



## **CAUTION**

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*Archives and Records Staff*

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UNION PACIFIC RESOURCES COMPANY

# 2676

9.20 UNIT ACRES  
- 0 - NON-UNIT AC.

STATE LEASE

MF097584

CONTROL	BASEFILE	COUNTY
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01-101197	-	WASHINGTON /239

SURVEY : NEW YEARS CREEK  
BLOCK :  
TOWNSHIP :  
SECTION/TRACT: 1  
PART :  
ACRES : ~~5.00~~ 9.20 BASED ON ~~RE~~SURVEY  
DEPTH LIMITS : NO

Rentals: *M.T.*

Lease  
Admin: *KSA*

Mineral  
Maps: *[Signature]*

LESSEE : UNION PACIFIC RESOURCES COMPAN  
LEASE DATE : Oct 01 1996  
PRIMARY TERM : 3 yrs  
BONUS (\$) : 500.00  
RENTAL (\$) : 5.00  
ROYALTY : 0.25000000  
VAR ROYALTY :

Duplicate

CONTENTS OF FILE NO. MF 097584

1. Bid Form 10/1/96

2. Lease 10/1/96

3. Letter 10/1/96

4. <sup>pooling committee rpt - + pooling agreement</sup>  
~~Document Missing~~ 3-16-98

5. Completion Reports. 1/12/98

6. Certified Lease 1/9/98

Scanned sm 11/19/15

M-97584

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BID E-0334

OCTOBER 1, 1996  
MINERAL LEASE BID APPLICATION  
Texas General Land Office ED - CA-040(8-93)

APPLICANT AGREEMENT

I agree, if awarded a lease on the referenced tract, to comply with all terms and conditions of said lease and with all applicable laws that so govern said lease, as those laws may be amended.

APPLICANT IDENTIFICATION TO APPEAR ON LEASE (type/print)

Name Union Pacific Resources Company  
Address 801 Cherry Street  
City Fort Worth State Texas Zip 76102-6852  
(Include +4 Code)  
Telephone ( 817) 877-6000 Attn: Mr. Greg Smith

AREA DESCRIPTION

County(ies) Washington Survey/Area James Walker A-106  
(If Applicable)  
Boundary line J. Cole A-3  
P & A Hope A-62 &

Block/Tsp. \_\_\_\_\_ Section/Tract 1 Acres 5.00  
(If Applicable) Tract 1 is bound on the Northwest by the centerline of Washington County Road 65 crossing said creek and is bound on the Southeast by the centerline of Washington County Road 81 crossing said creek

BID SUBMISSION

(A) Cash Bonus Enclosed (\$) 500.00 (type/print amount below)  
Five Hundred and 00/100 37005580  
(B) Sales Fee Attached (\$) 7.50 (type/print amount below)  
Seven dollars and 50/100  
This Sales Fee is 1 - 1/2% of the cash bonus as provided in Section 32.110 of the Natural Resources Code as amended.

MGL. NO.

69

APPLICANT (same as above)

Union Pacific Resources Company

BONUS AMOUNT ONLY (A)


(Do Not include sales fee)

(\$ 500.00)

APPLICANT TAX I.D. #



SIGNATURE OF AGENT (type/print below)

  
Jim Burgin

97584 ①

BID FORM

~~OCT 01 1996~~

OCT 01 1996

37002220

37002220

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# The State of Texas



Austin, Texas

**OIL AND GAS LEASE  
NO. M-97584**

WHEREAS, pursuant to the Texas Natural Resources Code Chapters 32, 33, 51, and Chapter 52, Subchapters A-D and H, (said Code being hereinafter referred to as N.R.C.), and subject to all rules and regulations promulgated by the Commissioner of the General Land Office and/or the School Land Board pursuant thereto, and all other applicable statutes and amendments to said N.R.C., the following area, to-wit:

**TRACT 1, NEW YEAR CREEK, WASHINGTON COUNTY, TEXAS, CONTAINING APPROXIMATELY 5 ACRES, IS BOUND ON THE NORTHWEST BY THE CENTERLINE OF WASHINGTON COUNTY ROAD 65 CROSSING SAID CREEK AND IS BOUND ON THE SOUTHEAST BY THE CENTERLINE OF WASHINGTON COUNTY ROAD 81 CROSSING SAID CREEK,**

was, after being duly advertised, offered for lease on the 1st day of October, 1996, at 10:00 o'clock a.m., by the Commissioner of the General Land Office of the State of Texas and the School Land Board of the State of Texas, for the sole and only purpose of prospecting and drilling for, and producing oil and/or gas that may be found and produced from the above described area; and

WHEREAS, after all bids and remittances which were received up to said time have been duly considered by the Commissioner of the General Land Office and the School Land Board at a regular meeting thereof in the General Land Office, on the 1st day of October, 1996, hereinafter the "effective date" and it was found and determined that **Union Pacific Resources Company** whose address is **801 Cherry Street, Fort Worth, TX 76102-6852** had offered the highest and best bid for a lease of the area above described and is, therefore, entitled to receive a lease thereon:

NOW, THEREFORE, I, Garry Mauro, Commissioner of the General Land Office of the State of Texas, hereinafter sometimes referred to as "Lessor," whose address is Austin, Texas, by virtue of the authority vested in me and in consideration of the payment by the hereinafter designated Lessee, the sum of **Five Hundred and 00/100 Dollars (\$500.00)**, receipt of which is hereby acknowledged and of the royalties, covenants, stipulations and conditions contained and hereby agreed to be paid, observed and performed by Lessee, do hereby demise, grant, lease and let unto the above mentioned bidder the exclusive right to prospect for, produce and take oil and/or gas from the aforesaid area upon the following terms and conditions, to-wit:

**1. RESERVATION:** There is hereby excepted and reserved to Lessor the full use of the property covered hereby and all rights with respect to the surface and subsurface thereof for any and all purposes except those granted and to the extent herein granted to Lessee, together with the rights of ingress and egress and use of said lands by Lessor and its mineral lessees, for purposes of exploring for and producing the minerals which are not covered, or which may not be covered in the future, under the terms of this lease, but which may be located within the surface boundaries of the leased area. All of the rights in and to the leased premises retained by Lessor and all of the rights in and to the leased premises granted to Lessee herein shall be exercised in such a manner that neither shall unduly interfere with the operations of the other.

**2. TERM:** Subject to the other provisions hereof, this lease shall be for a term of **three (3) years** from the effective date hereof (herein called "primary term") and as long thereafter as oil or gas is produced in paying quantities from said area.

**3. DELAY RENTALS:** If no well be commenced on the land hereby leased on or before the anniversary date of this lease, this lease shall terminate as to both parties unless the Lessee on or before said date shall pay or tender to the Commissioner of the General Land Office of the State of Texas at Austin, Texas, the sum of **Five Dollars (\$5.00)**, per acre, which shall operate as rental and cover the privilege of deferring the commencement of a well for twelve (12) months from said date. In like manner and upon like payments or tenders the commencement of a well may be further deferred for like periods of the same number of months successively during the primary term hereof.

**4. PRODUCTION ROYALTIES:** Subject to the provisions for royalty reductions set out in subparagraph (E) of this paragraph 4, upon production of oil and/or gas, the Lessee agrees to pay or cause to be paid to the Commissioner of the General Land Office in Austin, Texas, for the use and benefit of the State of Texas, during the term hereof:

**(A) OIL:** As a royalty on oil, which is defined as including all hydrocarbons produced in a liquid form at the mouth of the well and also all condensate, distillate, and other liquid hydrocarbons recovered from oil or gas run through a separator or other equipment, as hereinafter provided,  $\frac{1}{4}$  part of the gross production or the market value thereof, at the option of the Lessor, such value to be determined by 1) the highest posted price, plus premium, if any, offered or paid for oil, condensate, distillate, or other liquid hydrocarbons, respectively, of a like type and gravity in the general area where produced and when run, or 2) the highest market price thereof offered or paid in the general area where produced and when run, or 3) the gross proceeds of the sale thereof, whichever is the greater. Lessee agrees that before any gas produced from the land hereby leased is sold, used or processed in a plant, it will be run free of cost to Lessor through an adequate oil and gas separator of conventional type or other equipment at least as efficient to the end that all liquid hydrocarbons recoverable from the gas by such means will be recovered. Upon written consent of Lessor, the requirement that such gas be run through such a separator or other equipment may be waived upon such terms and conditions as prescribed by Lessor.

**(B) NON-PROCESSED GAS:** As a royalty on any gas (including flared gas), which is defined as all hydrocarbons and gaseous substances not defined as oil in subparagraph (A) above, produced from any well on said land (except as provided herein with respect to gas processed in a plant for the extraction of gasoline, liquid hydrocarbons or other products)  $\frac{1}{4}$  part of the gross production or the market value thereof, at the option of the Lessor, such value to be based on the highest market price paid or offered for gas of comparable quality in the general area where produced and when run, or the gross price paid or offered to the producer, whichever is greater provided that the maximum pressure base in measuring the gas under this lease contract shall not at any time exceed 14.65 pounds per square inch absolute, and the standard base temperature shall be sixty (60) degrees Fahrenheit, correction to be made for pressure according to Boyle's Law, and for specific gravity according to test made by the Balance Method or by the most approved method of testing being used by the industry at the time of testing.

**(C) PROCESSED GAS:** As a royalty on any gas processed in a gasoline plant or other plant for the recovery of gasoline or other liquid hydrocarbons,  $\frac{1}{4}$  part of the residue gas and the liquid hydrocarbons extracted or the market value thereof, at the option of the Lessor. All royalties due herein shall be based on one hundred percent (100%) of the total plant production of residue gas attributable to gas produced from this lease, and on fifty percent (50%) or that percent accruing to Lessee, whichever is the greater, of the total plant production of liquid hydrocarbons, attributable to the gas produced from this lease; provided that if liquid hydrocarbons are recovered from gas processed in a plant in which Lessee (or its parent, subsidiary or affiliate) owns an interest, then the percentage applicable to liquid hydrocarbons shall be fifty percent (50%) or the highest percent accruing to a third party processing gas through such plant under a processing agreement negotiated at arms' length (or if there is no such third party, the highest percent then being specified in processing agreements or contracts in the industry), whichever is the greater. The respective royalties on residue gas and on liquid hydrocarbons shall be determined by 1) the highest market price paid or offered for any gas (or liquid hydrocarbons) of comparable quality in the general area or 2) the gross price paid or offered for such residue gas (or the weighted average gross selling price for the respective grades of liquid hydrocarbons), whichever is the greater. In no event, however, shall the royalties payable under this paragraph be less than the royalties which would have been due had the gas not been processed.

**(D) OTHER PRODUCTS:** As a royalty on carbon black, sulphur or any other products produced or manufactured from gas (excepting liquid hydrocarbons) whether said gas be "casinghead," "dry" or any other gas, by fractionating, burning or any other processing,  $\frac{1}{4}$  part of gross production of such products, or the market value thereof, at the option of Lessor, such market value to be determined as follows:

- (1) On the basis of the highest market price of each product, during the same month in which such product is produced, or
- (2) On the basis of the average gross sale price of each product for the same month in which such products are produced; whichever is the greater.

**(E) VARIABLE ROYALTY:** (i) Subject to the other provisions of this lease, it is hereby provided that in the event production in paying quantities is established pursuant to the terms of this lease and such production is brought on-line and sales thereof are commenced within eighteen (18) months of the effective date hereof, the royalty rate provided herein shall be reduced to 20%, and shall apply to each subsequent well drilled and produced on the land covered by this lease. Provided that, if during such eighteen (18) month term during which Lessee may earn a reduced royalty rate of 20% as herein provided, Lessee should drill in good faith and complete the first well as a dry hole on the land covered by this lease, Lessee may receive a three (3) month extension of the term in which to earn a reduced royalty rate by giving notice to the Commissioner of the General Land Office, commencing drilling operations on an additional well prior to the expiration of such three (3) month period and prosecuting diligently and in good faith the drilling of such additional well and completing same so that production in paying quantities is established and so that such production is brought on line and sales thereof are commenced prior to the expiration of such three (3) month extension period.

(ii) In the event production in paying quantities is established pursuant to the terms of this lease and such production is brought on line and sales thereof are commenced after the expiration of eighteen (18) months from the effective date hereof but prior to the expiration of thirty-six (36) months from the effective date hereof, the royalty rate provided herein shall be reduced to 22.5% and shall apply to each subsequent well drilled and produced on the land covered by this lease.

**(F) NO DEDUCTIONS:** Lessee agrees that all royalties accruing to Lessor under this lease shall be without deduction for the cost of producing, transporting, and otherwise making the oil, gas and other products produced hereunder ready for sale or use.

**(G) ROYALTY IN KIND:** Notwithstanding anything contained herein to the contrary, Lessor may, at its option, upon not less than 60 days notice to Lessee, require at any time or from time to time that payment of all or any royalties accruing to Lessor under this lease be made in kind without deduction for the cost of producing, gathering, storing, separating, treating, dehydrating, compressing, processing, transporting and otherwise making the oil, gas and other products produced hereunder ready for sale or use. Lessor's right to take its royalty in kind shall not diminish or negate Lessor's rights or Lessee's obligations, whether express or implied, under this lease.

(H) **PLANT FUEL AND RECYCLED GAS:** No royalty shall be payable on any gas as may represent this lease's proportionate share of any fuel used to process gas produced hereunder in any processing plant. Notwithstanding anything contained herein to the contrary, and subject to the consent in writing of the Commissioner of the General Land Office, Lessee may recycle gas for gas lift purposes on the leased premises after the liquid hydrocarbons contained in the gas have been removed, and no royalties shall be payable on the gas so recycled until such time as the same may thereafter be produced and sold or used by Lessee in such manner as to entitle Lessor to a royalty thereon under the royalty provisions of this lease.

(I) **MINIMUM ROYALTY:** During any year after the expiration of the primary term of this lease, if this lease is maintained by production, the royalties paid to Lessor in no event shall be less than an amount equal to the total annual delay rental herein provided; otherwise, there shall be due and payable on or before the last day of the month succeeding the anniversary date of this lease a sum equal to the total annual rental less the amount of royalties paid during the preceding year.

(J) **MARGINAL PRODUCTION ROYALTY:** Upon Lessee's written application, the School Land Board may reduce the royalty rate set out in this paragraph and/or the minimum royalty set out in subparagraph 4 (I) to extend the economic life of this lease and encourage recovery of oil or gas that might otherwise remain unrecovered. Any such royalty reduction must conform to the requirements of any School Land Board administrative rules on this subject. Royalty may not be reduced below the applicable statutory minimum.

5. **ROYALTY PAYMENTS AND REPORTS:** All royalties not taken in kind shall be paid to the Commissioner of the General Land Office at Austin, Texas, in the following manner:

Payment of royalty on production of oil and gas shall be as provided in the rules set forth in the Texas Register. Rules currently provide that royalty on oil is due and must be received in the General Land Office on or before the 5th day of the second month succeeding the month of production, and royalty on gas is due and must be received in the General Land Office on or before the 15th day of the second month succeeding the month of production, accompanied by the affidavit of the owner, manager or other authorized agent, completed in the form and manner prescribed by the General Land Office and showing the gross amount and disposition of all oil and gas produced and the market value of the oil and gas, together with a copy of all documents, records or reports confirming the gross production, disposition and market value including gas meter readings, pipeline receipts, gas line receipts and other checks or memoranda of amount produced and put into pipelines, tanks, or pools and gas lines or gas storage, and any other reports or records which the General Land Office may require to verify the gross production, disposition and market value. In all cases the authority of a manager or agent to act for the Lessee herein must be filed in the General Land Office. Each royalty payment shall be accompanied by a check stub, schedule, summary or other remittance advice showing by the assigned General Land Office lease number the amount of royalty being paid on each lease. If Lessee pays his royalty on or before thirty (30) days after the royalty payment was due, then Lessee owes a penalty of 5% on the royalty or \$25.00, whichever is greater. A royalty payment which is over thirty (30) days late shall accrue a penalty of 10% of the royalty due or \$25.00 whichever is greater. In addition to a penalty, royalties shall accrue interest at a rate of 12% per year; such interest will begin accruing when the royalty is sixty (60) days overdue. Affidavits and supporting documents which are not filed when due shall incur a penalty in an amount set by the General Land Office administrative rule which is effective on the date when the affidavits or supporting documents were due. The Lessee shall bear all responsibility for paying or causing royalties to be paid as prescribed by the due date provided herein. Payment of the delinquency penalty shall in no way operate to prohibit the State's right of forfeiture as provided by law nor act to postpone the date on which royalties were originally due. The above penalty provisions shall not apply in cases of title dispute as to the State's portion of the royalty or to that portion of the royalty in dispute as to fair market value.

6. (A) **RESERVES, CONTRACTS AND OTHER RECORDS:** Lessee shall annually furnish the Commissioner of the General Land Office with its best possible estimate of oil and gas reserves underlying this lease or allocable to this lease and shall furnish said Commissioner with copies of all contracts under which gas is sold or processed and all subsequent agreements and amendments to such contracts within thirty (30) days after entering into or making such contracts, agreements or amendments. Such contracts and agreements when received by the General Land Office shall be held in confidence by the General Land Office unless otherwise authorized by Lessee. All other contracts and records pertaining to the production, transportation, sale and marketing of the oil and gas produced on said premises, including the books and accounts, receipts and discharges of all wells, tanks, pools, meters, and pipelines shall at all times be subject to inspection and examination by the Commissioner of the General Land Office, the Attorney General, the Governor, or the representative of any of them.

(B) **DRILLING RECORDS:** Written notice of all operations on this lease shall be submitted to the Commissioner of the General Land Office by Lessee or operator five (5) days before spud date, workover, re-entry, temporary abandonment or plug and abandonment of any well or wells. Such written notice to the General Land Office shall include copies of Railroad Commission forms for application to drill. Copies of well tests, completion reports and plugging reports shall be supplied to the General Land Office at the time they are filed with the Texas Railroad Commission. Lessee shall supply the General Land Office with any records, memoranda, accounts, reports, cuttings and cores, or other information relative to the operation of the above-described premises, which may be requested by the General Land Office, in addition to those herein expressly provided for. Lessee shall have an electrical and/or radioactivity survey made on the bore-hole section, from the base of the surface casing to the total depth of well, of all wells drilled on the above described premises and shall transmit a true copy of the log of each survey on each well to the General Land Office within fifteen (15) days after the making of said survey.

(C) **PENALTIES:** Lessee shall incur a penalty whenever reports, documents or other materials are not filed in the General Land Office when due. The penalty for late filing shall be set by the General Land Office administrative rule which is effective on the date when the materials were due in the General Land Office.

7. **RETAINED ACREAGE:** Notwithstanding any provision of this lease to the contrary, after a well producing or capable of producing oil or gas has been completed on the leased premises, Lessee shall exercise the diligence of a reasonably prudent operator in drilling such additional well or wells as may be reasonably necessary for the proper development of the leased premises and in marketing the production thereon.

**(A) VERTICAL:** In the event this lease is in force and effect two (2) years after the expiration date of the primary or extended term it shall then terminate as to all of the leased premises, EXCEPT (1) 40 acres surrounding each oil well capable of producing in paying quantities and 320 acres surrounding each gas well capable of producing in paying quantities (including a shut-in oil or gas well as provided in Paragraph 11 hereof), or a well upon which Lessee is then engaged in continuous drilling or reworking operations, or (2) the number of acres included in a producing pooled unit pursuant to Natural Resources Code Sections 52.151-52.153, or (3) such greater or lesser number of acres as may then be allocated for production purposes to a proration unit for each such producing well under the rules and regulations of the Railroad Commission of Texas, or any successor agency, or other governmental authority having jurisdiction. Within 90 days of a partial termination of this lease in accordance with this subparagraph and upon payment of the minimum filing fee set by General Land Office rules in effect at the time of the partial termination, Lessee shall have the right to obtain a surface lease for ingress and egress on and across the terminated portion of the leased premises as may be reasonably necessary for the continued operation of the portions of the lease remaining in force and effect. If Lessee fails to apply for a surface lease within the 90 day period specified above, Lessee may apply for a surface lease from the Land Office, but the Land Commissioner has the discretion to grant or deny such application and to set the fee for such surface lease.

**(B) HORIZONTAL:** In the event this lease is in force and effect two (2) years after the expiration date of the primary or extended term it shall further terminate as to all depths below 100 feet below the total depth drilled (hereinafter "deeper depths") in each well located on acreage retained in Paragraph 7 (A) above, unless on or before two (2) years after the primary or extended term Lessee pays an amount equal to one-half (1/2) of the bonus originally paid as consideration for this lease (as specified on page 1 hereof). If such amount is paid, this lease shall be in force and effect as to such deeper depths, and said termination shall be delayed for an additional period of two (2) years and so long thereafter as oil or gas is produced in paying quantities from such deeper depths covered by this lease.

**(C) IDENTIFICATION AND FILING:** The surface acreage retained hereunder as to each well shall, as nearly as practical, be in the form of a square with the well located in the center thereof, or such other shape as may be approved by the School Land Board. Within thirty (30) days after partial termination of this lease as provided herein, Lessee shall execute and record a release or releases containing a satisfactory legal description of the acreage and/or depths not retained hereunder. The recorded release, or a certified copy of same, shall be filed in the General Land Office, accompanied by the filing fee prescribed by the General Land Office rules in effect on the date the release is filed. If Lessee fails or refuses to execute and record such release or releases within ninety (90) days after being requested to do so by the General Land Office, then the Commissioner at his sole discretion may designate by written instrument the acreage and/or depths to be released hereunder and record such instrument at Lessee's expense in the county or counties where the lease is located and in the official records of the General Land Office and such designation shall be binding upon Lessee for all purposes. If at any time after the effective date of the partial termination provisions hereof, the applicable field rules are changed or the well or wells located thereon are reclassified so that less acreage is thereafter allocated to said well or wells for production purposes, this lease shall thereupon terminate as to all acreage not thereafter allocated to said well or wells for production purposes.

**8. OFFSET WELLS:** If oil and/or gas should be produced in commercial quantities from a well located on land privately owned or on State land leased at a lesser royalty, which well is within one thousand (1,000) feet of the area included herein, or which well is draining the area covered by this lease, the Lessee shall, within sixty (60) days after such initial production from the draining well or the well located within one thousand (1,000) feet from the area covered by this lease begin in good faith and prosecute diligently the drilling of an offset well on the area covered by this lease, and such offset well shall be drilled to such depth as may be necessary to prevent the undue drainage of the area covered by this lease, and the Lessee, manager or driller shall use all means necessary in a good faith effort to make such offset well produce oil and/or gas in commercial quantities. Only upon the determination of the Commissioner and with his written approval, may the payment of a compensatory royalty satisfy the obligation to drill an offset well or wells required under this Paragraph.

**9. DRY HOLE/CESSATION OF PRODUCTION DURING PRIMARY TERM:** If, during the primary term hereof and prior to discovery and production of oil or gas on said land, Lessee should drill a dry hole or holes thereon, or if during the primary term hereof and after the discovery and actual production of oil or gas from the leased premises such production thereof should cease from any cause, this lease shall not terminate if on or before the expiration of sixty (60) days from date of completion of said dry hole or cessation of production Lessee commences additional drilling or reworking operations thereon, or pays or tenders the next annual delay rental in the same manner as provided in this lease. If, during the last year of the primary term or within sixty (60) days prior thereto, a dry hole be completed and abandoned, or the production of oil or gas should cease for any cause, Lessee's rights shall remain in full force and effect without further operations until the expiration of the primary term; and if Lessee has not resumed production in paying quantities at the expiration of the primary term, Lessee may maintain this lease by conducting additional drilling or reworking operations pursuant to Paragraph 10, using the expiration of the primary term as the date of cessation of production under Paragraph 10. Should the first well or any subsequent well drilled on the above described land be completed as a shut-in oil or gas well within the primary term hereof, Lessee may resume payment of the annual rental in the same manner as provided herein on or before the rental paying date following the expiration of sixty (60) days from the date of completion of such shut-in oil or gas well and upon the failure to make such payment, this lease shall ipso facto terminate. If at the expiration of the primary term or any time thereafter a shut-in oil or gas well is located on the leased premises payments may be made in accordance with the shut-in provisions hereof.

**10. CESSATION, DRILLING, AND REWORKING:** If, after the expiration of the primary term, production of oil or gas from the leased premises, after once obtained, should cease from any cause, this lease shall not terminate if Lessee commences additional drilling or reworking operations within sixty (60) days after such cessation, and this lease shall remain in full force and effect for so long as such operations continue in good faith and in workmanlike manner without interruptions totaling more than sixty (60) days. If such drilling or reworking operations result in the production of oil or gas, the lease shall remain in full force and effect for so long as oil or gas is produced from the leased premises in paying quantities or payment of shut-in oil or gas well royalties or payment of compensatory royalties is made as provided herein or as provided by law. If the drilling or reworking operations result in the

completion of a well as a dry hole, the lease will not terminate if the Lessee commences additional drilling or reworking operations within sixty (60) days after the completion of the well as a dry hole, and this lease shall remain in effect so long as Lessee continues drilling or reworking operations in good faith and in a workmanlike manner without interruptions totaling more than sixty (60) days. Lessee shall give written notice to the General Land Office within thirty (30) days of any cessation of production.

**11. SHUT-IN ROYALTIES:** For purposes of this paragraph, "well" means any well that has been assigned a well number by the state agency having jurisdiction over the production of oil and gas. If at any time after the expiration of the primary term of a lease that, until being shut in, was being maintained in force and effect, a well capable of producing oil or gas in paying quantities is located on the leased premises, but oil or gas is not being produced for lack of suitable production facilities or lack of a suitable market, then Lessee may pay as a shut-in oil or gas royalty an amount equal to double the annual rental provided in the lease, but not less than \$1,200 a year for each well capable of producing oil or gas in paying quantities. To be effective, each initial shut-in oil or gas royalty must be paid on or before: (1) the expiration of the primary term, (2) 60 days after the Lessee ceases to produce oil or gas from the leased premises, or (3) 60 days after Lessee completes a drilling or reworking operation in accordance with the lease provisions; whichever date is latest. If the shut-in oil or gas royalty is paid, the lease shall be considered to be a producing lease and the payment shall extend the term of the lease for a period of one year from the end of the primary term, or from the first day of the month following the month in which production ceased, and, after that, if no suitable production facilities or suitable market for the oil or gas exists, Lessee may extend the lease for four more successive periods of one (1) year by paying the same amount each year on or before the expiration of each shut-in year.

**12. COMPENSATORY ROYALTIES:** If, during the period the lease is kept in effect by payment of the shut-in oil or gas royalty, oil or gas is sold and delivered in paying quantities from a well located within one thousand (1,000) feet of the leased premises and completed in the same producing reservoir, or in any case in which drainage is occurring, the right to continue to maintain the lease by paying the shut-in oil or gas royalty shall cease, but the lease shall remain effective for the remainder of the year for which the royalty has been paid. The Lessee may maintain the lease for four more successive years by Lessee paying compensatory royalty at the royalty rate provided in the lease of the market value of production from the well causing the drainage or which is completed in the same producing reservoir and within one thousand (1,000) feet of the leased premises. The compensatory royalty is to be paid monthly to the Commissioner beginning on or before the last day of the month following the month in which the oil or gas is produced from the well causing the drainage or that is completed in the same producing reservoir and located within one thousand (1,000) feet of the leased premises; if the compensatory royalty paid in any 12-month period is in an amount less than the annual shut-in oil or gas royalty, Lessee shall pay an amount equal to the difference within thirty (30) days from the end of the 12-month period; and none of these provisions will relieve Lessee of the obligation of reasonable development nor the obligation to drill offset wells as provided in N.R.C. Section 52.034; however, at the determination of the Commissioner, and with the Commissioner's written approval, the payment of compensatory royalties shall satisfy the obligation to drill offset wells. Compensatory royalty payments which are not timely paid will accrue penalty and interest in accordance with Paragraph 5 of this lease.

**13. EXTENSIONS:** If, at the expiration of the primary term of this lease, production of oil or gas has not been obtained on the leased premises but drilling operations are being conducted thereon in good faith and in a good and workmanlike manner, Lessee may, on or before the expiration of the primary term, file in the General Land Office written application to the Commissioner of the General Land Office for a thirty (30) day extension of this lease, accompanied by payment of Three Thousand Dollars (\$3,000.00) if this lease covers six hundred forty (640) acres or less and Six Thousand Dollars (\$6,000.00) if this lease covers more than six hundred forty (640) acres and the Commissioner shall, in writing, extend this lease for a thirty (30) day period from and after the expiration of the primary term and so long thereafter as oil or gas is produced in paying quantities; provided further, that Lessee may, so long as such drilling operations are being conducted make like application and payment during any thirty (30) day extended period for an additional extension of thirty (30) days and, upon receipt of such application and payment, the Commissioner shall, in writing, again extend this lease so that same shall remain in force for such additional thirty (30) day period and so long thereafter as oil or gas is produced in paying quantities; provided, however, that this lease shall not be extended for more than a total of three hundred ninety (390) days from and after the expiration of the primary term unless production in paying quantities has been obtained.

**14. USE OF WATER; SURFACE:** Lessee shall have the right to use water produced on said land necessary for operations hereunder and solely upon the leased premises; provided, however, Lessee shall not use potable water or water suitable for livestock or irrigation purposes for water flood operations without the prior written consent of Lessor. Subject to its obligation to pay surface damages, Lessee shall have the right to use so much of the surface of the land that may be reasonably necessary for drilling and operating wells and transporting and marketing the production therefrom, such use to be conducted under conditions of least injury to the surface of the land. Lessee shall pay surface damages in an amount set by the General Land Office fee schedule which is effective on the date when the activity requiring the payment of surface damages occurs.

**15. POLLUTION:** In developing this area, Lessee shall use the highest degree of care and all proper safeguards to prevent pollution. Without limiting the foregoing, pollution of coastal wetlands, natural waterways, rivers and impounded water shall be prevented by the use of containment facilities sufficient to prevent spillage, seepage or ground water contamination. In the event of pollution, Lessee shall use all means at its disposal to recapture all escaped hydrocarbons or other pollutant and shall be responsible for all damage to public and private properties.

**(A) UPLANDS:** Lessee shall build and maintain fences around its slush, sump, and drainage pits and tank batteries so as to protect livestock against loss, damage or injury; and upon completion or abandonment of any well or wells, Lessee shall fill and level all slush pits and cellars and completely clean up the drilling site of all rubbish thereon.

**(B) SUBMERGED LANDS:** No discharge of solid waste or garbage shall be allowed into State waters from any drilling or support vessels, production platform, crew or supply boat, barge, jack-up rig or other equipment located on the leased area. Solid waste shall include but shall not be limited to containers, equipment, rubbish, plastic, glass, and any other man-made non-biodegradable items. A sign must be displayed in a high traffic area on all vessels and manned platforms stating, "Discharge of any solid waste or garbage into State Waters from vessels or platforms is strictly prohibited and may subject a State of Texas lease to forfeiture." Such statement shall be in lettering of at least 1" in size.

(C) **RIVERS:** To the extent necessary to prevent pollution, the provisions found in subsections (a) and (b) of this paragraph shall also apply to rivers and riverbeds.

(D) **PENALTY:** Failure to comply with the requirements of this provision may result in the maximum penalty allowed by law including forfeiture of the lease. Lessee shall be liable for the damages caused by such failure and any costs and expenses incurred in cleaning areas affected by the discharged waste.

**16. IDENTIFICATION MARKERS:** Lessee shall erect, at a distance not to exceed twenty-five (25) feet from each well on the premises covered by this lease, a legible sign on which shall be stated the name of the operator, the lease designation and the well number. Where two or more wells on the same lease or where wells on two or more leases are connected to the same tank battery, whether by individual flow line connections direct to the tank or tanks or by use of a multiple header system, each line between each well and such tank or header shall be legibly identified at all times, either by a firmly attached tag or plate or an identification properly painted on such line at a distance not to exceed three (3) feet from such tank or header connection. Said signs, tags, plates or other identification markers shall be maintained in a legible condition throughout the term of this lease.

**17. ASSIGNMENTS:** The lease may be transferred at any time. All transfers must reference the lease by the file number and must be recorded in the county where the area is located, and the recorded transfer or a copy certified to by the County Clerk of the county where the transfer is recorded must be filed in the General Land Office within ninety (90) days of the execution date, as provided by N.R.C. Section 52.026, accompanied by the filing fee prescribed by the General Land Office rules in effect on the date of receipt by the General Land Office of such transfer or certified copy thereof. Every transferee shall succeed to all rights and be subject to all obligations, liabilities, and penalties owed to the State by the original lessee or any prior transferee of the lease, including any liabilities to the state for unpaid royalties.

**18. RELEASES:** Lessee may relinquish the rights granted hereunder to the State at any time by recording the relinquishment in the county where this area is situated and filing the recorded relinquishment or certified copy of same in the General Land Office within ninety (90) days after its execution accompanied by the filing fee prescribed by the General Land Office rules in effect on the date of receipt by the General Land Office of such relinquishment or certified copy thereof. Such relinquishment will not have the effect of releasing Lessee from any liability theretofore accrued in favor of the State.

**19. LIEN:** In accordance with N.R.C. Section 52.136, the State shall have a first lien upon all oil and gas produced from the area covered by this lease to secure payment of all unpaid royalty and other sums of money that may become due under this lease. By acceptance of this lease, Lessee grants the State, in addition to the lien provided by N.R.C. Section 52.136 and any other applicable statutory lien, an express contractual lien on and security interest in all leased minerals in and extracted from the leased premises, all proceeds which may accrue to Lessee from the sale of such leased minerals, whether such proceeds are held by Lessee or by a third party, and all fixtures on and improvements to the leased premises used in connection with the production or processing of such leased minerals in order to secure the payment of all royalties or other amounts due or to become due under this lease and to secure payment of any damages or loss that Lessor may suffer by reason of Lessee's breach of any covenant or condition of this lease, whether express or implied. This lien and security interest may be foreclosed with or without court proceedings in the manner provided in the Title 1, Chapter 9 of the Texas Business and Commerce Code. Lessee agrees that the Commissioner may require Lessee to execute and record such instruments as may be reasonably necessary to acknowledge, attach or perfect this lien. Lessee hereby represents that there are no prior or superior liens arising from and relating to Lessee's activities upon the above-described property or from Lessee's acquisition of this lease. Should the Commissioner at any time determine that this representation is not true, then the Commissioner may declare this lease forfeited as provided herein.

**20. FORFEITURE:** If Lessee shall fail or refuse to make the payment of any sum within thirty (30) days after it becomes due, or if Lessee or an authorized agent should knowingly make any false return or false report concerning production or drilling, or if Lessee shall fail or refuse to drill any offset well or wells in good faith as required by law and the rules and regulations adopted by the Commissioner of the General Land Office, or if Lessee should fail to file reports in the manner required by law or fail to comply with rules and regulations promulgated by the General Land Office, the School Land Board, or the Railroad Commission, or refuse the proper authority access to the records pertaining to operations, or if Lessee or an authorized agent should knowingly fail or refuse to give correct information to the proper authority, or knowingly fail or refuse to furnish the General Land Office a correct log of any well, or if Lessee shall knowingly violate any of the material provisions of this lease, or if this lease is assigned and the assignment is not filed in the General Land Office as required by law, the rights acquired under this lease shall be subject to forfeiture by the Commissioner, and he shall forfeit same when sufficiently informed of the facts which authorize a forfeiture, and when forfeited the area shall again be subject to lease to the highest bidder, under the same regulations controlling the original sale of leases. However, nothing herein shall be construed as waiving the automatic termination of this lease by operation of law or by reason of any special limitation arising hereunder. Forfeitures may be set aside and this lease and all rights thereunder reinstated before the rights of another intervene upon satisfactory evidence to the Commissioner of the General Land Office of future compliance with the provisions of the law and of this lease and the rules and regulations that may be adopted relative hereto.

**21. RIVERBED TRACTS:** In the event this lease covers a riverbed, Lessee is hereby specifically granted the right of eminent domain and condemnation as provided for in N.R.C. Sections 52.092-52.093, as a part of the consideration moving to Lessor for the covenants herein made by Lessee.

**22. APPLICABLE LAWS AND DRILLING RESTRICTIONS:** This lease shall be subject to all rules and regulations, and amendments thereto, promulgated by the Commissioner of the General Land Office governing drilling and producing operations on Permanent Free School Land, payment of royalties, and auditing procedures, and shall be subject to all other valid statutes, rules, regulations, orders and ordinances that may affect operations under the provisions of this lease. Without limiting the generality of the foregoing, Lessee hereby agrees, by the acceptance of this lease, to be bound by and subject to all statutory and regulatory provisions relating to the

General Land Office's audit billing notice and audit hearings procedures. Said provisions are currently found at 31 Texas Administrative Code, Chapter 4, and Texas Natural Resources Code Sections 52.135 and 52.137 through 52.140. In the event this lease covers land franchised or leased or otherwise used by a navigation district or by the United States for the purpose of navigation or other purpose incident to the operation of a port, then Lessee shall not be entitled to enter or possess such land without prior approval as provided under Section 61.117 of the Texas Water Code, but Lessee shall be entitled to develop such land for oil and gas by directional drilling; provided, however, that no surface drilling location may be nearer than 660 feet and special permission from the Commissioner of the General Land Office is necessary to make any surface location nearer than 2,160 feet measured at right angles from the nearest bulkhead line or from the nearest dredged bottom edge of any channel, slip, or turning basin which has been authorized by the United States as a federal project for future construction, whichever is nearer.

**23. REMOVAL OF EQUIPMENT:** Upon the termination of this lease for any cause, Lessee shall not, in any event, be permitted to remove the casing or any part of the equipment from any producing, dry, or abandoned well or wells without the written consent of the Commissioner of the General Land Office or his authorized representative; nor shall Lessee, without the written consent of said Commissioner or his authorized representative remove from the leased premises the casing or any other equipment, material, machinery, appliances or property owned by Lessee and used by Lessee in the development and production of oil or gas therefrom until all dry or abandoned wells have been plugged and until all slush or refuse pits have been properly filled and all broken or discarded lumber, machinery, or debris shall have been removed from the premises to the satisfaction of the said Commissioner or his authorized representative.

**24. FORCE MAJEURE:** Should Lessee be prevented from complying with any express or implied covenant of this lease, from conducting drilling operations thereon, or from producing oil and/or gas therefrom, after effort made in good faith, by reason of war, rebellion, riots, strikes, fires, acts of God or any order, rule or regulation of governmental authority, then while so prevented, Lessee's obligation to comply with such covenant shall be suspended upon proper and satisfactory proof presented to the Commissioner of the General Land Office in support of Lessee's contention and Lessee shall not be liable for damages for failure to comply therewith (except in the event of lease operations suspended as provided in the rules and regulations adopted by the School Land Board); and this lease shall be extended while and so long as Lessee is prevented, by any such cause, from drilling, reworking operations or producing oil and/or gas from the leased premises; provided, however, that nothing herein shall be construed to suspend the payment of rentals during the primary or extended term, nor to abridge Lessee's right to a suspension under any applicable statute of this State.

**25. RAILROAD COMMISSION HEARINGS ON GAS:** No natural gas or casinghead gas, including both associated and non-associated gas, produced from the mineral estate subject to this lease may be sold or contracted for sale to any person for ultimate use outside the State of Texas unless the Railroad Commission of Texas, after notice and hearing as provided in Title 3 of the W.R.C., finds that (a) the person, agency, or entity that executed the lease in question does not require the natural gas or casinghead gas to meet its own existing needs for fuel; (b) no private or public hospital, nursing home, or other similar health-care facility in this State requires the natural gas or casinghead gas to meet its existing needs for fuel; (c) no public or private school in this State that provides elementary, secondary, or higher education requires the natural gas or casinghead gas to meet its existing needs for fuel; (d) no facility of the State or of any county, municipality, or other political subdivision in this State requires the natural gas or casinghead gas to meet its existing needs for fuel; (e) no producer of food and fiber requires the natural gas or casinghead gas necessary to meet the existing needs of irrigation pumps and other machinery directly related to this production; and (f) no person who resides in this State and who relies on natural gas or casinghead gas to provide in whole or part his existing needs for fuel or raw material requires the natural gas or casinghead gas to meet those needs. However, the Railroad Commission of Texas may grant exceptions to these provisions as set forth in W.R.C. Section 52.296.

**26. LEASE SECURITY:** Lessee shall take the highest degree of care and all proper safeguards to protect said premises and to prevent theft of oil, gas, and other hydrocarbons produced from said lease. This includes, but is not limited to, the installation of all necessary equipment, seals, locks, or other appropriate protective devices on or at all access points at the lease's production,

gathering and storage systems where theft of hydrocarbons can occur. Lessee shall be liable for the loss of any hydrocarbons resulting from theft and shall pay the State of Texas royalties thereon as provided herein on all oil, gas or other hydrocarbons lost by reason of theft.

**27. REDUCTION OF PAYMENTS:** If, during the primary term, a portion of the land covered by this lease is included within the boundaries of a pooled unit that has been approved by the School Land Board in accordance with Natural Resources Code Sections 52.151-52.153, or if, at any time after the expiration of the primary term or the extended term, this lease covers a lesser number of acres than the total amount described herein, payments that are made on a per acre basis hereunder shall be reduced according to the number of acres pooled, released, surrendered, or otherwise severed, so that payments determined on a per acre basis under the terms of this lease during the primary term shall be calculated based upon the number of acres outside the boundaries of a pooled unit, or, if after the expiration of the primary term, the number of acres actually retained and covered by this lease.

**28. SUCCESSORS AND ASSIGNS:** The covenants, conditions and agreements contained herein shall extend to and be binding upon the heirs, executors, administrators, successors or assigns of Lessee herein.

**29. ANTIQUITIES CODE:** In the event that any feature of archeological or historical interest is encountered during the activities authorized by this lease, Lessee will immediately cease activities and will immediately notify the General Land Office and the Texas Historical Commission so that adequate measures may be undertaken to protect or recover such discoveries or findings, as appropriate. Lessee is expressly placed on notice of the National Historical Preservation Act of 1966 (PB-89-66, 80 Statute 915; 16 U.S.C.A. 470). Lessee shall comply with the Antiquities Code of Texas, Chapter 191, Natural Resources Code, as amended.

30. **VENUE:** Lessor and lessee, including lessee's successors and assigns, hereby agree that venue for any dispute arising out of a provision of this lease, whether express or implied, regarding interpretation of this lease, or relating in any way to this lease or to applicable case law, statutes, or administrative rules, shall be in a court of competent jurisdiction located in Travis County, State of Texas.






31. **LEASE FILING:** Pursuant to Chapter 9 of the Tex. Bus. & Com. Code, this lease must be filed of record in the office of the County Clerk in any county in which all or any part of the leased premises is located, and certified copies thereof must be filed in the General Land Office. The prescribed filing fee shall accompany the certified copies sent to the General Land Office.

32. **EXECUTION:** This oil and gas lease must be signed and acknowledged by the Lessee before it is filed of record in the county records and in the General Land Office of the State of Texas.

\_\_\_\_\_  
LESSEE  
  
BY: \_\_\_\_\_  
  
TITLE: \_\_\_\_\_  
  
DATE: \_\_\_\_\_

IN TESTIMONY WHEREOF, witness the signature of the Commissioner of the General Land Office of the State of Texas under the seal of the General Land Office.

  
\_\_\_\_\_  
COMMISSIONER OF THE GENERAL LAND OFFICE  
OF THE STATE OF TEXAS

APPROVED  
Contents   
Legal   
DC   
SD   
Exec 

STATE OF \_\_\_\_\_

(CORPORATION ACKNOWLEDGMENT)

COUNTY OF \_\_\_\_\_

BEFORE ME, the undersigned authority, on this day personally appeared \_\_\_\_\_  
known to me to be the person whose name is subscribed to the foregoing instrument, as \_\_\_\_\_ of  
\_\_\_\_\_ and acknowledged to me that he executed the same  
for the purposes and consideration therein expressed, in the capacity stated, and as the act and deed of said corporation.

Given under my hand and seal of office this the \_\_\_\_\_ day of \_\_\_\_\_, 19\_\_\_\_\_.

Notary Public in and for \_\_\_\_\_  
\_\_\_\_\_

STATE OF CALIFORNIA  
COUNTY OF \_\_\_\_\_  
NOTARY PUBLIC  
\_\_\_\_\_

STATE OF \_\_\_\_\_

(INDIVIDUAL ACKNOWLEDGMENT)

COUNTY OF \_\_\_\_\_

Before me, the undersigned authority, on this day personally appeared \_\_\_\_\_  
known to me to be the persons whose names are subscribed to the foregoing instrument, and acknowledged to me that they executed the  
same for the purposes and consideration therein expressed.

Given under my hand and seal of office this the \_\_\_\_\_ day of \_\_\_\_\_, 19\_\_\_\_\_.

Notary Public in and for \_\_\_\_\_  
\_\_\_\_\_

②

97584

OIL AND GAS LEASE NO.

OCT 01 1996

DATE



November 21, 1996

Mr. Jim Burgin  
Union Pacific Resources Company  
801 Cherry Street  
Fort Worth, TX 76102-6852

Dear Mr. Burgin:

Thank you for participating in the State of Texas Oil and Gas Lease Sale held on October 1, 1996. In total, almost \$10 million was generated for the Permanent School Fund.

I am pleased to inform you that you were the high bidder on the marginal number listed below, which has been assigned the corresponding lease number:

MGL NO. 68            M-97583

The lease agreement for this marginal number is enclosed and will serve as your receipt for the amount of your bid. As stated in Sections 31 and 32, this lease form must be signed and acknowledged by the lessee, and then recorded in the County Clerk's office of the county or counties in which lands covered by the lease are located. After signing and recording the lease, please submit a certified copy of the recorded lease to the attention of Kristin Anderson at the Texas General Land Office. These requirements are material provisions of the lease; therefore, please return the certified copy at your earliest convenience.

The lessee's other contractual and statutory responsibilities are outlined in the lease agreement, such as Section 6(B), which requires operators to submit written notice of all drilling, production, and related activities. When lessees file specific forms with the Texas Railroad Commission and the Department of Energy, they are required to submit copies of these forms to the Texas General Land Office. Examples of these forms are:

- W-1, Application to Drill, Deepen, or Plug Back with Plat;
- W-2, Oil Well Potential Test, Completion or Recompletion Report and Log;
- W-3, Plugging Record;
- G-1, Gas Well Back Pressure Test, Completion/Recompletion Report and Log;
- G-5, Gas Well Classification Report;
- G-10, Gas Well Status Report;
- W-10, Oil Well Status Report;
- W-12, Inclination Report;
- Electrical Logs (any scale and within fifteen (15) days after they are made);
- Directional Surveys;

P-12, Certificate of Pooling Authority  
F-1, NGPA Supplemental Application; and  
FERC-121, Application for Determination

When production is secured from this lease, production/royalty reports outlining production/disposition activities (GLO Forms 1,1a,2,2a) are required to be submitted to this office. If you are not familiar with the required forms and procedures, please call the Royalty Management Division of the Land Office at (512) 463-5042 and request the Oil and Gas Reports and Payment Procedures booklet. With respect to any applicable Resource Management Codes, lessees should contact the Texas General Land Office for updates and any additional information prior to drilling. Your cooperation in complying with the reporting requirements outlined above will be greatly appreciated and will contribute to this office's efforts to effectively manage the State of Texas' oil and gas resources.

Please do not hesitate to contact my office at (512) 463-5042 if you need any assistance in the future or if you have questions concerning any state lease that you operate.

Sincerely,

  
Garry Mauro  
Texas Land Commissioner

GM/RH/ka

Enclosures

Exhibit "A"

The following are additional marginal numbers awarded and the corresponding lease numbers:

MGL NO. 69      M-97584

MGL NO. 70      M-97585

M- 97584

3

TRANSMITTAL LETTER

File Dated OCT 01 1996

# DO NOT DESTROY



## UNIT AGREEMENT MEMO

Unit No. 2676

Operator Union Pacific Resources Company

Unit Name THIEL Unit # 1

County Washington

Effective Date \_\_\_\_\_

Unitized for: Oil \_\_\_ Gas \_\_\_ Oil & Gas

1. M.F. No. 97452  
Area HRW Tr. \_\_\_\_\_  
Sec. \_\_\_\_\_ Blk. \_\_\_\_\_ Survey \_\_\_\_\_  
 $\frac{16.53}{1108.60} \times \frac{3}{16} = .2796\%$   
.014910 .1875 .002796

2. M.F. No. 97584  
Area New Year Creek Tr. \_\_\_\_\_  
Sec. \_\_\_\_\_ Blk. \_\_\_\_\_ Survey \_\_\_\_\_  
 $\frac{9.20}{1108.60} \times \frac{1}{5} = .166\%$   
.008298 .20 .00166

3. M.F. No. \_\_\_\_\_  
Area \_\_\_\_\_ Tr. \_\_\_\_\_  
Sec. \_\_\_\_\_ Blk. \_\_\_\_\_ Survey \_\_\_\_\_  
\_\_\_\_\_ x \_\_\_\_\_ %

4. M.F. No. \_\_\_\_\_  
Area \_\_\_\_\_ Tr. \_\_\_\_\_  
Sec. \_\_\_\_\_ Blk. \_\_\_\_\_ Survey \_\_\_\_\_  
\_\_\_\_\_ x \_\_\_\_\_ %

### REMARKS:

.004456

Prepared by: <u>E. GARZA</u>	Date <u>05-15-98</u>
Map & GIS updated by: <u>[Signature]</u>	Date <u>6-15-98</u>
Keyed into database by: <u>MT.</u>	Date <u>6-16-98</u>

## POOLING COMMITTEE REPORT

TO: SCHOOL LAND BOARD

DATE: February 17, 1998

OPERATOR: Union Pacific Resources Co. COUNTY: Washington

UNIT NAME: Thiel Unit #1 FIELD: Giddings  
(Austin Chalk, Gas)

## STATE LEASE(S) IN UNIT

Lease *Type	State Number	State Royalty	Expiration Date	Term Year	Acres Acres	Acres In Unit	Lessee of Record
SF	M-97584	1/4 **	10/1/99	3	5	9.20	UPRC
					(Called)	(Surveyed)	
HEOW	m-97452	3/16			16.53	16.53	

\*\* Subject to variable royalty provision in the lease

\* RAL = Relinquishment Act

\* SF = State Fee

\* FR = Free Royalty

PRIVATE ACRES: 1099.40  
 STATE ACRES: 9.20  
 TOTAL UNIT ACRES: 1108.60

Unitized for:

Oil \_\_\_\_\_

Gas \_\_\_\_\_

Both x

Depth(s):

See Remarks

Formation:

See Remarks

Well Location:

State Land \_\_\_\_\_

Private Land x

Participation:

Basis Surface acreageState Acreage 0.8299%State Unit Royalty 0.166%

Railroad Commission Rules:

Spacing 1600 AcresAcreage Factor 100%

Agree to drill to density of field rules:

Yes x No \_\_\_\_\_

Holds only acreage included in the unit

past primary term:

Yes x No \_\_\_\_\_

Satisfactory geological data furnished:

Yes x No \_\_\_\_\_

REMARKS:

- Union Pacific Resources Company is requesting permanent oil and gas pooling of the Austin Chalk Formation defined as the stratigraphic interval or its correlative equivalent occurring from 14,502 feet to 14,897 feet K.B. as shown on the Union Pacific Resource Company Thiel #1 Gamma Ray well log.
- The applicant completed the unit well on September 23, 1996 as a dual lateral horizontal gas well in the Austin Chalk Formation. The well has produced approximately 1.7 bcf of gas through November 1997.
- If the unit is approved, the applicant will have earned a royalty reduction to 20%, making the state's unit royalty participation 0.166%.
- Horizontal severance is provided for in the state lease. The state will participate from date of first production.
- APPROVAL BY THE SCHOOL LAND BOARD IN NO WAY RATIFIES ANY OF THE STATE LEASES INCLUDED IN THIS PROPOSED UNIT.

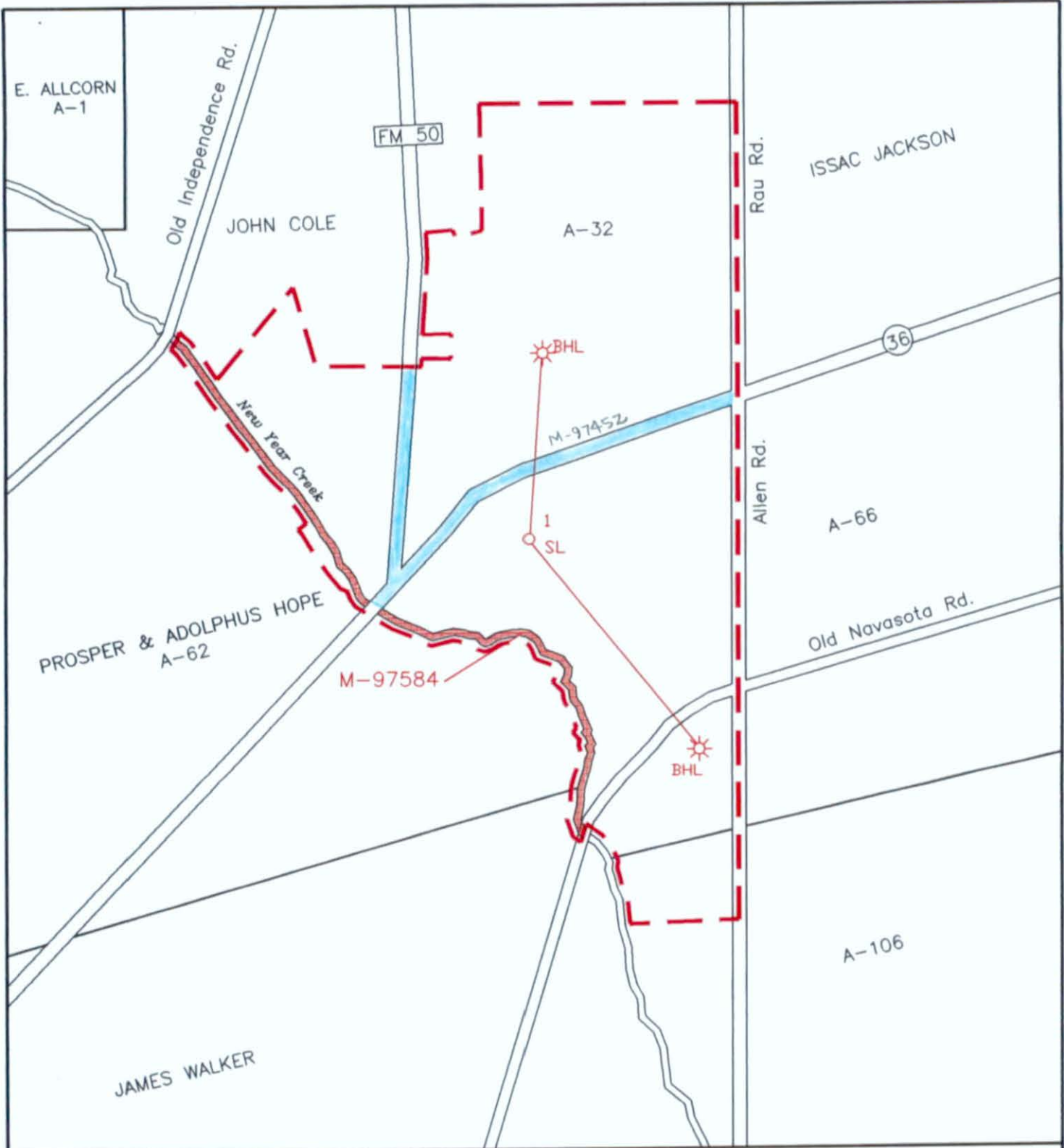
POOLING COMMITTEE RECOMMENDATION:

- The Pooling Committee recommends Board approval of a permanent oil and gas unit, under the above stated provisions.

  
Jeffee Martinez-Vargas

  
John Howard

  
Peter A. Boone



98-8/RH/2-98

UNION PACIFIC RESOURCES COMPANY  
THIEL UNIT #1  
GIDDINGS AUSTIN CHALK  
M-97584  
WASHINGTON COUNTY

POOLING AGREEMENT  
UNION PACIFIC RESOURCES COMPANY  
THIEL UNIT NO. 1  
WASHINGTON COUNTY, TEXAS

THIS AGREEMENT is entered into by and between the Commissioner of the General Land Office, on behalf of the State of Texas, as "Lessor" and Union Pacific Resources Company, herein referred to as "Lessee", and such other interested parties as may join in the execution hereof, the undersigned parties herein collectively referred to as the "parties", in consideration of the mutual agreements hereinafter set forth and other valuable considerations, the receipt and sufficiency of which are hereby acknowledged, and for the purposes and upon the terms and conditions which follow:

PURPOSES:

1.

This Pooling Agreement ("Agreement") is made for the purposes of conservation and utilization of the pooled mineral, to prevent waste, to facilitate orderly development and to preserve correlative rights. To such end, it is the purpose of this Agreement to effect equitable participation within the unit formed hereby. This Agreement is intended to be performed pursuant to and in compliance with all applicable statutes, decisions, regulations, rules, orders and directives of any governmental agency having jurisdiction over the production and conservation of the pooled mineral and in its interpretation and application shall, in all things, be subject thereto.

UNIT DESCRIPTION:

2.

The oil and gas leases, which are included within the pooled unit, are listed on the attached Exhibit "A", to which leases and the records thereof reference is here made for all pertinent purposes. The pooled unit shall consist of all of the lands described in Exhibit "B" attached hereto and made a part hereof. A plat of the pooled unit is attached hereto as Exhibit "C".

MINERAL POOLED:


3.

The mineral pooled and unitized ("pooled mineral") hereby shall be oil and gas including all hydrocarbons that may be produced from an oil well or a gas well as such wells are recognized and designated by the Railroad Commission of Texas or other state regulatory agency having jurisdiction of the drilling and production of oil and gas wells. The pooled mineral shall extend to those depths underlying the surface boundaries of the pooled unit in the Austin Chalk Formation defined as the stratigraphic interval or its correlative equivalent occurring from 14,502 feet to 14,897 feet, measured from the Kelly Bushing, as shown on the Gamma Ray Log of the Union Pacific Resources Company, Thiel No. 1 well ("unitized interval").

POOLING AND EFFECT:

4.

The parties hereto commit all of their interests which are within the unit to the extent and as above described into said unit and unitize and pool hereunder the separate tracts described on the attached Exhibit "B", for and during the term hereof, so that such pooling or unitization shall have the following effect:

- 
- (a) The unit, to the extent as above described, shall be operated as an entirety for the exploration, development and production of the pooled mineral, rather than as separate tracts.
  - (b) All drilling operations, reworking or other operations with respect to the pooled mineral on land within the unit shall be considered as though the same were on each separate tract in the unit, regardless of the actual location of the well or wells thereon, for all purposes under the terms of the respective leases or other contracts thereon and this Agreement. In the event the unitized area covered by this Agreement is maintained in force by drilling or reworking operations conducted on a directional well drilled under the unitized area from a surface location on adjacent or adjoining lands not included within the boundaries of the unitized area, such operations shall be considered to have been commenced on the unitized area when drilling is commenced on the adjacent or adjoining land for the purpose of directionally drilling under the unitized area and production of oil or gas from the unitized area through any directional well surfaced on adjacent or adjoining land or drilling or reworking of any such directional well shall be considered production or drilling or reworking operations, as the case may be, on the unitized area for all purposes under this Agreement. Nothing in this Agreement is intended or shall be construed as granting to Lessee any leasehold interest, easements, or other rights in or with respect to any such adjacent or adjoining land in addition to any such leasehold interests, easements, or other rights which the lessee, operator or other interest owner in the unitized area may have lawfully acquired from the state or others.
  - (c) Production of the pooled mineral from the unit allocated to each separate tract, respectively, as hereinafter provided, shall be deemed to have been produced from each such separate tract in the unit, regardless of the actual location of the well or wells thereon, for all purposes under the terms of the respective leases or other contracts thereon and this Agreement.
  - (d) All rights to the production of the pooled mineral from the unit, including royalties and other payments, shall be determined and governed by the lease or other contract pertaining to each separate tract, respectively, based upon the production so allocated to such tract only, in lieu of the actual production of the pooled mineral therefrom. Provided that, payments that are made on a per acre basis shall be reduced according to the number of acres pooled and included herein, so that payments made on a per acre basis shall be calculated based upon the number of acres actually included within the boundaries of the pooled unit covered by this Agreement.
  - (e) A shut-in oil or gas well located upon any land or lease included within said unit shall be considered as a shut-in oil or gas well located upon each land or lease included within said unit; provided, however, that shut-in oil or gas well royalty shall be paid to the State on each State lease wholly or partially within the unit, according to the terms of such lease as though such shut-in oil or gas well were

located on said lease, it being agreed that shut-in royalties provided in each State lease shall not be shared with other royalty owners.

- (f) Notwithstanding any other provision hereof, it is expressly agreed that each State lease may be maintained in force as to areas lying outside the unitized area described in Exhibit "B" only as provided in each such lease without regard to unit operations or unit production. Neither production of the pooled mineral, nor unit operations with respect thereto, nor the payment of shut-in royalties from a unit well, shall serve to hold any State lease in force as to any area outside the unitized area described in Exhibit "B" regardless of whether the production or operations on the unit are actually located on the State lease or not. "Area" as used in this paragraph shall be based upon surface acres to the end that, except as may otherwise be provided in each State Lease, the area inside the surface boundaries of the pooled unit, if held, will be held as to all depths and horizons.
- (g) If the Railroad Commission of Texas (or any other Texas regulatory body having jurisdiction) shall adopt special field rules providing for oil and/or gas proration units of less than 1108.60 acres, then Lessee agrees to either (1) drill to the density permitted by the Railroad Commission, (2) make application to the School Land Board of the State of Texas to reform the unit to comply with Railroad Commission unit rules, or (3) make application to the School Land Board of the State of Texas for such remedy as may be agreeable to the Board.
- (h) This Agreement shall not relieve Lessee from the duty of protecting the State leases described in Exhibit "A" and the State lands within the boundaries of the pooled unit described in Exhibit "B" from drainage from any well situated on privately owned land, lying outside the unitized area described in Exhibit "B", but, subject to such obligation, Lessee may produce the allowable for the entire unit as fixed by the Railroad Commission of Texas or other lawful authority, from any one or more wells completed thereon.
- (i) There shall be no obligation to drill internal offsets to any other well on separate tracts within the pooled unit, nor to develop the lands within the boundaries thereof separately, as to the pooled mineral.
- (j) Should this Agreement terminate for any cause, in whole or in part, the leases and other contracts affecting the lands within the unit, if not then otherwise maintained in force and effect, shall remain and may be maintained in force and effect under their respective terms and conditions in the same manner as though there had been production or operations under said lease or contract and the same had ceased on the date of the termination of this Agreement.

ALLOCATION OF PRODUCTION:

5.

For the purpose of computing the share of production of the pooled mineral to which each interest owner shall be entitled from the pooled unit, there shall be allocated to each tract committed to said unit that pro rata portion of the pooled mineral produced from the pooled unit which the number of surface acres covered by each such tract and included in the unit bears to the total number of surface acres included in said unit, and the share of production to which each interest owner is entitled shall be computed on the basis of such owner's interest in the production so allocated to each tract.

TAKING ROYALTY IN KIND:

6.

Notwithstanding anything contained herein to the contrary, the State may, at its option, upon not less than sixty (60) days notice to Lessee, require that payment of all or any royalties accruing to the State under this pooling or unitization agreement be made in kind, without deduction for the cost of producing, gathering, storing, separating, treating, dehydrating, compressing, processing, transporting and otherwise making the oil, gas and other products produced hereunder ready for sale or use.

FULL MARKET VALUE:

7.

In the event the State does not elect to take its royalty in kind, the State shall receive full market value for its royalty hereunder, such value to be determined as follows:

- (a) As to royalty on oil by (1) the highest posted price, plus premium, if any, offered or paid for oil, condensate, distillate, or other liquid hydrocarbons, respectively, of a like type and gravity for the field where produced and when run, or (2) the highest market price thereof offered or paid for the field where produced and when run, or (3) gross proceeds of the sale thereof, whichever is the greater;
- (b) As to royalty on gas, such value to be based on (1) the highest market price paid or offered for gas of comparable quality for the field where produced and when run, or (2) the gross price paid or offered to the producer, whichever is the greater.

(For the purposes of this Agreement "field" means the general area in which the lands covered hereby are located.)

EFFECTIVE DATE:

8.

Upon execution by the Commissioner of the General Land Office of the State of Texas this Agreement shall become effective as of February 17, 1998; however, it is agreed that the State will participate in production from the Unit well or wells on a unitized basis from the date the pooled mineral was or is first produced.

TERM:

9.

This Agreement shall remain in effect so long as the pooled mineral is being produced from said unit, or so long as all leases included in the pooled unit are maintained in force by payment of delay rentals or shut-in oil or gas well royalties, by drilling or rework, or by other means, in accordance with the terms of said leases. Nothing herein shall amend or modify Section 52.031 of the Natural Resources Code, or any of the provisions thereof which are contained in any State lease covered by this Agreement.

STATE LAND:

10.

Insofar as the royalty interest of the State of Texas in and under any State tract committed to the unit is concerned, this Agreement is entered into, made and executed by the undersigned Commissioner of the General Land Office by virtue of the authority and pursuant to the provisions of Subchapter E, Chapter 52, of the Natural Resources Code, authorizing the same, after the prerequisites, findings and approval hereof, as provided in said Code having been duly considered, made and obtained.

DISSOLUTION:

11.

The unit covered by this Agreement may be dissolved by Lessee, his heirs, successors or assigns, by an instrument filed for record in Washington County, Texas, and a certified copy thereof filed in the General Land Office at any time after the cessation of production on said unit or the completion of a dry hole thereon prior to production or upon such other date as may be approved by the School Land Board and mutually agreed to by the undersigned parties, their successors or assigns.

RATIFICATION/WAIVER:

12.

Nothing in this Agreement, nor the approval of this Agreement by the School Land Board, nor the execution of this Agreement by the Commissioner shall: (1) operate as a ratification or revivor of any State lease that has expired, terminated, or has been released in whole or in part or terminated under the terms of such State lease or the laws applicable thereto; (2) constitute a waiver or release of any claim for money, oil, gas or other hydrocarbons, or other thing due to the State by reason of the existence or failure of such lease; (3) constitute a waiver or release of any claim by the State that such lease is void or voidable for any reason, including, without limitation, violations of the laws of the State with respect to such lease or failure of consideration; (4) constitute a confirmation or recognition of any boundary or acreage of any tract or parcel of land in which the State has or claims an interest; or (5) constitute a ratification of, or a waiver or release of any claim by the State with respect to any violation of a statute, regulation, or any of the common laws of this State, or any breach of any contract, duty, or other obligation owed to the State.

COUNTERPARTS:

13.

This Agreement may be executed in counterparts and if so executed shall be valid, binding and have the same effect as if all the parties hereto actually joined in and executed one and the same document. For recording purposes and in the event counterparts of this Agreement are executed, the executed pages, together with the pages necessary to show acknowledgments, may be combined with the other pages of this Agreement so as to form what shall be deemed and treated as a single original instrument showing execution by all parties hereto.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement upon the respective dates indicated below.

Date Executed 3/11/98

STATE OF TEXAS

Legal  
Content  
Geology  
Execution



By: Garry Mauro  
Garry Mauro, Commissioner  
of the General Land Office

Date Executed 3-2-98

UNION PACIFIC RESOURCES Company

*SPS*  
*ALM*

By: Carolyn J. David  
Carolyn J. David, Attorney-In-Fact

ATTEST: *[Signature]*

CERTIFICATE

I, Linda K. Fisher, Secretary of the School Land Board of the State of Texas, do hereby certify that at a meeting of the School Land Board duly held on the 17th day of February, 1998, the foregoing instrument was presented to and approved by said Board under the provisions of Subchapter E, Chapter 52, of the Natural Resources Code, all of which is set forth in the Minutes of the Board of which I am custodian.

IN TESTIMONY WHEREOF, witness my hand this the 17th day of March, 1998.

Linda K. Fisher  
Secretary of the School Land Board

STATE OF TEXAS

COUNTY OF TARRANT

This instrument was acknowledged before me on March 2, 1998, by Carolyn J. David as Attorney-In-Fact for Union Pacific Resources Company, a Delaware corporation, on behalf of said corporation.

Maureen T. Black  
Notary Public in and for the  
State of Texas

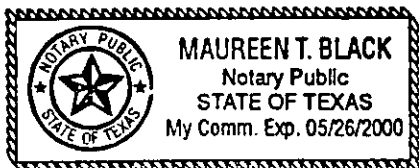


EXHIBIT 'A'

THIEL UNIT NO. 1  
WASHINGTON COUNTY, TEXAS  
1096.35 ACRES

9/24/96

LAND SUMMARY										
Thiel Unit No. 1										
Washington County, Texas										
AFE # A1780										
BEFORE PAYOUT - AT PAYOUT 5% OF JHY ORRI										
CONVERTS TO A 20% WI										
UPRC BPO WL: 1.00000000										
UPRC BPO NRI: .77387080										
JHY BPO ORL: .05608422										
LEASE INFORMATION:										
LESSOR	JHY/LS#	UNIT TR. #	LEASE NO.	EXPIRATION	LEASE NRI	# ACRES IN UNIT	UPRC UNIT NRI	JHY ORRI	LESSOR URI	COMMENTS
Bon J Meyer, et al - 110 61	7223-01	1 - Non-Drillsite	JHY 83819	4/8/97	0.8125	106.10	0.07258175	0.00604848	0.01814544	JHY FO Lease/W/PO 110 AC. LSE AS DRLD TO ALL
Benton W. Schulze, Sr. - 27 394 (1/4)	7232-01	2 - Non-Drillsite	JHY 80249(9)	4/15/97	0.8125	27.42	0.00468942	0.00039079	0.00117236	JHY FO Lease - payout notice - Need Memo
Hancy Green Scheffler - 30 0 (1/4)	7232-03	2 - Non-Drillsite	JHY 80249(8)	8/13/97	0.8333	.	0.00468942	0.00052105	0.00104209	JHY FO Lease - payout notice
Burnie H. Sommer - 27 394 (1/8)	7232-01	2 - Non-Drillsite	JHY 80249(10)	4/15/97	0.8125	.	0.00234471	0.00019539	0.00058618	JHY FO Lease - payout notice
Benton Schulze, II, Estate, et al - 27 394 (20)		2 - Non-Drillsite	UNLEASED				0.00500205			WAITING ON LEASE
Linda Goodman - 30 0 (1/80)		2 - Non-Drillsite	TX1-80249(3)	6/6/99	0.8125	.	0.00025401		0.00005862	UPRC LEASE
Ann Masel - 30 0 (1/80)		2 - Non-Drillsite	TX1-80249(5)	6/6/99	0.8125	.	0.00025401		0.00005862	UPRC LEASE
Mark Kamin, et al - 30 0 (1/20)		2 - Non-Drillsite	TX1-80249(4)	5/29/99	0.8125	.	0.00101604		0.00023447	UPRC LEASE
John Friedman Altman - 30 0 (1/20)		2 - Non-Drillsite	TX1-80249(1)	5/29/99	0.8125	.	0.00101604		0.00023447	UPRC LEASE
Joe G. Post Trust, et al - 30 0 (1/20)		2 - Non-Drillsite	TX1-80249(2)	6/6/99	0.8125	.	0.00101604		0.00023447	UPRC LEASE
State of Texas		3 - Non-Drillsite	TX2-81623		0.8125	5.41	0.00400933		0.00092523	REC'D STATE LEASE APPROVAL LETTER
Burney C. Graeber - 7 47 (1/2)	7280-01	4 - Non-Drillsite	JHY 83806/2	8/10/97	0.8333	14.54	0.00497332	0.00055259	0.00110518	JHY FO Lease - payout notice
Lloyd S. Fink - 7 47 (1/2)	7280-02	4 - Non-Drillsite	JHY 83806/1	8/10/97	0.8333	.	0.00497332	0.00055259	0.00110518	JHY FO Lease - payout notice
Burney C. Graeber - 6 524 (1/2)	7264-01	4 - Non-Drillsite	JHY 83810/2	7/6/97	0.8333	.	calc. included above	calc. included above	calc. included above	JHY FO Lease - payout notice
Lloyd S. Fink - 6 524 (1/2)	7264-02	4 - Non-Drillsite	JHY 83810/1	7/6/97	0.8333	.	calc. included above	calc. included above	calc. included above	JHY FO Lease - payout notice
Larry Astorin - 19 2	WA7233-01	5 - Drillsite	JHY 83757	5/4/97	0.8333	19.78	0.01353126	0.00150347	0.00300695	JHY FO Lease - payout notice
Est. of E.C. Barfoot, Jr. - 19 442	W7291-01	6 - Drillsite	JHY 83753	7/30/97	0.8333	19.41	0.01327815	0.00147535	0.00295070	JHY FO Lease - payout notice
Pat J. Cole - 3 434 (1/2)	7248-02	7 - Non-Drillsite	JHY 83802/1	5/21/97	0.8333	3.43	0.00117321	0.00013036	0.00026071	JHY FO Lease - payout notice
Walter George Schomberg - 3 434 (1/2)	7248-01	7 - Non-Drillsite	JHY 83802/2	5/21/97	0.8333	.	0.00117321	0.00013036	0.00026071	JHY FO Lease - payout notice
Benton W. Roberts - 30 (1/2)	7288-01	8 - Non-Drillsite	JHY 83822/1	9/19/97	0.8333	3.01	0.00102955	0.00011439	0.00022879	JHY FO Lease - payout notice
Arnold M. & James E. Kennedy (1/2)		8 - Non-Drillsite	UNLEASED			.	0.00137274			UNLEASED

THIEL UNIT NO. 1  
WASHINGTON COUNTY, TEXAS  
1096.35 ACRES

9/24/96

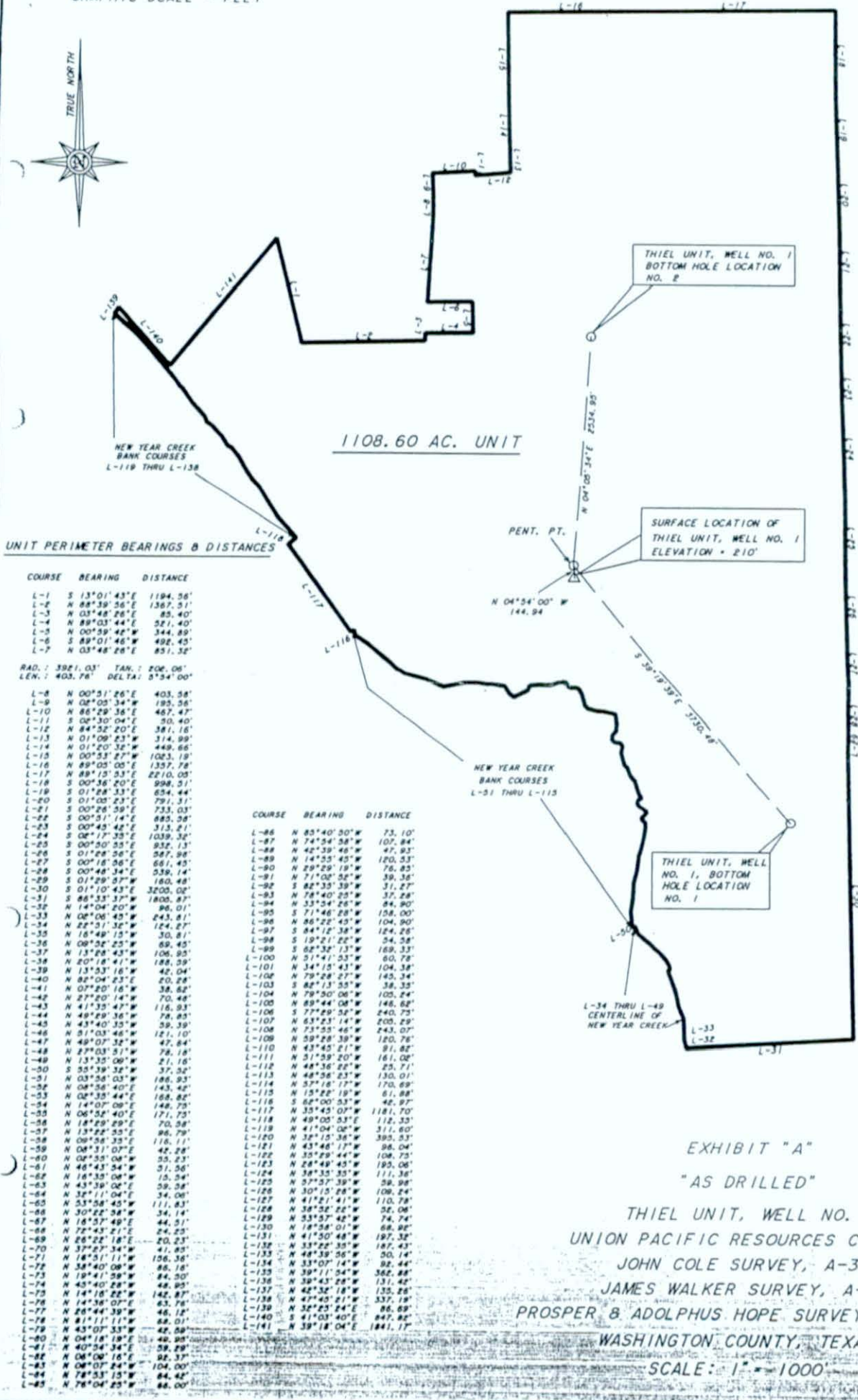
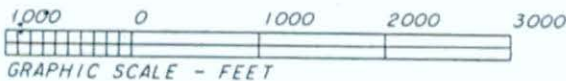
LESSOR	UNIT TR. #	LEASE NO.	EXPIRATION	LEASE NRI	# ACRES IN UNIT	UPRC UNIT NRI	JHY ORRI	LESSOR URI	COMMENTS
Ervin M. Kuecker - 3.0	7286-01	JHY 83448	9/13/97	0.8333	3.00	0.00205226	0.00022803	0.00045606	JHY FO Lease - payout notice
Larry Schroeder - 3.0	WA 7285-01	JHY 84420	9/16/97	0.8333	3.01	0.00205911	0.00022879	0.00045758	JHY FO Lease - payout notice
Ben W. Boehnke - 7.0	WA 7226-01	JHY 83756	10/31/97	0.8333	7.00	0.00478862	0.00053207	0.00106414	JHY FO Lease - payout notice
Kenneth Ray Baker - 1.0	7338-01	JHY 83749	11/2/97	0.8333	1.01	0.00069093	0.00007677	0.00015354	JHY FO Lease - payout notice
Rosell Jeanette Baker - 18.22	7339-01	JHY 83751	11/2/97	0.8333	18.29	0.01251197	0.00139022	0.00278044	JHY FO Lease - payout notice
Johnny D. Buford - 9.816	7370-01	JHY 83755	12/6/97	0.8333	9.79	0.00689722	0.00074414	0.00148827	JHY FO Lease - payout notice
Arne Spitzer - 42.253		TX1-49362	8/8/96	0.8333	1.32	0.00100333		0.00020067	Lease extended-LIMITATION-Neapolitan Unit
Margaret Irene Roberts - 14.90		TX1-60550	11/2/96	0.8333	0.07	0.00005321		0.00001064	Lease extended-LIMITATION-Neapolitan Unit
Henry Gus Herrmann, et al - 134.648 (95833333) 7231-01		JHY 84415/2	4/26/97	0.8333	132.92	0.08714028	0.00968225	0.01936451	JHY FO Lease - payout notice
Henry E. Herrmann, Jr. - 134.648 (04166667) 7231-02		JHY 84415/1	3/17/98	0.8333		0.00378871	0.00042097	0.00084194	JHY FO Lease - payout notice
Mark Kamin, et al - 78.065	WA 7358-01	JHY 83846	9/15/97	0.8125	78.71	0.05384458	0.00448705	0.01346114	JHY FO Lease - payout notice
Reinhold Herrmann - 2.36	7234-01	JHY 84416	5/14/97	0.8333	2.41	0.00164865	0.00018318	0.00036637	JHY FO Lease - payout notice
Neil Wayne Maurer - 1.605	7237-01	JHY 83818	5/14/97	0.8333	1.65	0.00112875	0.00012542	0.00025083	JHY FO Lease - payout notice
Lake Mae Watkins - 1.605	7239-01	JHY 84424	5/17/97	0.8333	1.66	0.00113559	0.00012618	0.00025235	JHY FO Lease - payout notice
Sueiri Warren & Terri Stewart - 1.605	7244-01	JHY 84423	5/14/97	0.8333	1.66	0.00113559	0.00012618	0.00025235	JHY FO Lease - payout notice
Henry E. Herrmann, Jr. - 1.605	7392-01	JHY 84414	3/17/98	0.8333	1.68	0.00114927	0.00012777	0.00025539	JHY FO Lease - payout notice
Alfred Herrmann - 1.605	7236-01	JHY 84413	5/14/97	0.8333	1.67	0.00114243	0.00012694	0.00025387	JHY FO Lease - payout notice
Anton W. Sommerfield, Jr. - 1.605	7240-01	JHY 84427	5/14/97	0.8333	1.68	0.00114927	0.00012777	0.00025539	JHY FO Lease - payout notice
Janeta Sue Bolenbarr and Donald Lee Weiss - 1.605		JHY 83757	5/14/97	0.8333	1.70	0.00116295	0.00012922	0.00025643	JHY FO Lease - payout notice
Jeanne D. Maurer - 2.0	7235-01	JHY 83817	5/14/97	0.8333	2.16	0.00147763	0.00016418	0.00032836	JHY FO Lease - payout notice
Harwood Lange - 14.482 (1/2)	7247-01	JHY 83811/2	5/20/97	0.8333	14.77	0.00505199	0.00056133	0.00112266	JHY FO Lease - payout notice
Donna Sue Garcia - 14.482 (1/6)	7247-02	JHY 83811/1	8/1/97	0.8333		0.00168400	0.00018711	0.00037422	JHY FO Lease - payout notice
Guy L. Hatley - 14.482 (1/6)	7247-03	JHY 83811/4	8/1/97	0.8333		0.00168400	0.00018711	0.00037422	JHY FO Lease - payout notice
David L. Hatley - 14.482 (1/6)	7247-04	JHY 83811/3	8/1/97	0.8333		0.00168400	0.00018711	0.00037422	JHY FO Lease - payout notice
Brenham Country Club, Inc. - 99.7	WA 7230-01	JHY 83760	5/11/97	0.8333	106.17	0.07262963	0.00806996	0.01613992	JHY FO Lease - payout notice
Kenneth Hulse - 2.786	7249-01	JHY 84417	5/26/97	0.8333	2.99	0.00204542	0.00022727	0.00045454	JHY FO Lease - payout notice
Larry Wayne Benker - 4.179	7246-01	JHY 83752	5/31/97	0.8333	4.54	0.00310576	0.00034508	0.00069017	JHY FO Lease - payout notice
Glenwood L. Vernon - 4.928	7250-01	JHY 84426/1	5/25/97	0.8333	5.04	0.00344780	0.00038309	0.00076618	JHY FO Lease - payout notice
William H. Warnasch - 2.51	7250-02	JHY 84426/2	6/8/97	0.8333	2.70	0.00184704	0.00020523	0.00041045	JHY FO Lease - payout notice
Verdell A. Toll - 743	7250-03	JHY 84426/3	6/18/97	0.8333	0.88	0.00060200	0.00006689	0.00013378	JHY FO Lease - payout notice
Verdell A. Toll - .70 ** (1/8)		JHY -	6/18/97	0.8333	0.94	0.00008038	0.00000893	0.00001786	JHY FO Lease - payout notice
William H. Warnasch - .70 ** (1/8)		JHY -	6/8/97	0.8333		0.00008038	0.00000893	0.00001786	JHY FO Lease - payout notice
Glenwood L. Vernon - .70 ** (1/8)		JHY -	5/25/97	0.8333		0.00048228	0.00005359	0.00010717	JHY FO Lease - payout notice
** 7 acres (tr. 33) on same lease as tr. 32, 33, 34									
State of Texas		TX 2-81673		0.8125	11.12	0.00824098		0.00190176	REC'D STATE LEASE APPROVAL LETTER
Richard L. Oberlin - 4.38	7271-01	JHY 83821	7/11/97	0.8333	4.35	0.00297578	0.00033064	0.00066129	JHY FO Lease - payout notice

THIEL UNIT NO. 1  
WASHINGTON COUNTY, TEXAS  
1096.35 ACRES

9/24/96

LESSOR	UNIT TR. #	LEASE NO.	EXPIRATION	LEASE NRI	# ACRES IN UNIT	UPRC UNIT NRI	JHY ORRI	LESSOR URI	COMMENTS
Evelyn Rosenthal - 50.72 - (1/2)	38 - Drillsite	TX1 - 72681/1	1/20/98	0.8000	57.68	0.02104437		0.00526109	limitation-no pugh clause - LPR states pugh clause
Linda Goodman - 50.72 - (1/4) 7312-02	38 - Drillsite	JHY 72611/2	9/29/97	0.8125		0.00986455	0.00082205	0.00246614	JHY FO Lease - payout notice - limitation
Ann Maset - 50.72 - (1/4) WA 7312-01	38 - Drillsite	JHY 72681/3	9/29/97	0.8125		0.00986455	0.00082205	0.00246614	JHY FO Lease - payout notice - limitation
Margaret Collette - 384 7319-01	39 - Drillsite	JHY 83804	11/17/97	0.8333	0.42	0.00028732	0.00003192	0.00006365	JHY FO Lease - payout notice
Herbert H. Thiel, Jr. - 88.13 7216-01	40 - Drillsite	JHY 84422	3/22/97	0.8125	90.67	0.06202627	0.00516886	0.01550657	JHY FO Lease - payout notice
James Lindsey Malner - 13.6829 7287-01	41 - Drillsite	JHY 84412	7/19/97	0.8333	13.91	0.00951567	0.00105730	0.00211459	JHY FO Lease - payout notice
Fred Koehne - 1.3191 7263-01 7281-01	42 - Non-Drillsite	JHY 83847	7/23/97	0.8333	1.37	0.00093720	0.00010413	0.00020827	JHY FO Lease - payout notice
Ruth Stetler - 11.923 (100% in 10.923 & 1/2 in 1.0) all 7263-01	43 - Non-Drillsite	JHY 84421/2	7/7/97	0.8333	12.02	0.00788070	0.00087563	0.00175127	JHY FO Lease - payout notice
Interest of Ruth now in Kathy Lynn Stetler									
Jaimie Lacy - 1.0 (1/2) UPRC will capture	43 - Non-Drillsite	UNLEASED				0.00045606			Unable to locate - UPRC will capture interest
John Allen Jr. & Gwendolyn Allen - 35.07 (1/4) 7311-01	44 - Non-Drillsite	JHY 80165(2)	9/27/97	0.8333	35.54	0.00607812	0.00067535	0.00135069	JHY FO Lease - payout notice
Lunnie Allen Sr., et ux - 35.07 (1/4)	44 - Non-Drillsite	TX1-80165(1)	5/2/99	0.8333		0.00675347		0.00135069	JHY FO Lease - payout notice
Ronald Fields - 35.07 (3/128)	44 - Non-Drillsite	TX1-80165(7)	5/6/99	0.8333		0.00063314		0.00012663	UPRC LEASE
James Fox Fields - 35.07 (3/128)	44 - Non-Drillsite	TX1-80165(3)	5/6/99	0.8333		0.00063314		0.00012663	UPRC LEASE
Linda Fields - 35.07 (3/128)	44 - Non-Drillsite	TX1 - 80165(5)	5/6/99	0.8333		0.00063314		0.00012663	UPRC LEASE
Joy Delle Maskins - 35.07 (0625)	44 - Non-Drillsite	TX1 - 80165(6)	5/3/99	0.8333		0.00168837		0.00033767	UPRC LEASE
Dwores A F Evans - 35.07 (0625)	44 - Non-Drillsite	TX1 - 80165(2)	5/2/99	0.8333		0.00168837		0.00033767	UPRC LEASE
Dorothy Eady, et al - (3046875 unleased)	44 - Non-Drillsite					0.00987695			UNLEASED
Edmund A. Schaefer - 8.687 7269-01	45 - Non-Drillsite	JHY 84418	7/27/97	0.8333	7.56	0.00517171	0.00057463	0.00114927	JHY FO Lease - payout notice
Jerry Lee Schaefer - 1.653 7270-01	46 - Non-Drillsite	JHY 84419	7/27/97	0.8333	1.88	0.00128609	0.00014290	0.00028580	JHY FO Lease - payout notice
Charles H. Conner - 11.67 (.44444444) 7273-02	47 - Non-Drillsite	JHY 82113/3	8/10/97	0.8333	11.40	0.00346605	0.00038512	0.00077023	JHY FO Lease - payout notice
Hugh Conner - 11.67 (.44444445) 7273-01	47 - Non-Drillsite	JHY 82113/5	8/10/97	0.8333		0.00346605	0.00038512	0.00077023	JHY FO Lease - payout notice
Larry Johnson - 11.67 (.11111111)	47 - Non-Drillsite	UNLEASED				0.00115535			UNLEASED
Larry Johnson - 11.67 (.11111111)	48 - Non-Drillsite	UNLEASED			11.68	0.00118373			UNLEASED
Charles H. Conner - 11.67 (08080808)	48 - Non-Drillsite	JHY -	8/10/97	0.8333		0.00064567	0.00007174	0.00014348	JHY FO Lease - payout notice
Hugh Conner - 11.67 (08080809)	48 - Non-Drillsite	JHY -	8/10/97	0.8333		0.00064567	0.00007174	0.00014348	JHY FO Lease - payout notice
Yvonne C. Phelps - 11.67 (08080808) 7273-07	48 - Non-Drillsite	JHY 82113/7	8/16/97	0.8333		0.00064567	0.00007174	0.00014348	JHY FO Lease - payout notice
Lawrence Christian Coleman - 11.67 (08080808) 7273-08	48 - Non-Drillsite	JHY 82113/8	8/17/97	0.8333		0.00064567	0.00007174	0.00014348	JHY FO Lease - payout notice
Sylvester Conner - 11.67 (08080808) 7273-09	48 - Non-Drillsite	JHY 82113/6	8/20/97	0.8333		0.00064567	0.00007174	0.00014348	JHY FO Lease - payout notice
Clayton Conner - 11.67 (08080808) 7273-05	48 - Non-Drillsite	JHY 82113/4	8/20/97	0.8333		0.00064567	0.00007174	0.00014348	JHY FO Lease - payout notice
Mary E. Johnson - 11.67 (08080808) 7273-06	48 - Non-Drillsite	JHY 82113/6	8/16/97	0.8333		0.00064567	0.00007174	0.00014348	JHY FO Lease - payout notice
Elurd Devenport - 11.67 (08080808) 7273-04	48 - Non-Drillsite	JHY 82113/10	8/18/97	0.8333		0.00064567	0.00007174	0.00014348	JHY FO Lease - payout notice
Jella D. Wright - 11.67 (08080808) 7273-03	48 - Non-Drillsite	JHY 82113/9	8/12/97	0.8333		0.00064567	0.00007174	0.00014348	JHY FO Lease - payout notice
Aida Conner Hens - 11.67 (08080808)	48 - Non-Drillsite	UNLEASED				0.00086089			
Tyree Conner - 11.67 (08080808)	48 - Non-Drillsite	UNLEASED				0.00086089			





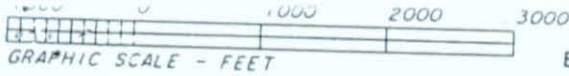


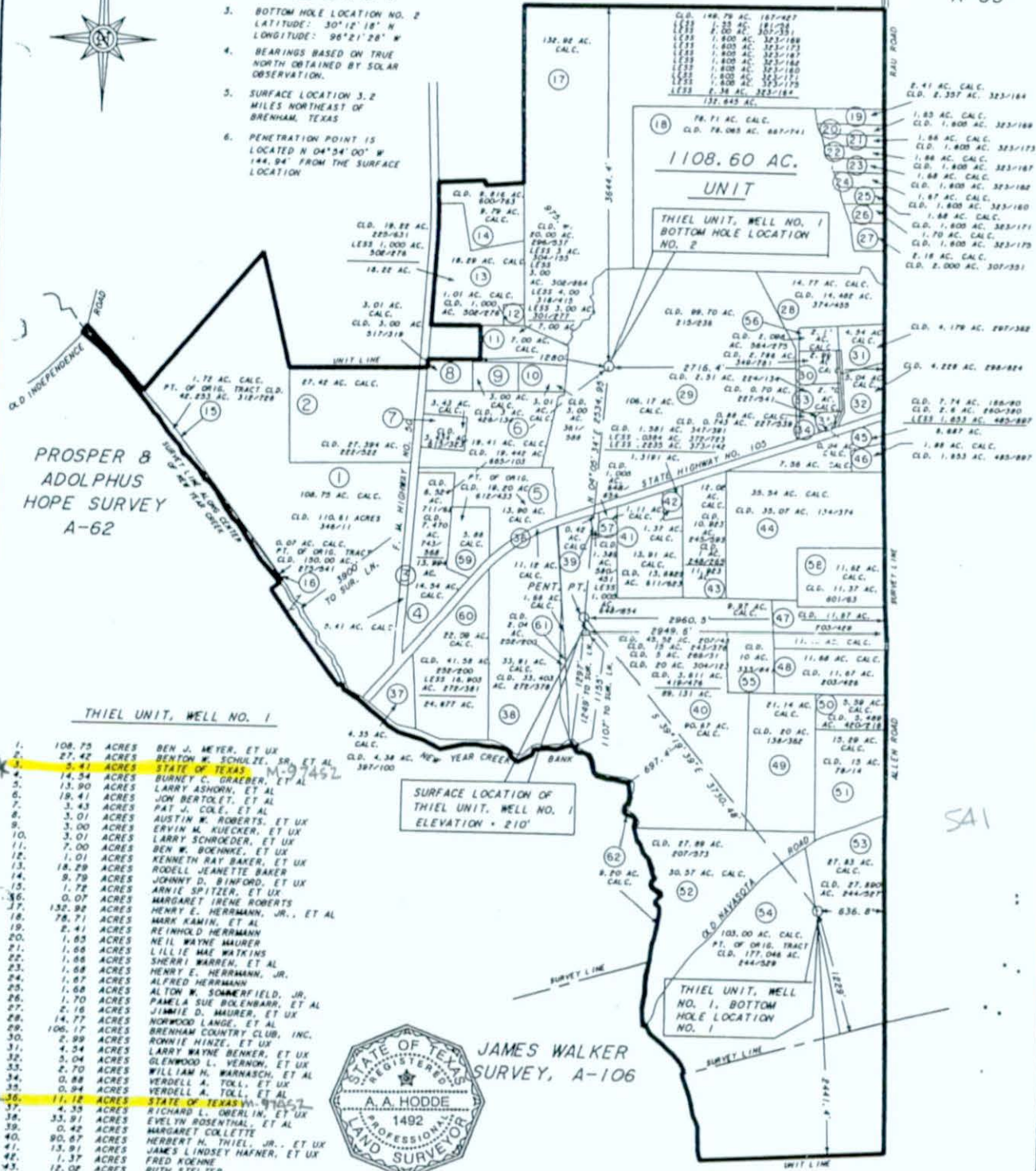
EXHIBIT "C"

NOTES:

1. SURFACE LOCATION:  
LATITUDE: 30°11'52" N.  
LONGITUDE: 96°21'31" W.
2. BOTTOM HOLE LOCATION NO. 1  
LATITUDE: 30°11'24" N  
LONGITUDE: 96°21'05" W
3. BOTTOM HOLE LOCATION NO. 2  
LATITUDE: 30°12'18" N  
LONGITUDE: 96°21'28" W
4. BEARINGS BASED ON TRUE NORTH OBTAINED BY SOLAR OBSERVATION.
5. SURFACE LOCATION 3.2 MILES NORTHEAST OF BRENHAM, TEXAS
6. PENETRATION POINT IS LOCATED N 04°04'00" W 144.94' FROM THE SURFACE LOCATION

JOHN COLE SURVEY, A-32

ISAAC JACKSON SURVEY A-66



PROSPER & ADOLPHUS HOPE SURVEY A-62

THIEL UNIT, WELL NO. 1

SURFACE LOCATION OF THIEL UNIT, WELL NO. 1  
ELEVATION = 210'

JAMES WALKER SURVEY, A-106



I, A. A. HODDE, REGISTERED PROFESSIONAL LAND SURVEYOR NO. 1492 OF THE STATE OF TEXAS, DO HEREBY CERTIFY THAT THIS PLAT WAS PREPARED FROM A PARTIAL SURVEY MADE ON THE GROUND AND FROM DEED RECORD INFORMATION AND DO HEREBY CERTIFY THAT THE RULES OF THE TEXAS BOARD OF PROFESSIONAL LAND SURVEYING HAVE BEEN COMPLIED WITH REGARDING THE TIES SHOWN FROM THE SURFACE LOCATION TO THE UNIT LINES.  
DATED THIS THE 31ST DAY OF MAY, 1996, A. D.  
REVISED NOVEMBER 7, 1998

"AS DRILLED"  
WELL LOCATION PLAT  
UNION PACIFIC RESOURCES COMPANY  
THIEL UNIT, WELL NO. 1  
WASHINGTON COUNTY, TEXAS  
SCALE: 1" = 1000'

1. 108.75 ACRES BEN J. MEYER, ET UX
2. 27.42 ACRES BENTON T. BOENHARDT, ET UX
3. 5.41 ACRES STATE OF TEXAS
4. 13.54 ACRES BURNETT C. GRAEBER, ET AL
5. 15.90 ACRES LARRY ASHORN, ET AL
6. 18.41 ACRES JON BERTOLET, ET AL
7. 3.43 ACRES PAT J. COLE, ET AL
8. 3.01 ACRES AUSTIN W. ROBERTS, ET UX
9. 3.00 ACRES ERYIN M. KUECKER, ET UX
10. 7.00 ACRES LARRY SCHROEDER, ET UX
11. 7.00 ACRES DEW W. BOENHKE, ET UX
12. 1.01 ACRES KENNETH RAY BAKER, ET UX
13. 18.29 ACRES RODELL JEANETTE BAKER
14. 9.79 ACRES JOHNNY D. BINFORD, ET UX
15. 1.75 ACRES ARNIE SPITZER, ET UX
16. 0.07 ACRES MARGARET IRENE ROBERTS
17. 132.92 ACRES HENRY E. HERRMANN, JR., ET AL
18. 78.71 ACRES MARK KAMIN, ET AL
19. 2.41 ACRES REINHOLD HERRMANN
20. 1.65 ACRES NEIL WAYNE MAURER
21. 1.65 ACRES LILLIE MAE WATKINS
22. 1.68 ACRES SHEPHERD WARREN, ET AL
23. 1.68 ACRES HENRY E. HERRMANN, JR.
24. 1.67 ACRES ALFRED HERRMANN
25. 1.68 ACRES ALTON W. SOMMERFIELD, JR.
26. 1.70 ACRES PAMELA SUE BOENHARDT, ET AL
27. 2.16 ACRES JIMMIE D. MAURER, ET UX
28. 14.77 ACRES NORWOOD LANGE, ET AL
29. 106.17 ACRES BRENHAM COUNTRY CLUB, INC.
30. 2.99 ACRES RONNIE HINZEL, ET UX
31. 4.54 ACRES LARRY WAYNE BENNER, ET UX
32. 5.04 ACRES GLENWOOD L. VERNON, ET UX
33. 2.70 ACRES WILLIAM H. WARNASCH, ET AL
34. 0.88 ACRES VERDELL A. TOLL, ET UX
35. 0.94 ACRES VERDELL A. TOLL, ET AL
36. 11.12 ACRES STATE OF TEXAS
37. 4.35 ACRES RICHARD L. OBERLIN, ET UX
38. 35.91 ACRES EVELYN ROSENTHAL, ET AL
39. 0.42 ACRES MARGARET COLLETTE
40. 90.67 ACRES HERBERT H. THIEL, JR., ET UX
41. 13.91 ACRES JAMES LINDSEY HAFNER, ET UX
42. 1.37 ACRES FRED KOENNE
43. 12.02 ACRES RUTH STELTER
44. 35.54 ACRES JOHN ALLEN, JR., ET AL
45. 7.58 ACRES EDWARD A. SCHAEFER, ET UX
46. 1.88 ACRES JERRY LEE SCHAEFER
47. 11.40 ACRES CHARLES H. CONNER, ET AL
48. 1.68 ACRES WILLIE C. PHELPS, ET AL
49. 21.14 ACRES BONNIE S. BAILEY
50. 5.59 ACRES ROBERT MEIER, ET UX
51. 15.29 ACRES EARL E. EWING
52. 30.57 ACRES OWEN H. ZEISS, ET UX
53. 27.83 ACRES BARBARA ZEISS KUECKER, ET VIR
54. 103.00 ACRES W. E. ZEISS, ET UX
55. 9.97 ACRES ANDREW ELLIOTT, ET AL
56. 2.11 ACRES FRED OTTO GASKAMP, ET UX
57. 1.11 ACRES ROBERT DON RANDELMANN
58. 17.62 ACRES IRIS JAMES RODGERS, ET AL
59. 5.88 ACRES LARRY ASHORN, ET AL
60. 22.06 ACRES EVELYN ROSENTHAL, ET AL
61. 1.61 ACRES EVELYN ROSENTHAL, ET AL
62. 8.20 ACRES STATE OF TEXAS

1108.60 ACRE UNIT

A. A. HODDE  
REGISTERED PROFESSIONAL  
LAND SURVEYOR NO. 1492  
HODDE & HODDE LAND SURVEYING, INC.  
613 EAST HORTON  
BREHMAN, TEXAS 77833  
409-838-0681

④ M-97584

Pooling Committee Rpt. +  
Pooling Agreement

DATED: 2-17-98

FILED: 3-16-98

*M-97584*

**RAILROAD COMMISSION OF TEXAS  
OIL & GAS DIVISION**

RECEIVED  
JUN 19 1996  
Regulatory Department

PERMIT TO DRILL, DEEPEN, PLUG BACK, OR RE-ENTER  
ON REGULAR OR ADMINISTRATIVE EXCEPTION LOCATION

PERMIT NUMBER <b>449029</b>	DATE PERMIT ISSUED OR AMENDED <b>6/12/96</b>	DISTRICT <b>03</b>
API NUMBER <b>42 477 30824</b>	FORM W-1 RECEIVED <b>6/07/96</b>	COUNTY <b>WASHINGTON</b>
TYPE OF OPERATION <b>DRILL (HORIZONTAL)</b>		ACRES <b>1,096.35</b>
OPERATOR <b>UNION PACIFIC RESOURCES COMPANY P.O. BOX 7 MS 3006 FORT WORTH TX 76101-0007</b>		NOTICE This permit and any allowable assigned may be revoked if payment for fee(s) submitted to the Commission is not honored. District Office Telephone No.: <b>713 460-0631</b>
LEASE NAME <b>THIEL UNIT</b>	WELL NUMBER <b>1</b>	
LOCATION <b>3.20 MILES NE FROM BRENHAM</b>	TOTAL DEPTH <b>15,675</b>	
SECTION, BLOCK and/or SURVEY <b>SECTION =&gt; BLOCK =&gt; ABSTRACT =&gt; 32</b> <b>SURVEY ==&gt; JOHN COLE</b>		
DISTANCE--LEASE LINES <b>2,049.60 F E - 1,096.00 F S</b>		DISTANCE--NEAREST WELL ON LEASE <b>N/A</b>
DISTANCE--SURVEY LINES <b>2,049.60 F E - 1,096.00 F S (CREEK)</b>		

**READ IMPORTANT CONDITIONS AND INSTRUCTIONS ON THE BACK OF THIS FORM**

FIELD(S) AND LIMITATIONS		
PERMIT BOTTOM HOLE LOCATION:		
LEASE DISTANCE ==>	<b>467.00 F E</b>	<b>- 1,924.70 F S</b>
SURVEY DISTANCE =>	<b>467.00 F E</b>	<b>- 554.00 F S</b>
NEAREST WELL ==> <b>N/A</b>		

GIDDINGS (AUSTIN CHALK-3)  
GIDDINGS (AUSTIN CHALK, GAS)

**\*\* LIMITATIONS \*\***

THE FOLLOWING RESTRICTIONS APPLY TO ALL FIELDS

REGULAR PROVIDED THIS WELL IS NEVER COMPLETED IN VIOLATION OF  
APPLICABLE SPECIAL FIELD OR STATEWIDE SPACING RULES.  
ANY WELLBORE DRILLED UNDER THIS PERMIT MUST BE COMPLETED, OPERATED,  
AND PRODUCED IN COMPLIANCE WITH STATEWIDE RULE 32.  
PENETRATION POINT SAME AS SURFACE LOCATION.  
TL#2: 2500 FNL & 2900 FEL OF UNIT  
4435 FSW(CREEK)L & 2900 FEL

## RAILROAD COMMISSION OF TEXAS

OIL AND GAS DIVISION

CAROLE KEETON HYLANDER,  
CHAIRMAN  
BARRY WILLIAMSON, COMMISSIONER  
CHARLES R. MATTHEWS,  
COMMISSIONER



DAVID E. SCHIECK  
DIRECTOR, OIL AND GAS DIVISION

1701 N. CONGRESS

CAPITOL STATION - P.O. BOX 12967 AUSTIN, TEXAS 78711-2967

(512) 463-7288

June 12, 1996

UNION PACIFIC RESOURCES COMPANY  
P.O. BOX 7 MS 3006  
FORT WORTH TX 76101-0007

RE: DIRECTIONAL DEVIATION  
PERMIT #: 449029  
LEASE: THIEL UNIT  
FIELD: SEE ATTACHMENT

WELL #: 1  
COUNTY: WASHINGTON

## SURFACE LOCATION:

LEASE: 2949.60 F E E 1096.00 F S  
SURVEY: 2949.60 F E E 1096.00 F S (CREEK)

## BOTTOM HOLE LOCATION:

LEASE: 467.00 F E E 1924.70 F S  
SURVEY: 467.00 F E E 554.00 F S

OPERATOR :

This will be your authority in accordance with Statewide Rule 11 to directionally drill the subject well. Please bear in mind that this well will be directionally drilled at your own risk and no allowable will be assigned until this office is in receipt of a certified directional survey report made and filed in the manner prescribed in Statewide Rules 11 and 12 showing that exact surface location and bottomhole location of the well, together with a certified plat to adequate scale showing correct surface location and other pertinent information in order to determine exact bottomhole location.

A drilling permit for the well is being issued subject to review after receipt of all completion forms, together with such evidence as is necessary to show the exact bottomhole location of the deviated well. A copy of this permit must be furnished to the person in charge of directional control of the well, so such person will know the permitted bottomhole location to which the well is projected. Completion forms should be accompanied by a letter of transmittal giving reference to this letter as authority to directionally deviate the well. This procedure should be followed regardless of whether the well is completed either as a producer or as a dry hole.

Yours very truly,

DAVID C. TRIANA, P.E.  
PERMITTING ENGINEER

cc: RRC - District Office HOUSTON  
Production and Proration

03

ATTACHMENT  
PERMIT #: 449029

FIELD: GIDDINGS (AUSTIN CHALK-3)

FIELD: GIDDINGS (AUSTIN CHALK, GAS)



DEPTH OF USABLE-QUALITY GROUND WATER TO BE PROTECTED

PLEASE READ ALL INSTRUCTIONS

The information requested is essential in order for this agency to provide an appropriate response. Please allow for receipt of this form in our offices at least two weeks before your operation begins. Due to the volume of these requests, it is difficult for us to handle telephone inquiries, and such only serve to delay the processing of these forms. Complete, keep the bottom sheet (yellow) for your files, and mail the top 3 sheets of the 4-sheet set of carbon-backed forms to the address below; one of them will be returned to you bearing our response and one will be sent to the appropriate district office of the Railroad Commission. For questions phone: 512/239-0515.

Surface Casing  
 TNRCC  
 P.O. Box 13087  
 Austin, TX 78711-3087

Date 06/06/96

TNRCC File No.: SC-

927

Teresa M. Parks (817) 877-6925

Name of person preparing this request & telephone no. w/AC

Union Pacific Resources Company

Company (operator's name as on RRC form W-1)

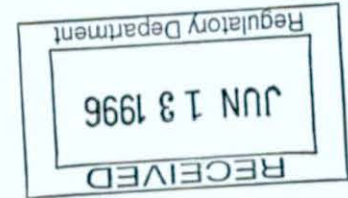
PO Box 7, MS 3006

Mailing Address

Fort Worth, Texas 76101-0007

City and State

Zip Code



COUNTY Washington Survey Name SL & TL2: John Cole TL1: James Walker  
 Block No. \_\_\_\_\_ Township \_\_\_\_\_ Section or Survey No. \_\_\_\_\_ (or) Lot No. \_\_\_\_\_  
 Abstract No. A-SL&TL2:32 TL1:106 LEASE Name Thiel Unit Well No. 1

A map showing all surrounding SURVEYS and your well site must accompany this request.

Distances, in feet, and directions measured at right angles from each of two intersecting Section or Survey lines  
 (NOT LEASE LINES) 2949.6 feet from East line and 1096 feet from South line  
 Distance (in miles) and direction from a nearby town in this County (name the town) 3.2 miles NE from Brenham, TX

THE ABOVE INFORMATION IN THIS BLOCK MUST BE COMPLETE AND CORRECT!!!

RRC Lease No. \_\_\_\_\_ RRC Dist. No. \_\_\_\_\_

Elevation (if avail.) 210' Proposed Total Depth 15675' Geologic Fm. at T.D. Austin Chalk

Purpose of the Request:  New Drill  Re-entry  Plug & Abd.  Other (specify) \_\_\_\_\_

Is this an amended request?  Yes  No Give previous File No. for this well: SC- \_\_\_\_\_

Additional data (check if attached):

Log of same or nearby well \_\_\_\_\_ (The applicable type of well log of a nearby well that shows the aquifers.)

ALWAYS attach the electric log of any well that is to be reentered.

Additional remarks: New horizontal wellbore

The TEXAS NATURAL RESOURCE CONSERVATION COMMISSION's recommendation for the protection of usable-quality ground water at the referenced location is as follows:

CO-WASHINGTON, SUR-COLE J., LSE-THIEL UNIT, A-32, #77/2200,, 850

The base of usable-quality water that must be protected is estimated to occur at a depth of 2200 feet below the land surface. Moreover, the water contained in the interval from the land surface to a depth of 350 feet must be isolated from water in underlying beds.

Very truly yours,

*Steven L. White*  
 Steven L. White

Date June 10, 1996

Geologist, Surface Casing, TNRCC

typed by TNRCC

NOTE: The depth to which we recommend that usable-quality water strata should be protected is intended to apply only to the subject well and not for area-wide use. Approval of the well-completion methods for protection of this ground water falls under the jurisdiction of the Railroad Commission of Texas. This recommendation is intended for normal drilling, production, and plugging operations only and does not apply to salt water disposal operations into a nonproductive zone (RRC Form W-14).

Fold

Fold

DO NOT WRITE HERE  
 FOR TNRCC USE ONLY

TYPE OR PRINT IN INK

Type or print only

483-047

API No. 42- 477-30824

7. RRC District No.

03

# Gas Well Back Pressure Test, Completion or Recompletion Report, and Log

8. RRC Gas ID No.

160814

9. Well No.

1

1. FIELD NAME (as per RRC Records or Wildcat)  
GIDDINGS AUSTIN CHALK - GAS

2. LEASE NAME  
THIEL UNIT

3. OPERATOR'S NAME (Exactly as shown on Form P-5, Organization Report)  
UNION PACIFIC RESOURCES COMPANY

RRC Operator No.  
876645

10. County of well site  
WASHINGTON

4. ADDRESS  
P.O. BOX 7, MS 3006 FORT WORTH, TEXAS 76101-007

11. Purpose of filing

Initial Potential

5. Location (Section, Block, and Survey)  
John Cole Abstract 32

5b. Distance and direction to nearest town in this county.  
3.20 miles NE from Brenham

Retest

6. If operator has changed within last 60 days, name former operator

12. If workover or reclass, give former field (with reservoir) & Gas ID or oil lease no.  
FIELD & RESERVOIR

Reclass

13. Pipe Line Connection  
Ferguson Burleson Cty G.G.S.

Well record only   
(Explain in remarks)

14. Completion or recompletion date  
09/23/96

15. Any condensate on hand at time of workover or recompletion?  Yes  No

16. Type of Electric or other Log Run.  
GR/CCL

Section I  
GAS MEASUREMENT DATA

Date of Test		Gas Measurement Method (Check One)						Gas produced during test		
10/06-09/96		Orifice Meter <input checked="" type="checkbox"/>	Flange Taps <input checked="" type="checkbox"/>	Pipe Taps <input type="checkbox"/>	Positive Choke <input type="checkbox"/>	Orifice Vent Meter <input type="checkbox"/>	Pitot Tube <input type="checkbox"/>	Critical-flow Prover <input type="checkbox"/>	71,978 MCF	
Run No.	Line Size	Orif. or Choke Size	24 Hr. Coeff. Orif. or Choke	Static P <sub>m</sub> or Choke Press	Diff. h <sub>w</sub>	Flow Temp. °F	Temp. Factor F <sub>tf</sub>	Gravity Factor F <sub>g</sub>	Compress Factor F <sub>pv</sub>	Volume MCF/DAY
1	5.761	3.750	98824.91	1,267.73	45	172	0.9069	0.9736	1.049	21,860
2										
3										
4										

Section II  
FIELD DATA AND PRESSURE CALCULATIONS

Gravity (Dry Gas)	Gravity Liquid Hydrocarbon	Gas-Liquid Hydro Ratio	Gravity of Mixture	Avg. Shut-in Temp.	Bottom Hole Temp.				
0.633	- Deg. API	- CF/Bbl	G <sub>mix</sub> = 0.633	221 °F	367 °F @ 15023 (Depth)				
D <sub>eff</sub> <sup>8/3</sup> = 10.806		√T <sub>r</sub> = √761 = 27.58		√G <sub>L</sub> = √8988.6 = 94.81					
C = $\frac{0.118 \times (D_{eff})^{8/3}}{\sqrt{T}} = \frac{12,080.87}{27.58} = 438.08$			√ $\frac{G_L}{C} = \frac{94.81}{438.08} = 0.2164$						
Run No.	Time of Run Min.	Choke Size	Wellhead Press. PSIA P <sub>w</sub>	Wellhead Flow Temp. °F	P <sub>w</sub> <sup>2</sup> (Thousands)	R	R <sup>2</sup> (Thousands)	P <sub>1</sub>	P <sub>w</sub> /P <sub>1</sub>
Shut-In		DUAL	10,115	75	102,313				
1	4,320	18/64	5,265	234	27,720	4,706.4	22,150.3	7,062	0.746
2									
3									
4									
Run No.	F	K	S = $\frac{1}{z}$	E <sup>ks</sup>	P <sub>f</sub> and P <sub>s</sub>	P <sub>f</sub> <sup>2</sup> and P <sub>s</sub> <sup>2</sup> (thousands)	P <sub>f</sub> <sup>2</sup> · P <sub>s</sub> <sup>2</sup> (thousands)	Angle of Slope	
Shut-In		0.247	0.671	1.1807	11,945	142,674		θ ..... 45.0°	
1	0.879	0.195	0.780	1.1641	8,221	67,585	75,089	n ..... 1,000	
2								Absolute Open Flow	
3								44,000 MCF/DAY	
4									

WELL TESTER'S CERTIFICATION: I declare under penalties prescribed in Sec. 91.143, Texas Natural Resources Code, that I conducted or supervised this test and that data and facts shown in Sections I and II above are true, correct, and complete, to the best of my knowledge. Bottomhole temperature and the diameter and length of flow string were furnished by the operator of the well.

UNION PACIFIC RESOURCES

Signature: Well Tester  
NORMAN HOMBERG

*Norman Homberg*

Name of Company

RRC Representative

OPERATOR'S CERTIFICATION: I declare under penalties prescribed in Sec. 91.143, Texas Natural Resources Code, that I am authorized to make this report, that I prepared or supervised and directed this report, and that data and facts stated therein are true, correct, and complete, to the best of my knowledge.

Signature: Operator's representative

Teresa M. Parks

Regulatory Analyst Agent

11/22/96

Tel: 817-877-6925

Title

Date

A/C Number

SECTION III DATA ON WELL COMPLETION AND LOG (Not Required on Retest)

17. Type of Completion: New Well  Deepening  Plug Back  Other

18. Permit to Drill, Plug Back or Deepen DATE 06/12/96 PERMIT NO. 449029  
 Rule 37 Exception CASE NO.  
 Water Injection Permit PERMIT NO.  
 Salt Water Disposal Permit PERMIT NO.  
 Other PERMIT NO.

19. Notice of Intention to Drill this well was filed in Name of Union Pacific Resources Company

20. Number of producing wells on this lease in this field (reservoir) including this well 1  
 21. Total number of acres in this lease 1096.35

22. Date Plug Back, Deepening, WorkOver or Drilling Operations: Commenced 07/02/96 Completed 09/23/96  
 23. Distance to nearest well, Same Lease & Reservoir NA

24. Location of well, relative to nearest lease boundaries of lease on which this well is located 2949.60 Feet From East Line and 1096 Feet from South Line of the Thiel Unit Lease

25. Elevation (DF, RKB, RT, GR, ETC.) GR: 210  
 26. Was directional survey made other than inclination (Form W-12)?  Yes  No

27. Top of Pay 11975  
 28. Total Depth MD 18460 TYD 15022  
 29. P. B. Depth 18460  
 30. Surface Casing Determined by: Field  Rules  Recommendation of T.D.W.R.  Railroad Commission (Special)   
 Dt. of Letter 06/10/96  
 Dt. of Letter

31. Is well multiple completion?  Yes  No  
 32. If multiple completion, list all reservoir names (completions in this well) and Oil Lease or Gas ID No. FIELD # RESERVOIR  
 GAS ID or OIL LEASE # Oil-O Gas-G WELL #  
 33. Intervals Drilled by: Rotary Tools Cable Tools XX  
 34. Name of Drilling Contractor H&P #149  
 35. Is Cementing Affidavit Attached?  Yes  No

36. CASING RECORD (Report All Strings Set in Well)

CASING SIZE	WT #/FT.	DEPTH SET	MULTISTAGE TOOL DEPTH	TYPE & AMOUNT CEMENT (sacks)	HOLE SIZE	TOP OF CEMENT	SLURRY VOL. cu. ft.
13 3/8"	61#	2864		1800 sx 'A'	17 1/2	Surface	4125
9 5/8"	53.5#	11975		350 sx 35:65 + 350 sx 'H'	12 1/4	10475	1228.5

37. LINER RECORD

Size	TOP	Bottom	Sacks Cement	Screen
(ST00) 7 5/8"	11671	14585		

38. TUBING RECORD

Size	Depth Set	Packer Set	From	To
2 7/8"	14200	14200	(ST00) 14585	17218
			(ST01) 14608	18460

39. Producing Interval (this completion) Indicate depth of perforation or open hole

40. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.

Depth Interval	Amount and Kind of Material Used

41. FORMATION RECORD (LIST DEPTHS OF PRINCIPAL GEOLOGICAL MARKERS AND FORMATION TOPS)

Formations	Depth	Formations	Depth
Austin Chalk	14512'		

REMARKS (ST00) Set cement retained @ 11733 & pumped 200 sx 'H'. Set SD packer @ 10711. Mixed & pumped 175 sx of 'H'. Set SD packer @ 10711. Mixed & pumped 175 sx of 'H'. Pulled out of hole w/ packer. Drilled cement 11422 to 11671. Set a SD cementer packer @ 11362. Pull out of hole w/ packer. Drill cement from 11689 to 11733. Drill cement retainer. Drill cement & floats from 14472 to 14502. Drilling formation from 14585 to 14590.

Attachment to G-1  
Union Pacific Resources Company  
Dated: November 22, 1996  
Thiel Unit #1  
Washington County

REMARKS:

Surface Location:

1155' FSL & 2949.6' FEL of Unit  
1107' FSL & 2949.6' FEL of Survey

Penetration Point Location:

1297' FSL & 2960' FEL of Unit  
1249' FSL & 2960' FEL of Survey

BHL (ST00):

2441.4' FSL & 638.8' FEL of Unit  
1229' FSL & 638.8' FEL of Survey

BHL (ST01):

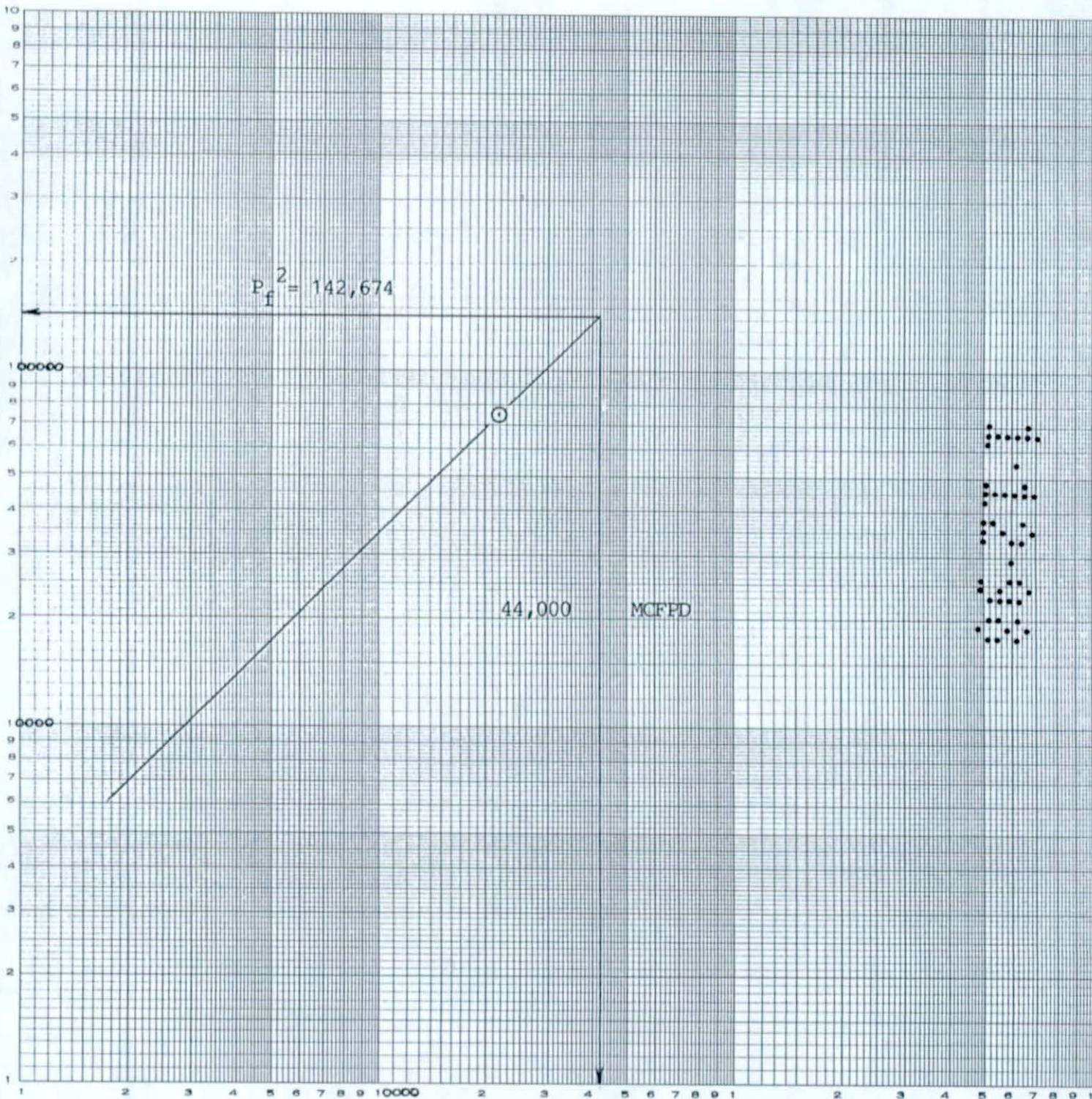
1280' FWL & 3644.4' FNL of Unit  
3900' FSWL & 2716.4' FEL of Survey



GAS WELL  
BACK PRESSURE CURVE

County WASHINGTON Field GIDDINGS AUSTIN CHALK - GAS  
 Operator UNION PACIFIC RESOURCES COMPANY  
 Lease THIEL UNIT #1  
 Volume 44,000 MCF/24 hr.  
 Date Tested 10/06-09/96

DIETZGEN CORPORATION  
 MADE IN U.S.A.  
 -Pf<sup>2</sup> - Ps<sup>2</sup> -  
 NO. 340-L33 DIETZGEN GRAPH PAPER  
 LOGARITHMIC  
 3 CYCLES X 3 CYCLES



- Q in MCF per DAY -  $\theta = 45.0^\circ$   $n = 1.000$

**GAS WELL**  
**CLASSIFICATION REPORT**

READ INSTRUCTIONS ON BACK

1. OPERATOR NAME (Exactly as shown on Form P-5 Organization Report) <b>Union Pacific Resources Company</b>		3. RRC DISTRICT NO. <b>03</b>	4. OIL LEASE NO. OR GAS WELL ID NO.																																										
2. MAILING ADDRESS <b>PO Box 7, MS 3006 Fort Worth, Texas 76101-0007</b>		5. WELL NO. <b>1</b>	6. API NO. <b>42- 477-30824</b>																																										
		7. COUNTY OF WELL SITE <b>Washington</b>																																											
8. FIELD NAME (as per RRC Records) <b>Giddings (Austin Chalk-gas)</b>	9. LEASE NAME <b>Thiel Unit</b>																																												
10. LOCATION (Section, Block, and Survey) <b>Joe Cole Abstract 32</b>	11. PIPELINE CONNECTION OR USE OF GAS																																												
I. PRODUCTION TEST AT RATE ELECTED BY OPERATOR (data on 24-hour basis)		II. A.S.T.M. DISTILLATION OF LIQUID SAMPLE. Distillation test is required for gas wells ONLY if the producing gas-liquid hydrocarbon ratio is less than 100,000 CF/barrel.																																											
A. Date of Test <u>10/08/96</u> B. Gas Volume <u>21,860</u> (Mcf) C. Oil or Condensate Volume <u>-0-</u> (Bbl) D. Water Volume <u>448.67</u> (Bbl) E. Gas/Liquid Hydrocarbon Ratio <u>NA</u> (Cf/Bbl) F. Flowing Tubing Pressure <u>5265</u> (psia) G. Choke Size <u>18/64 Dual</u> (In.) H. Casing Pressure <u>--</u> (psia) I. Shut-in Wellhead Pressure-- Tubing <u>10115</u> (psia) J. Separator Operating Pressure <u>1340</u> (psia) K. Color of Stock Tank Liquid <u>None</u> L. Gravity of Separator Liquid <u>None</u> °API M. Gravity of Stock Tank Liquid <u>None</u> °API N. Specific Gravity of the Gas (Air = 1) <u>.633</u>		Date Liquid Sample Obtained <u>NA</u> Where Obtained: <input type="checkbox"/> Separator <input type="checkbox"/> Stock Tank <table style="width:100%; border:none;"> <tr> <td style="width:15%;"></td> <td style="width:15%;">% Over</td> <td style="width:15%;">Temp. (deg. F)</td> <td style="width:15%;"></td> <td style="width:15%;">% Over</td> <td style="width:15%;">Temp. (deg. F)</td> </tr> <tr> <td>Initial Boiling Temp.</td> <td></td> <td></td> <td>60</td> <td></td> <td></td> </tr> <tr> <td>10</td> <td></td> <td></td> <td>70</td> <td></td> <td></td> </tr> <tr> <td>20</td> <td></td> <td></td> <td>80</td> <td></td> <td></td> </tr> <tr> <td>30</td> <td></td> <td></td> <td>90</td> <td></td> <td></td> </tr> <tr> <td>40</td> <td></td> <td></td> <td>95</td> <td></td> <td></td> </tr> <tr> <td>50</td> <td></td> <td></td> <td>End Point</td> <td></td> <td></td> </tr> </table> Total Recovery _____ percent Residue _____ percent Loss _____ percent			% Over	Temp. (deg. F)		% Over	Temp. (deg. F)	Initial Boiling Temp.			60			10			70			20			80			30			90			40			95			50			End Point		
	% Over	Temp. (deg. F)		% Over	Temp. (deg. F)																																								
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20			80																																										
30			90																																										
40			95																																										
50			End Point																																										
I declare under penalties prescribed in Sec. 91.143, Texas Natural Resources Code, that I am authorized to make this report, that this report was prepared by me or under my supervision and direction, and that data and facts stated therein are true, correct, and complete to the best of my knowledge.  <u>11/22/96</u> DATE		<b>RRC USE ONLY</b>																																											
		<u>Norman Homburg</u> NAME (Type or Print)																																											
		<u>Norman Homburg</u> SIGNATURE <u>Well Tester</u> TITLE																																											
<u>Teresa M. Parks</u> CONTACT PERSON		<u>( 817 ) 877-6925</u> PHONE NUMBER																																											



ELECTRIC LOG  
STATUS REPORT

## INSTRUCTIONS

When to file the L-1

- with Forms G-1, W-2, and GT-1 for new and deepened gas, oil, and geothermal wells
- with Form W-3 for plugged dry holes
- when sending in a log which was held under a request for confidentiality and the period of confidentiality has not yet expired

When the L-1 is NOT required

- with Forms W-2, G-1, and GT-1 filed for injection wells, disposal wells, water supply wells, service wells, re-test wells, re-classifications, and plugbacks of oil, gas, and geothermal wells
- with Form W-3 for plugging of other than a dry hole

Where to file the L-1

- with the appropriate Commission district office

Filling out the L-1

- Section I and the signature section must be filled out for all wells
- complete only the appropriate part of Section II

Type of log required

- any wireline survey run for the purpose of obtaining lithology, porosity, or resistivity information
- no more than one such log is required but it must be of the subject well
- if such a log is NOT run on the subject well, do NOT substitute any other type of log; just select Section II, Part A below

SEE REVERSE SIDE

## SECTION I. IDENTIFICATION

Operator Name Union Pacific Resources Company	District No. 03	Completion Date 09/23/96
Field Name Giddings (Austin Chalk-Gas)	Drilling Permit No. 449029	
Lease Name Thiel Unit	Lease/ID No.	Well No. 1
County Washington	API No. 42 - 477-30824	

## SECTION II. LOG STATUS (complete either A. or B.)

 A. BASIC ELECTRIC LOG NOT RUN

 B. BASIC ELECTRIC LOG RUN (select one)

1. Confidentiality requested.
2. Confidentiality already granted on basic electric log covering this interval (applicable to deepened wells only).
3. Basic electric log covering this interval already on file with Commission (applicable to deepened wells only).
4. Log attached to (select one)

(a) Form L-1 (this form). If the company/lease name on log is different from that shown in Section I, please enter name on log here: \_\_\_\_\_

Check here if attached log is being submitted after being held confidential

(b) Form P-7, Application for Discovery Allowable and New Field Designation.

(c) Form W-4, Application for Multiple Completion: lease or ID no.(s) \_\_\_\_\_, well no.(s) \_\_\_\_\_

Teresa M. Parks  
signature  
Teresa M. Parks  
name (print)

Regulatory Analyst Agent  
title  
( 817 ) 877-6925  
phone  
11/22/96  
date

For Railroad Commission use only

READ INSTRUCTIONS ON BACK

1. Field name exactly as shown on proration schedule <b>Giddings (Austin Chalk, Gas)</b>		2. Lease name <b>Thiel Unit</b>	
3. Operator name exactly as shown on P-5 Organization Report <b>Union Pacific Resources Company</b>		4. Operator P-5 no. <b>876645</b>	5. Oil lease no.
7. Operator address including city, state, and zip code <b>PO Box 7, MS 3006 Fort Worth, Texas 76101-0007</b>		8. County in which oil lease or gas well is actually located <b>Washington</b>	6. RRC district no. <b>03</b>
		9. Gas ID no.	10. Gas well no.
		11. Effective date	

12. GAS WELL GAS OR CASINGHEAD GAS. Additional space and example on reverse side.

Type Operation			Name of gatherer, purchaser, and/or nominator as indicated in type operation columns NOTE: For each purchaser, give its RRC-assigned system code and identify the market. If applicable, place an "X" in the full-well stream column for the gatherer.	RRC USE ONLY		Purchaser's RRC Assigned System Code	Purchaser's Market		Percent of Take	Full-well stream
gatherer	purchaser	nominator		G/P/N Code			inter-state	intra-state		
XX			Fergusson Burleson Cty GGS						100	
	XX		Austin Chalk Natural Gas Marketing Services			0001		XX	100	

13. NAME OF OIL OR CONDENSATE GATHERER List highest volume gatherer first <b>Pride Pipeline Company</b>		Percent of Take <b>100</b>	RRC USE ONLY Gath. code	14. PURPOSE OF FILING. Remarks:	
				a. <input type="checkbox"/> New oil lease <input checked="" type="checkbox"/> New gas well <input type="checkbox"/> Reclassification (oil to gas or gas to oil) <input type="checkbox"/> Consolidation, unitization or subdivision b. CHANGE <input type="checkbox"/> Gatherer <input type="checkbox"/> Nominator <input type="checkbox"/> Purchaser <input type="checkbox"/> Purchaser's system code	

RRC USE ONLY	c. CHANGE FROM
Approved (Initials) _____ Oper. No. _____ Date _____ Field No. _____ Remarks:	<input type="checkbox"/> Operator _____ <input type="checkbox"/> Field Name _____ <input type="checkbox"/> Lease Name _____

15. OPERATOR CHANGE. Being the PREVIOUS OPERATOR, I certify that operating responsibility for wells located on the subject lease has been transferred in its entirety to the above named Current Operator. I understand, as Previous Operator, that designation of the above named operator as Current Operator is not effective until this certificate is approved by the Commission.

Previous Operator \_\_\_\_\_ Date \_\_\_\_\_  
Signature \_\_\_\_\_ Name (Print) \_\_\_\_\_  
Title \_\_\_\_\_ Phone ( ) \_\_\_\_\_  
Address with city/state/zip \_\_\_\_\_

16. CURRENT OPERATOR'S CERTIFICATION. By signing this certificate as the CURRENT OPERATOR, I acknowledge responsibility for the regulatory compliance of the subject lease, INCLUDING PLUGGING OF WELLS if required under Statewide Rule 14. I also acknowledge that I will remain designated as the Current Operator until a new certificate designating a new Current Operator is approved by the Commission.

Signature Teresa M. Parks Name (Print) **Teresa M. Parks**  
Title **Regulatory Analyst Agent** Date **11/22/96** Phone **(817) 877-6925**

I, the Current Operator, certify that the above agent is authorized to transport the above specified percentage of the allowable oil or gas produced from the above described property in accordance with the regulations of the Railroad Commission of Texas, and that this authorization will be valid until further notice or until cancelled by the Railroad Commission of Texas, and further certify that the conservation laws of the State of Texas and all rules, regulations and orders of the Railroad Commission of Texas have been complied with in respect to the property covered by this report.

check if listings are continued on reverse side

RAILROAD COMMISSION OF TEXAS  
OIL AND GAS DIVISION

CERTIFICATE OF POOLING AUTHORITY

I, Teresa M. Parks, being of lawful age, being familiar with the matter, and having full knowledge of the facts set out, do state:

(1) That the acreage claimed for the purpose of establishing a pooled drilling or proration unit under applicable orders of the Railroad Commission of Texas, for the

NAME OF OPERATOR: Union Pacific Resources Company

NAME OF POOLED UNIT: Thiel Unit WELL NO. 1

FIELD: Giddings (Austin Chalk-Gas)  
Giddings (Austin Chalk-3), Washington COUNTY,

TEXAS, contains 1096.35 acres; that with respect to such pooled unit, as it is hereafter described, parties now owning a mineral interest or mineral interests (including royalty interests, working interests, or other mineral interests) therein either (1) acquired such interest as they now have subject to the provisions of an instrument or instruments now in effect and which permit the pooling of said interests or (2) have, by virtue of the execution of an instrument or instruments the provisions of which are now in effect, pooled such of said interests as they now own therein, in such manner that all of such pooled unit shall be considered by the Commission as one base tract as if all rights with respect thereto has been acquired under a single contract.

(2) That the pooled unit described in the preceding paragraph is made up of and contains the hereafter described individual tracts of land no part of which is embraced within any other pooled unit in the same field and which, by virtue of the pooling agreements referred to in the preceding paragraph, are now contained within the pooled unit herein described.

(3) That where a non-pooled undivided interest exists in any of the individual tracts pooled, that certain non-pooled interest is noted in the margin of this instrument beside the tract description to identify the existence of the non-pooled interests in that tract:

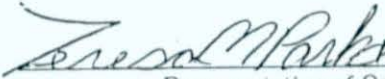
(OVER)

DESCRIPTION OF INDIVIDUAL TRACTS OR LEASES CONTAINED  
WITHIN POOLED UNIT REFERRED TO IN PARAGRAPH (1) ABOVE

NAME OF HOLDER OF LEASE	LEASE NAME	NO. OF ACRES	MARGIN
Union Pacific Resources Company	1. Ben J. Meyer, et ux	106.10	
Union Pacific Resources Company	2. Benton W. Schulze, Sr., et al	27.42	
Union Pacific Resources Company	3. State of Texas	5.41	
Union Pacific Resources Company	4. Burney C. Graeber, et al	14.54	
Union Pacific Resources Company	5. Larry Ashorn, et ux	19.78	
Union Pacific Resources Company	6. Jon Bertolet, et al	19.41	
Union Pacific Resources Company	7. Pat J. Cole, et al	3.43	
Union Pacific Resources Company	8. Austin W. Roberts, et ux	3.01	
Union Pacific Resources Company	9. Ervin M. Kuecker, et ux	3.00	
Union Pacific Resources Company	10. Larry Schroeder, et ux	3.01	
Union Pacific Resources Company	11. Ben W. Boehnke, et ux	7.00	
Union Pacific Resources Company	12. Kenneth Ray Baker, et ux	1.01	
Union Pacific Resources Company	13. Rodell Jeanette Baker	18.29	
Union Pacific Resources Company	14. Johny D. Binford, et ux	9.79	
Union Pacific Resources Company	15. Arnie Spitzer, et ux	1.32	
Union Pacific Resources Company	16. Margaret Irene Roberts	0.07	
Union Pacific Resources Company	17. Henry E. Herrmann, Jr., et al	132.92	
Union Pacific Resources Company	18. Mark Kamin, et al	78.71	
Union Pacific Resources Company	19. Reinhold Herrmann	2.41	
Union Pacific Resources Company	20. Neil Wayne Maurer	1.65	
Union Pacific Resources Company	21. Lillie Mae Watkins	1.66	
Union Pacific Resources Company	22. Sherri Warren, et al	1.66	
Union Pacific Resources Company	23. Henry E. Herrmann, Jr.	1.68	
Union Pacific Resources Company	24. Alfred Herrmann	1.67	
Union Pacific Resources Company	25. Alton W. Sommerfield, Jr.	1.68	
Union Pacific Resources Company	26. Pamela Sue Blenbarr, et al	1.70	
Union Pacific Resources Company	27. Jimmie D. Maurer, et ux	2.16	
Union Pacific Resources Company	28. Norwood Lange, et al	14.77	
Union Pacific Resources Company	29. Brenham Country Club, Inc.	106.17	
Union Pacific Resources Company	30. Ronnie Hinze, et ux	2.99	

CERTIFICATE:

I declare under penalties prescribed in Sec. 91.143, Texas Natural Resources Code, that I am authorized to make this report, that this report was prepared by me or under my supervision and direction, and that data and facts stated therein are true, correct, and complete, to the best of my knowledge.

 Teresa M. Parks Representative of Operator	Regulatory Analyst Agent	11/22/96
	Title	Date
	Telephone 817	877-6925
	A / C	Number

INSTRUCTIONS


Where two or more tracts are pooled to form either a drilling unit or a proration unit as permitted by Commission regulation, the operator thereof must furnish a certificate of pooling authority at the time action by the Commission is sought either for a permit to drill on a pooled drilling unit or for establishment of an allowable for a well on a pooled proration unit.

DESCRIPTION OF INDIVIDUAL TRACTS OR LEASES CONTAINED  
WITHIN POOLED UNIT REFERRED TO IN PARAGRAPH (1) ABOVE

NAME OF HOLDER OF LEASE	LEASE NAME	NO. OF ACRES	MARGIN
Union Pacific Resources Company	31. Larry Wayne Benker, et ux	4.54	
Union Pacific Resources Company	32. Glenwood L. Vernon, et ux	5.04	
Union Pacific Resources Company	33. William H. Warnasch, et al	2.70	
Union Pacific Resources Company	34. Verdell A. Toll, et ux	0.88	
Union Pacific Resources Company	35. Verdell A. Toll, et al	0.94	
Union Pacific Resources Company	36. State of Texas	11.12	
Union Pacific Resources Company	37. Richard L. Oberlin, et ux	4.35	
Union Pacific Resources Company	38. Evelyn Rosenthal	57.68	
Union Pacific Resources Company	39. Margaret Collette	0.42	
Union Pacific Resources Company	40. Herbert H. Thiel, Jr., et ux	90.67	
Union Pacific Resources Company	41. James Linsey Hafner, et ux	13.91	
Union Pacific Resources Company	42. Fred Koehne	1.37	
Union Pacific Resources Company	43. Ruth Stetler	12.02	
Union Pacific Resources Company	44. John Allen, Jr., et al	35.54	
Union Pacific Resources Company	45. Edmund A. Schaefer, et ux	7.56	
Union Pacific Resources Company	46. Jerry Lee Schaefer	1.88	
Union Pacific Resources Company	47. Charles H. Conner, et al	11.40	
Union Pacific Resources Company	48. Willie C. Phelps, et al	11.68	
Union Pacific Resources Company	49. Bennie G. Bailey	21.14	
Union Pacific Resources Company	50. Robert Meier, et ux	5.59	
Union Pacific Resources Company	51. Earl E. Ewing	15.29	
Union Pacific Resources Company	52. Owen H. Zeiss, et ux	30.57	
Union Pacific Resources Company	53. Barbara Zeiss Kuecker, et vir	27.83	
Union Pacific Resources Company	54. W.E. Zeiss, et ux	103.00	
Union Pacific Resources Company	55. Andrew Elliott, et al	9.97	
Union Pacific Resources Company	56. Fred Otto Gaskamp, et ux	2.11	
Union Pacific Resources Company	57. Robert Don Randermann	1.11	
Union Pacific Resources Company	58. Iris Jewel Rogers, et al	11.62	
	TOTAL	<u>1096.35</u>	

## CERTIFICATE:

I declare under penalties prescribed in Sec. 91.143, Texas Natural Resources Code, that I am authorized to make this report, that this report was prepared by me or under my supervision and direction, and that data and facts stated therein are true, correct, and complete, to the best of my knowledge.

 <u>Teresa M. Parks</u> Representative of Operator	<u>Regulatory Analyst Agent</u> Title	<u>11/22/96</u> Date
Telephone <u>817</u> A / C	<u>877-6925</u> Number	

## INSTRUCTIONS

Where two or more tracts are pooled to form either a drilling unit or a proration unit as permitted by Commission regulation, the operator thereof must furnish a certificate of pooling authority at the time action by the Commission is sought either for a permit to drill on a pooled drilling unit or for establishment of an allowable for a well on a pooled proration unit.

RAILROAD COMMISSION OF TEXAS  
OIL AND GAS DIVISION

CERTIFICATE OF POOLING AUTHORITY

I, Teresa M. Parks, being of lawful age, being familiar with the matter, and having full knowledge of the facts set out, do state:

(1) That the acreage claimed for the purpose of establishing a pooled drilling or proration unit under applicable orders of the Railroad Commission of Texas, for the

NAME OF OPERATOR: Union Pacific Resources Company

NAME OF POOLED UNIT: Thiel Unit WELL NO. 1

FIELD: Giddings (Austin Chalk-Gas)  
Giddings (Austin Chalk-3), Washington COUNTY,

TEXAS, contains 1096.35 acres; that with respect to such pooled unit, as it is hereafter described, parties now owning a mineral interest or mineral interests (including royalty interests, working interests, or other mineral interests) therein either (1) acquired such interest as they now have subject to the provisions of an instrument or instruments now in effect and which permit the pooling of said interests or (2) have, by virtue of the execution of an instrument or instruments the provisions of which are now in effect, pooled such of said interests as they now own therein, in such manner that all of such pooled unit shall be considered by the Commission as one base tract as if all rights with respect thereto has been acquired under a single contract.

(2) That the pooled unit described in the preceding paragraph is made up of and contains the hereafter described individual tracts of land no part of which is embraced within any other pooled unit in the same field and which, by virtue of the pooling agreements referred to in the preceding paragraph, are now contained within the pooled unit herein described.

(3) That where a non-pooled undivided interest exists in any of the individual tracts pooled, that certain non-pooled interest is noted in the margin of this instrument beside the tract description to identify the existence of the non-pooled interests in that tract:

(OVER)

STATEMENT OF PRODUCTIVITY OF ACREAGE  
ASSIGNED TO PRORATION UNITS

The undersigned states that he is authorized to make this statement; that he has knowledge of the facts concerning the Union Pacific Resources Company, OPERATOR, Thiel Unit LEASE, No. 1 WELL; that such well is completed in the Giddings (Austin Chalk-Gas) Field, Washington County, Texas and that the acreage claimed, and assigned to such well for proration purposes as authorized by special rule and as shown on the attached certified plat embraces 1096.35 acres which can reasonably be considered to be productive of hydrocarbons.

- CERTIFICATE -

*I declare under penalties prescribed in Sec. 91.143, Texas Natural Resources Code, that I am authorized to make this report, that this report was prepared by me or under my supervision and direction, and that data and facts stated therein are true, correct, and complete, to the best of my knowledge.*

Date 11/22/96

Signature Teresa M. Parks Teresa M. Parks

Telephone 817-877-6925  
AREA CODE

Title Regulatory Analyst Agent

Cementer: Fill in shaded areas.  
Operator: Fill in other items.

RAILROAD COMMISSION OF TEXAS  
Oil and Gas Division

1. Operator's Name (As shown on Form P-5, Organization Report) <b>Union Pacific Resources Company</b>	2. RRC Operator No. <b>876645</b>	3. RRC District No. <b>03</b>	4. County of Well Site <b>Washington</b>
5. Field Name (Wildcat or exactly as shown on RRC records) <b>Giddings (Austin Chalk-Gas)</b>		6. API No. <b>42- 477-30824</b>	7. Drilling Permit No. <b>449029</b>
8. Lease Name <b>Thiel Unit</b>	9. Rule 37 Case No.	10. Oil Lease/Gas ID No.	11. Well No. <b>1</b>

CASING CEMENTING DATA:	SURFACE CASING	INTER-MEDIATE CASING	PRODUCTION CASING		MULTI-STAGE CEMENTING PROCESS	
			Single String	Multiple Parallel Strings	Tool	Shoe
12. Cementing Date	7/5/96					
13. •Drilled hole size	17 1/2					
•Est. % wash or hole enlargement						
14. Size of casing (In. O.D.)	13 3/8					
15. Top of liner (ft.)						
16. Setting depth (ft.)	2864					
17. Number of centralizers used	8					
18. Hrs. waiting on cement before drill-out	24					
1st Slurry	19. API cement used: No. of sacks ▶	1300				
	Class ▶	A				
	Additives ▶	3% A-5 + 2% A-2 + 1#/sk Celloflake				
2nd Slurry	No. of sacks ▶	500				
	Class ▶	A				
	Additives ▶	Neat				
3rd Slurry	No. of sacks ▶	-----				
	Class ▶	-----				
	Additives ▶	-----				
1st	20. Slurry pumped: Volume (cu. ft.) ▶	3510				
	Height (ft.) ▶	5052.8				
2nd	Volume (cu. ft.) ▶	615				
	Height (ft.) ▶	885.06				
3rd	Volume (cu. ft.) ▶	-----				
	Height (ft.) ▶	-----				
Total	Volume (cu. ft.) ▶	4125				
	Height (ft.) ▶	5937.86				
21. Was cement circulated to ground surface (or bottom of cellar) outside casing?		Yes				
22. Remarks						

CEMENTING TO PLUG AND ABANDON	PLUG # 1	PLUG # 2	PLUG # 3	PLUG # 4	PLUG # 5	PLUG # 6	PLUG # 7	PLUG # 8
23. Cementing date								
24. Size of hole or pipe plugged (in.)								
25. Depth to bottom of tubing or drill pipe (ft.)								
26. Sacks of cement used (each plug)								
27. Slurry volume pumped (cu. ft.)								
28. Calculated top of plug (ft.)								
29. Measured top of plug, if tagged (ft.)								
30. Slurry wt. (lbs/gal)								
31. Type cement								

CEMENTER'S CERTIFICATE: I declare under penalties prescribed in Sec. 91.143, Texas Natural Resources Code, that I am authorized to make this certification, that the cementing of casing and/or the placing of cement plugs in this well as shown in the report was performed by me or under my supervision, and that the cementing data and facts presented on both sides of this form are true, correct, and complete, to the best of my knowledge. This certification covers cementing data only.

John Zaleski/Service Supervisor  
Name and title of cementer's representative

BJ Services  
Cementing Company

John Zaleski  
Signature

1680 Independence  
Address

Bryan, Texas 77803  
City, State, Zip Code

(409) 779-8125  
Tel.: Area Code Number

7/5/96  
Date: mo. day yr.

OPERATOR'S CERTIFICATE: I declare under penalties prescribed in Sec. 91.143, Texas Natural Resources Code, that I am authorized to make this certification, that I have knowledge of the well data and information presented in this report, and that data and facts presented on both sides of this form are true, correct, and complete, to the best of my knowledge. This certification covers all well data.

Teresa M. Parks  
Typed or printed name of operator's representative

Regulatory Analyst Agent  
Title

Teresa Marke  
Signature

PO Box 7, MS 3006 Fort Worth, Texas 76101-0007  
Address

817-877-6925  
Tel.: Area Code Number

11/23/96  
Date: mo. day yr.

### Instructions to Form W-15, Cementing Report

**IMPORTANT:** Operators and cementing companies must comply with the requirements of the Commission's Statewide Rules 8 (Water Protection), 13 (Casing, Cementing, Drilling, and Completion), and 14 (Well Plugging). For offshore operations, see the requirements of Rule 13 (c).

**A. What to file.** An operator should file an original and one copy of the completed Form W-15 for each cementing company used on a well. The cementing of different casing strings on a well by one cementing company may be reported on one form. Form W-15 should be filed with the following:

- An initial oil or gas completion report, Form W-2 or G-1, as required by Statewide or special field rules;
- Form W-4, Application for Multiple Completion, if the well is a multiple parallel casing completion; and
- Form W-3, Plugging Record, unless the W-3 is signed by the cementing company representative. When reporting dry holes, operators must complete Form W-15, in addition to Form W-3, to show any casing cemented in the hole.

**B. Where to file.** The appropriate Commission District Office for the county in which the well is located.

**C. Surface casing.** An operator must set and cement sufficient surface casing to protect all usable-quality water strata, as defined by the Texas Department of Water Resources, Austin. Before drilling a well in any field or area in which no field rules are in effect or in which surface casing requirements are not specified in the applicable rules, an operator must obtain a letter from the Department of Water Resources stating the protection depth. Surface casing should not be set deeper than 200 feet below the specified depth without prior approval from the Commission.

**D. Centralizers.** Surface casing must be centralized at the shoe, above and below a stage collar or diverting tool, if run, and through usable-quality water zones. In nondeviated holes, a centralizer must be placed every fourth joint from the cement shoe to the ground surface or to the bottom of the cellar. All centralizers must meet API specifications.

**E. Exceptions and alternative casing programs.** The District Director may grant an exception to the requirements of Statewide Rule 13. In a written application, an operator must state the reason for the requested exception and outline an alternate program for casing and cementing through the protection depth for strata containing usable-quality water. The District Director may approve, modify, or reject a proposed program. **An operator must obtain approval of any exception before beginning casing and cementing operations.**

**F. Intermediate and production casing.** For specific technical requirements, operators should consult Statewide Rule 13 (b) (3) and (4).

**G. Plugging and abandoning.** Cement plugs must be placed in the wellbore as required by Statewide Rule 14. The District Director may require additional cement plugs. For onshore or inland wells, a 10-foot cement plug must be placed in the top of the well, and the casing must be cut off three feet below the ground surface. All cement plugs, except the top plug, must have sufficient slurry volume to fill 100 feet of hole, plus ten percent for each 1,000 feet of depth from the ground surface to the bottom of the plug.

To plug and abandon a well, operators must use only cementers approved by the Director of Field Operations. Cementing companies, service companies, or operators can qualify as approved cementers by demonstrating that they are able to mix and pump cement in compliance with Commission rules and regulations.

Cementer: Fill in shaded areas.  
Operator: Fill in other items.

RAILROAD COMMISSION OF TEXAS  
Oil and Gas Division

1. Operator's Name (As shown on Form P-5, Organization Report) <b>Union Pacific Resources Company</b>	2. RRC Operator No. <b>876645</b>	3. RRC District No. <b>03</b>	4. County of Well Site <b>Washington</b>
5. Field Name (Wildcat or exactly as shown on RRC records) <b>Giddings (Austin Chalk-Gas)</b>	6. API No. <b>42- 477-30824</b>	7. Drilling Permit No. <b>449029</b>	
8. Lease Name <b>Thiel Unit</b>	9. Rule 37 Case No.	10. Oil Lease/Gas ID No.	11. Well No. <b>1</b>

CASING CEMENTING DATA:	SURFACE CASING	INTER-MEDIATE CASING	PRODUCTION CASING		MULTI-STAGE CEMENTING PROCESS	
			Single String	Multiple Parallel Strings	Tool	Shoe
12. Cementing Date		7/24/96				
13. •Drilled hole size		12 1/4"				
•Est. % wash or hole enlargement						
14. Size of casing (In. O.D.)		9 5/8"				
15. Top of liner (ft.)						
16. Setting depth (ft.)		11975				
17. Number of centralizers used		9				
18. Hrs. waiting on cement before drill-out		24				
1st Slurry	API cement used: No. of sacks ▶	350				
	Class ▶	35:65:6 (Poz:H:Gel)				
	Additives ▶	3% Salt + .2% R-3				
2nd Slurry	No. of sacks ▶	350				
	Class ▶	H				
	Additives ▶	.35% S-8 + .1% ASA-301 + .3% R-3				
3rd Slurry	No. of sacks ▶	-----				
	Class ▶	-----				
	Additives ▶	-----				
1st	20. Slurry pumped: Volume (cu. ft.) ▶	714				
	Height (ft.) ▶	2279.8				
2nd	Volume (cu. ft.) ▶	514.5				
	Height (ft.) ▶	1642.7				
3rd	Volume (cu. ft.) ▶	-----				
	Height (ft.) ▶	-----				
Total	Volume (cu. ft.) ▶	1228.5				
	Height (ft.) ▶	3922.5				
21. Was cement circulated to ground surface (or bottom of cellar) outside casing?		No				
22. Remarks						

CEMENTING TO PLUG AND ABANDON	PLUG # 1	PLUG # 2	PLUG # 3	PLUG # 4	PLUG # 5	PLUG # 6	PLUG # 7	PLUG # 8
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30. Slurry wt. (lbs/gal)								
31. Type cement								

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Thomas Carr/Service Supervisor  
Name and title of cementer's representative

BJ Servcies  
Cementing Company

*Thomas Carr*  
Signature

1680 Independence  
Address

Bryan, Texas 77803  
City, State, Zip Code

(409) 779-8125  
Tel: Area Code Number

7/24/96  
Date: mo. day yr.

OPERATOR'S CERTIFICATE: I declare under penalties prescribed in Sec. 91.143, Texas Natural Resources Code, that I am authorized to make this certification, that I have knowledge of the well data and information presented in this report, and that data and facts presented on both sides of this form are true, correct, and complete, to the best of my knowledge. This certification covers all well data.

Teresa M. Parks  
Typed or printed name of operator's representative

Regulatory Analyst Agent  
Title

*Teresa M. Parks*  
Signature

PO Box 7, MS 3006 Fort Worth, Texas 76101-0007  
Address

City, State, Zip Code

817-877-6925  
Tel: Area Code Number

11/22/96  
Date: mo. day yr.

### Instructions to Form W-15, Cementing Report

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B. **Where to file.** The appropriate Commission District Office for the county in which the well is located.

C. **Surface casing.** An operator must set and cement sufficient surface casing to protect all usable-quality water strata, as defined by the Texas Department of Water Resources, Austin. Before drilling a well in any field or area in which no field rules are in effect or in which surface casing requirements are not specified in the applicable rules, an operator must obtain a letter from the Department of Water Resources stating the protection depth. Surface casing should not be set deeper than 200 feet below the specified depth without prior approval from the Commission.

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E. **Exceptions and alternative casing programs.** The District Director may grant an exception to the requirements of Statewide Rule 13. In a written application, an operator must state the reason for the requested exception and outline an alternate program for casing and cementing through the protection depth for strata containing usable-quality water. The District Director may approve, modify, or reject a proposed program. An operator must obtain approval of any exception before beginning casing and cementing operations.

F. **Intermediate and production casing.** For specific technical requirements, operators should consult Statewide Rule 13 (b) (3) and (4).

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To plug and abandon a well, operators must use only cementers approved by the Director of Field Operations. Cementing companies, service companies, or operators can qualify as approved cementers by demonstrating that they are able to mix and pump cement in compliance with Commission rules and regulations.

# The State of Texas



7394

Austin, Texas

**OIL AND GAS LEASE**  
NO. H-97584

WHEREAS, pursuant to the Texas Natural Resources Code Chapters 32, 33, 51, and Chapter 52, Subchapters A-D and H, (said Code being hereinafter referred to as N.R.C.), and subject to all rules and regulations promulgated by the Commissioner of the General Land Office and/or the School Land Board pursuant thereto, and all other applicable statutes and amendments to said N.R.C., the following area, to-wit:

TRACT 1, NEW YEAR CREEK, WASHINGTON COUNTY, TEXAS, CONTAINING APPROXIMATELY 5 ACRES, IS BOUND ON THE NORTHWEST BY THE CENTERLINE OF WASHINGTON COUNTY ROAD 65 CROSSING SAID CREEK AND IS BOUND ON THE SOUTHEAST BY THE CENTERLINE OF WASHINGTON COUNTY ROAD 81 CROSSING SAID CREEK,

was, after being duly advertised, offered for lease on the 1st day of October, 1996, at 10:00 o'clock a.m., by the Commissioner of the General Land Office of the State of Texas and the School Land Board of the State of Texas, for the sole and only purpose of prospecting and drilling for, and producing oil and/or gas that may be found and produced from the above described area; and

WHEREAS, after all bids and remittances which were received up to said time have been duly considered by the Commissioner of the General Land Office and the School Land Board at a regular meeting thereof in the General Land Office, on the 1st day of October, 1996, hereinafter the "effective date" and it was found and determined that Union Pacific Resources Company whose address is 801 Cherry Street, Fort Worth, TX 76102-6852 had offered the highest and best bid for a lease of the area above described and is, therefore, entitled to receive a lease thereon:

NOW, THEREFORE, I, Garry Mauro, Commissioner of the General Land Office of the State of Texas, hereinafter sometimes referred to as "Lessor," whose address is Austin, Texas, by virtue of the authority vested in me and in consideration of the payment by the hereinafter designated Lessee, the sum of Five Hundred and 00/100 Dollars (\$500.00), receipt of which is hereby acknowledged and of the royalties, covenants, stipulations and conditions contained and hereby agreed to be paid, observed and performed by Lessee, do hereby demise, grant, lease and let unto the above mentioned bidder the exclusive right to prospect for, produce and take oil and/or gas from the aforesaid area upon the following terms and conditions, to-wit:

1. **RESERVATION:** There is hereby excepted and reserved to Lessor the full use of the property covered hereby and all rights with respect to the surface and subsurface thereof for any and all purposes except those granted and to the extent herein granted to Lessee, together with the rights of ingress and egress and use of said lands by Lessor and its mineral lessees, for purposes of exploring for and producing the minerals which are not covered, or which may not be covered in the future, under the terms of this lease, but which may be located within the surface boundaries of the leased area. All of the rights in and to the leased premises retained by Lessor and all of the rights in and to the leased premises granted to Lessee herein shall be exercised in such a manner that neither shall unduly interfere with the operations of the other.

2. **TERM:** Subject to the other provisions hereof, this lease shall be for a term of three (3) years from the effective date hereof (herein called "primary term") and as long thereafter as oil or gas is produced in paying quantities from said area.

3. **DELAY RENTALS:** If no well be commenced on the land hereby leased on or before the anniversary date of this lease, this lease shall terminate as to both parties unless the Lessee on or before said date shall pay or tender to the Commissioner of the General Land Office of the State of Texas at Austin, Texas, the sum of Five Dollars (\$5.00), per acre, which shall operate as rental and cover the privilege of deferring the commencement of a well for twelve (12) months from said date. In like manner and upon like payments or tenders the commencement of a well may be further deferred for like periods of the same number of months successively during the primary term hereof.

4. **PRODUCTION ROYALTIES:** Subject to the provisions for royalty reductions set out in subparagraph (E) of this paragraph 4, upon production of oil and/or gas, the Lessee agrees to pay or cause to be paid to the Commissioner of the General Land Office in Austin, Texas, for the use and benefit of the State of Texas, during the term hereof:

A CERTIFIED COPY issued **JAN - 7 1996**  
Beth Rothermel, County Clerk  
Washington County, TX. Deputy  
LaFayne Littleton

(A) OIL: As a royalty on oil, which is defined as including all hydrocarbons produced in a liquid form at the mouth of the well and also all condensate, distillate, and other liquid hydrocarbons recovered from oil or gas run through a separator or other equipment, as hereinafter provided,  $\frac{1}{4}$  part of the gross production or the market value thereof, at the option of the Lessor, such value to be determined by 1) the highest posted price, plus premium, if any, offered or paid for oil, condensate, distillate, or other liquid hydrocarbons, respectively, of a like type and gravity in the general area where produced and when run, or 2) the highest market price thereof offered or paid in the general area where produced and when run, or 3) the gross proceeds of the sale thereof, whichever is the greater. Lessee agrees that before any gas produced from the land hereby leased is sold, used or processed in a plant, it will be run free of cost to Lessor through an adequate oil and gas separator of conventional type or other equipment at least as efficient to the end that all liquid hydrocarbons recoverable from the gas by such means will be recovered. Upon written consent of Lessor, the requirement that such gas be run through such a separator or other equipment may be waived upon such terms and conditions as prescribed by Lessor.

(B) NON-PROCESSED GAS: As a royalty on any gas (including flared gas), which is defined as all hydrocarbons and gaseous substances not defined as oil in subparagraph (A) above, produced from any well on said land (except as provided herein with respect to gas processed in a plant for the extraction of gasoline, liquid hydrocarbons or other products)  $\frac{1}{4}$  part of the gross production or the market value thereof, at the option of the Lessor, such value to be based on the highest market price paid or offered for gas of comparable quality in the general area where produced and when run, or the gross price paid or offered to the producer, whichever is greater provided that the maximum pressure base in measuring the gas under this lease contract shall not at any time exceed 14.65 pounds per square inch absolute, and the standard base temperature shall be sixty (60) degrees Fahrenheit, correction to be made for pressure according to Boyle's Law, and for specific gravity according to test made by the Balance Method or by the most approved method of testing being used by the industry at the time of testing.

(C) PROCESSED GAS: As a royalty on any gas processed in a gasoline plant or other plant for the recovery of gasoline or other liquid hydrocarbons,  $\frac{1}{4}$  part of the residue gas and the liquid hydrocarbons extracted or the market value thereof, at the option of the Lessor. All royalties due herein shall be based on one hundred percent (100%) of the total plant production of residue gas attributable to gas produced from this lease, and on fifty percent (50%) or that percent accruing to Lessee, whichever is the greater, of the total plant production of liquid hydrocarbons, attributable to the gas produced from this lease; provided that if liquid hydrocarbons are recovered from gas processed in a plant in which Lessee (or its parent, subsidiary or affiliate) owns an interest, then the percentage applicable to liquid hydrocarbons shall be fifty percent (50%) or the highest percent accruing to a third party processing gas through such plant under a processing agreement negotiated at arms' length (or if there is no such third party, the highest percent then being specified in processing agreements or contracts in the industry), whichever is the greater. The respective royalties on residue gas and on liquid hydrocarbons shall be determined by 1) the highest market price paid or offered for any gas (or liquid hydrocarbons) of comparable quality in the general area or 2) the gross price paid or offered for such residue gas (or the weighted average gross selling price for the respective grades of liquid hydrocarbons), whichever is the greater. In no event, however, shall the royalties payable under this paragraph be less than the royalties which would have been due had the gas not been processed.

(D) OTHER PRODUCTS: As a royalty on carbon black, sulphur or any other products produced or manufactured from gas (excepting liquid hydrocarbons) whether said gas be "casinghead," "dry" or any other gas, by fractionating, burning or any other processing,  $\frac{1}{4}$  part of gross production of such products, or the market value thereof, at the option of Lessor, such market value to be determined as follows:

- (1) On the basis of the highest market price of each product, during the same month in which such product is produced, or
- (2) On the basis of the average gross sale price of each product for the same month in which such products are produced; whichever is the greater.

(E) VARIABLE ROYALTY: (i) Subject to the other provisions of this lease, it is hereby provided that in the event production in paying quantities is established pursuant to the terms of this lease and such production is brought on line and sales thereof are commenced within eighteen (18) months of the effective date hereof, the royalty rate provided herein shall be reduced to 20%, and shall apply to each subsequent well drilled and produced on the land covered by this lease. Provided that, if during such eighteen (18) month term during which Lessee may earn a reduced royalty rate of 20% as herein provided, Lessee should drill in good faith and complete the first well as a dry hole on the land covered by this lease, Lessee may receive a three (3) month extension of the term in which to earn a reduced royalty rate by giving notice to the Commissioner of the General Land Office, commencing drilling operations on an additional well prior to the expiration of such three (3) month period and prosecuting diligently and in good faith the drilling of such additional well and completing same so that production in paying quantities is established and so that such production is brought on line and sales thereof are commenced prior to the expiration of such three (3) month extension period.

(ii) In the event production in paying quantities is established pursuant to the terms of this lease and such production is brought on line and sales thereof are commenced after the expiration of eighteen (18) months from the effective date hereof but prior to the expiration of thirty-six (36) months from the effective date hereof, the royalty rate provided herein shall be reduced to 22.5% and shall apply to each subsequent well drilled and produced on the land covered by this lease.

(F) NO DEDUCTIONS: Lessee agrees that all royalties accruing to Lessor under this lease shall be without deduction for the cost of producing, transporting, and otherwise making the oil, gas and other products produced hereunder ready for sale or use.

(G) ROYALTY IN KIND: Notwithstanding anything contained herein to the contrary, Lessor may, at its option, upon not less than 60 days notice to Lessee, require at any time or from time to time that payment of all or any royalties accruing to Lessor under this lease be made in kind without deduction for the cost of producing, gathering, storing, separating, treating, dehydrating, compressing, processing, transporting and otherwise making the oil, gas and other products produced hereunder ready for sale or use. Lessor's right to take its royalty in kind shall not diminish or negate Lessor's rights or Lessee's obligations, whether express or implied, under this lease.



(A) VERTICAL: In the event this lease is in force and effect two (2) years after the expiration date of the primary or extended term it shall then terminate as to all of the leased premises, EXCEPT (1) 40 acres surrounding each oil well capable of producing in paying quantities and 320 acres surrounding each gas well capable of producing in paying quantities (including a shut-in oil or gas well as provided in Paragraph 11 hereof), or a well upon which Lessee is then engaged in continuous drilling or reworking operations, or (2) the number of acres included in a producing pooled unit pursuant to Natural Resources Code Sections 52.151-52.153, or (3) such greater or lesser number of acres as may then be allocated for production purposes to a proration unit for each such producing well under the rules and regulations of the Railroad Commission of Texas, or any successor agency, or other governmental authority having jurisdiction. Within 90 days of a partial termination of this lease in accordance with this subparagraph and upon payment of the minimum filing fee set by General Land Office rules in effect at the time of the partial termination, Lessee shall have the right to obtain a surface lease for ingress and egress on and across the terminated portion of the leased premises as may be reasonably necessary for the continued operation of the portions of the lease remaining in force and effect. If Lessee fails to apply for a surface lease within the 90 day period specified above, Lessee may apply for a surface lease from the Land Office, but the Land Commissioner has the discretion to grant or deny such application and to set the fee for such surface lease.

(B) HORIZONTAL: In the event this lease is in force and effect two (2) years after the expiration date of the primary or extended term it shall further terminate as to all depths below 100 feet below the total depth drilled (hereinafter "deeper depths") in each well located on acreage retained in Paragraph 7 (A) above, unless on or before two (2) years after the primary or extended term Lessee pays an amount equal to one-half (1/2) of the bonus originally paid as consideration for this lease (as specified on page 1 hereof). If such amount is paid, this lease shall be in force and effect as to such deeper depths, and said termination shall be delayed for an additional period of two (2) years and so long thereafter as oil or gas is produced in paying quantities from such deeper depths covered by this lease.

(C) IDENTIFICATION AND FILING: The surface acreage retained hereunder as to each well shall, as nearly as practical, be in the form of a square with the well located in the center thereof, or such other shape as may be approved by the School Land Board. Within thirty (30) days after partial termination of this lease as provided herein, Lessee shall execute and record a release or releases containing a satisfactory legal description of the acreage and/or depths not retained hereunder. The recorded release, or a certified copy of same, shall be filed in the General Land Office, accompanied by the filing fee prescribed by the General Land Office rules in effect on the date the release is filed. If Lessee fails or refuses to execute and record such release or releases within ninety (90) days after being requested to do so by the General Land Office, then the Commissioner at his sole discretion may designate by written instrument the acreage and/or depths to be released hereunder and record such instrument at Lessee's expense in the county or counties where the lease is located and in the official records of the General Land Office and such designation shall be binding upon Lessee for all purposes. If at any time after the effective date of the partial termination provisions hereof, the applicable field rules are changed or the well or wells located thereon are reclassified so that less acreage is thereafter allocated to said well or wells for production purposes, this lease shall thereupon terminate as to all acreage not thereafter allocated to said well or wells for production purposes.

8. OFFSET WELLS: If oil and/or gas should be produced in commercial quantities from a well located on land privately owned or on State land leased at a lesser royalty, which well is within one thousand (1,000) feet of the area included herein, or which well is draining the area covered by this lease, the Lessee shall, within sixty (60) days after such initial production from the draining well or the well located within one thousand (1,000) feet from the area covered by this lease begin in good faith and prosecute diligently the drilling of an offset well on the area covered by this lease, and such offset well shall be drilled to such depth as may be necessary to prevent the undue drainage of the area covered by this lease, and the Lessee, manager or driller shall use all means necessary in a good faith effort to make such offset well produce oil and/or gas in commercial quantities. Only upon the determination of the Commissioner and with his written approval, may the payment of a compensatory royalty satisfy the obligation to drill an offset well or wells required under this Paragraph.

9. DRY HOLE/CESSATION OF PRODUCTION DURING PRIMARY TERM: If, during the primary term hereof and prior to discovery and production of oil or gas on said land, Lessee should drill a dry hole or holes thereon, or if during the primary term hereof and after the discovery and actual production of oil or gas from the leased premises such production thereof should cease from any cause, this lease shall not terminate if on or before the expiration of sixty (60) days from date of completion of said dry hole or cessation of production Lessee commences additional drilling or reworking operations thereon, or pays or tenders the next annual delay rental in the same manner as provided in this lease. If, during the last year of the primary term or within sixty (60) days prior thereto, a dry hole be completed and abandoned, or the production of oil or gas should cease for any cause, Lessee's rights shall remain in full force and effect without further operations until the expiration of the primary term; and if Lessee has not resumed production in paying quantities at the expiration of the primary term, Lessee may maintain this lease by conducting additional drilling or reworking operations pursuant to Paragraph 10, using the expiration of the primary term as the date of cessation of production under Paragraph 10. Should the first well or any subsequent well drilled on the above described land be completed as a shut-in oil or gas well within the primary term hereof, Lessee may resume payment of the annual rental in the same manner as provided herein on or before the rental paying date following the expiration of sixty (60) days from the date of completion of such shut-in oil or gas well and upon the failure to make such payment, this lease shall ipso facto terminate. If at the expiration of the primary term or any time thereafter a shut-in oil or gas well is located on the leased premises payments may be made in accordance with the shut-in provisions hereof.

10. CESSATION, DRILLING, AND REWORKING: If, after the expiration of the primary term, production of oil or gas from the leased premises, after once obtained, should cease from any cause, this lease shall not terminate if Lessee commences additional drilling or reworking operations within sixty (60) days after such cessation, and this lease shall remain in full force and effect for so long as such operations continue in good faith and in workmanlike manner without interruptions totaling more than sixty (60) days. If such drilling or reworking operations result in the production of oil or gas, the lease shall remain in full force and effect for so long as oil or gas is produced from the leased premises in paying quantities or payment of shut-in oil or gas well royalties or payment of compensatory royalties is made as provided herein or as provided by law. If the drilling or reworking operations result in the

completion of a well as a dry hole, the lease will not terminate if the Lessee commences additional drilling or reworking operations within sixty (60) days after the completion of the well as a dry hole, and this lease shall remain in effect so long as Lessee continues drilling or reworking operations in good faith and in a workmanlike manner without interruptions totaling more than sixty (60) days. Lessee shall give written notice to the General Land Office within thirty (30) days of any cessation of production.

11. **SHUT-IN ROYALTIES:** For purposes of this paragraph, "well" means any well that has been assigned a well number by the state agency having jurisdiction over the production of oil and gas. If at any time after the expiration of the primary term of a lease that, until being shut in, was being maintained in force and effect, a well capable of producing oil or gas in paying quantities is located on the leased premises, but oil or gas is not being produced for lack of suitable production facilities or lack of a suitable market, then Lessee may pay as a shut-in oil or gas royalty an amount equal to double the annual rental provided in the lease, but not less than \$1,200 a year for each well capable of producing oil or gas in paying quantities. To be effective, each initial shut-in oil or gas royalty must be paid on or before: (1) the expiration of the primary term, (2) 60 days after the Lessee ceases to produce oil or gas from the leased premises, or (3) 60 days after Lessee completes a drilling or reworking operation in accordance with the lease provisions; whichever date is latest. If the shut-in oil or gas royalty is paid, the lease shall be considered to be a producing lease and the payment shall extend the term of the lease for a period of one year from the end of the primary term, or from the first day of the month following the month in which production ceased, and, after that, if no suitable production facilities or suitable market for the oil or gas exists, Lessee may extend the lease for four more successive periods of one (1) year by paying the same amount each year on or before the expiration of each shut-in year.

12. **COMPENSATORY ROYALTIES:** If, during the period the lease is kept in effect by payment of the shut-in oil or gas royalty, oil or gas is sold and delivered in paying quantities from a well located within one thousand (1,000) feet of the leased premises and completed in the same producing reservoir, or in any case in which drainage is occurring, the right to continue to maintain the lease by paying the shut-in oil or gas royalty shall cease, but the lease shall remain effective for the remainder of the year for which the royalty has been paid. The Lessee may maintain the lease for four more successive years by Lessee paying compensatory royalty at the royalty rate provided in the lease of the market value of production from the well causing the drainage or which is completed in the same producing reservoir and within one thousand (1,000) feet of the leased premises. The compensatory royalty is to be paid monthly to the Commissioner beginning on or before the last day of the month following the month in which the oil or gas is produced from the well causing the drainage or that is completed in the same producing reservoir and located within one thousand (1,000) feet of the leased premises; if the compensatory royalty paid in any 12-month period is in an amount less than the annual shut-in oil or gas royalty, Lessee shall pay an amount equal to the difference within thirty (30) days from the end of the 12-month period; and none of these provisions will relieve Lessee of the obligation of reasonable development nor the obligation to drill offset wells as provided in N.R.C. Section 52.034; however, at the determination of the Commissioner, and with the Commissioner's written approval, the payment of compensatory royalties shall satisfy the obligation to drill offset wells. Compensatory royalty payments which are not timely paid will accrue penalty and interest in accordance with Paragraph 5 of this lease.

13. **EXTENSIONS:** If, at the expiration of the primary term of this lease, production of oil or gas has not been obtained on the leased premises but drilling operations are being conducted thereon in good faith and in a good and workmanlike manner, Lessee may, on or before the expiration of the primary term, file in the General Land Office written application to the Commissioner of the General Land Office for a thirty (30) day extension of this lease, accompanied by payment of Three Thousand Dollars (\$3,000.00) if this lease covers six hundred forty (640) acres or less and Six Thousand Dollars (\$6,000.00) if this lease covers more than six hundred forty (640) acres and the Commissioner shall, in writing, extend this lease for a thirty (30) day period from and after the expiration of the primary term and so long thereafter as oil or gas is produced in paying quantities; provided further, that Lessee may, so long as such drilling operations are being conducted make like application and payment during any thirty (30) day extended period for an additional extension of thirty (30) days and, upon receipt of such application and payment, the Commissioner shall, in writing, again extend this lease so that same shall remain in force for such additional thirty (30) day period and so long thereafter as oil or gas is produced in paying quantities; provided, however, that this lease shall not be extended for more than a total of three hundred ninety (390) days from and after the expiration of the primary term unless production in paying quantities has been obtained.

14. **USE OF WATER; SURFACE:** Lessee shall have the right to use water produced on said land necessary for operations hereunder and solely upon the leased premises; provided, however, Lessee shall not use potable water or water suitable for livestock or irrigation purposes for water flood operations without the prior written consent of Lessor. Subject to its obligation to pay surface damages, Lessee shall have the right to use so much of the surface of the land that may be reasonably necessary for drilling and operating wells and transporting and marketing the production therefrom, such use to be conducted under conditions of least injury to the surface of the land. Lessee shall pay surface damages in an amount set by the General Land Office fee schedule which is effective on the date when the activity requiring the payment of surface damages occurs.

15. **POLLUTION:** In developing this area, Lessee shall use the highest degree of care and all proper safeguards to prevent pollution. Without limiting the foregoing, pollution of coastal wetlands, natural waterways, rivers and impounded water shall be prevented by the use of containment facilities sufficient to prevent spillage, seepage or ground water contamination. In the event of pollution, Lessee shall use all means at its disposal to recapture all escaped hydrocarbons or other pollutant and shall be responsible for all damage to public and private properties.

(A) **UPLANDS:** Lessee shall build and maintain fences around its slush, sump, and drainage pits and tank batteries so as to protect livestock against loss, damage or injury; and upon completion or abandonment of any well or wells, Lessee shall fill and level all slush pits and cellars and completely clean up the drilling site of all rubbish thereon.

(B) **SUBMERGED LANDS:** No discharge of solid waste or garbage shall be allowed into State waters from any drilling or support vessels, production platform, crew or supply boat, barge, jack-up rig or other equipment located on the leased area. Solid waste shall include but shall not be limited to containers, equipment, rubbish, plastic, glass, and any other man-made non-biodegradable items. A sign must be displayed in a high traffic area on all vessels and manned platforms stating, "Discharge of any solid waste or garbage into State Waters from vessels or platforms is strictly prohibited and may subject a State of Texas lease to forfeiture." Such statement shall be in lettering of at least 1" in size.

(C) RIVERS: To the extent necessary to prevent pollution, the provisions found in subsections (a) and (b) of this paragraph shall also apply to rivers and riverbeds.

(D) PENALTY: Failure to comply with the requirements of this provision may result in the maximum penalty allowed by law including forfeiture of the lease. Lessee shall be liable for the damages caused by such failure and any costs and expenses incurred in cleaning areas affected by the discharged waste.

16. IDENTIFICATION MARKERS: Lessee shall erect, at a distance not to exceed twenty-five (25) feet from each well on the premises covered by this lease, a legible sign on which shall be stated the name of the operator, the lease designation and the well number. Where two or more wells on the same lease or where wells on two or more leases are connected to the same tank battery, whether by individual flow line connections direct to the tank or tanks or by use of a multiple header system, each line between each well and such tank or header shall be legibly identified at all times, either by a firmly attached tag or plate or an identification properly painted on such line at a distance not to exceed three (3) feet from such tank or header connection. Said signs, tags, plates or other identification markers shall be maintained in a legible condition throughout the term of this lease.

17. ASSIGNMENTS: The lease may be transferred at any time. All transfers must reference the lease by the file number and must be recorded in the county where the area is located, and the recorded transfer or a copy certified to by the County Clerk of the county where the transfer is recorded must be filed in the General Land Office within ninety (90) days of the execution date, as provided by N.R.C. Section 52.026, accompanied by the filing fee prescribed by the General Land Office rules in effect on the date of receipt by the General Land Office of such transfer or certified copy thereof. Every transferee shall succeed to all rights and be subject to all obligations, liabilities, and penalties owed to the State by the original lessee or any prior transferee of the lease, including any liabilities to the state for unpaid royalties.

18. RELEASES: Lessee may relinquish the rights granted hereunder to the State at any time by recording the relinquishment in the county where this area is situated and filing the recorded relinquishment or certified copy of same in the General Land Office within ninety (90) days after its execution accompanied by the filing fee prescribed by the General Land Office rules in effect on the date of receipt by the General Land Office of such relinquishment or certified copy thereof. Such relinquishment will not have the effect of releasing Lessee from any liability theretofore accrued in favor of the State.

19. LIEN: In accordance with N.R.C. Section 52.136, the State shall have a first lien upon all oil and gas produced from the area covered by this lease to secure payment of all unpaid royalty and other sums of money that may become due under this lease. By acceptance of this lease, Lessee grants the State, in addition to the lien provided by N.R.C. Section 52.136 and any other applicable statutory lien, an express contractual lien on and security interest in all leased minerals in and extracted from the leased premises, all proceeds which may accrue to Lessee from the sale of such leased minerals, whether such proceeds are held by Lessee or by a third party, and all fixtures on and improvements to the leased premises used in connection with the production or processing of such leased minerals in order to secure the payment of all royalties or other amounts due or to become due under this lease and to secure payment of any damages or loss that lessor may suffer by reason of Lessee's breach of any covenant or condition of this lease, whether express or implied. This lien and security interest may be foreclosed with or without court proceedings in the manner provided in the Title 1, Chapter 9 of the Texas Business and Commerce Code. Lessee agrees that the Commissioner may require Lessee to execute and record such instruments as may be reasonably necessary to acknowledge, attach or perfect this lien. Lessee hereby represents that there are no prior or superior liens arising from and relating to Lessee's activities upon the above-described property or from Lessee's acquisition of this lease. Should the Commissioner at any time determine that this representation is not true, then the Commissioner may declare this lease forfeited as provided herein.

20. FORFEITURE: If Lessee shall fail or refuse to make the payment of any sum within thirty (30) days after it becomes due, or if Lessee or an authorized agent should knowingly make any false return or false report concerning production or drilling, or if Lessee shall fail or refuse to drill any offset well or wells in good faith as required by law and the rules and regulations adopted by the Commissioner of the General Land Office, or if Lessee should fail to file reports in the manner required by law or fail to comply with rules and regulations promulgated by the General Land Office, the School Land Board, or the Railroad Commission, or refuse the proper authority access to the records pertaining to operations, or if Lessee or an authorized agent should knowingly fail or refuse to give correct information to the proper authority, or knowingly fail or refuse to furnish the General Land Office a correct log of any well, or if Lessee shall knowingly violate any of the material provisions of this lease, or if this lease is assigned and the assignment is not filed in the General Land Office as required by law, the rights acquired under this lease shall be subject to forfeiture by the Commissioner, and he shall forfeit same when sufficiently informed of the facts which authorize a forfeiture, and when forfeited the area shall again be subject to lease to the highest bidder, under the same regulations controlling the original sale of leases. However, nothing herein shall be construed as waiving the automatic termination of this lease by operation of law or by reason of any special limitation arising hereunder. Forfeitures may be set aside and this lease and all rights thereunder reinstated before the rights of another intervene upon satisfactory evidence to the Commissioner of the General Land Office of future compliance with the provisions of the law and of this lease and the rules and regulations that may be adopted relative hereto.

21. RIVERBED TRACTS: In the event this lease covers a riverbed, Lessee is hereby specifically granted the right of eminent domain and condemnation as provided for in N.R.C. Sections 52.092-52.093, as a part of the consideration moving to Lessor for the covenants herein made by Lessee.

22. APPLICABLE LAWS AND DRILLING RESTRICTIONS: This lease shall be subject to all rules and regulations, and amendments thereto, promulgated by the Commissioner of the General Land Office governing drilling and producing operations on Permanent Free School Land, payment of royalties, and auditing procedures, and shall be subject to all other valid statutes, rules, regulations, orders and ordinances that may affect operations under the provisions of this lease. Without limiting the generality of the foregoing, Lessee hereby agrees, by the acceptance of this lease, to be bound by and subject to all statutory and regulatory provisions relating to the

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 Beth Rothenel, County Clerk  
 Washington County, TX. Deputy  
 LaFayne Littleton

General Land Office's audit billing notice and audit hearings procedures. Said provisions are currently found at 31 Texas Administrative Code, Chapter 4, and Texas Natural Resources Code Sections 52.135 and 52.137 through 52.140. In the event this lease covers land franchised or leased or otherwise used by a navigation district or by the United States for the purpose of navigation or other purpose incident to the operation of a port, then Lessee shall not be entitled to enter or possess such land without prior approval as provided under Section 61.117 of the Texas Water Code, but Lessee shall be entitled to develop such land for oil and gas by directional drilling; provided, however, that no surface drilling location may be nearer than 660 feet and special permission from the Commissioner of the General Land Office is necessary to make any surface location nearer than 2,160 feet measured at right angles from the nearest bulkhead line or from the nearest dredged bottom edge of any channel, slip, or turning basin which has been authorized by the United States as a federal project for future construction, whichever is nearer.

23. **REMOVAL OF EQUIPMENT:** Upon the termination of this lease for any cause, Lessee shall not, in any event, be permitted to remove the casing or any part of the equipment from any producing, dry, or abandoned well or wells without the written consent of the Commissioner of the General Land Office or his authorized representative; nor shall Lessee, without the written consent of said Commissioner or his authorized representative remove from the leased premises the casing or any other equipment, material, machinery, appliances or property owned by Lessee and used by Lessee in the development and production of oil or gas therefrom until all dry or abandoned wells have been plugged and until all slush or refuse pits have been properly filled and all broken or discarded lumber, machinery, or debris shall have been removed from the premises to the satisfaction of the said Commissioner or his authorized representative.

24. **FORCE MAJEURE:** Should Lessee be prevented from complying with any express or implied covenant of this lease, from conducting drilling operations thereon, or from producing oil and/or gas therefrom, after effort made in good faith, by reason of war, rebellion, riots, strikes, fires, acts of God or any order, rule or regulation of governmental authority, then while so prevented, Lessee's obligation to comply with such covenant shall be suspended upon proper and satisfactory proof presented to the Commissioner of the General Land Office in support of Lessee's contention and Lessee shall not be liable for damages for failure to comply therewith (except in the event of lease operations suspended as provided in the rules and regulations adopted by the School Land Board); and this lease shall be extended while and so long as Lessee is prevented, by any such cause, from drilling, reworking operations or producing oil and/or gas from the leased premises; provided, however, that nothing herein shall be construed to suspend the payment of rentals during the primary or extended term, nor to abridge Lessee's right to a suspension under any applicable statute of this State.

25. **RAILROAD COMMISSION HEARINGS ON GAS:** No natural gas or casinghead gas, including both associated and non-associated gas, produced from the mineral estate subject to this lease may be sold or contracted for sale to any person for ultimate use outside the State of Texas unless the Railroad Commission of Texas, after notice and hearing as provided in Title 3 of the N.R.C., finds that (a) the person, agency, or entity that executed the lease in question does not require the natural gas or casinghead gas to meet its own existing needs for fuel; (b) no private or public hospital, nursing home, or other similar health-care facility in this State requires the natural gas or casinghead gas to meet its existing needs for fuel; (c) no public or private school in this State that provides elementary, secondary, or higher education requires the natural gas or casinghead gas to meet its existing needs for fuel; (d) no facility of the State or of any county, municipality, or other political subdivision in this State requires the natural gas or casinghead gas to meet its existing needs for fuel; (e) no producer of food and fiber requires the natural gas or casinghead gas necessary to meet the existing needs of irrigation pumps and other machinery directly related to this production; and (f) no person who resides in this State and who relies on natural gas or casinghead gas to provide in whole or part his existing needs for fuel or raw material requires the natural gas or casinghead gas to meet those needs. However, the Railroad Commission of Texas may grant exceptions to these provisions as set forth in N.R.C. Section 52.296.

26. **LEASE SECURITY:** Lessee shall take the highest degree of care and all proper safeguards to protect said premises and to prevent theft of oil, gas, and other hydrocarbons produced from said lease. This includes, but is not limited to, the installation of all necessary equipment, seals, locks, or other appropriate protective devices on or at all access points at the lease's production,

gathering and storage systems where theft of hydrocarbons can occur. Lessee shall be liable for the loss of any hydrocarbons resulting from theft and shall pay the State of Texas royalties thereon as provided herein on all oil, gas or other hydrocarbons lost by reason of theft.

27. **REDUCTION OF PAYMENTS:** If, during the primary term, a portion of the land covered by this lease is included within the boundaries of a pooled unit that has been approved by the School Land Board in accordance with Natural Resources Code Sections 52.151-52.153, or if, at any time after the expiration of the primary term or the extended term, this lease covers a lesser number of acres than the total amount described herein, payments that are made on a per acre basis hereunder shall be reduced according to the number of acres pooled, released, surrendered, or otherwise severed, so that payments determined on a per acre basis under the terms of this lease during the primary term shall be calculated based upon the number of acres outside the boundaries of a pooled unit, or, if after the expiration of the primary term, the number of acres actually retained and covered by this lease.

28. **SUCCESSORS AND ASSIGNS:** The covenants, conditions and agreements contained herein shall extend to and be binding upon the heirs, executors, administrators, successors or assigns of Lessee herein.

29. **ANTIQUITIES CODE:** In the event that any feature of archeological or historical interest is encountered during the activities authorized by this lease, Lessee will immediately cease activities and will immediately notify the General Land Office and the Texas Historical Commission so that adequate measures may be undertaken to protect or recover such discoveries or findings, as appropriate. Lessee is expressly placed on notice of the National Historical Preservation Act of 1966 (PB-89-66, 80 Statute 915; 16 U.S.C.A. 470). Lessee shall comply with the Antiquities Code of Texas, Chapter 191, Natural Resources Code, as amended.

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 Washington County, TX. Deputy  
 LaFayne Littleton

30. VERUE: Lessor and lessee, including lessee's successors and assigns, hereby agree that venue for any dispute arising out of a provision of this lease, whether express or implied, regarding interpretation of this lease, or relating in any way to this lease or to applicable case law, statutes, or administrative rules, shall be in a court of competent jurisdiction located in Travis County, State of Texas.

31. LEASE FILING: Pursuant to Chapter 9 of the Tex. Bus. & Com. Code, this lease must be filed of record in the office of the County Clerk in any county in which all or any part of the leased premises is located, and certified copies thereof must be filed in the General Land Office. The prescribed filing fee shall accompany the certified copies sent to the General Land Office.

32. EXECUTION: This oil and gas lease must be signed and acknowledged by the Lessee before it is filed of record in the county records and in the General Land Office of the State of Texas.

UNION PACIFIC RESOURCES COMPANY  
LESSEE  
BY: Carolyn J. David  
TITLE: Attorney-in-Fact  
DATE: 12-10-96

APD  
SOC

IN TESTIMONY WHEREOF, witness the signature of the Commissioner of the General Land Office of the State of Texas under the seal of the General Land Office.

Garry Mauro  
COMMISSIONER OF THE GENERAL LAND OFFICE  
OF THE STATE OF TEXAS

APPROVED  
Contents [Signature]  
Legal [Signature]  
DC [Signature]  
SD [Signature]  
Exec [Signature]

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Beth Rothermel, County Clerk  
Washington County, TX. [Signature] Deputy  
LaFayne Littleton

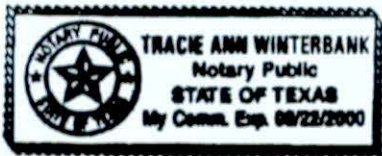
STATE OF Texas  
COUNTY OF Tarrant

(CORPORATION ACKNOWLEDGMENT) ✓

BEFORE ME, the undersigned authority, on this day personally appeared Carolyn J. David  
known to me to be the person whose name is subscribed to the foregoing instrument, as attorney-in-fact of  
Union Pacific Resources Company and acknowledged to me that he executed the same  
for the purposes and consideration therein expressed, in the capacity stated, and as the act and deed of said corporation.

Given under my hand and seal of office this the 10<sup>th</sup> day of December, 19 96.

Tracie Ann Winterbank  
Notary Public in and for The State of Texas



STATE OF \_\_\_\_\_  
COUNTY OF \_\_\_\_\_

(INDIVIDUAL ACKNOWLEDGMENT)

Before me, the undersigned authority, on this day personally appeared \_\_\_\_\_  
known to me to be the persons whose names are subscribed to the foregoing instrument, and acknowledged to me that they executed the  
same for the purposes and consideration therein expressed.

Given under my hand and seal of office this the \_\_\_\_\_ day of \_\_\_\_\_, 19 \_\_\_\_\_.

Notary Public in and for \_\_\_\_\_

**FILED**  
AT 2:30 P. M.  
DEC 11 1996  
Beth A. Rothermel  
BETH ROTHERMEL  
COUNTY CLERK, WASHINGTON COUNTY, TX

STATE OF TEXAS  
COUNTY OF WASHINGTON

I hereby certify that this instrument was FILED on  
the date and at the time affixed hereon by me and  
was duly RECORDED in the volume and page of the  
OFFICIAL RECORDS of Washington County, Texas, as  
stamped hereon by me on

DEC 12 1996



Beth A. Rothermel  
Beth Rothermel, County Clerk  
Washington County, Texas

CERTIFIED COPY CERTIFICATE  
STATE OF TEXAS  
COUNTY OF WASHINGTON

The above is a full, true, and correct photographic  
copy of the original record now in my lawful custody  
and possession as the same is recorded in the  
OFFICIAL RECORDS in my office with volume and  
page number stamped thereon. I hereby certify on

JAN - 7 1996



BETH ROTHERMEL  
COUNTY CLERK  
WASHINGTON COUNTY, TEXAS  
By LaFayne Littleton  
LaFayne Littleton Deputy

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Case No. MF097584

Certified Lease

Date Filed: 11/9/88

By David Newburs, Commissioner  
*David Newburs*



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