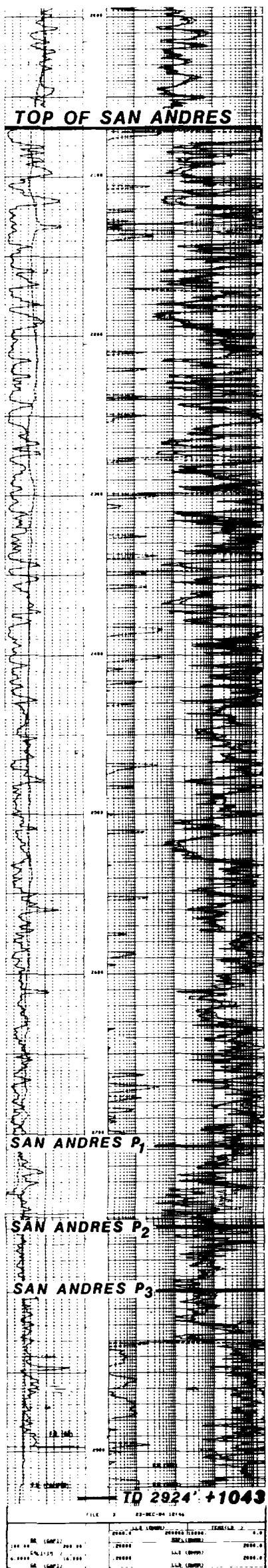
TABLE 8h





DUAL LATEROLOG
MICRO-SFL

COMPENSATED
NEUTRON
LITHO DENSITY



PROPOSED
UNITIZED
INTERVAL

Permanent Datum:	G.L.	Elev.: 3956	Elev.: K.B. 3967
Log Measured From:	K.B. 11	Ft. Above Perm. Datum	D.F. 3956
Drilling Measured From:	K.B.		G.L.
Date	12-23-84		
Run No.	ONE		
Depth-Driller	2925		
Depth-Logger (Schl.)	2924		
Bm. Log Interval	2922		
Top Log Interval	153		
Casing-Driller	8 5/8@ 154	@	@
Casing-Logger	153		
Bit Size	7 7/8		
Type Fluid in Hole	SALT GEL STARCH		
Dens. Visc.	10.2 37		
pH Fluid Loss	8 5.5 ml	ml	ml
Source of Sample	PIT		
Km @ Meas. Temp.	.058 @ 78 °F	@ °F	@ °F
Rmf @ Meas. Temp.	.048 @ 77 °F	@ °F	@ °F
Kmc @ Meas. Temp.	- @ °F	@ °F	@ °F
Source: Rmf Km	M		
Rm @ BHT	.049 @ 93 °F	@ °F	@ °F
Circulation Stopped	0430		
Logger on Bottom	1300		
Max. Rec. Temp.	93 °F	°F	°F
Equip. Location	8215 FSWL		
Recorded By	GREER		
Witnessed By	BONE		

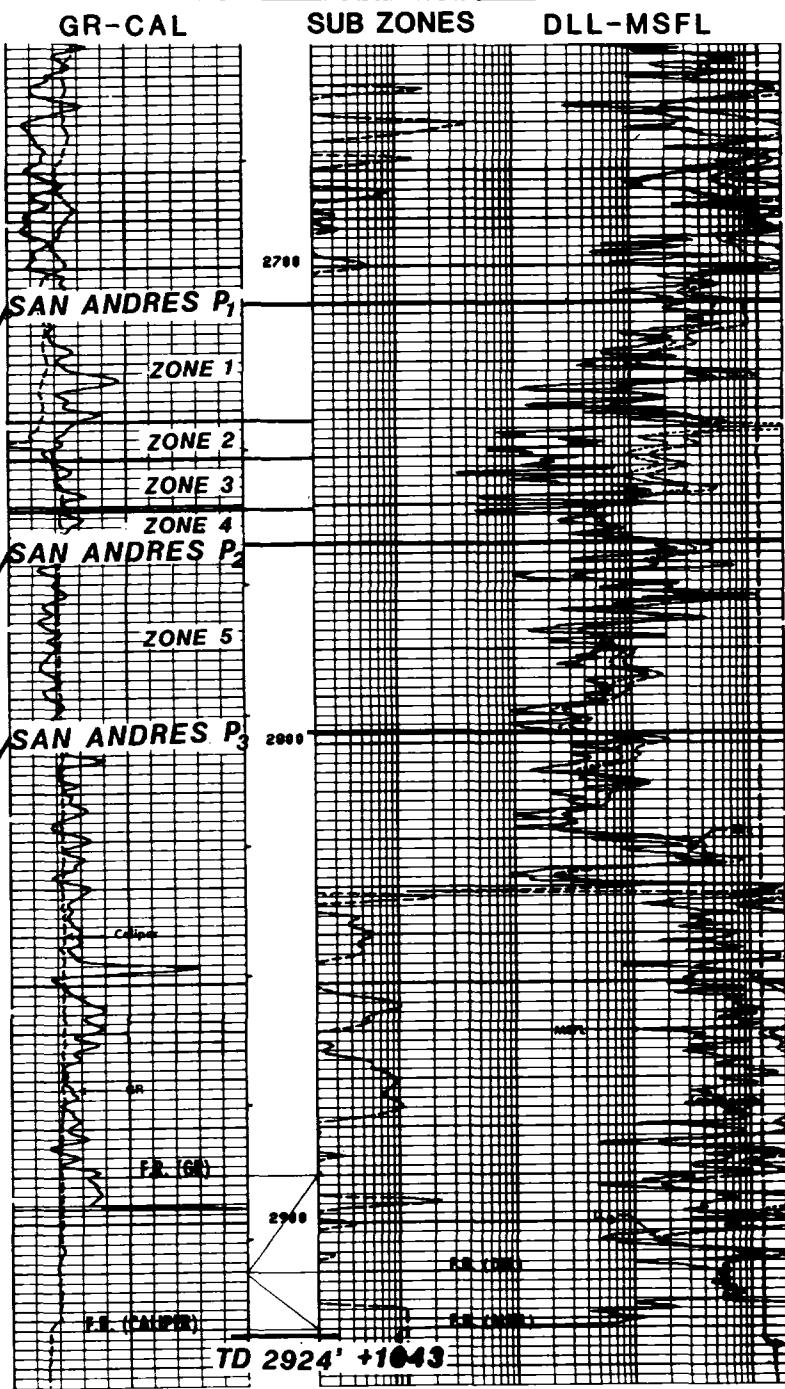


EXHIBIT
15
921049211

PELTO-O'BRIEN L-16
Sec. 6 T-9-S R-29-E
2310' FNL & 1675 FEL
KB. Elevation: 3967'
12/23/84

Schlumberger

SIMULTANEOUS
COMPENSATED NEUTRON-
LITHO DENSITY

COUNTY	CHAVES, N.M.				
	TWIN LAKES				
FIELD	O'BRIEN "L" #16				
	PELTO OIL COMPANY				
LOCATION	PELTO OIL COMPANY				
	WELL				
COMPANY	PELTO OIL COMPANY				
WELL		O'BRIEN "L" #16			
FIELD		TWIN LAKES			
COUNTY		CHAVES	STATE NEW MEXICO		
LOCATION		2310' FNL 1675' FEL			
API SERIAL NO.		SEC. 6	TWP. 9-S RANGE 29-E		
Other Services:		DLL/MSFL BHC			
Permanent Datum: G.L.		Elev.: 3956			
Log Measured From K.B. 11		Ft. Above Perm. Datum			
Drilling Measured From K.B.					
Elev.: K.B. 3967					
D.F. 3956					
G.L. 3956					
Date 12-23-84					
Run No. ONE					
Depth-Driller 2925					
Depth-Logger 2925					
Btm. Log Interval 2923					
Top Log Interval SURF					
Casing-Driller 8 5/8@ 154		@	@		
Casing-Logger 153					
Bit Size 7 7/8					
Type Fluid in Hole SALT GEL STARCH					
Dens.	Visc.	10.2	37		
pH	Fluid Loss	8	5.5 ml	ml	ml
Source of Sample PIT					
Rm @ Meas. Temp.	.058 @ 78 °F	@	°F	@	°F
Rmf @ Meas. Temp.	.048 @ 77 °F	@	°F	@	°F
Rmc @ Meas. Temp.	- @ °F	@	°F	@	°F
Source: Rmf Rmc	M				
Rm @ BHT	.049 @ 93 °F	@	°F	@	°F
TIME	Circulation Stopped 0430				
	Logger on Bottom 0930				
	Max. Rec. Temp. 93 °F		°F	°F	°F
Equip.	Location 8215 RSWL				
Recorded By	GREER				
Witnessed By	BONE				

 The well name, location and borehole reference data were furnished by the customer.
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Schlumberger

SIMULTANEOUS
DUAL LATEROLOG
MICRO-SFL

COUNTY	CHAVES, N.M.	PELTO OIL COMPANY	COMPANY PELTO OIL COMPANY			<div style="border: 1px solid black; padding: 5px; width: 100%;"> EXHIBIT <div style="border: 1px solid black; padding: 2px; margin-top: 2px;">16</div> <div style="border: 1px solid black; padding: 2px; margin-top: 2px;">921049211</div> </div>	
	TWIN LAKES		WELL	O'BRIEN "L" #16			
	FIELD		FIELD	TWIN LAKES			
	LOCATION		O'BRIEN "L" #16	COUNTY	CHAVES		STATE
WELL		LOCATION	2310' FNL 1675' FEL		Other Services:		
		API SERIAL NO.	SEC	TWP	RANGE	CNL/LDT BMC	
			6	9-S	29-E		
Permanent Datum: G.L.			Elev.: 3956			Elev.: K.B. 3967	
Log Measured From K.B. 11			Ft. Above Perm. Datum			D.F. _____ G.L. 3956	
Drilling Measured From K.B.							
Date	12-23-84						
Run No.	ONE						
Depth-Driller	2925						
Depth-Logger (Schl.)	2924						
Btm. Log Interval	2922						
Top Log Interval	153						
Casing-Driller	8 5/8@ 154		@		@		
Casing-Logger	153						
Bit Size	7 7/8						
Type Fluid in Hole	SALT GEL STARCH						
Dens.	Visc.	10.2	37				
pH	Fluid Loss	8	5.5 ml	ml	ml	ml	
Source of Sample PIT							
Rm @ Meas. Temp.	.058 @ 78 °F		@	°F	@	°F	
Rmf @ Meas. Temp.	.048 @ 77 °F		@	°F	@	°F	
Rmc @ Meas. Temp.	- @ °F		@	°F	@	°F	
Source: Rmf	Rmc	M					
Rm @ BHT	.049 @ 93 °F		@	°F	@	°F	
TIME	Circulation Stopped 0430						
	Logger on Bottom 1300						
Max. Rec. Temp. 93 °F							
Equip.	Location	8215 R.W.	+	I			
Recorded By GREER							
Witnessed By BONE							

The well name location and borehole information do not necessarily agree with the data on the front of this card.

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