

Calculation and Payment of Royalties – Un-leased Mineral Owners and

Non-Ratified Royalty Owners

By

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This paper was written to place in one article the general principles of royalty ownership and its calculation under three scenarios: 1) straight hole wells drilled and produced on a lease/unit basis; 2) deviated wells drilled and produced on a lease/unit basis and 3) horizontal wells drilled and produced on a lease/unit basis. The general definitions upon which this article is premised will be set out immediately below with such discussion as is necessary to allow the author to draw the royalty payment conclusions set out in the last part of the paper.

The author has elected to depict the various legal scenarios pictorially (Exhibits “1” and “2”). The matrix of royalty payment requirements in the factual scenarios set out below is to be read in conjunction with the pictorial representations of the different factual situations set forth in said exhibits. Each factual scenario will be identified with a suffix numbered as it appears in the discussion portion of this paper. CAVEAT: The factual scenarios depicted in the examples do not necessarily comply with regulatory requirements for the drilling/pooled units. Rather, they are depicted solely for royalty calculation discussion purposes.

The paper is divided into two distinct parts: Part One – Discussion of selected topics and legal rules for the proper payment of royalties and Part Two – Application of the legal rules in Part One to the different factual scenarios identified in Exhibits “1” and “2”.

Definitions and Legal Discussion – The following definitions are general in nature. It is not the purpose of this paper to explore the definitions from a strictly legal perspective. Rather, the definitions are to be utilized as an aid in understanding the different royalty ownership/payment scenarios hereinafter described.

The pertinent provision of the Texas Receivership Statute (“TRS”) that applies to the proper payment of royalty in Texas is found in the Civil Practice and Remedies Code, Title 3, Chapter 64, § 64.093 Receiver For Royalty Interests Owned By Nonresident Or Absentee. This provision allows for the appointment of a receiver for a person owing a royalty interest in Texas lands AND whose residence or identity is unknown or who is a nonresident. The suit must be brought by a person claiming to or owning an undivided mineral interest in land in Texas or an undivided leasehold interest under a mineral lease of land in Texas.

What is key to the proper payment of royalties is the verification that the receiver has ratified either 1) an oil and gas lease (with pooling provision) or 2) the actual pooled unit, either of which encompasses the land under which the royalty interest is owned.

Equally important, despite what the ratification instrument states as its effective date (Ex – “...to be effective as of the date of first production.”), ratification of an oil and gas lease by a receiver is only effective from and after the date the lease/pooled unit is ratified. Thus, if the non-participating royalty interest was on a non-drillsite tract, and not ratified at the time the well was drilled and production was established (and thus not pooled), the non-participating royalty owner is only entitled to its share of pooled production attributable to its interest from and after the date of the ratification of the lease/unit by the receiver.

“ Article 64.091 of the Texas Civil Practice and Remedies Code, the statute allowing a trial court to appoint a receiver for mineral interests, does not authorize the receiver to convey any rights to personal property. TEX. CIV. PRAC. & REM.CODE ANN. § 64.091 (Vernon 1997). Royalties become personal property once the mineral estate is severed from the real estate at the well head. *Humble Oil & Ref. Co. v. West*, 508 S.W.2d 812, 817 (Tex.1974); *Rogers v. Ricane Enters., Inc.*, 930 S.W.2d 157, 165 (Tex.App.-Amarillo 1996, no writ). A party to a mineral development lease is only entitled to mineral royalties accruing after the date the owner ratified the lease in question... *Amoco Production Co. v. Wood*, 113 S.W.3d 462, 466 (Tex.App. — 2003) emphasis added

Division Order Statute

The Texas Division Order Statute is found at Natural Resources Code (§§ 1.001 - 221.048), Title 3. Oil And Gas (§§ 91.401 et seq.). It sets out a schemata for **timely** payments of royalty in Texas. Most notable in the statute that directly impacts the correct and timely payment of royalty in Texas are the following quoted provisions.

1. “If payment has not been made for any reason in the time limits specified in Section 91.402 of this code, the payor must pay interest to a payee beginning at the expiration of those time limits at two percentage points above the percentage rate charged on loans to depository institutions by the New York Federal Reserve Bank, unless a different rate of interest is specified in a written agreement between payor and payee.” (§ 91.403. Payment Of Interest On Late Payments)

2. “(a) The proceeds derived from the sale of oil or gas production from an oil or gas well located in this state must be paid to each payee by payor on or before 120 days after the end of the month of first sale of production from the well. After that time, payments must be made to each payee on a timely basis according to the frequency of payment specified in a lease or other written agreement between payee and payor. If the lease or other agreement does not specify the time for payment, subsequent proceeds must be paid no later than:
 - (1) 60 days after the end of the calendar month in which subsequent oil production is sold; or
 - (2) 90 days after the end of the calendar month in which subsequent gas production is sold.”

(b) Payments may be withheld without interest beyond the time limits set out in Subsection (a) of this section when there is:

 - (1) a dispute concerning title that would affect distribution of payments;
 - (2) a reasonable doubt that the payee:
 - (A) has sold or authorized the sale of its share of the oil or gas to the purchaser of such production; or
 - (B) has clear title to the interest in the proceeds of production;
 - (3) a requirement in a title opinion that places in issue the title, identity, or whereabouts of the payee and that has not been satisfied by the payee after a reasonable request for curative information has been made by the payor. (§ 91.402. Time For Payment Of Proceeds)

Definition of Landowner's Royalty – “Royalty” means that share of the product or monetary payment (percentage) that is reserved by the lessor/mineral owner for permitting the lessee to enter onto its land and appropriate the minerals throughout the term of the oil and gas lease. (Texas Jur 2d Section 378) For discussion purposes only, throughout this paper, all references to landowner(‘s) royalty will be to the reservation of a one-eighth (1/8) of eight-eighths (8/8) of production/revenues.

The right to pool the landowner’s royalty, if any, may be found in the base oil and gas lease or an amendment thereto. Until a lessee is vested with the power to pool a particular lease, or until the lessor ratifies its lessee’s unauthorized act of pooling its lease into a pooled unit, that lease must be maintained via the terms and provisions of the underlying lease(s) ie payment of delay rentals, actual production in paying quantities from the leased premises etc. *Jones v. Killingsworth*, 403 S.W.2d. 326 (Tex. – 1965); *Knight v. Chicago*, 188 S.W.2d. 564 (Tex. – 1945) and *Brown v. Smith*, 174 S.W.2d. 43 (Tex. 1943)

Definition of Overriding Royalty Interest– “Overriding Royalty Interest” usually means a percentage of production/revenue carved out of the oil and gas lessee’s interest (“working interest”) which has as its term the life of the lease then in force when created. For discussion purposes only, all references to an overriding royalty interest will be 5% of 8/8. (Texas Jur 2d Section 383)

According to *Union Pacific Resources Co. v. Hutchison*, 990 S.W.2d 368 (Tex.App. — 1999), an oil and gas lessee, taking an oil and gas lease with the right to pool contained therein and 1) thereafter assigning said oil and gas lease to a third party AND 2) reserving an overriding royalty interest in said assignment, creates within the assignee the right to pool the reserved overriding royalty interest without further consent or ratification by the owner of the newly created overriding royalty interest.

“ We hold Hutchison (former owner of the working interest and present owner of the overriding royalty interest) transferred to Fuller, in her assignment, her express authority to pool the sixty-five-acre tract. Consequently, no further consent on her part was required before Union Pacific pooled the sixty-five acres into the Knebel unit.” *Union Pacific Resources Co. v. Hutchison*, 990 S.W.2d 368, 371 (Tex.App. — 1999) – “(former owner of the working interest and present owner of the overriding royalty interest)” added by author for clarification purposes.

The above case stands not only for the above principle concerning the pooling of an overriding royalty interest but also that all documents creating overriding royalty interests must be carefully inspected to insure that there is no language which would negative the right of the oil and gas lessee to pool such interests. This is especially true where the conveyance of the overriding royalty interest is by simple assignment from the working interest owner to a third party. These instruments must be carefully examined to determine if the assignor (working interest owner) intended to retain the right to pool said assigned overriding royalty interest or conveyed the right to pool said interest to the assignee.

Definition of Non-Participating Royalty Interest – “Non-Participating Royalty Interest” usually means a percentage of production/revenue carved out of the mineral estate. This interest is typically not entitled to participate in the leasing of the lands in which the interest is resident nor participate in the bonus or delay rentals. For discussion purposes only, all references to an overriding royalty interest will be 1/16 of 8/8.

“Non-participating royalty has a well-understood meaning in the oil industry. It may be defined as an interest in the gross production of oil, gas, and other minerals carved out of the mineral fee estate as a free royalty, which does not carry with it the right to participate in the execution of the bonus payable for, or the delay rentals to accrue under, oil, gas, and mineral leases executed by the owner of the mineral fee estate. The exclusive leasing privilege remaining in the mineral fee owner is commonly referred to and known as the "executive right." *MCZ, Inc. v. Triolo*, 708 S.W.2d 49, 52 (Tex.App. — 1986)

Generally, the granting or reservation of a non-participating royalty interest by then then mineral owner (full or partial ownership) does not carry with it the intention that the grantor of the interest intended to give to the holder of the leasehold estate (the oil and gas lessee) the right to pool said interest. To properly pool a non-participating royalty interest, whether under the drillsite tract or non-drillsite tract, consent from the non-participating royalty interest owner must be obtained via ratification of the underlying oil and gas lease (containing the pooling provision) covering the lands in which the non-participating royalty interest is owned or direct ratification of the pooled unit.

“The mere reservation of a non-participating royalty interest under a tract does not show that the royalty owner intended to give to the holder of the executive rights the power to diminish the

royalty owner's interest under that tract. Consequently, pooling on the part of the holder of the executive rights cannot be binding upon the non-participating royalty owner in the absence of his consent. *Minchen v. Fields*, 162 Tex. 73, 345 S.W.2d 282 (1961); *Brown v. Smith*, 141 Tex. 425, 174 S.W.2d 43 (1943); and *Nugent v. Freeman*, 306 S.W.2d 167 (Tex.Civ.App.--Eastland 1957, writ ref'd n.r.e.), cited with approval in *Minchen v. Fields*, supra..." *Montgomery v. Rittersbacher*, 424 S.W.2d 210, 213 (Tex. - 1968)

Clearly, where the oil and gas lessee, in accordance with the express pooling provisions of the underlying oil and gas lease(s) pools the lease(s) under which part of the royalty attributable to such tract is owned by a non-participating royalty interest owner, the non-participating royalty interest owner can ratify the act of pooling: 1) voluntarily (with the lessee's consent), 2) by acceptance of pooled royalties or 3) by unilaterally ratifying the act of pooling by filing suit to enforce the lease as written.

"... This evidence demonstrates Montgomery's intention to ratify the lease, and by filing suit to enforce the lease as written, Montgomery, as a matter of law, has exercised his option to ratify the lease. We think that the manner in which he has exercised his option is analogous to the manner by which a principal can ratify the unauthorized actions of an agent--bringing a suit to enforce the unauthorized act. In such a situation it has been held that the bringing of the suit constitutes an implied ratification of the unauthorized act..." "*Montgomery v. Rittersbacher*, 424 S.W.2d 210, 214 (Tex. - 1968)

If the non-participating royalty interest owner's interest is located on the drillsite tract, it may elect not to ratify the act of pooling and to take its royalty share on an **un-pooled** basis. If the non-participating royalty interest owner's interest is located on a non-drillsite tract, and the non-participating royalty interest owner does not ratify the act of pooling, it is not entitled to any interest in unit production. *MCZ, Inc. v. Triolo*, 708 S.W.2d 49 (Tex.App. — 1986) That is, the failure to ratify the act of pooling in either case results in the non-participating royalty interest owner being treated as an un-pooled royalty interest owner.

Definition of Cotenant – "Cotenant" usually means an un-leased mineral owner under a lease well or a pooled well (drillsite tract only). The un-leased mineral owner becomes a cotenant with the other leased mineral owner(s) and the lessee(s) in that tract. *Wilson v. Superior Oil Company*, 274 S. W. 2d. 947 (Tex. Civ. App. -

writ ref'd n.r.e.); *Wooley v. West*, 391 S. W. 2d. 157 (Tex. Civ. App. - 1965, writ ref'd n.r.e.) One cotenant may lease its interest in a tract of land without the consent of its other cotenant(s). Any cotenant or its lessee may commence drilling for oil and gas on the leased premises without the consent of the other cotenant(s). *Powell v. Johnson*, 170 S. W. 2d. 273 (Tex. Civ. App. - 1943, aff'd) More importantly, the entry by either cotenant onto the tract for drilling and production purposes is not deemed a trespass since each cotenant has a co-equal right of possession. *Byrom v. Pendley*, 717 S. W. 2d. 602 (Tex – 1986).

The failure to identify and lease an undivided mineral owner under a lease well or under the drillsite tract for a unit well can result in the payment of monies to the un-leased cotenant (after recoupment of all drilling and producing expenses) based on its undivided interest in the tract (in the case of a pooled unit, the un-leased cotenant under the drillsite tract will be entitled to its ownership interest on an un-pooled basis out of all production). *Byrom v. Pendley*, 717 S. W. 2d. 602 (Tex – 1986)

In view of the foregoing principles, an un-leased cotenant who refuses to join in the development minerals on the drillsite tract by another cotenant (or its lessee) is nevertheless entitled to a proportionate share of the proceeds of development less a proportionate share of the reasonable and necessary costs of the development production. *White v. Smyth*, 214 S.W.2d 967 (Tex. - 1948). The non-consenting cotenant, however, is under no obligation to pay for any costs apart from having such costs deducted from his share, if any, of the development's proceeds. *Cox v. Davison*, 397 S.W.2d 200 (Tex. – 1965) The cotenant's share of proceeds is free of any pooling unless the act of pooling is expressly ratified by the un-leased cotenant.

Whether a well is located on a pooled unit drillsite tract or not, the then un-leased cotenant may elect to adopt the lease and thus be entitled to royalty thereunder as though leased and properly pooled. If the un-leased cotenant's ownership is in a pooled non-drillsite tract, its interest is deemed pooled due to its adoption of the oil and gas containing a pooling provision which covers and pertains to that tract. *Jones v. Killingsworth*, 403 S.W.2d. 326 (Tex. – 1965); *Knight v. Chicago*, 188 S.W.2d. 564 (Tex. – 1945) and *Brown v. Smith*, 174 S.W.2d. 43 (Tex. 1943)

“Where this is done and production of oil and/or gas is obtained, the other cotenants are privileged to either recognize and adopt the lease as of their interest as well, so as to be entitled to their fractional interest in the royalty, or to reject it and be entitled to their fractional part of oil

and/or gas produced, less a proportionate part of the cost of discovery and production. *Cox v. Davison*, 397 S.W.2d 200 (Tex. - 1965).” *Hamman v. Ritchie*, 547 S.W.2d 698, 707 (Tex.App. — 1977) (emphasis added).

Definition of Straight Well – A “Straight Well” is an essentially straight well with less than 5° total horizontal deviation from surface to the bottom hole location. Usually, the total well angle is restricted. For purposes of this paper, a straight well has its bottom hole location on the same tract as its surface location. (See Ex. “2”, Straight Well.)

Definition of Deviated Well – A “Deviated Well” is a well drilled with a horizontal deviation of greater than 5° total deviation from surface to the bottom hole location. For purposes of this paper, a deviated well may: 1) have its surface location and bottom hole location on the same tract or 2) have its surface location on one tract and bottom hole location under another separate and distinct tract. (See Ex. “2”, Deviated Well) A deviated well may also have multiple completions occurring under two or more tracts.

Definition of Horizontal Well – A “Horizontal Well” is a well drilled with a deviation of the borehole from vertical so that the borehole penetrates a productive formation in a manner parallel to the formation. For purposes of this paper, a horizontal well may: 1) be drilled and the horizontal leg be confined solely to one tract or 2) drilled where the horizontal leg passes through two or more separate and distinct tracts. (See Ex. “2”, Horizontal Well)

SEE EXHIBIT “3” for a discussion of horizontal wells and the law of commingling.

Definition of Pooling – Voluntary “Pooling” is the unilateral act of the oil and gas lessee, pursuant to a contractual right (power) granted it in an oil and gas lease, combining, via an instrument prepared and executed (usually) solely by the lessee, two or more separate and distinct oil and gas leases covering two or more separate tracts of land with the concomitant right to develop said leases as one lease. (Pooling may also be accomplished under the Mineral Interest Pooling Act (6 Tex. Nat. Res. Code Ann. § 102 et seq. (Vernon Supp. 1989)).

Factual Scenarios and Discussion (Refer to Exhibits “1” and “2” for pictorial representations)

All tract references in this paper will be to the tract numbers as found for each well classification in Exhibit “1” (Pooled) and Exhibit “2” (Not Pooled). For purposes of this paper, it will be assumed that a deviated well has only one completion under the bottom hole tract location. Each completion under separate tracts in a deviated hole would each be considered as a straight hole completion for lease (as opposed to pooled unit) payment purposes for each tract with such a completion. Each tract in the exhibits contains 25 acres. The notes refer to one or more of the rules set out above under the pertinent ownership definition/rule section (Landowner Royalty, Non-participating Royalty Interest and Overriding Royalty Interest).

Exhibits “1” and “2”

Company A is the owner of the oil and gas leases covering Tracts 1-4.

N = Non-participating royalty interest

OR = Overriding royalty interest

½ UL = One-half un-leased mineral owner

X = Surface location

O = Bottom hole location

For example purposes, all wells are pooled on a surface acre basis.

Straight Well and Deviated Well

Lease Well (Ex 2A1 and Ex 2A2)

Landowner Royalty –

Tract 1 - 1/8 of 8/8 less 1/16 of 8/8 (NPRI) = 1/16 of 8/8

Non-Participating Royalty Interest/

Ratified/Non-ratified – (Ex 2A1 and 2A2)

Tract 1 – 1/16 of 8/8

NOTE: Ratification for an NPRI under the drillsite tract for a lease well is not required.

Tract 2 (Ex 2B1 and 2B2) – **0**

NOTE: Since there is no unit, the NPRI owner has no right to participate in production from Tract 1.

Overriding Royalty Interest

Ratified/Non-ratified – (Ex 2A1 and 2A2)

Tract 1 – 5% of 8/8

NOTE: Ratification for an ORRI under the drillsite tract for a lease well is not required.

Tract 2 (Ex 2B1 and 2B2) – **0**

NOTE: Since there is no unit, the ORRI owner has no right to participate in production from Tract 1

Un-leased Mineral Interest – (Ex 2C1 and 2C2)

Tract 1 – 1/2 of 8/8 (less costs of production after recoupment of costs of drilling by Company A (Not subject to ORR created by Company A)

Unit Well – (Ex 1)

Landowner Royalty –

Tract 1 – (Ex 1A1 and 1A2) - 25/100 of (1/8 of 8/8) less (1/16 of 8/8)
= **0**

NOTE: Where non-participating royalty owner **does not** ratify the lease covering Tract 1, its interest is free from the unit. The royalty owner's pooled interest is to bear all of the NPRI which, since it does not own enough royalty interest on a pooled basis, reduces its interest to **0**. **OR**

Tract 1 – 25/100 of (1/8 less 1/16) = 1/64 of 8/8

NOTE: Where non-participating royalty owner **ratifies** the lease covering Tract 1, its interest is subject to the unit. The royalty owner's pooled interest in Tract 1 bears the pooled non-participating royalty interest.

Non-Participating Royalty Interest/

Non-ratified –

Tract 1 (Ex 1A1 and 1A2) – 1/16 of 8/8 on an un-pooled basis

NOTE: NPRI owner has the option of ratifying the oil and gas lease covering its interest. If the well is on the tract in which its interest is located and no ratification is forthcoming, NPRI royalty payments are to be made on an un-pooled basis.

Ratified –

Tract 1 (Ex 1A1 and 1A2) – ¼ of 1/16 of 8/8= 1/64 of 8/8 on a pooled basis

NOTE: NPRI owner has the option of ratifying the oil and gas lease covering its interest. If the well is on the tract in which its interest is located and a ratification is forthcoming, NPRI royalty payments are to be made on a pooled basis. If not ratified, royalty payments are to be made on a lease/un-pooled basis.

Non-ratified –

Tract 2, Straight Well, Tract 3 Deviated Well (Ex 1B1 and 1B2) – **0**

NOTE: NPRI owner has the option of ratifying the oil and gas lease covering its interest. If the well is not on the tract in which its interest is located and no ratification is forthcoming, the NPRI owner does not have the right to participate in unit production. This situation can occur where the NPRI owner cannot be located.

Ratified –

Tract 2 Straight Well, Tract 3 Deviated Well (Ex 1B1 and 1B2) – $\frac{1}{4}$ of $\frac{1}{16}$ of $\frac{8}{8}$ = $\frac{1}{64}$ of $\frac{8}{8}$ on a pooled basis

NOTE: NPRI owner has the option of ratifying the oil and gas lease covering its interest. If the well is not on the tract in which its interest is located and the NPRI owner elects to ratify the lease pertaining to said tract (either voluntarily or by filing suit against the lessee), then from and after the date of ratification, NPRI royalty payments are to be made on a pooled basis.

Overriding Royalty Interest

Tract 1 (Ex1C1 and 1C2) – $\frac{1}{4}$ of 5% of $\frac{8}{8}$ = $\frac{1}{80}$ of $\frac{8}{8}$ on a pooled basis

NOTE: As noted above (*Definition of Overriding Royalty Interest*), if the overriding royalty interest was created by the working interest owner in an assignment to a third party with a reservation of same, that reserved overriding royalty is deemed pooled when said working interest owner (assignee) executes the pooling agreement.

CAVEAT: If the overriding royalty interest was created by a simple assignment from the working interest owner to a third party, that instrument will have to be examined to determine if the working interest owner kept the right to pool same or if the pooling rights of that overriding royalty interest were conveyed to the assignee. If the pooling rights were kept by the ORR owner, and a ratification of the lease is not forthcoming, the ORR owner is to be paid on an un-pooled lease basis.

Tract 2 Straight Well, Tract 3 Deviated Well (Ex1D1 and 1D2)– $\frac{1}{4}$ of 5% of $\frac{8}{8} = \frac{1}{80}$ of $\frac{8}{8}$ on a pooled basis

NOTE: As noted above (*Definition of Overriding Royalty Interest*), if the overriding royalty interest was created by the working interest owner in an assignment to a third party with a reservation of same, that reserved overriding royalty is deemed pooled when said working interest owner (assignee) executes the pooling agreement.

CAVEAT: If the overriding royalty interest was created by a simple assignment from the working interest owner to a third party, that instrument will have to be examined to determine if the working interest owner kept the right to pool same or if the pooling rights of that overriding royalty interest were conveyed to the assignee.

Un-leased Mineral Interest

Tract 1 (Ex 1E1 and 1E2) – $\frac{1}{2}$ of $\frac{8}{8}$ on un-pooled basis (less costs of production after recoupment of costs of drilling by Company A (Not subject to ORR created by Company A) .

CAVEAT: As set forth in *Definition of Cotenant*, a cotenant has the right to take its share of production as set out herein OR adopt the oil and gas lease covering the tract in which it owns its interest.

Tract 2 Straight Well, Tract 3 Deviated Well (Ex 1F1 and 1F2) – $\frac{1}{4}$ of $\frac{1}{2}$ of $\frac{1}{8}$ of $\frac{8}{8} = \frac{1}{64}$ of $\frac{8}{8}$ on a pooled basis

CAVEAT: As set forth in *Definition of Cotenant*, a cotenant has the right to adopt the oil and gas lease covering the tract in which it owns its interest in Tracts 2/3. If it does not avail itself of this right, it is not entitled to any revenues from the production of oil and/or gas well located on Tract 1.

Horizontal Well

Lease Well

Landowner Royalty –

Tract 1 (Ex- 2A3) $\frac{1}{2}$ of $\frac{1}{8}$ of $\frac{8}{8}$ less $\frac{1}{2}$ of $\frac{1}{16}$ of $\frac{8}{8}$ (NPRI) = $\frac{1}{32}$ of $\frac{8}{8}$

NOTE: The well depicted in Ex 2A3, although horizontal in nature, is a lease well. No pooling has taken place. Given the nature of horizontal wells, it is highly unlikely that a horizontal leg such as that depicted will ever occur. However, the reader is invited to project the illustration to a very large tract surrounded by other tracts which will support a horizontal well.

NOTE: The depicted well is a horizontal well with its horizontal leg (measured from PP to TP) being on Tracts 1 and 4 with each portion being of equal length on said tracts. The author has elected to treat both tracts as being similarly underlain with oil and gas ie each tract gets credited with one-half of the commingled production from said well on an un-pooled basis.

Non-Participating Royalty Interest

Ratified/Non-ratified – (Ex 2A3)

Tract 1 – $\frac{1}{2}$ of $\frac{1}{16}$ of $\frac{8}{8}$ = $\frac{1}{32}$

NOTE: Ratification for an NPRI under the drillsite tract for a lease well is not required.

NOTE: The depicted well is a horizontal well with its horizontal leg (measured from PP to TP) being on Tracts 1 and 4 with each portion being of equal length on said tracts. The author has elected to treat both tracts as being similarly underlain with oil and gas ie each tract gets credited with one-half of the commingled production from said well on an un-pooled basis.

Tract 2 (Ex 2B3) – 0

NOTE: Since there is no unit, the NPRI owner has no right to participate in production from Tracts 1 and 2.

Overriding Royalty Interest

Ratified/Non-ratified – (Ex 2A3)

Tract 1 – $\frac{1}{2}$ of 5% of 8/8 = 1/40 of 8/8

NOTE: Ratification for an ORRI under the drillsite tract for a lease well is not required.

NOTE: The depicted well is a horizontal well with its horizontal leg (measured from PP to TP) being on Tracts 1 and 4 with each portion being of equal length on said tracts. The author has elected to treat both tracts as being similarly underlain with oil and gas ie each tract gets credited with one-half of the commingled production from said well on an un-pooled basis.

Tract 2 (Ex 2B3) – 0

NOTE: Since there is no unit, the ORRI owner has no right to participate in production from Tracts 1 and 2

Un-leased Mineral Interest – (Ex 2C3)

Tract 1 – $\frac{1}{2}$ of $\frac{1}{2}$ of 8/8 = $\frac{1}{4}$ of 8/8 (less costs of production after recoupment of costs of drilling by Company A (Not subject to ORR created by Company A)

NOTE: The depicted well is a horizontal well with its horizontal leg (measured from PP to TP) being on Tracts 1 and 4 with each portion being of equal length on said tracts. The author has elected to treat both tracts as being similarly underlain with oil and gas ie each tract gets credited with one-half of the commingled production from said well on an un-pooled basis.

Unit Well – (Ex 1) Per the pooling designation, each tract is to be credited with one-fourth of the production from the unit well

Landowner Royalty –

Tract 1 – (Ex 1A3) - 25/100 of (1/8 of 8/8) less (1/2 of 1/16 of 8/8) = 0

NOTE: Where non-participating royalty owner **does not** ratify the lease covering Tract 1, its interest is free from the unit. Thus the non-participating royalty owner would be entitled to $\frac{1}{2}$ of 1/16 of the production on an un-pooled basis (assuming that Tract 1 is to be credited with one-half of the production from the horizontal well). The royalty owner's pooled interest is to bear all of the NPRI which, since

it does not own enough royalty interest on a pooled basis, reducing its interest to 0.

NOTE: The depicted well is a horizontal well with its horizontal leg (measured from PP to TP) being on Tracts 1 and 4 with each portion being of equal length on said tracts. The author has elected to treat both tracts as being similarly underlain with oil and gas.

NOTE: See Exhibit 3 for a complete discussion on what share of production from Tract 1 the non-participating royalty owner **may** be entitled to if it is not pooled. OR

Tract 1 (Ex 1A3)– $25/100$ of $(1/8 \text{ less } 1/16) = 1/64$ of $8/8$

NOTE: Where non-participating royalty owner **ratifies** the lease covering Tract 1, its interest is subject to the unit. The royalty owner's pooled interest bears the NPRI, both on a pooled basis.

Non-Participating Royalty Interest/

Non-ratified –

Tract 1 (Ex 1A3) – $1/2$ of $1/16$ of $8/8 = 1/32$ on an un-pooled basis

NOTE: NPRI owner has the option of ratifying the oil and gas lease covering its interest or not. If the well is on the tract in which its interest is located and if no ratification is forthcoming, NPRI royalty payments are to be made on an un-pooled basis.

NOTE: The depicted well is a horizontal well with its horizontal leg (measured from PP to TP) being on Tracts 1 and 4 with each portion being of equal length on said tracts. The author has elected to treat both tracts as being similarly underlain with oil and gas.

Ratified

Tract 1 (Ex 1A3)– $1/4$ of $1/16$ of $8/8 = 1/64$ of $8/8$ on a pooled basis

NOTE: NPRI owner has the option of ratifying the oil and gas lease covering its interest or not. If the well is on the tract in which

its interest is located and if a ratification is forthcoming, NPRI royalty payments are to be made on a pooled basis.

Non-ratified –

Tract 2 (Ex 1B3) – 0

NOTE: NPRI owner has the option of ratifying the oil and gas lease covering its interest or not. If the well is not on the tract in which its interest is located and no ratification is forthcoming, the NPRI owner does not have the right to participate in unit production. This situation can occur where the NPRI owner cannot be located.

Ratified –

Tract 2 (Ex 1B3) – ¼ of 1/16 of 8/8 = 1/64 of 8/8 on a pooled basis

NOTE: NPRI owner has the option of ratifying the oil and gas lease covering its interest or not. If the well is not on the drillsite tract in which its interest is located and the NPRI owner elects to ratify the lease pertaining to said tract (either voluntarily or by filing suit against the lessee), then from and after the date of ratification, NPRI royalty payments are to be made on a pooled basis.

Overriding Royalty Interest

Tract 1 (Ex1C3) – ¼ of 5% of 8/8 = 1/80 of 8/8 on a pooled basis

NOTE: As noted above (*Definition of Overriding Royalty Interest*), if the overriding royalty interest was created by the working interest owner in an assignment to a third party with a reservation of same, that reserved overriding royalty is deemed pooled when said working interest owner (assignee) executes the pooling agreement.

CAVEAT: If the overriding royalty interest was created by a simple assignment from the working interest owner to a third party, that instrument will have to be examined to determine if the working interest owner kept the right to pool same or if the pooling rights of that overriding royalty interest were conveyed to the assignee. If the pooling rights were kept by the ORR owner, and a ratification of the lease is not forthcoming, the ORR owner is to be paid on an un-pooled lease basis.

Tract 2 (Ex1D3)– $\frac{1}{4}$ of 5% of $\frac{8}{8}$ = $\frac{1}{80}$ of $\frac{8}{8}$ on a pooled basis

NOTE: As noted above (*Definition of Overriding Royalty Interest*), if the overriding royalty interest was created by the working interest owner in an assignment to a third party with a reservation of same, that reserved overriding royalty is deemed pooled when said working interest owner (assignee) executes the pooling agreement.

CAVEAT: If the overriding royalty interest was created by a simple assignment from the working interest owner to a third party, that instrument will have to be examined to determine if the working interest owner kept the right to pool same or if the pooling rights of that overriding royalty interest were conveyed to the assignee.

Un-leased Mineral Interest

Tract 1 (Ex 1E3) – $\frac{1}{2}$ of $\frac{1}{2}$ of $\frac{8}{8}$ = $\frac{1}{4}$ on un-pooled basis (less costs of production after recoupment of costs of drilling by Company A (Not subject to ORR created by Company A) .

CAVEAT: As set forth in *Definition of Cotenant*, a cotenant has the right to take its share of production as set out herein OR adopt the oil and gas lease covering the tract in which it owns its interest.

NOTE: See Exhibit 3 for a complete discussion on what share of production from Tract 1 the non-participating royalty owner **may** be entitled to if it is not leased/pooled.

NOTE: The depicted well is a horizontal well with its horizontal leg (measured from PP to TP) being on Tracts 1 and 4 with each portion being of equal length on said tracts. The author has elected to treat both tracts as being similarly underlain with oil and gas.

Tract 2 (Ex 1F3) – $\frac{1}{4}$ of $\frac{1}{2}$ of $\frac{1}{8}$ of $\frac{8}{8}$ = $\frac{1}{64}$ of $\frac{8}{8}$ on a pooled basis

CAVEAT: As set forth in *Definition of Cotenant*, a cotenant has the right to adopt the oil and gas lease covering the tract in which it owns its interest in Tract 2. If it does not avail itself of this right, it is not entitled to any revenues from the production of oil and/or gas well located on Tracts 1/2.

NOTE: The depicted well is a horizontal well with its horizontal leg (measured from PP to TP) being on Tracts 1 and 4 with each portion being of equal length on said tracts. The author has elected to treat both tracts as being similarly underlain with oil and gas.

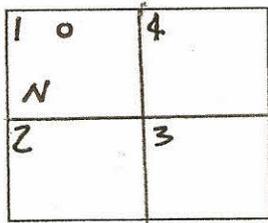
Ex. "1" - POOLED

STRAIGHT WELL

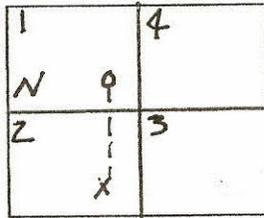
DEVIATED WELL

HORIZONTAL WELL

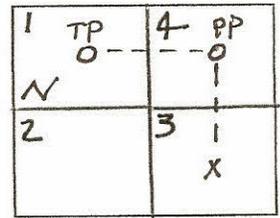
A.



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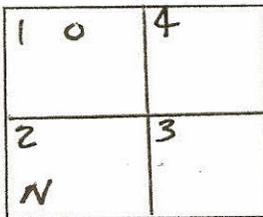


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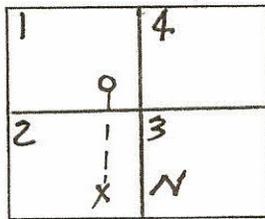


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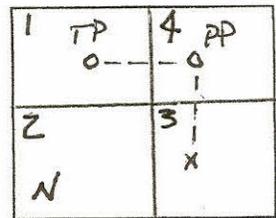
B.



①

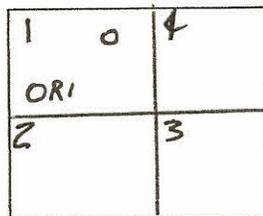


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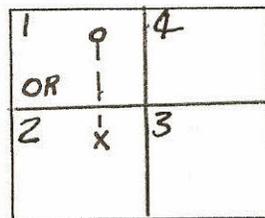


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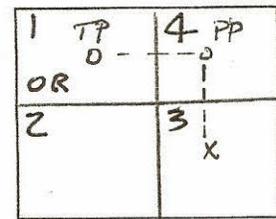
C.



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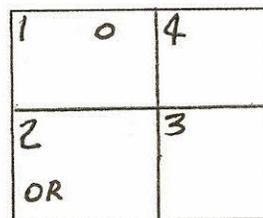


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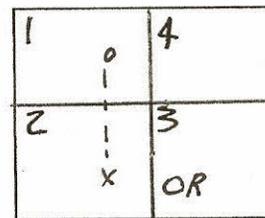


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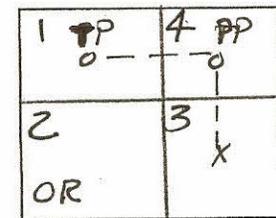
D.



①

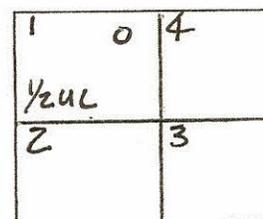


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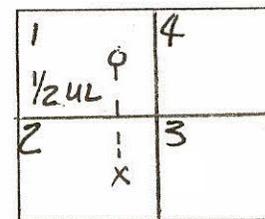


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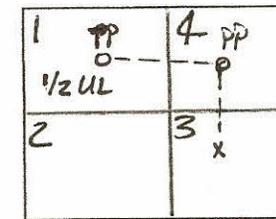
E.



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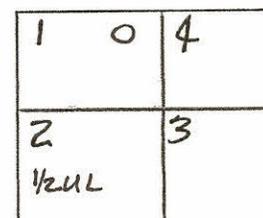


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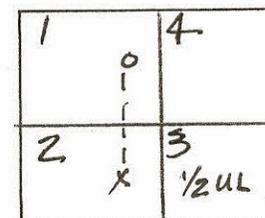


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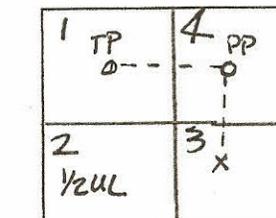
F.



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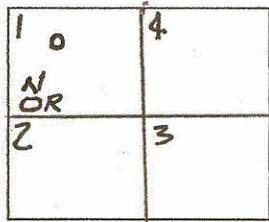
Ex. "2" - NOT POOLED

STRAIGHT WELL

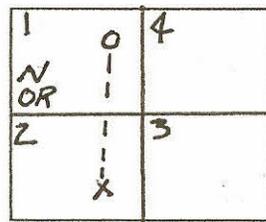
DEVIATED WELL

HORIZONTAL WELL

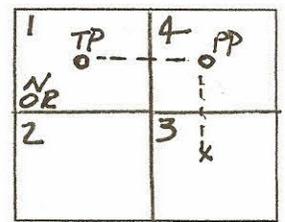
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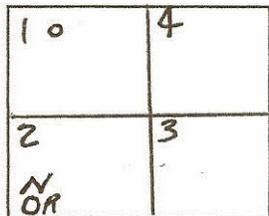


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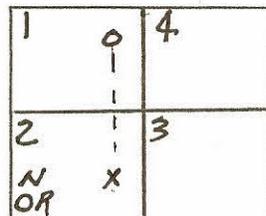


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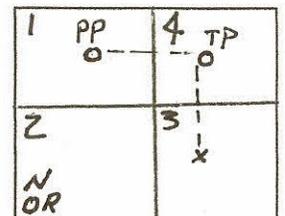
B.



①

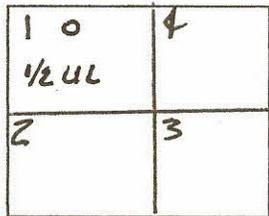


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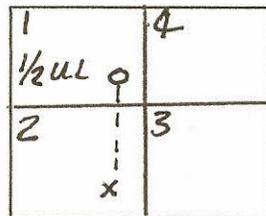


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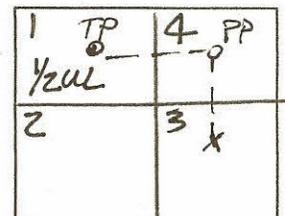
C.



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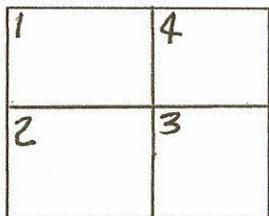


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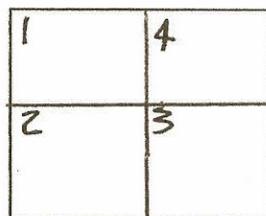


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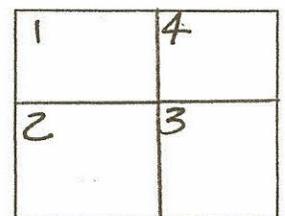
D.



①

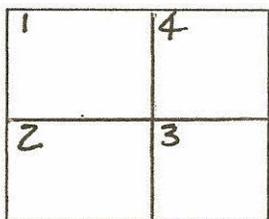


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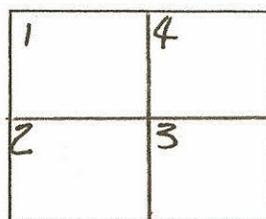


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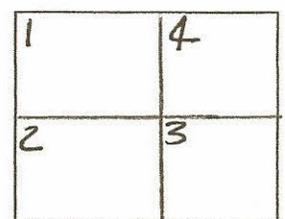
E.



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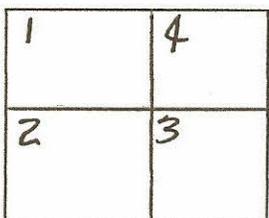


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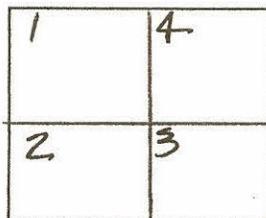


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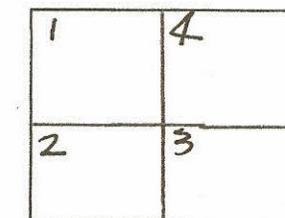
F.



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②



③

UNIT WELL

C/T = 1/2	1	opr = 5%	4
N/PRI = 1/6	2		3

RATIFIED

TRACT 1
 Roy O = $\frac{1}{4} \times \frac{1}{2} \times \frac{1}{8} = \frac{1}{64}$
 C/T = $\frac{1}{4} \times \frac{1}{2} \times \frac{1}{8} = \frac{1}{64}$
 W10 = $\frac{1}{4} \times \frac{1}{8} = \frac{1}{32}$
 $\frac{8}{32} = \frac{1}{4}$

TRACT 2
 Roy O = $\frac{1}{4} \times (\frac{1}{8} - \frac{1}{16}) = \frac{1}{64}$
 N/PRI = $\frac{1}{4} \times \frac{1}{16} = \frac{1}{64}$
 W10 = $\frac{1}{4} \times \frac{1}{8} = \frac{1}{32}$
 $\frac{8}{32} = \frac{1}{4}$

TRACT 3
 Roy O = $\frac{1}{4} \times \frac{1}{8} = \frac{1}{32}$
 W10 = $\frac{1}{4} \times \frac{1}{8} = \frac{1}{32}$
 $\frac{8}{32} = \frac{1}{4}$

TRACT 4
 Roy O = $\frac{1}{4} \times \frac{1}{8} = \frac{1}{32}$
 opr = $\frac{5}{100} \times \frac{1}{4} = \frac{1}{80}$
 W10 = $\frac{1}{4} \times (\frac{1}{8} - \frac{1}{100}) = \frac{33}{160}$
 $\frac{33}{160} = \frac{1}{4}$

Non-Ratified

TRACT 1
 C/T = $\frac{1}{2} \times \frac{1}{8} = \frac{1}{16}$
 Roy O = $\frac{1}{4} \times \frac{1}{8} = \frac{1}{32}$
 W10 = $\frac{1}{4} \times \frac{1}{4} = \frac{1}{16}$

TRACT 2
 Roy O = $\frac{1}{4} \times \frac{1}{8} = \frac{1}{32}$
 W10 = $\frac{1}{8} \times \frac{1}{4} = \frac{1}{32}$
 $\frac{8}{32} = \frac{1}{4}$

TRACT 3
 Roy O = $\frac{1}{4} \times \frac{1}{8} = \frac{1}{32}$
 W10 = $\frac{1}{4} \times \frac{1}{8} = \frac{1}{32}$
 $\frac{8}{32} = \frac{1}{4}$

TRACT 4
 Roy O = $\frac{1}{4} \times \frac{1}{8} = \frac{1}{32}$
 W10 = $\frac{1}{4} \times \frac{1}{8} = \frac{1}{32}$
 $\frac{8}{32} = \frac{1}{4}$

UNIT W10 = 25/64

UNIT WELL

1 C/T-1/2	4 O/R-5/8
2 N/PRI-1/16	3

TRACT 1

$$\begin{aligned} \text{ROY O} &= \frac{1}{4} \times \frac{1}{2} \times \frac{1}{8} = \frac{1}{64} \\ \text{C/T} &= \frac{1}{4} \times \frac{1}{2} \times \frac{1}{8} = \frac{1}{64} \\ \text{W10} &= \frac{1}{4} \times \frac{1}{8} = \frac{1}{32} \\ &= \frac{2}{64} \end{aligned}$$

TRACT 2

$$\begin{aligned} \text{ROY O} &= \frac{1}{4} \times \left(\frac{1}{8} - \frac{1}{16}\right) = \frac{1}{64} \\ \text{N/PRI} &= \frac{1}{4} \times \frac{1}{16} = \frac{1}{64} \\ \text{W10} &= \frac{1}{4} \times \frac{1}{8} = \frac{2}{32} \end{aligned}$$

TRACT 3

$$\begin{aligned} \text{ROY O} &= \frac{1}{4} \times \frac{1}{8} = \frac{1}{32} \\ \text{W10} &= \frac{1}{4} \times \frac{1}{8} = \frac{1}{32} \\ &= \frac{2}{64} \end{aligned}$$

TRACT 4

$$\begin{aligned} \text{ROY O} &= \frac{1}{4} \times \frac{1}{8} = \frac{1}{32} \\ \text{O/R} &= \frac{5}{100} \times \frac{1}{4} = \frac{1}{80} \\ \text{W10} &= \frac{1}{4} \times \left(\frac{1}{8} - \frac{1}{100}\right) = \frac{33}{160} \\ &= \frac{33}{160} \end{aligned}$$

Non-Particed

TRACT 1

$$\begin{aligned} \text{C/T} &= \frac{1}{2} \times \frac{1}{8} = \frac{1}{16} \\ \text{ROY O} &= \frac{1}{4} \times \frac{1}{8} = \frac{1}{32} \\ \text{W10} &= \frac{1}{8} \times \frac{1}{4} = \frac{1}{32} \end{aligned}$$

TRACT 2

$$\begin{aligned} \text{ROY O} &= \frac{1}{4} \times \frac{1}{8} = \frac{1}{32} \\ \text{W10} &= \frac{1}{8} \times \frac{1}{4} = \frac{1}{32} \\ &= \frac{2}{64} \end{aligned}$$

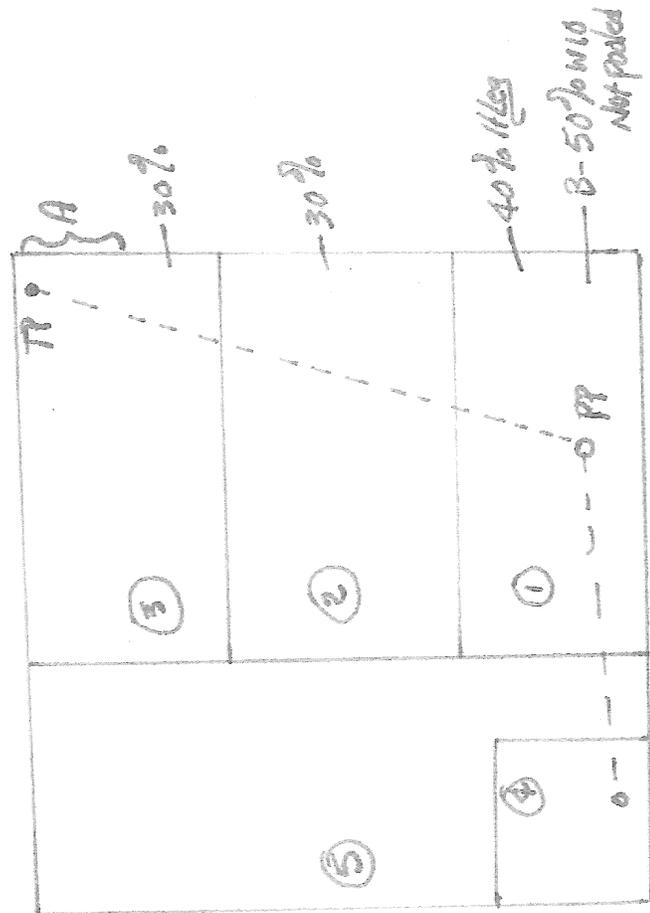
TRACT 3

$$\begin{aligned} \text{ROY O} &= \frac{1}{4} \times \frac{1}{8} = \frac{1}{32} \\ \text{W10} &= \frac{1}{4} \times \frac{1}{8} = \frac{1}{32} \\ &= \frac{2}{64} \end{aligned}$$

TRACT 4

$$\begin{aligned} \text{ROY O} &= \frac{1}{4} \times \frac{1}{8} = \frac{1}{32} \\ \text{W10} &= \frac{1}{4} \times \frac{1}{8} = \frac{1}{32} \\ &= \frac{2}{64} \end{aligned}$$

UNIT W10 = 25/64



HORIZONTAL WELLS AND COMMINGLING

By Terry E. Hogwood – Attorney At Law

Facts:

1. Oil Company A drills a horizontal well whose penetration point is located on Tract 1, passes through Tract 2 and terminates on Tract 3.
2. Each tract contains 50 acres and, as to Company A's leasehold estate in each tract, is validly pooled.
3. One third (1/3) of the horizontal leg after the penetration point is on each tract.
4. Fifty percent (50%) of the mineral estate in Tract 1 is leased to Company B. Company B has not been invited to pool its leasehold interest along with Company A's leasehold interest. Company B has no contractual relationship with Company A.
5. The horizontal well produces 1,000 barrels of oil per day.
6. The well was subjected to a multi-stage frac with the result that all oil produced from all three tracts (if any) is *commingled* at the surface.
7. Company A is selling **all** of the oil and gas produced from the well and, even after demand from Company B, is not accounting to Company B for any revenue from the sale of oil/gas.
8. Company B sues Company A for conversion of its oil and gas attributable to its leasehold interest in Tract 1.

Issues:

After production commences, Company B demands that it be paid its "fair" share of unit production. Of course, Company A first demands Company B tender its "fair" share of the costs of drilling the well. How will Company B's "fair" share of costs and production to be computed? That is, due to Company A's commingling, will a court decide to use:

1. Surface acreage as is prescribed in the oil and gas leases where pooling takes place multiplied by Company B's leasehold (50%) interest in Tract 1 (even though Company B is not subject to any contractual relationship with Company A); or
2. Tract 1's prorata share of production based on the fraction - length of the horizontal leg after the penetration point located on Tract 1/total length of the horizontal leg measured from penetration point to penetration point (1/3 of production) multiplied by Company B's leasehold interest (50%) in Tract 1; or
3. Fraction - Net surface acre feet in the unit attributable to Company B's leasehold interest in Tract 1/total net surface acre feet in the unit or
4. Tract 1's prorata share of production based on the fraction – number of fractures located on Tract 1/total number of fractures in the entire horizontal leg multiplied by Company B's leasehold interest (50%) in Tract 1 or

5. Some other reserve calculation methodology;

and, based on a demonstrable, provable reserve calculation methodology, assuming Company B's interest is not forced pooled, determine cost sharing and production sharing for Company B.

The first focus of the paper will be to look at the use of the tort action of conversion as the vehicle to establish Company B's "fair" share of working interest/net revenue interest in the production from Company A's horizontal well. The paper will then analyze the status of the law regarding the legal nature of horizontal wells in Texas. This analysis will be followed by the general Texas rules regarding commingling. Last, the paper will analyze the potential outcome of Company B's conversion case along with some of the options a court may have available, given that commingling has and will, under the above scenario, continue to take place, to calculate Company B's fair share of production.

The Tort of Conversion

The initial question Company B has to address is how to go about putting at issue the fact that it is not being paid for the oil and gas removed from Tract 1 and attributable to its fee simple determinable interest (oil and gas lease) in said tract. *Moore v. Jet Stream Investments, Ltd*, 261 S.W.3d 412 (Tex.App.-2008) It should be noted that Company B has already made demand for payment of its "fair" share of production AND that Company A has produced and sold oil and gas, some of which is attributable to Company B's interest, and has not tendered any remuneration to Company B on any basis.

Further, title is not an issue. Company A recognizes that Company B has leased an undivided 50% mineral interest in Tract 1. It simply has not, or will not, address the issue of the proper division of the production of oil and gas attributable to Company B's leasehold interest.

"To establish a claim for conversion of personal property, a plaintiff must prove that (1) the plaintiff owned or had legal possession of the property or entitlement to possession; (2) the defendant unlawfully and without authorization assumed and exercised dominion and control over the property to the exclusion of, or inconsistent with, the plaintiff's rights as an owner; (3) the plaintiff demanded return of the property; and (4) the defendant refused to return the property." *In re Chinn Exploration Co.*, 349 S.W.3d 805, 810 (Tex.App.- 2011)

"Conversion is an act of dominion and control wrongfully exerted over another's personal property and inconsistent with that person's right in the property. *Waisath v. Lack's Stores, Inc.*, 474 S.W.2d 444, 446 (Tex.1971). An act of conversion does not have to be an actual manual taking but merely an act that is such active interference with the owner's right of property or control as to deprive him of its free use and enjoyment." *Pierson v. GFH Financial Services Corp.*, 829 S.W.2d 311, 314 (Tex.App. -1992)

There can be no question that Company A has, at the least, interfered with Company B's right to take its oil and gas in kind and/or receive its aliquot share of dollars attributable to its interest resulting from the sale of its share of oil and gas. Oil and gas, once severed from the land, are considered as personalty. *Rogers v. Ricane Enterprises, Inc* , 930 S.W.2d 157 (Tex.App. - 1996) The exercise of dominion and control over same by Company A, to the exclusion of Company B, is an act of conversion. Apparently, an act of formal demand for the return of the property (in this case, the dollars attributable to Company B's aliquot share) is not necessary. To prove conversion, Company B need only show that Company A has unequivocally exercised dominion and control over Company B's share of oil and gas inconsistent with the rights of Company B to possession of said oil and gas. *Pierson v. GFH Financial Services Corp.*, 829 S.W.2d 311 (Tex.App. -1992).

Filing a lawsuit for conversion against Company A will put before the court the issue of Company B's ownership of oil and gas under Tract 1, the nature of the well involved (horizontal well) and the fact

that Company A has commingled all of the oil and gas produced from Tracts 1 – 3 and has refused to account to Company B for any production attributable to its leasehold interest in Tract 1.

The Nature of Horizontal Wells:

Horizontal wells are, generally speaking, a relatively new method of drilling for and producing oil and gas. As will be explored later in this paper, it appears that the newness of the technique and the outstanding results obtained from horizontal drilling may have outstripped the law and science when it comes to allocating costs/production within a horizontal unit.

Perhaps one of the leading cases on the nature and legal rules relating to horizontal is *Browning Oil Co., Inc. v. Luecke*, 38 S.W.3d 625 (Tex. App. - 2000). The following quotes summarize the general rules relating to the nature of horizontal wells:

Rule 1 – Each tract which has located on it part of the horizontal well (See **Rule 2**) is a drillsite tract.

“This dispute requires us to consider the applicability of these traditional oil and gas concepts to horizontal wells. Horizontal wells are initially drilled vertically, and then at a pre-determined point, the drillstem deviates and proceeds horizontally into the targeted formation. See Patricia A. Moore, *Horizontal Drilling--New Technology Bringing New Legal and Regulatory Challenges*, 36 Rocky Mtn. Min. L. Inst. § 15.01[1] (1990). A wellbore can extend across several acres and several leased tracts, increasing the likelihood of recovery of minerals. Each tract traversed by the horizontal wellbore is a drillsite tract, and each production point on the wellbore is a drillsite.” *Browning Oil Co., Inc. v. Luecke*, 38 S.W.3d 625,634 (Tex. App. - 2000) emphasis added

Rule 2 – The actual, measurable part of the horizontal well lies between the initial penetration point and the terminus point.

“The Railroad Commission refers to a "horizontal drainhole well" as any well that consists of one or more horizontal drainholes. See 16 Tex.Admin.Code§ 3.86(a)(4) (2000). A horizontal drainhole is that part of the wellbore that deviates at more or less of a right angle from the vertical wellbore; it begins at the *penetration point*, where it penetrates the field at an interval capable of production, and ends at the *terminus point*, the point farthest from the penetration point but within the producing interval. See *id.* § 3.86(a)(2), (5), (6) (2000). For purposes of designating a proration unit and allocating production allowables, units are determined by the length of the horizontal displacement between the penetration point and the terminus point, i.e., the horizontal displacement of the drainhole. See *Giddings (Austin Chalk-3) Field Rules*. The displacement of the drainhole must extend at least 100 feet for the well to be classified as a horizontal drainhole. See 16 Tex.Admin.Code § 3.86(a)(4).” *Browning Oil Co., Inc. v. Luecke*, 38 S.W.3d 625, 635 (Tex. App. - 2000) emphasis added

Rule 3 – Where there is no effective pooling, and the horizontal drainhole is located in part on one tract, the un-pooled mineral owner/lessee is entitled to have its share of production calculated only on that production taking place on and attributable to the tract where such ownership occurs.

“Without valid pooled units, the leases do not and cannot award the Lueckes royalties on oil and gas produced from tracts they do not own. The Lueckes rely on the remedy appropriate to vertical wells to argue that ‘where pooling is not valid, a landowner with a wellbore drilled on his land receives the full royalty promised in his lease, and landowners with no wellbore receive nothing.’ The Lueckes have a portion of both horizontal drainholes and the vertical drillsite of one well on their tracts; they argue that they are entitled to royalties for the total production (and even double production) from each well traversing each of their tracts. They rely on exhibit seventeen [28] to

calculate royalties based on this theory. *However, when pooling is invalid, production will be considered to take place only on the actual tract upon which it occurs.* See Tichacek, 997 S.W.2d at 170.”

“In the case of a vertical well, traditional legal principles such as the rule of capture may support the Lueckes' theory that they are entitled to royalties for all production if the wellbore is drilled on their tract. [29] But the rule of capture, which is premised on drainage, does not support their entitlement to royalties on all production from a horizontal well, precisely because (1) the geophysical characteristics of the formation actually inhibit the natural drainage underlying the rule of capture, (2) production from multiple drillsite tracts is involved, and (3) the fractures contributing to production are not all adjacent to any single drillsite. The ability of a horizontal well to drain an elongated area depends upon the number of *fractures* encountered and the length of the drainhole. *Browning Oil Co., Inc. v. Luecke*, 38 S.W.3d 625, 645 (Tex. App. - 2000) emphasis added

“On the other hand, we recognize the immense benefits that have accompanied the advent of horizontal drilling, including the reduction of waste and the more efficient recovery of hydrocarbons. Draconian punitive damages for a lessee's failure to comply with applicable pooling provisions could result in the curtailment of horizontal drilling. We decline to apply legal principles appropriate to vertical wells that are so blatantly inappropriate to horizontal wells and would discourage the use of this promising technology. The better remedy is to allow the offended lessors to recover royalties as specified in the lease, compelling a determination of what production can be attributed to their tracts with reasonable probability. See *Ortiz Oil Co. v. Luttess*, 141 S.W.2d 1050, 1053 (Tex.Civ.App.--Texarkana 1940, writ dism'd by agr.) (fact that exact amount of oil produced cannot be precisely determined is no reason for denying recovery based on jury's approximation). The Lueckes are entitled to the royalties for which they contracted, no more and no less.” *Browning Oil Co., Inc. v. Luecke*, 38 S.W.3d 625, 647 (Tex. App. - 2000) emphasis added

Clearly, neither the plaintiff, defendant or the court raised nor looked at the law of commingling. As will be explored later in this paper, asserting that commingling has occurred can shift the burden of proof concerning Company B's ownership in the full wellbore stream to Company A. The court did recognize that there was probably going to be a proof problem involving the calculation of production attributable to one tract out of a unit upon which part of the horizontal leg was located but gave no insight on possible solutions to that dilemma.

Early Law of Commingling:

The doctrine of confusion of goods (commingling) originated early in Texas jurisprudence. In fact, since Texas adopted the common law of England as it existed in 1840 (*Perry v. Smith*, 231 S.W. 340 (Tex.Com.App. - 1921)), the doctrine of confusion of goods has been recognized in Texas from and after that date. The following early cases yield rules of law governing the doctrine in addition to those set out in the *West* cases below.

Rule No. 1 – Before the rules governing commingling may be applied, the party seeking such application must prove and secure a fact finding that commingling did in fact occur.

“ In applying the commingling rule, it is proper to hold the willful commingler to a strict showing, but the rule has no application at all until the facts establish that there has been a commingling. If there was no commingling during a portion of the periods of time covered by Items 3, 4, and 5, then there is no warrant for the application of the rule to oil produced during such periods. Whether or not there was a commingling during those periods must be determined by the trier of facts. For this error the judgment of the Court of Civil Appeals must be reversed and the cause remanded to the trial court.” *Mooers v. Richardson Petroleum Co.* 204 S.W.2d 606, 608 (Tex. - 1947)

Rule No. 2 – The commingling of goods/assets of like kind and nature of two or more persons, whether done intentionally, negligently or inadvertently, which makes the goods/assets of the parties to become indistinguishable, places the burden of proof of determining the ownership share of each party on the commingling party.

Rule No. 3 -The failure of the commingling party to carry its burden of proof and show the respective ownership shares of the commingled goods/assets results in the forfeiture of the whole commingled mass by the commingling party.

“ The evidence showed that after the seed company obtained possession of the stock of goods it carried on a business with it, buying and selling in the usual course of trade, so as to make the original articles incapable of identification. There were no allegations in the pleadings of either party with reference to this matter. The court held that since the garnishee, after the service of the writ, had so mingled other merchandise of a like character with the original articles of the stock as to make it impracticable to distinguish them, it should deliver up to the sheriff the whole stock as it existed at the time of the trial. The complaint here is the facts upon which it was based were not pleaded. We are of the opinion, however, that it was not a matter necessary to be pleaded. **The rule as to the confusion of goods is merely a rule of evidence.** The wrongful mingling of one's own goods with those of another, when the question of identification of the property arises, throws upon the wrongdoer the burden of pointing out his own goods, and, if this cannot be done, he must bear the loss which results from it. It is but an application of the principle that all things are presumed against the spoliator; that is to say, against one who wrongfully destroys or suppresses evidence. ... Clearly, the evidence by which the property is to be identified need not be pleaded. *Holloway Seed Co. v. City Nat. Bank*, 47 S.W. 95, 97 (Tex. - 1898) emphasis added

“In 9 Tex.Jur. title Confusion of Goods, Sec. 2, we find these principles stated: 'An owner who wrongfully permits the property of another to become so intermingled and confused with his own property as to render impossible the identification of either is under the burden of disclosing such facts as will insure a fair division, and if he fails or refuses to do so, the combined property or its value will be awarded to the injured party. The rule applies where there has been an intermingling of cattle, community property or what-not. There must be a willful or wrongful invasion of right in order to induce the condign consequences of forfeiture. This doctrine of the law has often been discussed, and it may be considered as having been clearly and distinctly settled.'” *Farrow v. Farrow*, 238 S.W.2d 255,257 (Tex.Civ.App. - 1951) emphasis added

Rule No. 4 – If the respective shares of the commingled parties in the confused mass of like goods/assets can be determined, no change of ownership in the goods/assets takes place.

Rule No. 5 – If division of goods is impossible, but the parties' aliquot shares of the commingled mass can be determined by valuing the commingled mass, then each party may claim its prorata share of the total *value* thereof.

“...We make the following quotation from the opinion in the case of *Robinson v. Holt*, 39 N.H. 563, 75 Am. Dec. 236, which seems somewhat applicable here: "The doctrine of the confusion of goods has been often discussed, and may be considered as clearly and distinctly settled. If the goods of several intermingled can be easily distinguished and separated, *no change of property takes place*, and each party may lay claim to his own. If the goods are of the same nature and value, although not capable of an actual separation by identifying each particular; *if the portion of each owner is known, and a division can be made of equal proportionate value*, as in the case of a mixture of corn, coffee, tea, wine, or other article of the same kind and quality,--*then each may claim his aliquot part.*" To the same general effect is the language of Mr. Story in his work on *Bailments* (9th Ed., § 40), where, after giving the general rule applicable against one wrongfully mixing the goods of another with his own, he states (page 42): "*But there may be a case of confusion of property, neither by consent, nor by willfulness,--as where the bailee, by negligence, or*

unskillfulness, or inadvertence, mixes up his own goods of the same sort with those bailed; and there may also be a confusion arising from mere accident and unavoidable casualty. In the latter case--that of intermixture by accident--the civil law deemed the property to be held in common, whether the mixture produced a thing of the same sort or not; as, if the wine of two persons were mixed by accident. ... Applying these principles to the case before us, we overrule all assignments attacking the judgment because of the apportionment of the cattle the court undertook to make between the respective mortgagees. While a mixture of cattle on the range may not be altogether analogous to a mixture of cotton, corn, coffee, tea, wine, etc., *we nevertheless are of opinion that equity is not without power to afford a remedy in such case for a confusion resulting from accident or the wrong of a third party, where, as in this instance, the proportion of interest of each claimant may be reasonably ascertained notwithstanding the confusion. ...* *Belcher v. Cassidy Bros. Live-Stock Commission Co*, 62 S.W. 924, 926 (Tex.Civ.App. - 1901) emphasis added

Rule No. 6 – The evidence presented by the commingling party/adversely affected party to prove damages need only be sufficient to allow a jury to calculate the amount of damages with *reasonable certainty*. *Ortiz Oil Co. v. Luttis*, 141 S.W.2d 1050 (Tex.Civ.App. – 1940) See discussion of *reasonable certainty* below.

The West Cases Trilogy

Texas law on the matter of oil and gas commingling does not originate with the *West Case (Humble Oil & Refining Co. v. West*, 508 S.W.2d 812 (Tex. – 1974)) but, until the advent of horizontal drilling, was governed from and after 1974 by the rules set forth in the case. To completely understand the ruling in the Supreme Court case, it is helpful to review the holdings of the appeals court prior to the Supreme Court opinion and the appeals court ruling after the Supreme Court opinion.

West v. Humble Oil & Refining Co, 496 S.W.2d 212 (Tex.Civ.App. - 1973)

The initial appeals case involved the entry by Humble onto the West oil and gas lease in which it was the lessee as well as owner of the gas storage rights. Humble began injecting gas into the yet to be depleted gas reservoir for storage purposes. The Wests sued for an injunction prohibiting Humble from using the reservoir for gas storage until all native gas located in the reservoir had been produced. Alternatively, the Wests asked the court, if an injunction was not to be granted, to order Humble to pay royalties in accordance with the lease whether the gas produced was native gas or stored gas.

Humble argued that 89% of the native gas had already been produced. It further stated that if all native gas was produced prior to storage activities, that the reservoir would be damaged for gas storage purposes and thus not usable. Humble offered to pay to the Wests royalties on gas until the volume of gas it paid royalties on equaled the volume of gas still remaining in place.

The trial court denied the Wests' request for a permanent injunction but did order Humble to account to the Wests for their royalty share of **all** gas produced from tracts in which they owned royalty interests, *whether native or stored gas*.

The appeals court also addressed the issue of calculating damages where proof of same was difficult. The holding of the court then is almost prophetic today, given the potential difficulty of calculating the amount of actual production attributable to individual tracts along a horizontal well.

“Moreover the record reflects that plaintiffs' damages may not be fixed with any accuracy. Defendant's geologist, witness Warnock, who testified as to the size and contents of the field based on available data candidly informed the court he could not state the margin of error in his testimony. Insofar as his testimony is concerned the error could be 100%, 200% or any other figure. Defendant's engineer witness Whitson's testimony was no more certain than that of Warnock. And

plaintiffs' remedy at law is inadequate if damages may not be determined with some precision. ...”
West v. Humble Oil & Refining Co, 496 S.W.2d 212, 215 (Tex.Civ.App. - 1973)

Since the proof of damages tendered by Humble was, in the opinion of the court, suspect as to its accuracy, the court held that lacking a clear, adequate remedy at law, the Wests were entitled to relief by injunction and remanded the case back to the trial court with instructions to enter a permanent injunction prohibiting Humble from injecting gas until all native gas in the reservoir had been produced.

Humble Oil & Refining Co. v. West, 508 S.W.2d 812 (Tex. – 1974)

The case reached the Texas Supreme Court for review. In light of the appeals court holding on the issue of damages and the apparent lack of specificity and accuracy on native gas reserves calculations, the court looked at the law of confusion of goods in Texas (commingling). It set forth the following general rules regarding commingling:

1. The confusion of goods theory only applies where the commingled goods of two or more parties are joined (confused) such that the property of each of the parties cannot be determined.
2. If the commingled goods are similar in value and nature then each party takes its share of the commingled mass. In this case, the in-place native gas and stored gas were clearly commingled in the reservoir. The problem is determining what percentage of the thereafter produced gas was native gas and what percentage was stored gas.
3. The *burden of proof* for determining the ownership of a commingled mass is *on the commingling party*.
4. *If the commingled mass is so confused that a proper and accurate division of same cannot be made, the loss falls on the commingling party.*

“ Stated differently, since Humble is responsible for, and is possessed with peculiar knowledge of the gas injection, it is under the burden of establishing the aliquot shares with *reasonable certainty*...” *Humble Oil & Refining Co. v. West*, 508 S.W.2d 812, 818 (Tex. – 1974) emphasis added

Thus the burden of proof fell on Humble to show, with *reasonable certainty*, the volume of native gas upon which the Wests were entitled to receive their royalty share absent the injection of the storage gas. This shift in the burden of proof occurred upon proof by the Wests:

- 1) That Humble had commingled native gas and storage gas and
- 2) Proof of the Wests’ royalty percentage in the native gas.

The issue thus became whether Humble could accurately prove the percentage of native/stored gas reserves *with reasonable certainty*. If so, the burden of proof would have been discharged by Humble by such evidence.

“The threshold question for determination is whether the requisite computation of reserves is capable of establishment with *reasonable certainty*; and, if so, the further question to be resolved is whether the burden defined above is discharged by Humble under the evidence. We have concluded that the cause should be generally remanded to the trial court for determination of these issues at the trial level, as well as for consideration of any other issues the parties may raise in the light of our rulings.” *Humble Oil & Refining Co. v. West*, 508 S.W.2d 812, 819 (Tex. – 1974) emphasis added

Exxon Corp. v. West, 543 S.W.2d 667 (Tex.Civ.App. - 1976)

This portion of the case arose after remand where the appeals court addressed the evidence introduced by Humble (now Exxon) in an attempt to satisfy its burden of proof as outlined by the Supreme Court. The court is attempting to determine if the gas reserves (native and stored) were computed with *reasonable certainty*, thus discharging Exxon's burden of proof. This appeal takes place after a second trial on the merits.

The court sets out the Supreme Court rule of the case which it believed the trial court should have followed:

“. . . (I)t is our view that the act of commingling native and extraneous gas did not impose upon Humble the obligation of paying royalties on all gas thereafter produced from the reservoir, if the evidence establishes with *reasonable certainty* the volume of gas reserves upon which the Wests would have been entitled to royalties, absent injection of extraneous gas. The burden of this showing devolves upon Humble after proof by the Wests of their royalty interest, together with proof of Humble's commingling of extraneous and native gas. The threshold question for determination is whether the requisite computation of reserves is capable of establishment with *reasonable certainty*; and, if so, the further question to be resolved is whether the burden defined above is discharged by Humble under the evidence . . .” *Exxon Corp. v. West*, 543 S.W.2d 667,669 (Tex.Civ.App. - 1976) emphasis added

Exxon again relied on the testimony of two witnesses: a geologist and a petroleum. The two witnesses testified as experts on the maximum amount of gas that was in place as of the date gas storage operations commenced. The Wests did not present any witnesses to rebut their testimony. After their testimony, both sides rested. The trial court found for the Wests, requiring Exxon to pay royalties on all gas produced from the West lease, be it native or stored gas. It further found that Exxon had not established, *with reasonable certainty*, the maximum volume of recoverable gas in the reservoir nor the total amount of gas in the reservoir as of the date of commencement of gas storage operations.

Significant to this case, the appellate court looked at the evidence presented by Exxon on the calculation of recoverable gas reserves and total possible in place gas reserves. Key in its analysis was the fact that the Wests elected not to present any expert witnesses of their own.

“ However, where the nature of the subject matter of the experts' testimony is such that the trier of facts must be guided solely by the opinion of experts in that scientific field, the opinions given by the expert witnesses may be regarded as conclusive, if otherwise credible and free from contradiction and inconsistency”. *Exxon Corp. v. West*, 543 S.W.2d 667, 672 (Tex.Civ.App. - 1976) emphasis added

The court then went on to analyze the evidence presented by Exxon. It acknowledged that the trial court, as the trier of fact, did not accept Exxon's maximum recoverable gas calculations.

“In its findings the trial court specifically declared that it did not believe the witnesses' opinions that their calculations were *reasonably certain* as to the 'maximum' volume of '**recoverable**' gas and it found that such determination could not be made with *reasonable certainty*. For reasons not clear, it made no specific finding to this effect with respect to the witnesses' opinions concerning the maximum 'total' amount of gas remaining in the reservoir. The trial court concluded, as a matter of law, that upon its findings that Exxon had not established with *reasonable certainty* the volume of gas reserves upon which the Wests would have been entitled to royalties, absent injection of extraneous gas, the Wests were entitled to be paid royalties on all gas produced from the reservoir, whether native or extraneous. *Exxon Corp. v. West*, 543 S.W.2d 667, 669 (Tex.Civ.App. - 1976) emphasis added

The case turned on a stipulation by Exxon that it would pay royalties on the maximum amount of gas in the reservoir as of the commencement date of injection of storage gas. Exxon argued that even if had not met its burden of proof regarding the establishment of the total amount of recoverable gas in the reservoir as of the commencement date of gas storage, it did meet its burden of proof by proving with *reasonable certainty* the maximum amount of gas which could have been in the reservoir as of the gas storage commencement date.

“In view of Exxon's stipulation, this court holds that its burden was met if by a preponderance of the evidence it established with *reasonable certainty* the maximum total amount of gas which could have been in place in the reservoir when storage operations were commenced. The question is whether the evidence compels a finding that Exxon met this burden.” *Exxon Corp. v. West*, 543 S.W.2d 667, 669 (Tex.Civ.App. - 1976)

The court found that absolute accuracy in determining the amount of producible gas/native gas in place was not required. Rather, the evidentiary rule adopted by the court was *reasonable certainty* even if the exact volume of reserves could not be determined.

Additionally, since none of the Exxon scientific evidence was controverted, the court found that the Exxon total in-place reserve calculations (prior to gas injection operations) offered by its experts was binding on the trial court.

“We do not think the evidence warranted any such conclusion by the trial court, and since the testimony of the witness with reference to the objects he found on the ground, the measurements he made, etc., was uncontroverted, we are of the opinion that the rule announced in the case of Texas & N.O.R.R. Co. v. Burden, 146 Tex. 109, 203 S.W. 2d 522, 530, with reference to the province of the jury has equal application to the trial court in this instance; that is: 'It is the province of the jury to decide the issues which are raised by conflicting evidence, but where there is evidence upon an issue and there is no evidence to the contrary, then the jury has not the right to disregard the undisputed evidence and decide such issue in accordance with their wishes.'” *Exxon Corp. v. West*, 543 S.W.2d 667, 673 (Tex.Civ.App. - 1976).

The *West* Trilogy Cases add a new element to shifting the burden of proof from the willful commingler to the commingled party. If the commingling party can show, with *reasonable certainty*, the aliquot share of production that the commingled party is entitled to, it has met its burden of proof and, in the absence of controverting evidence to the contrary, will bind the commingled party (as in the last of the three *West* cases). This rule of evidence will be key in determining, in the fact situation set out above ie how Company B will be compensated.

Post West Case:

Perhaps it is best to review at this juncture. Conversion of oil and gas as well as the rules governing commingling appear to be affirmed in the one case found by the author post *West* Trilogy Cases. However, this case deals with vertical wells and does not appear to apply in any way to horizontal wells. Additionally, it appears to completely misstate the *evidentiary* rule of commingling by creating a new cause of action called “willful commingling”. In the author’s opinion, future cases dealing with the conversion of an un-leased/un-pooled owner’s share of oil and gas under a horizontal well, where commingling of that oil and gas with other non-owned oil and gas, will be governed by the rules of evidence relating to whether the commingling party can prove, with *reasonable certainty*, the aliquot share of oil and gas attributable to the non-commingling party.

The case of *W.L. Lindemann Operating Co., Inc. v. Strange*, 256 S.W.3d 766 (Tex.App. - 2008) appears to create a new cause of action identified as “Willful Commingling”. The case initially identifies commingling correctly by citing the rule from The *West* cases and further correctly identifying the commingling rule as one of evidence, not recovery.

“Commingling is also referred to as confusion of goods; “[a]s a general rule, the confusion of goods theory attaches only when the commingled goods of different parties are so confused that the property of each cannot be distinguished.” *Humble Oil & Ref. Co. v. West*, 508 S.W.2d 812, 818 (Tex.1974); see also 12 TEX. JUR.3D Confusion of Goods 902, 903 (2004). “One who wrongfully permits the property of another to become so intermingled and confused with his own property as to render it impossible to identify the goods of each is under the burden of disclosing such facts as will insure a fair division, and if he fails or refuses to do so, the combined property or its value will be awarded to the injured party.” 12 TEX. JUR.3D Confusion of Goods 902, 905-06 (2004) (citing *Humble Oil*, 508 S.W.2d at 818); see *Farrow v. Farrow*, 238 S.W.2d 255, 257 (Tex.Civ.App.-Austin 1951, no writ). In applying the commingling rule, we hold one who willfully commingles to a strict burden; however, the application of such a burden is not appropriate until “the facts establish that there has been a commingling.” *Mooers v. Richardson Petroleum Co.*, 146 Tex. 174, 204 S.W.2d 606, 608 (Tex.1947); *Cole v. Wadsworth*, 326 S.W.2d 928, 931 (Tex.Civ.App.-Eastland 1959, writ ref’d n.r.e.); see also *Dorchester Gas Producing Co. v. Harlow Corp.*, 743 S.W.2d 243, 256 (Tex.App.-Amarillo 1987, writ dismissed).” *W.L. Lindemann Operating Co., Inc. v. Strange*, 256 S.W.3d 766, 781 (Tex.App. - 2008)

Although the plaintiff alleged conversion as one of the potential causes of action, the court addressed another alleged cause of action, willful commingling. The author has never seen such a cause of action supported in any of the cases reviewed. It is unclear if this is a new tort action or some other form of recovery newly created by this case.

“In its first issue, appellant contends that the evidence is legally and factually insufficient to support the jury's finding that it willfully commingled oil that was produced from the D.D. Strange with oil from the Powell and Hoff. As part of this issue, appellant contends that Texas Railroad Commission reports purportedly relied on by appellee are not evidence of commingling, that there is insufficient evidence of any commingling between the D.D. Strange and the Powell, that there is insufficient evidence that if any commingling occurred, it happened while appellant operated the D.D. Strange, that there is insufficient evidence to identify oil that appeared in the Hoff saltwater disposal tank after Willowbend took over operation of the D.D. Strange as actually coming from the D.D. Strange, that there is insufficient evidence of willfulness, and that the evidence shows, at most, only an accidental malfunction of the separator float, the means by which appellee claims the oil from the D.D. Strange was commingled with oil from the Powell and Hoff.” *W.L. Lindemann Operating Co., Inc. v. Strange*, 256 S.W.3d 766, 781 (Tex.App. - 2008) emphasis added

The purpose of this paper was to address how to determine Company B’s aliquot share of oil and gas it is entitled to receive from a horizontal well located partially on its leasehold estate (as well as calculate what percentage of the drilling costs it is to be assessed). In the author’s opinion, Company A is not in a position to deny that:

1. it drilled part of the horizontal well on Company B’s leasehold estate
2. it has produced oil and gas in part from such leasehold and
3. that it owes Company B its share of such production.

Conversion appears to have taken place as a matter of law since Company A did in fact exercise dominion and control over Company B’s oil and gas, producing same, reducing it to possession and selling same WITHOUT accounting to Company B, even after demand. How will Company B’s share of production from the horizontal well be determined?

Into the Future – Reasonable Certainty?

The author is not a scientist. There do not appear to be any cases to assist (other than the *West* cases) in assessing how to calculate Company B's ownership share of commingled oil and gas in a horizontal well. The author spent considerable time interviewing reservoir engineers for this paper and was able to synthesize from such interviews the above methods of determining Company B's aliquot share of production from the horizontal well. The following is a brief discussion of the law announced over time to prove that which may be difficult to prove with exactness.

The difficulty in proving the aliquot shares of all parties in a commingled mass was addressed early on in Texas jurisprudence as indicated above in the *Ortiz* case. Exactness in that case was simply not possible but apparent ranges of the amount of property converted could be ascertained from the evidence presented. The jury responded to a special issue that the amount of oil produced from the Plaintiff's land was so intermingled that it could not determine Plaintiff's aliquot share of oil produced. The Defendant thus argued, in light of such a finding (inability to calculate the amount of oil converted by the Defendant with certainty), that Plaintiff was prohibited from recovering any amount of money as damages even though it had prevailed on its conversion cause of action. The appellate court disagreed with Defendant.

"...The fact that the exact amount of oil produced and converted by defendant cannot be precisely determined is no reason for denying plaintiffs a recovery for their interest in the 275,000 barrels conservatively estimated by the jury. "The law requires only that the evidence be sufficient to enable the jury to estimate the loss or damages with *reasonable certainty*. Damages will not be disallowed merely because the amount thereof can be stated only approximately. Thus the fact that the exact number of logs lost by the plaintiff by reason of the defendant's unlawful obstruction of a stream cannot be definitely shown should not defeat his right of recovery." 13 T. J. 368, Sec. 210." *Ortiz Oil Co. v. Luttes*, 141 S.W.2d 1050, 1053 (Tex.Civ.App. – 1940) emphasis added

West cites *Ortiz* as the basis for holding that the standard for proving damages in a conversion of oil and gas case, involving commingling, is *reasonable certainty*. The last of the *West* Cases Trilogy further directly addressed the level of exactness Exxon had to assume to satisfy its burden of proof concerning the maximum amount of gas in the reservoir as of the commencement date of injection of storage gas.

"Where, as in this case, there has been a conversion of goods through intentional commingling, and the evidence establishes a *reasonably certain* estimate of the extent of property converted, judgment should be entered upon the basis of such amount, even though the **precise** amount cannot be ascertained with *reasonable certainty*. *Ortiz Oil Co. v. Luttes*, 141 S.W.2d 1050, 1055 (Tex.Civ.App.--Texarkana 1940, writ dism'd by agr.). *Exxon Corp. v. West*, 543 S.W.2d 667, 673 (Tex.Civ.App. - 1976) emphasis added

If, as the court found in this case, the commingling party met its burden of proof by establishing with *reasonable certainty* the respective ownership percentages of the commingled mass, the burden of proof has been satisfied and thus shifted back, in our example, to Company B to prove or attempt to prove to the contrary. To meet this burden of proof, the court held that the expert testimony, even though not contradicted by an opposing expert, is usually held NOT to be binding on the trier of fact. Except... where only one conclusion can be drawn from the facts. The appellate court, apparently sitting as the trier of fact, determined that only one conclusion could be deduced from the expert testimony – the maximum amount of gas in the reservoir as of the commencement date of injection of storage gas had been proven with *reasonable certainty*.

"The opinion testimony of expert witnesses, even though not contradicted by an opposing expert, is generally held not to be binding upon the trier of facts if more than one possible conclusion can be drawn from the facts. *Gregory v. Texas Emp. Ins. Ass'n*, 530 S.W.2d 105 (Tex.1975). This is particularly true where the experts' testimony is based upon studies made while in the employ of the party who is offering their testimony. *Luttes v. State*, 159 Tex. 500, 324 S.W.2d 167, 189 (1959).

However, where the nature of the subject matter of the experts' testimony is such that the trier of facts must be guided solely by the opinion of experts in that scientific field, the opinions given by the expert witnesses may be regarded as conclusive, if otherwise credible and free from contradiction and inconsistency. *Scott v. Liberty Mutual Ins. Co.*, 204 S.W.2d 16, 18 (Tex.Civ.App.--Austin 1947, writ ref'd n.r.e.); *Coxson v. Atlanta Life Ins. Co.*, 142 Tex. 544, 179 S.W.2d 943 (1944).” *Exxon Corp. v. West*, 543 S.W.2d 667, 672 (Tex.Civ.App. - 1976)

In the author’s opinion, the last of the *West* Trilogy Cases does not completely address the quality of evidence that the commingling party must adduce at trial in order to a) shift the burden of proof to the commingled party and b) demonstrate the amount of oil and gas the commingled party is entitled to receive. The appellate court in this last *West* case appears to have ruled on the evidence and directly contradicted the trial court on the significance of the expert testimony presented by Exxon. More importantly, *reasonable certainty* was never defined. It is defined in other cases.

Reasonable certainty is not the same burden of proof as proving other types of damages with no margin of error. Rather, in conversion cases involving commingling, the commingling party must show through expert testimony the amount of oil and gas attributable to the commingled party’s interest as a ratio for all oil and gas that may reasonably be produced from the horizontal well. Once qualified as an expert on geological/engineering matters, it is up to the expert to prove to the satisfaction of the trier of fact the relevant ownership percentages of the reserves underlying and which will be produced from the horizontal well.

“Before a plaintiff can recover damages, he must prove " with *reasonable certainty*" the damages he suffered from the defendant's breach, including the value of " a certain quantity of oil, worth a certain amount...." See *Tex. P. Coal & Oil Co. v. Barker*, 117 Tex. 418, 427, 6 S.W.2d 1031, 1033 (1928). The value of mineral reserves is not a matter of common knowledge, and therefore it is the plaintiff's burden to prove damages by expert testimony. *Arkoma Basin Exploration Co. v. FMF Assoc. 1990-A, Ltd.*, 249 S.W.3d 380, 388 (Tex.2008). Experienced people who are acquainted with the conditions of the land in the locality of the leased premises can give an opinion as to the amount of recoverable oil in the unit. See *Barker*, 117 Tex. at 427, 6 S.W.2d at 1034. The plaintiff's expert should, after examining the logs and other relevant information from the field and surrounding wells, give an opinion as to the probability of obtaining production and the extent of such production on the land in question. See *County Mgt., Inc. v. Butler*, 650 S.W.2d 888, 890 (Tex.App.-Austin 1983, writ dism'd). Such matters as production costs, geological trends, proration, and kind and quality of the oil should also be referred to by the expert in making his opinion. *Id.*” *Reeder v. Wood County Energy L.L.C*, 320 S.W.3d 433, 448 (Tex.App.- 2010) emphasis added

“The nature of the inquiry makes it practically impossible to ascertain with certainty the exact amount of the plaintiff's damage. *Barker*, 117 Tex. at 427, 6 S.W.2d at 1034. But damages must be established with *reasonable certainty*, not mathematical precision. *O & B Farms, Inc. v. Black*, 300 S.W.3d 418, 422 (Tex.App.-Houston [14th Dist.] 2009, pet. filed). If the best available evidence affords a reasonable basis for the jury to calculate damages, then recovery cannot be denied because the exact amount of damages cannot be ascertained. *Id.* As a general rule, the jury has broad discretion to award damages within the range of evidence presented at trial, so long as a rational basis exists for its calculation. *Khorshid, Inc. v. Christian*, 257 S.W.3d 748, 760 (Tex.App.-Dallas 2008, no pet.). The jury's findings will not be disregarded merely because its reasoning in arriving at its figures may be unclear. *Id.*” *Reeder v. Wood County Energy L.L.C*, 320 S.W.3d 433, 448 (Tex.App.- 2010) emphasis added

Application of Law to the Facts:

The author listed several alternative methods of production/revenue sharing available to Company A or B to argue or for a court to use to base a decision upon. Ultimately, whichever method of production/revenue sharing is chosen and argued, a court will have to initially determine if the evidence

presented is sufficient to enable the jury (or court sitting as the trier of fact) to determine the amount of oil and gas under Tract 1 to which Company B is entitled. That determination, initially to be made by the trial court, will require the imposition of the standard of *reasonable certainty* as identified above.

However, it should be apparent, without citation, that Company B owns some percentage of the oil and gas which will be produced from the horizontal well by Company A unless no oil and gas are present under Tract 1. If that is the case, then the act of pooling by Company A could be seriously contested by the mineral owners under Tracts 2 and 3 as being in bad faith for including acreage not productive of oil and/or gas. (*Vela v. Pennzoil Producing Co.*, 723 S.W.2d 199 (Tex.App. - 1986)) What a trial court (or appellate court(s)) has to address is that, regardless of the status of science as it relates to calculating Company B's share of oil and gas, the court must be reasonable and rational enough not to take Company B's share of oil and gas for expediency purposes or because the "science is not there yet". That is the exact reason why the rules governing commingling were developed.

Specifically, Company A has the burden of proof to show the aliquot share of oil and gas production/revenue to which Company B is entitled. Although the above rules allow latitude in the proof of production/revenue sharing under the *reasonable certainty* standard, the evidence still must reflect some scientific basis for the conclusions proffered by each company's expert.

Each production/revenue sharing calculation methodology set out above has attendant potentially significant evidentiary problems. Briefly:

1. *Surface acreage as is prescribed in the oil and gas leases where pooling takes place multiplied by Company B's leasehold (50%) interest in Tract 1 (even though Company B is not subject to any contractual relationship with Company A).* Company A will first have to establish, via expert testimony, that all of the underlying productive formation is uniform under all three tracts. The level of exactness in this proof will depend on the industry knowledge and specific knowledge of the designated expert. A net surface acre feet calculation under each tract may have to be made to enable the expert to speak with scientific confidence about Company B's share of recoverable oil and gas from the horizontal well.
2. *Tract 1's prorata share of production based on the fraction - length of the horizontal leg after the penetration point located on Tract 1/total length of the horizontal leg measured from penetration point to penetration point (40% of production) multiplied by Company B's leasehold interest (50%) in Tract 1.* This methodology is but a restatement of 1, still requiring a scientific knowledge of net acre feet or scientific understanding of the productive reservoir under the horizontal well which would lead to an expert opinion that this methodology leads to a fair and scientific apportionment of the oil and gas produced from the well to Company B.
3. *Fraction - Net surface acre feet in the unit attributable to Company B's leasehold interest in Tract 1/total net surface acre feet in the unit.* In the author's opinion, this is potentially the most accurate methodology of determining Company B's ownership of oil and gas in the productive reservoir. The several reservoir engineers interviewed by the author indicated that information from one well alone does not usually allow for an accurate computation of surface acre feet in a given reservoir. Numerous well logs, completion information, production information and seismic data are all important in making a surface acreage calculation, production information being among the most important. Company A does not have a year to make the production/revenue sharing determination – Company B wants its share of production from the date of first production of the well.
4. *Tract 1's prorata share of production based on the fraction – number of fractures located on Tract 1/total number of fractures in the entire horizontal leg multiplied by Company B's leasehold interest (50%) in Tract 1.* Opinions differed significantly among the several engineers concerning this methodology. It was argued that:

- a. some of the shale formations do not have fractures at all or
- b. if fractures do exist, it is very difficult, with any degree of accuracy, to determine their location.
- c. even if locatable, the existence of a fracture does not lead to a scientific conclusion that each fracture produces equal amounts of oil and gas or any at all since fracing information does not address the production rate from each fracture.

Conclusion

Company B has to show that:

1. Company B owns an undivided leasehold estate in and to Tract
2. Company A has exercised dominion and control over a quantum of oil and gas that is owned by Company B by producing and selling same and refusing to account to Company B for its aliquot share of the proceeds from such sales
3. Company B demanded an accounting for its share of oil and gas sales and Company A has refused same
4. Company A has commingled the production of its share of production from a horizontal well and that of Company B.

Once this proof is made, the burden of proof shifts to Company A to demonstrate with *reasonable certainty* the ownership share of oil and gas underlying the horizontal well and thus the aliquot share of monies (costs and expenses) due Company B. Ultimately, lying in wait is the default solution to Company A's proof problem – Company B gets $\frac{1}{2}$ of $\frac{8}{8}$ of all production if Company A fails to meet its burden of proof.