POOLING –
PLANNING AND PITFALLS
IN PREPARATION FOR A HORIZONTAL WELL

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WALTER H. WALNE, III (Tracy)

Mr. Walne is a graduate of Princeton University (A.B. English 1969) and the University of Texas School of Law (J.D. 1973) and served in the United States Marine Corps Reserve from 1969 to 1975, finishing his duty as a Captain. Mr. Walne's legal career of over thirty-eight years has been devoted almost exclusively to an oil & gas practice focused on upstream exploration and development; purchases and sales of producing properties; title opinions; pipeline issues; compliance with onshore and offshore regulatory agencies; representation of various independent oil and gas producers engaged in domestic onshore and offshore exploration and production operations; and representing financial institutions and borrowers in connection with reserve based loan transactions.

After practicing law for a number of years, Mr. Walne also had experience as the owner of an independent oil company engaged in generating drilling prospects, acquiring leases, obtaining industry financing and operating during the testing and development of each prospect and prior to that was a co-founder of Black Stone Oil Company which generated and sold exploration prospects to the oil & gas industry. Its principal activity involved the testing of the Woodbine (deep gas) formation in Polk and Tyler Counties, Texas, in numerous wildcat prospects, including the Michener Field, named for the noted author who visited the field discovery well during logging operations. It is one of those coincidences of the oil & gas business that the scene of Mr. Walne's experience as an oilman was in the area that is now showing promise as an extension of the Eagle Ford Shale play in East Texas.

His wife, Marina, is an education consultant who founded the John Cooper School in The Woodlands, and her uncle is the genius behind the dramatic success of the shale plays that have proven to be so prolific, George P. Mitchell, to whom we are all deeply indebted. Mr. Walne has three adult sons: Travis is a landman for Escondido Energy Partners; Dixon owns Mojeaux's, a bar and restaurant in Ft. Collins, Colorado; and Kelly is a commercial litigation attorney in Houston.

HEATHER D. PERSON

Ms. Person is an alumna of the University of Oklahoma (B.S. Zoology 1995) and the University of Houston Law Center (J.D. 2010), where she is currently an LLM (master of law) candidate specializing in Energy, Environment and Natural Resources law. Prior to joining the Texas Bar in 2010, Ms. Person worked for several years as a real property law clerk in the Law Office of Charles J. Jacobus, focusing on sales, leasing and mortgage financing. Ms. Person joined Walne Law, PLLC in early 2011, as an associate attorney. Her practice includes preparing agreements to facilitate upstream oil and gas transactions and development, including third-party mortgage financing, licensing, confidentiality and non-disclosure agreements, net profit interest development agreements, and forming and terminating pooled units. Ms. Person also advises corporate land departments on development issues, including pooling, spacing requirements, property rights and interests, and interpreting leases and agreements.

Married to a native Texan and chemical engineer, Ms. Person brings a practical approach to living a full life. She enjoys traveling with her family and is already looking forward to the next road trip.

TABLE OF CONTENTS

POOLING –
PLANNING AND PITFALLS IN PREPARATION FOR A HORIZONTAL WELL

Even before the advent of horizontal drilling, pooling was one of the more esoteric concepts in the upstream oil & gas industry. The device proved useful in a variety of situations, such as establishing control of a geological feature to be developed by the proposed unit well, establishing a drill site tract that would meet the spacing requirements of the Texas Railroad Commission (the "RRC"), avoiding a Rule 37 problem or an offset well obligation on an adjacent tract, or perhaps to combine leases for timely development within the primary term requirements of each lease.

I. Traditional Pooling Issues:

There are many typical issues to consider in pooling multiple tracts for production from a single vertical well drilled on one of the tracts, including:

- **Lease and Agreement Issues:**
  - Does each lease to be included in a proposed unit authorize pooling? Is pooling authorized for both oil and gas? If the original lease does not authorize pooling, are there subsequent amendments or agreements that do (or have such subsequent instruments modified the original pooling power)?
  - If pooling is authorized, do any of the leases impose limitations on the overall magnitude of the proposed unit?
  - Are there requirements for the lease to contribute a minimum amount of acreage or to comprise a minimum percentage of the unit?
  - Is there express authority for the lessee to amend or terminate a unit after it is formed? Can it be enlarged, or decreased in size?
  - Does exercising the pooling authority specifically affect other provisions contained within any of the unitized leases (*e.g.* triggering a Pugh clause as to any acreage not included in a pooled unit after expiration of the primary term of the lease)?
  - Will termination of a lease included in a pooled unit result in termination of the unit as to the terminated leasehold? Or will the unit continue to cover the lands underlying the terminated lease?[1]
  - Are the lands (or leases) to be pooled subject to any prior, unreleased pooled unit?[2]

- **Regulatory Issues:**
  - What limitations do the RRC Statewide Rules impose on the formation of a proposed unit?
  - Are there special field rules in effect for the formation?

[1] *See*, *Waggoner & Brown v Sheppard*, 282 SW3d 419 (Tex. 2008) (holding, in part, that a unit continues in effect as to the lands covered by a terminated lease where the lands, rather than the leasehold estate, were pooled, as is commonly found in many lease forms).
[2] *Ibid*.

- Is there a need to obtain a Rule 37 exception to the spacing requirements? If so, has proper notice been given to all necessary parties via the RRC[3] or by proper publication in the event the location of an outstanding interest owner is unknown[4]?
- Does the RRC "prescribe," *i.e.* require, a certain unit size in order to obtain a full proration allowable, or does the RRC spacing regulation merely permit (or allow) a larger unit size? Are the pooled unit sizes compelled by RRC spacing rules consistent with or in conflict with the express provisions of any of the leases to be pooled?

- **Unit Formation and Designation Issues:**
  - Should the unit cover all depths or only a specified formation?
  - Does a horizontal severance form of Pugh clause result in the lessee's losing rights to the non-unitized depths where the unit is limited to a specified formation or depth interval?
  - Is the intended pooling implemented in good faith, or does it expose the pooling lessee to an allegation of a bad faith exercise of the pooling authority? This is generally a fact question for jury determination based on the specific circumstances in each particular instance where a lessee utilizes the pooling authority (not a matter of law for the judge to decide).

- **Apportionment Issues and Outside Interests:**
  - How are any unleased or unpooled partial interest owners to be treated, whether on the drill site tract or non-drill site tracts?
  - What are the various interests to be included in the proposed unit, *i.e.* besides working interests and royalty interests, are there other outstanding interests or encumbrances on the leases that must be taken into account?
  - How will production from the unit well be allocated? Based on surface acreage contributions from each lease, or the acre feet or the reservoir covered by each tract in the unit?

II. Extending Comprehensive Coverage: Pooling for Horizontal Wells

Technological advances in horizontal drilling and hydraulic fracturing contribute substantially to the recent widespread success of domestic upstream oil & gas operations. The concurrent implementation of these technologies has resulted in a host of new issues concerning the means of appropriately forming production units for horizontal wells. The long history and

[3] The applicant for a Rule 37 spacing exception must file with the RRC a list of the mailing addresses of all "affected persons" whose property rights will be impacted should the RRC grant an exception to the spacing rules. These "affected persons" who are entitled to notice are: (1) any designated operator, (2) all lessees of record for tracts with no designated operator, and (3) all unleased mineral interest owners of record. 16 Tex. Admin. Code Sec. 3.37(a)(2)(A). The RRC does not deem a royalty interest owner an "affected person" entitled to notice for purposes of obtaining a Rule 37 exception, and notifying other interests than the ones specified above is not required to obtain a spacing exception for a well. *H.G. Sledge, Inc. v. Prospective Investment & Trading Company, Ltd.*, 36 S.W.3d 597 (Tex.App.-Austin 2000, *reh. denied*).

[4] 16 TEX. ADMIN. CODE § 1.46; *see*, Eric C. Camp, Dealing with Missing Persons & Holdouts: Using Rule 37 and MIPA for Urban Gas Development, Dallas Bar Association-Energy Law Section (Jan. 19, 2011).

continuing use of common industry lease forms which do not contemplate horizontal drilling can compound pooling challenges, since these forms were not drafted to account for long lateral wellbores which can extend over a mile or more across multiple tracts.

The legal community has devoted considerable research to these new development challenges, and a number of recent papers address the issues created by the need to adapt the pooling authority provided for in conventional oil and gas leases to better accommodate horizontal well bores. For landmen, understanding and incorporating the practical application of these legal analyses into the planning stages of a drilling program can prove beneficial. An appropriate, timely and effective use of pooling and/or production sharing agreements can provide efficiencies (and improved economics) in implementing horizontal drilling across multiple lease or unit tracts.

In today's resource plays, horizontal wells are designed to maximize production from blanket formations rather than from geological structures which created the traditional hydrocarbon trapping mechanism. The lack of permeability in these target formations is resolved through the use of long lateral wellbores and multiple hydraulic fracture treatments, which allow for the release of hydrocarbons embedded within the rock. In the process of applying this new technology, long lateral wellbores are drilled, which consistently cross lease lines and involve multiple tracts. Each tract in which the horizontal wellbore is located in the correlative interval (*i.e*. within the producing target formation) is considered a drill site.[5] Drainage in a tight formation is limited in terms of distance from the wellbore even after hydraulic fracturing occurs, and typical drainage concerns and a strict rule of capture do not necessarily apply in allocating production from a horizontal wellbore that traverses multiple tracts, whether these tracts are pooled or not.[6] With such limited drainage extending from the wellbore, thick shale formations may require drilling vertically stacked horizontal wellbores to fully develop the objective formation.

The same surface location may be used to drill multiple lateral drainholes extending from the same vertical wellbore (a "multiple lateral well"). However, utilizing separate vertical wellbores, while more expensive, can further accelerate multiple lateral drilling from approximately the same surface location. The direction of each lateral extending from a well is determined by subsurface geology so that the well will achieve the most salutary drainage of the formation. The matrix of the multiple laterals extending from the same surface location is designed to maximize efficient drainage of the formation, while still allowing enough space to avoid cross drainage between wellbores and to prevent a consequent reduction of production from nearby laterals. Statewide RRC Rule 86 allows for such multiple laterals to be considered one single well for purposes of permitting.[7]

With the extensive length of horizontally drilled laterals frequently allowing for the allocation of additional unit acreage to a single well,[8] planning the locations of the various wellbores is critical, and often necessarily includes pooling the leases to be traversed by each proposed well. In certain more complicated cases, the desired location for a new horizontal well

[5] *Browning Oil Company, Inc. v. Luecke*, 38 S.W.3d 625 (Tex. App.—Austin, 2000).
[6] *Id*.
[7] 16 TEX. ADMIN. CODE § 3.86(e).
[8] As is permissible under RRC Rule 86 or under special field rules in certain areas.

may involve multiple irregularly shaped tracts covered by old drilling units which are separately leased from various individuals and business entities and can include hundreds of interest owners. In such an instance, using a production sharing agreement ("PSA") between units may be the most efficient way to obtain the authority needed to develop across units.

The ability to efficiently pool and allocate production payments and royalties among many owners can be critical to the economic operation of the proposed well. Significantly, since the same leases and underlying constraints will be involved, any subsequent wells drilled across the same tracts (such as multiple lateral wells) will be affected by the same limitations on pooling or production sharing as the first horizontal well drilled across the tracts. This not infrequent circumstance of drilling multiple wells across the same tracts demonstrates the important principal of preparing for pooling or production sharing from the start of a drilling program, since errors made in the beginning can have multiplied problematic effects if not resolved early on. If proper agreements and authority are not in place at the beginning of a drilling program, any pooling across the tracts may be ineffective and the proper allocation of production may be uncertain for multiple wells, placing the lessee at risk of litigation and perhaps being required to overpay royalties to satisfy various tract owners that they have received their contracted shares of production from the well.[9] A single error in the process can be compounded, as it will have an impact on all wells drilled on the same tracts.

Pooling of the various leases affected by a horizontal well drilling program requires substantial planning and preparation, and numerous decisions must be made that will affect the outcome of the program. Obtaining the authority to form a pooled unit or entering into a PSA with all interest owners should be contemplated *prior* to drilling any proposed well that will necessarily cross lease boundary lines. This can be a challenge with the pressure to commence operations, but the adage regarding proper prior planning has clear application in these circumstances.

In outlining a drilling program, an analysis of all of the leases affected by the program should be performed to determine: (1) the extent of current limitations imposed on the program by specific lease provisions, (2) whether such limitations need to be removed or altered, and (3) how such removal or alteration may be accomplished. Such an analysis necessarily includes considering any subsequent lease amendments, pooling agreements, unit designations, etc., which are currently in effect. To aid in this analysis, the remainder of this paper presents additional considerations applicable to forming units which are particular to or deserve emphasis in the development of horizontal wells.[10]

[9] The issue of commingled production and damages has not been fully addressed by the courts in relationship to horizontal drilling, and thus poses a risk with an uncertain outcome for the lessee. *See infra*, pp. 6-7 (discussing the treatment of unpooled royalty interests).

[10] This is not an exhaustive list; rather, this paper is intended to present an overview of considerations which may occur with relative frequency in the field.

III. Getting It Right the First Time: Specific Considerations for Pooling Horizontal Wells

A. RIGHTS, ROYALTY & ALLOCATION

Authority to pool and to retain large units.

Ensuring proper pooling authority in each lease to be included in a unit is vital prior to acting, since improperly pooled units can be subject to litigation claims, penalties and may even be shut-in by the RRC.[11] Amending a lease provides the opportunity to ensure that the specific lease provisions allow for large units so that all necessary leases may be pooled. Additionally, it is advisable to ensure that any retained acreage provision in a lease (or later amendment) allows for holding developed units to the extent of the designated unit, rather than being limited to a smaller acreage designation as frequently found in older lease forms (*e.g.* 40 acres for an oil well or 160 acres for a gas well). The pooled unit needs to be large enough to protect the horizontal wellbore from damage and drainage. If other horizontal wellbores are positioned too close in relation to the radial extent of the instant wellbore's fracturing (which fracturing can extend several thousand feet from the wellbore), production from the instant wellbore can be impaired.[12] Lessees and landmen need to recognize the operational requirements of developing the leased area efficiently and economically, guarding against lease provisions which require horizontal development on tracts with less than optimal spacing for fracturing the objective formation. Amending lease provisions which impair orderly pooling and the layout of proposed horizontal wellbores to allow for sufficiently large units and retained acreage prior to the formation of any units (and prior to the commencement of drilling) may prove necessary to ensure that both the lessor and lessee are able to benefit fully from the desired well and the acreage allocated thereto.

Combining multiple pooled units.

Where lands or leases are covered by pooled units already in existence (and note that as the result of *Wagner & Brown v. Sheppard* cited above, once a unit is formed, it does not necessarily terminate upon the termination of any or all of the unitized leases), a PSA may be employed to combine the interests from multiple units into an agreement covering any wells drilled which span the multiple units.[13] To form a PSA, which the RRC will permit as a single drillsite tract, an operator must obtain consent from at least 65% of the working interest and 65% of the royalty interest owners.[14] A PSA must be in place prior to any drilling across unit boundaries to alleviate the risk of litigation brought by mineral interest owners against the lessee—the PSA should designate the planned unit, while allowing for appropriate and necessary modifications to the unit designation upon actual completion of the well, so that the final designation and, correspondingly, the production sharing allocation between or among units will be governed by the actual results of drilling.

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[11] 16 TEX. ADMIN. CODE § 3.37(e); *see*, Eric C. Camp, Dealing with Missing Persons and Holdouts, *supra* note 4.

[12] John W. Broomes, Spinning Straw Into Gold: Refining and Redefining Lease Provisions for the Realities of Resource Play Operations, 57th Annual Inst. Of the Rocky Mountain Mineral Law Institute (July 21-23, 2011), citing *Coastal Oil & Gas Corp. v. Garza Energy Trust*, 268 S.W.3d 1, 33 n.34 (Tex. 2008).

[13] Doug J. Dashiell, Texas Railroad Commission Regulation of Horizontal Drilling in Texas—Potential Problems & Practical Solutions, 36th Annual Ernest E. Smith Oil, Gas & Mineral Law Institute (April 9, 2010)

[14] H. Martin Gibson, Modifying Oil & Gas Documents for Horizontal Drilling, 37th Annual Ernest E. Smith Oil, Gas & Mineral Law Institute, Houston, Texas (April 7-8, 2011). This paper includes a sample form of PSA.

Offsite surface location and trespass considerations. Drilling from an offsite surface location should not occur on or across an unleased tract in order to access leased tracts unless appropriate easements have been obtained from the surface owner. Any drilling on an unleased tract for which a surface easement is obtained must take place outside of the correlative interval (*i.e.* the producing formation). No logging or mineral information may be obtained from any drilling on or across unleased tracts, and obtaining an additional drilling easement from a mineral interest owner of the tract may be advisable, depending on the circumstances. If obtaining such a drilling easement is deemed prudent, an easement granted by one mineral interest owner should suffice, since a co-tenant may grant such a right without the joinder of other co-tenants (*viz*. any other mineral interest owners in the tract).

Treat each tract as a drill site.

Any tract in which the horizontal wellbore is drilled through the correlative interval (*i.e.* within the objective formation) is considered a drill site tract. Without an effective pooling or production sharing agreement among all tract owners, the lessee of a horizontal well is presented with a significant problem of determining how to allocate royalty on production according to which tract the production came from. A lessee may be required to demonstrate with reasonable probability how much production is attributable to each tract[15]; otherwise, the lessee may be required to overpay total royalties under the "commingling of goods" theory of damages.[16] This is a relatively unsettled area of law, and implementing agreements that would clarify the issue is advised in order to avoid potential litigation.

Paying Royalty. Alternatives for allocating production to the various pooled tracts: There are several methods for allocating production among different tracts in a pooled or a PSA unit which include calculating proportionate shares on the basis of: (1) the length of the horizontal drainhole within a tract in relationship to, (a) the total horizontal drainhole displacement (the length between the penetration point and the terminus), or (b) the entire length of the wellbore from surface to terminus; (2) the number of take points (open perforations) located within a tract in relationship to the number of take points along the entire producing lateral well bore; (3) the proportion that the surface acreage of each tract lying within a specified distance of the drain hole bears to the aggregate of all such tracts in the unit; and (4) the proportion that the total surface acreage of each tract bears to the aggregate of all such tracts in the unit.

Outstanding royalty interests. If there are outstanding non-participating or overriding royalty interests (those which are not subsequently pooled under the terms of their grant) on any of the tracts to be included in the proposed horizontal well unit, every effort must be made to obtain the joinder of these interest owners, or their ratification of the proposed unit, since every tract in a unit for a horizontal wellbore is deemed to be a drill site tract. A non-ratifying or non-pooled NPRI owner arguably cannot claim a share of *all* production from the unit (as is possible with vertical well units), based upon the reasoning of the Austin Court of Appeals in *Browning Oil Company, Inc. v. Luecke*.[17] The lessee should be able to pay unpooled royalties on an allocated tract basis by demonstrating with reasonable probability how much production from the

[15] *Browning Oil Company, Inc. v. Luecke*, 38 S.W.3d 625 (Tex. App.—Austin, 2000).
[16] *Humble Oil & Refining Co. v. West*, 508 S.W.2d 812 (Tex. 1954).
[17] *Supra*, note 14.

wellbore is attributable to each tract (at least for now and until the Texas Supreme Court determines otherwise). However, this is an area at risk of litigation, and the commingling lessee most likely still holds the burden of proof for limiting damage claims on production from horizontal wells.[18]

Timing: Formation of a unit before or after the well is drilled.

(a) Pooled Units: The timing of unit formation should be well-considered prior to drilling. If drilling constraints prevent the wellbore from reaching its intended lateral length, the acreage assigned to a unit which was designated prior to drilling may exceed what is allowed for the actual well as-drilled. An amendment to the unit designation will be needed, unless the lessee has opted to wait until after drilling to designate the actual unit. Some lease forms (and any subsequent agreements) may not allow for amending a unit designation, hence a new agreement to amend could be required if the pooled unit was already designated. It is advisable to wait until the wellbore is drilled to the terminus point to designate the pooled unit. In any event any unit should be designated prior to actual production to prevent commingling and potential confusion of goods damage claims.

PSA Units: For a wellbore specific PSA, the planned wellbore unit designation should be agreed to prior to drilling since the well is expected to cross multiple units and pooling is precluded. There needs to be a basic form of agreement among all necessary parties to ensure that the well can be produced in an orderly manner between units. However, the PSA should specify that the designated unit area shall be amended after drilling is completed, based on specified criteria for allocating interests, in the event that the actual wellbore is materially or substantially altered from that which was planned in forming the PSA.[19]

B. STATE REGULATIONS[20]

The application of the statewide spacing rules fixes the fundamental matrix for a horizontal well drilling program. Statewide Rule 86 generally applies to the formation of units for horizontal wells.

Special Field Rules. Where the Railroad Commission has implemented special field rules governing horizontal drilling, these rules apply instead of Statewide Rule 86 for the development of horizontal wells within the field.

[18] *Supra*, note 15.

[19] Cross-unit wells in Arkansas (regulated under Rule B-43(o)) provide a good example for designating an initial PSA unit, with later amendment. *See*, George A. Snell, III, Multi-State Roundup on Oil & Gas Land & Lease Issues, Houston Bar Association, Oil, Gas & Mineral Law Section (Feb. 22, 2011).

[20] *See*, Doug J. Dashiell, Texas Railroad Commission Regulation of Horizontal Drilling in Texas, *supra* note 13; Carroll Martin & D. Davin McGinnis, All for One and One for All: A Primer on Pooling in Texas, 31st Annual Ernest E. Smith Oil, Gas, and Mineral Law Institute (April 1, 2005).

Conformity of Units to RRC Rules: Compliance with Statewide Rule 86 (including Statewide Rules 37 and 38) is required absent special field rules. Observing and complying with RRC rules is fundamental to obtaining a valid permit. In particular and of critical importance is ensuring compliance with spacing regulations or obtaining exceptions for wells which do not comply with statewide or special field rules. Violating spacing rules can result in a permit that is considered void *ab initio* (i.e. from the beginning), which requires that the well be shut in until a valid spacing exception is obtained.[21] All production occurring under a void permit is deemed illegal or unlawful and is subject to forfeiture to the state of Texas.[22]

A Rule 37 exception is required to obtain a valid drilling permit for any well that would otherwise violate the spacing rules between property or lease lines (whether Statewide or special field rules apply). When a well is drilled within one-half the between-well spacing distance (which is 600' under the statewide rule) on the same tract or unit or is drilled within the minimum lease line spacing distance (which is 467' under the statewide rule), a spacing exception is required for a valid permit to be obtained. Spacing requirements do not apply to the surface drilling location of a horizontal well. Therefore, under statewide rules, where the horizontal wellbore is within the correlative interval (between the penetration point and the terminus of the wellbore within the target formation), drilling must occur at least 467 feet from any property, lease, unit or subdivision line if the separate tracts are not pooled or if there are outstanding mineral interests between the tracts; otherwise an exception to Rule 37 must be obtained.

For Rule 37 purposes property lines exist where there is an internal tract of land in which the owners of working interests (and their respective proportionate interests) are the same throughout the tract, while outside of the tract at least one of the owners (or the respective interests of the owners) are different. Thus, even when all the owners are the same entities, differences in ownership percentages between tracts will create a "property line" for spacing purposes.[23] Additionally, non-joining, undivided mineral interests within a pooled unit create property lines for Rule 37 purposes between the boundaries of the tracts within the pooled unit. If all interests in the separate tracts are pooled and leased by lessee, the horizontal wellbore may approach and cross the boundary line without concern for Rule 37. However, if the lessee desires to drill across a boundary line in a pooled unit where there are outstanding interests (i.e. they are unleased or leased to another party/different operator)[24] between the tracts, a Rule 37 exception must be obtained to comply with spacing and notice requirements.[25]

Application of RRC rules in the formation of units. The spacing rules of the RRC can be expressed as a requirement in language that "prescribes" the size of the unit, or the amount of

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[21] 16 TEX. ADMIN. CODE §3.37(e); See, Brian R. Sullivan, P.E., Rule 37: Any Well Drilled in Violation of this Rule Shall be Plugged, 22nd Annual

Advanced Oil, Gas, and Energy Resources Law Course, Chapter 6 (September 30, 2004 – October 1, 2004).

[22] TEX. NAT. RES. CODE §115.031.

[23] *Humble Exploration Co., Inc. v. Railroad Commission of Texas*, No. 13,999, 3rd Court of Appeals, Oct. 3, 1999 – unreported.

[24] *See*, note 2 for "affected parties" for who addresses must be provided to the RRC with any spacing exception application; notice to these parties is required for each exception granted by the RRC.

[25] *See*, note 4.

acreage, that must be allocated to a well in order for it to be assigned a full production allowable. The spacing regulation may also be expressed permissively, so that a unit may be "permitted" to be as large as a specified number of acres, although a smaller unit will entitle the well to a full allowable. While some lease forms authorized pooling on the basis of whatever is either "prescribed or permitted" by the RRC, other lease forms limit the expansion of unit size to only what is "prescribed" by the RRC in order for the lessee to obtain a full allowable. As these practices encounter horizontal drilling intentions, this language can be problematic. Texas case law clearly states that the lessee's authority to increase the size of a unit to what is "prescribed" is *not* the same as having authority to increase a unit to a size "permitted" by the RRC.[26]

In the context of horizontal drilling, this problem arises: in order to enlarge a unit in accordance with the formula provided in Statewide Rule 86, which states that a unit "may" obtain additional acreage based on the length of total horizontal wellbore displacement, there can be conflict with the language of certain pooling provisions that only allow for the expansion of pooling units to a size "prescribed" (*i.e*. required) by the RRC in order to obtain a full allowable. In order obtain the largest unit size allowable under this type of lease (assuming a lease amendment is not a viable option), the lessee's focus should be to determine the minimum size required to obtain a full proration allowable under the RRC rules—that will be the "prescribed" maximum size limit for a unit limited by such lease language—and to limit the size of the unit to this amount of acreage.

Limit the depth interval to be pooled if Special Field Rules are in effect which prescribe larger units. If the governmental authority provision of a lease is to be relied upon to form a larger unit than is otherwise authorized under the lease provisions, the pooled interval should be limited to the reservoir or formation to be developed as allowed under the special field rules. Without special field rules in effect for other reservoirs, authority to pool under the lease is limited and to pool outside of the correlative interval or field for which the RRC has adopted field rules will require a lease or pooled unit amendment.

Enlargement of existing units. If an existing wellbore is re-entered for horizontal drilling, the existing unit for the well may have to be enlarged. Generally, the pooling authority in the leases involved must allow for the enlargement of the pooled unit. There is case authority allowing the lessee to enlarge an existing unit if the lease is otherwise silent—however, this decision is limited, since it only applies to circumstances where all affected parties are benefited by the expansion. Additionally, any exercise of this limited implied authority by lessee must be done good faith.[27]

C. OTHER ISSUES FOR CONSIDERATION

In planning the configuration of pooled units for horizontal wells, there may be other considerations to be taken into account.

Pugh clauses. To the extent that any lease to be included in a unit includes a form of Pugh clause, care must be taken to preserve the non-unitized lands covered by the lease. If the

[26] *Jones v. Killingsworth*, 403 S.W.2d 325 (Tex. 1965).
[27] *See Expando Production v. Marshall*, 407 S.W. 2d 254(Tex. Civ. App. – Ft. Worth 1966, writ ref'd n.r.e.).

form of Pugh clause includes a horizontal severance, the application of this provision must be considered in light of the thickness of the objective formation and whether the objective formation can be completely drained by a single lateral or whether stacked laterals may be necessary to develop fully the formation. If a horizontal severance will take effect, the unit must be formed in a way that will preserve the deeper tier of the formation for later development.

Continuous development obligations. If a lease that is to be pooled includes a continuous development obligation, it must be confirmed that a well on the lands included in the unit will satisfy the continuous drilling requirement of the lease. Consideration must be given, as well, to how non-unitized acreage will be preserved for subsequent development, including having sufficient acreage to be combined with the left over acreage in order to form another unit and to do so within the time period required to meet the continuous development obligation.

Offset well obligations. If a planned horizontal well will precipitate an offset well obligation on a lease that is not to be included in the proposed unit, consideration must be given to the means of satisfying the offset well obligation, and sufficient acreage must be preserved for allocation to the unit for the offsetting well.

How to educate lessors and their attorneys regarding the foregoing issues? Do not expect immediate and unconditional cooperation from lessors whose participation is needed in connection with the formation of units for horizontal wells. Such parties, and their counsel, will need education on all aspects of a proposed unit, including the consequences of each such party's failure to cooperate on the development of a proposed horizontal unit and on subsequent units. There are great rewards to reap for all involved, so long as there is adequate cooperation to allow for reasonable and orderly development.

D. ONE LAST PLAY IN THE PAYBOOK, THE "HAIL MARY"

Mineral Interest Pooling Act ("MIPA") (when all else fails…).[28] The MIPA provides the RRC with a limited forced pooling power in Texas, which has been utilized with some success in the Barnett Shale.[29] The legitimate purposes of utilizing forced pooling under MIPA are to prevent drilling unnecessary wells, to protect correlative rights, and to prevent waste. A MIPA applicant desiring to form a pooled unit must make a fair and reasonable voluntary pooling offer to the other party intended to be included in the pooled unit prior to seeking forced pooling. If such an offer has been made and rejected, the offering party may seek to implement forced pooling under the MIPA by applying to the RRC for such treatment. Oil and gas fields which were not discovered and produced prior to March 8, 1961, qualify for consideration of forced pooling using MIPA. Special field rules by which the RRC has established the proration unit size and shape for the field need to be either in effect or granted in conjunction with a MIPA application, since MIPA does not apply to wildcat zones or wells. MIPA units are limited to

[28] *See*, Eric C. Camp, Dealing with Missing Persons & Holdouts: Using Rule 37 and MIPA for Urban Gas Development, *supra* note 4; *see also*, *Ronnie* Blackwell, Forced Pooling within the Barnett Shale: How Should the Texas Mineral Interest Pooling Act Apply to Units with Horizontal Wells?, 17 Tex. Wesleyan L. Rev. 1, Fall 2010; Mark Leaverton, MIPA…SCHMIPA: The Foibles of the Texas Forced Pooling Act, State Bar of Texas, 25th Annual Advanced Oil, Gas & Energy Resources Law Course, Houston, Texas (Oct. 4 – 5, 2007).
[29] *Id*.

productive acreage of 160 acres for an oil well and 640 acres for a gas well, each with 10% tolerance.

1. Consider the layout of the proposed horizontal drilling program; examine the proposed wellbore locations relative to lease and unit boundaries and the locations of nearby wells, both vertical and horizontal.

2. Determine any Rule 37 spacing issues based upon the wellbore locations and the lease and unit boundaries and offset well locations; arrange to make Rule 37 exception applications as needed, providing the RRC with all available names and addresses of necessary parties.

3. Identify each of the leases covering the locations of each well in the drilling program and any amendments thereto; examine the specific scope of the pooling authority and any limitations thereon.

4. Examine the application of statewide spacing rules or special field rules to the wells included in the proposed drilling program. Determine any conflicts between the size and configuration of the proposed units, the applicable field rules and the limitations on the pooling authority included in any of the leases to be pooled.

5. Determine if local regulations or municipal ordinances require further compliance by a drilling program.

6. On the basis of the foregoing, determine whether conditions exist to form the units necessary to accommodate the wells included in the drilling program; consider the impact, if any, of:
    a. Prior existing units which continue in effect;
    b. Non-participating royalty interests burdening any of the tracts to be pooled;
    c. The impact of any Pugh clauses (*i.e.* vertical or horizontal severances triggered by the formation of the unit);
    d. The impact, if any, of continuous drilling obligations and how the same are satisfied with a unit well; and
    e. Whether the proposed unit results in a horizontal severance within the correlative interval and jeopardizes the lessee's ability to undertake a deeper tier lateral at a later date.

7. If the necessary units can be designated, amended, and terminated to meet the needs of the drilling program, then proceed with permitting, formation of the units (although holding to formally make each designation until each well is actually drilled).

8. If the needed units cannot be designated, amended, and terminated to accommodate the drilling program as originally conceived, then determine the most salutary alternative by:
    a. Revising the drilling program layout to avoid insurmountable issues created under the terms of certain leases or to avoid lands that are not under lease or otherwise unavailable to be included in a unit;
    b. Amending any lease that is an impediment;
    c. Amending or replacing pooling agreements; or

d. Entering into a production sharing agreement between or among prior existing units.

9. Timing:
    a. Satisfy all requirements to be able to form the proposed unit(s);
    b. Drill each horizontal well to its terminus;
    c. After each well is drilled to its terminus, officially designate the unit for the well in the county records, in accordance with the requirements in the documents and consistent with the RRC statewide or special field rules.

10. Keep meticulous and relevant records throughout the process in order to demonstrate reasonableness and good faith; determine the amount of production obtained from each tract with reasonable probability in order to meet royalty obligations owed to any unpooled/tract-based interests.

11. Consider the application of forced pooling under MIPA as a possible option of last resort.