TOP LEASE VULTURES: TITLE FAILURE, BAD FAITH POOLING, AND THE VALIDITY OF TOP LEASES IN THE TEXAS SHALE PLAYS

Comment

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I. INTRODUCTION

“In my lifetime, this is the biggest thing I’ve seen. We’re having a hard time comprehending what’s going on.”
—Cotulla, Texas Mayor Joe Lozano1

Cotulla, Texas, founded in 1880, grew into a large farming area with an expanding population to sustain it.2 As water supplies gradually gave out and farming declined, the city had to survive on ranching and hunting leases.3 Downtown Cotulla is currently full of empty lots and buildings fallen into ruin, and fewer people live in Cotulla now than fifty years ago.4 But Cotulla’s county is now a hot spot for the new Texas black gold rush, with landowners doing very well, and many making millions of dollars on lease-bonus payments.5 Only through recent developments in horizontal drilling and fracturing technologies did the black gold rush become possible.6 And now, the rush is on, and the only likely speed bumps are shortages of specialty drilling rigs.7

The intersection of two new technologies has drastically changed the industry’s perception of domestic gas resources.8 Vast new areas of potential gas resources—called plays—previously considered uneconomic

* B.S., M.A., Sam Houston State University; J.D. Candidate, Texas Tech University School of Law, 2012. I’d like to thank my family, Judith Young Robertson, James Robertson, and William Robertson, for their love and support both throughout the years and on this paper; my law school mentors, Professor Robert A. Weninger, J. Hadley Edgar Professor of Law, and Professor Dustin B. Benham, for their invaluable mentorship; Drs. Karen Douglas, Ph.D., and Mary Ann Davis, Ph.D., Sam Houston State University, for pushing me to aspire higher in academics; and everyone at the firm Schiffer Odom Hicks & Johnson, PLLC, whom I could not be happier to work with.

2. See id.
3. See id.
4. See id.
5. See id.
6. See id.
7. See id.
8. See infra Part II.B.
or depleted, boomed overnight into hotly competitive leasing areas. 9 The two newly combined technologies spurring the new black gold rush—horizontal drilling and hydraulic fracturing—have changed the face of domestic gas production. 10 A single Texas play potentially contains enough gas to sustain all United States’ domestic gas consumption for a decade. 11

In response to the new economic viability of vast domestic gas reserves, oil companies rushed to lease as many minerals as possible; consequently, the supply of unleased acreage decreased. 12 Demand for acreage continued rising as supply continued falling, and oil companies offered amounts as high as 200 times the normal lease-bonus payment rate in the shale plays for mineral interest owners to sign a lease. 13 Because the amount of available leaseholds in the plays is limited, oil companies eventually secured most of the potential mineral interests. 14

An old practice in which oil companies took out leases that would only take effect upon the expiration of an underlying lease (top leasing), received renewed attention as oil companies began building layers of leaseholds to try to secure land from competitors in the event that a competitor’s prior lease expired. 15 New opportunities clashed with old practices, and while oil companies have proceeded under the assumption that top leases are valid, it is not entirely clear that they are. 16

This Comment addresses questions of lease validity in the aftermath of title failure due to bad faith pooling. Part II begins by discussing the historical context of the Texas shale plays and the technologies acting as the impetus for the new opportunities and dilemmas. This section also provides background information on how oil companies maintain their leases against expiration of all or parts of nonproducing leases.

Practitioners should anticipate potential title failures of both bottom leases and top leases. Practitioners who represent the interests of bottom lessees may find themselves in a situation in which they must protect title in the bottom lease from a zealous top lessee; thus, Part III focuses on lease expiration, identifying several potential sources of litigation associated with pooling and title in the shale plays. This Part analyzes and discusses four potentially problematic examples of actively utilized clauses within the shale plays.

Other practitioners may find themselves seeking to protect the validity of a top lease. Accordingly, Part IV discusses the validity of top leases after expiration of a bottom lease under problematic clauses such as those

9. See infra notes 17-20 and accompanying text.
10. See infra Part II.B.
11. See infra notes 38-40 and accompanying text.
12. See infra Part II.A.
13. See infra note 42 and accompanying text.
14. See infra Part II.A.
15. See infra Part II.C.4.
discussed in the previous section. After a brief reconsideration of top leasing, this Part discusses and analyzes perhaps the greatest barrier to top lease validity—the Texas Rule Against Perpetuities, followed by a consideration of tortious interference with a contract as a potentially viable cause of action by bottom lessees against top lessees.

After identifying problems in bottom and top leasing in the shale plays, Part V proposes solutions to these dilemmas. The first subsection discusses how bottom lessees can avoid lease termination through drafting. The second subsection, on the other hand, urges Texas courts to construe as valid top leases coming into existence in the aftermath of title failure or bad faith pooling. Moreover, whenever possible, a bottom lessee should preserve its ability to pursue damages in situations when the top lessee has acted wrongfully through a claim for tortious interference with a contract.

II. TOP LEASING IN THE CONTEXT OF UNPRECEDENTED LEASING AND DRILLING ACTIVITIES IN THE TEXAS SHALE PLAYS

A. The New Black Gold

After fifty years of drilling operations, the conventional wisdom in the oil industry held that much of Texas’s mature hydrocarbon plays had been exhausted of their oil and gas production viability.17 The combination of rising oil and natural gas prices in the United States, along with increased political pressure to increase domestic supply as a matter of national security, resulted in increased demands on the oil industry to find new supplies of domestic energy.18 With economic incentives from higher prices and the political desire to increase domestic production calling oil companies to action, a host of new technologies developed—technologies that made possible and highly profitable the production of oil and gas that was previously economically and technologically impossible.19 Oil companies began looking at old, previously discovered shale plays with new glasses.20

18. See id.
19. See id.
20. See Fayetteville Shale Play Frequently Asked Questions, ARK. BUS. (Aug. 27, 2007), http://findarticles.com/p/articles/mi_hb5248/is_34_24/ai_n29373888 (on file with author) (explaining rudimentary information relating to the Fayetteville Shale Play). Gas is among the most prevalent hydrocarbons in a shale play. See id. The term “play” is “often a general term for a large region or basin of hydrocarbon accumulation used by energy companies to continue exploiting a given trend.” Id.
In the past, shale was not the most conducive environment for profitable extraction.\(^{21}\) Shale is a type of rock created by the deposition of fine sediments—clay, mud, or silt—and contains a finely stratified or laminated structure.\(^ {22}\) Although fine sedimentary structure provides shale with the porosity necessary for extraction, the physical property also acts as a barrier to trap and flow hydrocarbons from within the shale, as shale has little to no permeability.\(^ {23}\) Prior to new technological developments—such as horizontal drilling and hydraulic fracturing—the small pockets of gas within the shale plays that lay between dense rock formations remained economically unreachable.\(^ {24}\)

Presently, the three largest Texas shale plays, displayed in Figure 1, are the Barnett Shale, the Haynesville Shale, and Eagle Ford Shale.\(^ {25}\) The Barnett Shale play is the oldest of the Texas shale plays; in fact, the new techniques and processes necessary for viable shale hydrocarbon production originated here.\(^ {26}\) The Barnett Shale play is located in the Fort Worth basin of northern Texas.\(^ {27}\) The Haynesville Shale play begins in east Texas and continues into northwest Louisiana.\(^ {28}\) The Eagle Ford Shale play is located in south Texas.\(^ {29}\)

![Figure 1](image-url)

\(^{21}\) See infra notes 22-24 and accompanying text.
\(^{22}\) 38 AM. JUR. 2D Gas and Oil § 275 (2010).
\(^{24}\) See id. (discussing the difficulties encountered when seeking to exploit production from the Barnett Shale play).
\(^{26}\) See Airhart, Father of the Barnett, supra note 23.
\(^{27}\) Shale Play, supra note 25.
\(^{28}\) Id.
\(^{29}\) Id.
The Texas shale plays are highly competitive. The Barnett Shale, while the least active in terms of number of companies operating, well illustrates this competitive phenomenon. The Barnett Shale is one of the largest domestic onshore gas fields in the United States and is the largest in Texas. By 2004, over 2,500 wells had produced on the Barnett Shale with hundreds more waiting in the wings. Until 2002, primary vertical wells were drilled, but in that year, experimental horizontal drilling proved exceptionally fruitful—consequently, developers transitioned to horizontal drilling as the primary production method. Subsequently, the number of wells increased dramatically. One of the unique characteristics of the Barnett Shale is that there is no such thing as a dry hole—exploration guarantees production. The ability to ensure a return on exploration drives competition even higher.

The Haynesville Shale is similarly competitive. Estimated to provide enough natural gas for a decade of United States domestic natural gas consumption, the Haynesville Shale has been called “the largest natural gas field in the continental [United States].” As of 2009, more than $3.2 billion had already been paid to Haynesville Shale lessors in lease bonuses and royalty payments. Haynesville Shale became a lucrative natural gas play only in 2007 after new technologies proved rewarding in the Barnett Shale, and the rush to lease land caused bonuses to jump from $150 per acre to as high as $30,000 per acre in a span of a few months. The play was so

31. See Oil & Gas Shale Play List, MINERALWEB (Sept. 10, 2010), http://www.mineralweb.com/directory/shale-plays (listing the companies that are actively involved in the various Texas shale plays). The numbers of active companies by play include the following: Barnett Shale, sixteen; Bossier Shale, twenty-three; Eagle Ford Shale, twenty-six; Haynesville Shale, twenty-eight. Id.
33. Martineau, supra note 32, at 5-1.
34. Id.
35. Id.
36. Id. at 5-4 (stating the number of producing wells grew from 702 in 2000 to 1,204 in 2001 and sharply increased to 3,315 in 2004).
37. Id. at 5-8. A “dry hole” is “[a] completed well which is not productive of oil and/or gas (or which is not productive of oil and/or gas in paying quantities).” PATRICK H. MARTIN & BRUCE M. KRAMER, WILLIAMS & MEYERS MANUAL OF OIL AND GAS TERMS 276 (14th ed. 2009) [hereinafter MARTIN & KRAMER, MANUAL].
38. See Martineau, supra note 32, at 5-17.
40. Id.
41. Id.
42. Id. A “bonus” is the consideration given by a lessee to a lessor for the grant of a lease. MARTIN & KRAMER, MANUAL, supra note 37, at 90. A “royalty” is the lessors share of production, free of production expenses. Id. at 855.
competitive that when prices peaked at $28,750 per acre, some lessors collected amounts as high as $28.75 million in lease-bonus payments.43

A similar story exists for the Eagle Ford Shale.44 In late 2009, the Eagle Ford Shale boom created overnight billionaires as oil companies rushed to lease land.45 The only thing currently slowing production in the Eagle Ford Shale is a lack of enough horizontal drilling rigs.46 Mineral rights owners have collected lease bonuses as high as $3,500 per acre.47

B. New Technologies

Horizontal drilling and hydraulic fracturing (fracking) have granted unprecedented hydrocarbon access in shale formations.48

1. From Vertical Drilling to Horizontal Drilling

Vertical drilling, the original drilling method of oil and gas production, began as early as 1859, when a man named “Uncle Billy” extracted petroleum from the ground.49 After proceeding to smell and taste it, he ran to town to notify his boss, Colonel Edwin Drake, that the Drake Well in Titusville, Pennsylvania, had been successfully drilled and was capable of production.50 Throughout most of the remaining nineteenth and twentieth centuries, vertical drilling technology remained the most common method for drilling oil and gas wells.51 When domestic oil and gas reserves were

43. Bogan, supra note 39.
44. See MacCormack, supra note 1.
45. See id.
46. See id.
47. Id.
49. Id. at 1.
50. Id. at 11-15 (discussing the world’s first “modern” oil production).
51. See id. at 9-15 (detailing the history of vertical well production).
plentiful and oil and gas easily spewed forth from underground reservoirs, it was not difficult to simply punch a hole into the ground and extract oil—the Drake Well’s first extraction consisted of dipping a tin can sixty feet into a hole.52 Unfortunately, as the more easily reachable domestic resources dwindled, methods of production needed to advance in order to meet market demands.53 The efficacy of drilling a well straight down and essentially drawing out hydrocarbons from the ground as one would tap beer from a barrel diminished as time progressed, and the rule of capture wasted finite and dwindling resources.54 The fast and easy oil production days could not last forever, and the production free-for-all led to the extreme economic and physical waste of valuable natural resources, as well as significant environmental damage because of these practices.55 A coalition of oilmen and conservationists, alarmed by the long-term environmental problems associated with waste so severe that actual rivers of oil were created, as well as the economic inefficiency and waste resulting from free-for-all drilling, successfully thrust a regulatory agenda upon the states with the highest hydrocarbon production.56

Regulatory changes of this nature paced domestic production to more sustainable levels.57 Still, “[d]rilling vertical wells into horizontal reservoirs bothered some production engineers for a long time.”58 Because

52. See id. at 1.
53. See id. Geologist John Carll explained vertical wells in layperson’s terms as akin to drawing beer from a barrel:
The barrel is placed in the cellar and a pump inserted. At first the liquor flows freely through the tube without using the pump, but presently the gas weakens and the pump is called into recognition. And finally, the gas pressure becomes so weak that a vent hole must be made to admit atmospheric pressure before the barrel can be emptied, even by the pump.
Id. at 11. The U.S. Department of Energy provided a more technical definition of horizontal drilling in its seminal report on the practice of horizontal drilling:
Horizontal drilling is the process of drilling and completing, for production, a well that begins as a vertical or inclined linear bore which extends from the surface to a subsurface location just above the target oil or gas reservoir called the “kickoff point,” then bears off on an arc to intersect the reservoir at the “entry point,” and, thereafter, continues at a near-horizontal attitude tangent to the arc, to substantially or entirely remain within the reservoir until the desired bottom hole location is reached.
54. See RAYMOND & LEFFLER, supra note 48, at 14-16 (explaining how the infamous rule of capture, which encouraged landowners to drill as many wells as possible under the colloquial “use it or lose it,” contributed to a great decline in the amount of hydrocarbons available due to waste).
55. See id. at 12-15.
56. See id. at 14-15 (explaining the impact of proration—mandatory reductions in drilling—in creating higher, more stable prices for hydrocarbon producers; satisfying the fears of conservationists; establishing a new “legitimate empire” for governmental administration; and granting prominence to the new field of petroleum engineering).
57. See id.
58. Id. at 16.
reservoirs are typically wider than deep, a vertical wellbore makes contact with the hydrocarbons in the wrong plane. Imagine trying to drink a thin layer of very thick syrup floating horizontally beneath the surface of a swimming pool using a very long, unbendable drinking straw. Once the pool begins to drain, your straw would either have to continually (and expensively) move deeper to get all of the very thick syrup (reducing economy) or the project would have to be abandoned as uneconomical. On a larger scale, the same basic principle applies to vertical wells. As for horizontal wells, imagine a very long drinking straw that can be bent to go through the syrup layer horizontally, with multiple holes (take points) punched periodically in the straw rather than only one take point at the end of the straw. Also, imagine that materials can be forced into the straw and through the multiple holes in the straw that would thereafter make the syrup more flowable through those multiple take points. For the price of only one, very expensive, bendable, multi-take point well, combined with the fracking to increase the ability to flow, you can drain far more syrup—economically.

While the drilling of Texas’s first horizontal well purportedly dates back to 1929, scientists first successfully penetrated multiple reservoirs with horizontal wellbores in the 1980s in France and Italy, allowing for actual productivity increases. Vertical drilling involves physically rotating the entire drill pipe string from the drilling rig on the surface into the ground, with a drill bit at the end of the pipe being turned along with the pipe. This technology was problematic when attempting to reach more distant targets—particularly when the drill hole needed to be substantially deviated from a vertical course—commonly causing buckling and, ultimately, failure. Horizontal drilling, on the other hand, utilizes down-hole motors, which turn only the drill bit, greatly reducing the failure rate.

As horizontal drilling technology advanced, it allowed for many more subsurface production points. Not only could a single wellbore bend towards the resource it sought to capture, but a single drilling pad location could drill multiple wellbores, thereby reducing surface-related drilling and production costs, as well as vastly increasing subsurface access and economic viability, as depicted in Figure 2 above. Some studies have

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59. Id.
60. See infra text accompanying note 62.
61. RAYMOND & LEFFLER, supra note 48, at 16.
62. See id. at 14-16.
63. See id.
64. See id. at 16.
66. Id.; see supra Figure 2.
even suggested horizontal drilling increases productivity as high as 200% to 2,500%.\textsuperscript{67}

2. Fracking It Up

Fracturing of formations involves the splitting of rocks by injecting fluids at very high pressures into a well hole to create an area where hydrocarbons will naturally pool near the wellbore.\textsuperscript{68} In low permeability areas, such as the shale plays, hydrocarbon flow is so highly constrained that production cannot be commercial absent fracturing.\textsuperscript{69} “Fracturing allows the wellbore to be affected by a greater amount of the reservoir,” possibly allowing between five and fifty times more production from the well.\textsuperscript{70}

The terminology of hydraulic fracturing within the oil and gas field is that of “fracking” or “fracing,” and one is said to perform a “frac job” or “frack job” when performing the operation.\textsuperscript{71} Frack fluids typically involve low-gravity oil; water mixed with proprietary chemicals to thicken it; or water that carries dissolved carbon dioxide or nitrogen.\textsuperscript{72} Further, propants—small, uniformly sized sand grains or plastic pellets—typically combine with frack fluid and are forced into the fracture.\textsuperscript{73} By exerting the pumping pressure of as many as two dozen on-site pump trucks, the fluid is pumped down the tubulars and against the formation.\textsuperscript{74} An instrument measuring the pressure, viewable from the surface, will show a tremendous increase in pressure followed by an instant collapse, indicating that the stone formation has been successfully fracked.\textsuperscript{75}

After the fracture has been created, the fluid that is still being injected keeps the hole open while the propants bind to the formation and create a structure that keeps the fracture open.\textsuperscript{76} Further fracturing may subsequently occur after the initial creation of the well to prolong the life of the well as the propants grow weaker over time.\textsuperscript{77} Naturally, hydrocarbons flow through open spaces better than through nonpermeable rocks, and thus, fracking provides an invaluable method of increasing productivity in the shale plays.\textsuperscript{78} It was not until “light sand fracturing” was conceptually

\textsuperscript{67} Thibault et al., supra note 65, § 24.02(1)(b).
\textsuperscript{68} See RAYMOND & LEFFLER, supra note 48, at 216.
\textsuperscript{69} See id.
\textsuperscript{70} Id. at 218.
\textsuperscript{71} See id.
\textsuperscript{72} See id.
\textsuperscript{73} See id.
\textsuperscript{74} See id.
\textsuperscript{75} See id. at 218-19.
\textsuperscript{76} See id. at 219.
\textsuperscript{77} See id.
\textsuperscript{78} See supra notes 69-75 and accompanying text.
introduced to the Barnett Shale play in 1996 that oilfield production companies began noticing a potentially new economic viability of what was previously viewed to be uneconomic shale plays. While curiosity was piqued in shale play production, it was not until 2002 and 2003 that oil and gas producers realized that the amounts of gas actually available in shale plays had been vastly underestimated.

C. Lease Maintenance in the Black Gold Rush

The intersection of technology and history established a new economic regime for oil and gas production from shale plays. A rush to lease minerals in the shale plays has resulted in vast quantities of mineral acreage being leased in a very short period of time. In an effort to secure working interests, oil and gas producers have competitively and consistently increased prices offered to lessors, resulting in record per-acre lease sign-on bonuses and royalty payments. This has naturally resulted in record rig counts in the shale plays. Many of the new top leases in the shale plays were formed under industry standard lease forms that were tailored for vertical, rather than horizontal, drilling. Oil companies and mineral owners continue to execute thousands of mineral leases, with many more planned. Mineral leases, however, have finite lives that can end long before the end of economically producible hydrocarbons lying beneath that land. Mineral leases are only effective as long as certain conditions are met, which become all the more difficult to meet depending on the particular terms of the modern mineral leases and the existence or nonexistence of resources by particular parties desiring to maintain the leases in a highly competitive black gold rush. The failure of mineral leases to remain effective as to all or part of the acreage purportedly covered by such leases constitutes title failure.

79. See Airhart, Father of the Barnett, supra note 23; see also Humphrey v. Placid Oil Co., 142 F. Supp. 246, 250 n.1 (E.D. Tex. 1956), aff’d, 244 F.2d 184 (5th Cir. 1957) (“Sandfracing is an operation designed to loosen or break up tight formations which contain oil, thus causing said formations to have more permeability and resulting capability of producing oil.”).
80. See Airhart, Father of the Barnett, supra note 23.
81. See supra Part II.A-B.
82. See supra Part II.A.
83. See supra note 42 and accompanying text.
84. See supra Part II.A; see also Airhart, Boom, supra note 17 (discussing, inter alia, that current extraction from the Barnett Shale accounts for 2% of all gas consumed in the United States, making it the second largest gas-producing field in the country within only a few years of the beginning of production).
85. See, e.g., infra Part III.C.2.
86. See supra Part II.A.
87. See, e.g., infra Part II.C.1.
88. See infra Part II.C.1-4.
89. See discussion infra Part II.C.1.
1. Conditions Required to Sustain a Lease

A host of conditions are required in order to sustain a lease, and conditions that result in cancellation of a lease can vary from state to state.\textsuperscript{90} Conditions resulting in cancellation may either be expressed within the lease or implied into the lease by state law.\textsuperscript{91}

Before a discussion of the issues concerning sustaining a lease, a short description of mineral leases helps in understanding their creation, operation, and termination. A typical mineral lease begins with a “primary term.”\textsuperscript{92} The Texas Supreme Court described the primary term as the term:

> during which a lease may be kept alive by a lessee by virtue of drilling operations or the payment of rentals, even though there is no production. . . . [The] primary term is also a period of time at the end of which the estate granted will terminate but which estate may be extended by some other provision, usually one for production.\textsuperscript{93}

Thus, unless otherwise expressly provided in the lease, while the primary term is in effect, continuous drilling operations are not necessary to sustain the lease.\textsuperscript{94} The successful transition from primary to secondary term, however, usually requires continuous drilling operations to prevent termination of the lease for lack of production.\textsuperscript{95} Further, once the primary term has ceased to exist, continuous drilling operations, production operations, or both, are necessary to maintain the lease indefinitely into the future, with some contractually provided-for exceptions in the lease.\textsuperscript{96}

One of the most common conditions required to sustain a lease is the requirement of “production in paying quantities.”\textsuperscript{97} Even if a lease does not contain the term “production in paying quantities,” the Texas Supreme Court noted that “it is well settled that the terms ‘produced’ [or production] and ‘produced [or production] in paying quantities’ mean substantially the same thing.”\textsuperscript{98} Further, the Texas Supreme Court defined production in paying quantities as when a well “pays a profit, even small, over operating expenses . . . though it may never repay its costs, and the enterprise as a whole may prove unprofitable.”\textsuperscript{99} In Texas, production in paying quantities

\begin{itemize}
  \item \textsuperscript{90} See, e.g., Amoco Prod. Co. v. Alexander, 622 S.W.2d 563, 567 n.1 (Tex. 1981) (discussing the various classifications for implied covenants).
  \item \textsuperscript{91} Martin & Kramer, Manual, supra note 37, at 111.
  \item \textsuperscript{92} See Fox v. Thoreson, 398 S.W.2d 88, 91 (Tex. 1966).
  \item \textsuperscript{93} Id.
  \item \textsuperscript{94} See id.
  \item \textsuperscript{95} See id.
  \item \textsuperscript{96} See id.
  \item \textsuperscript{97} See generally Clifton v. Koontz, 325 S.W.2d 684, 690-91 (Tex. 1959) (discussing the operation of the term “production” in a mineral lease under Texas law).
  \item \textsuperscript{98} Id. at 690 (citing Garcia v. King, 164 S.W.2d 509, 511 (Tex. 1942)).
  \item \textsuperscript{99} Id. at 691 (quoting Garcia, 164 S.W.2d at 511).
\end{itemize}
requires not only producing oil and gas at a profitable level, but also
marketing the oil and gas at a profit.\textsuperscript{109} While alternative considerations
may be necessary under the facts of individual cases, permanent cessation
of production in paying quantities results in the automatic termination of a
lease under Texas law.\textsuperscript{101} Thus, production in paying quantities is
necessary to the perpetuation of a lease.\textsuperscript{102}

In addition to achieving and maintaining production in paying
quantities, drilling operators must develop their lease prudently by ensuring
the drilling of a sufficient number of wells.\textsuperscript{103} In \textit{Clifton v. Koontz}, the
Supreme Court of Texas noted that, even in the absence of express language
requiring prudent development:

\begin{quote}
[T]he lessee's obligation as to development is measured by the rule of
reasonable diligence or what an ordinarily prudent and diligent operator
would do, and he is not required to continue in the performance of these
duties or to engage in the performance of such implied duties unless there
is a reasonable expectation of profit, not only to the lessor, but also to the
lessee.\textsuperscript{104}
\end{quote}

While Texas courts are typically reluctant to provide for cancellation of
mineral leases, it is possible for a lease to be cancelled under this implied
covenant.\textsuperscript{105}

The necessity of maintaining a lease by performing various operations
expressly or impliedly imposed on the lessee in an extremely competitive
operator drilling environment results in one or more parties interested in the
same acreage.\textsuperscript{106} This has given rise to a vastly increased amount of leasing
of those same resources more than once by use of top leasing.\textsuperscript{107} In
addition, the black gold rush environment has given rise to a huge increase
in the number of wells drilled in Texas.\textsuperscript{108} Because lease boundaries do not
coincide with geologic boundaries, in order to efficiently develop
hydrocarbons and to prevent waste, it is critical to combine nearby leases

\begin{flushright}
\textsuperscript{100} Id.
\textsuperscript{101} See id. at 690.
\textsuperscript{102} See MARTIN & KRAMER, MANUAL, supra note 37, at 765.
\textsuperscript{103} See Clifton, 325 S.W.2d at 695.
\textsuperscript{104} See id.
\textsuperscript{105} Compare id. at 689 (holding that “factual situations . . . support [the trial court’s] finding and
judgment that there was not a cessation of production in paying quantities,” thereby not requiring an
operator to drill additional wells or lose the lease), \textit{with} Wes-Tex Land Co. \textit{v. Simmons}, 566 S.W.2d
719, 722 (Tex. App.—Eastland 1978, writ ref’d n.r.e.) (noting that because “protect[ion] against
drainage was a covenant and not a condition subsequent,” the proper remedy is not cancellation; rather,
the proper remedy is the assignee losing his royalty interest).
\textsuperscript{106} See MARTIN & KRAMER, MANUAL, supra note 37, at 1003-04.
\textsuperscript{107} See id.
\textsuperscript{108} See, e.g., Martineau, supra note 32, at 5-4.
\end{flushright}
such that one well can be drilled to maintain all or parts of such leases without the necessity of drilling a well on each and every lease.\textsuperscript{109}

2. \textit{The Pooling Clause: Sustaining Leases Through Pooling}

One of the major methods for sustaining a lease is “pooling” it with other leases.\textsuperscript{110} As a general rule, production perpetuates leases into secondary terms until the production ceases.\textsuperscript{111} Thus, quintessential oil and gas leases survive by production occurring on the leasehold.\textsuperscript{112} But some leases, perhaps due to their small size or due to regulatory spacing requirements, cannot uphold actual production.\textsuperscript{113} To account for this, regulatory authorities authorize pooling of multiple leases.\textsuperscript{114} In effect, the smaller tracts can be put together so that production on one holds all of the pooled leases.\textsuperscript{115} A lease, therefore, may be kept alive for as long as production occurs on any acreage included within the pooled unit.\textsuperscript{116}

3. \textit{The Pugh Clause: Total or Partial Expiration of Mineral Leases by Operation of the Pugh Clause}

One of the most common means by which a lease “shrinks” is through operation of the “Pugh clause.”\textsuperscript{117} This clause is a typical clause found in most modern oil and gas leases, “which provides for a severance of the lease where less than all of the leasehold is included in a single unit.”\textsuperscript{118} In other words, the Pugh clause provides for the partial expiration of a lease that is neither operated individually nor pooled into a unit that keeps the lease alive.\textsuperscript{119} This Pugh clause constitutes a way to contract around the general rule that an oil and gas lease is “indivisible by its nature” and that “[p]roduction from any part of the lease keeps the lease in effect . . . for as long as oil, gas and other minerals are being produced as to all lands described in the instrument.”\textsuperscript{120}

\begin{flushleft}
\textsuperscript{109} See Martin & Kramer, Manual, supra note 37, at 725-28.
\textsuperscript{110} See id. at 726.
\textsuperscript{111} See id. at 759.
\textsuperscript{112} See id.
\textsuperscript{113} See id. at 726.
\textsuperscript{114} See id.
\textsuperscript{115} See id.
\textsuperscript{116} See id. at 726-28.
\textsuperscript{117} See discussion infra Part II.C.3.
\textsuperscript{118} Patrick H. Martin & Bruce M. Kramer, Williams & Meyers Oil and Gas Law § 669.14, at 6-116 (abr. 3d ed. 2007) [hereinafter Martin & Kramer, Oil and Gas Law].
\textsuperscript{119} See id.
\textsuperscript{120} Friedrich v. Amoco Prod. Co., 698 S.W.2d 748, 752 (Tex. App.—Corpus Christi 1985, writ ref’d n.r.e.) (quoting Shawn v. Getty Oil Co., 645 SW.2d 555, 560 (Tex. App.—San Antonio 1982, writ ref’d n.r.e.)).
\end{flushleft}
If the Pugh clause is implicated, termination of the nonproducing, non-unitized portion is not automatic; rather, specific provisions of the contract must be scrutinized to ascertain how the parties have determined the lease can survive. Pugh clauses exist for the protection of the lessor by ensuring that the non-unitized, nonproducing portions of the lease terminate as to that portion. Therefore, any discussion of competitive top leasing would not be complete without the consideration of Pugh clauses as a determinative termination of at least part of a lease, thereby bringing that portion into existence under the top lease.

A traditional Pugh clause reads as follows:

Lessee is hereby given the power to pool the leased premises . . . notwithstanding anything to the contrary herein contained, the commencement of operations for drilling, the drilling or reworking of a well, or the production of oil, gas, or other mineral from any well situated on lands included within a unit embracing a portion of the leased premises and other lands not covered hereby shall serve only to maintain this lease in force as to that portion of the leased premises embraced in such unit; but during the primary term delay rentals payable hereunder shall be proportionally reduced and be payable on that portion of the leased premises not included in such unit.

But just as both vertical and horizontal drilling exist in the context of drilling operations, vertical and horizontal Pugh clauses exist with respect to contractual and property relationships. In other words, a lease may shrink both as to particular depths as well as to particular geographic parameters; however, the use of the terms “horizontal” and “vertical” with respect to Pugh clauses may seem confusing.

121. See 38 Am. Jur. 2d Gas and Oil § 178 (2010) ("[T]he lease may be maintained as to the remainder of the land only by doing so in a manner specified in the lease; and if it is to be done by delay rental payments, the rentals will be payable on the number of acres not included in the unit." (emphasis added)).
122. See Rogers v. Westhoma Oil Co., 291 F.2d 726, 731 (10th Cir. 1961).
123. See id. at 731-32.
125. See generally Sandefer Oil & Gas, Inc. v. Duhon, 961 F.2d 1207, 1209-10 (5th Cir. 1992) (applying Louisiana law). Much of the law surrounding Pugh clauses originated in Louisiana because that is where Lawrence G. Pugh drafted and utilized the original Pugh clause. Martin & Kramer, Manual, supra note 37, at 791. Thus, while applying Louisiana law, the Fifth Circuit’s consideration of vertical and horizontal Pugh clauses is a seminal and preeminent discussion of the distinction between vertical and horizontal Pugh clauses. See Duhon, 961 F.2d at 1211. For a less on-point discussion of horizontality versus verticality under Texas law with regards to Pugh clauses, see Amoco Prod. Co., 698 S.W.2d at 752.
126. See Duhon, 961 F.2d at 1209-10.
Courts provide legal effect to horizontal Pugh clauses by allowing severance along horizontal planes. Thus, lease severance under horizontal Pugh clauses occurs along horizons—the horizontal layers of formations at different subsurface depths.

A hypothetical proves illustrative to understanding how the horizontal Pugh clause operates. John Doe executes a lease to Snell Oil Corporation (Snell) containing a horizontal Pugh clause that states that, after the primary term, the lease automatically terminates “as to all horizons situated 100 feet below the deepest depth drilled.” Snell commences drilling and produces in paying quantities from a layer of minerals extending from 12,200 to 12,700 feet below the surface. After the primary term, Snell’s lease would expire as to everything below 12,800 feet below the surface. Because the Pugh clause is horizontal, however, Snell maintains its lease as to all acreage between the surface and 12,800 feet. Doe is now free to lease the entirety of his land below 12,800 feet to any other operator, though that operator could not produce above 12,800 feet.

In contrast to horizontal Pugh clauses, a vertical Pugh clause severs leaseholds along vertical planes—boundaries measured on the surface. Returning to the hypothetical, if the lease language provided that, after the primary term, automatic termination occurs “as to that portion of the leased premises embraced in such unit,” assuming that the unit covers all depths, then Snell would maintain all of the horizons (there would be no cut-off at 12,800 feet). But, the lease would expire as to all of those areas measured by surface acreage boundaries as set forth in the lease, which surface acre boundaries are not included in the producing unit of the lease. Doe could then seek new leases with other companies to produce from other acres of his land than the area surrounding Snell’s lease.

While horizontal Pugh clauses are relatively new, vertical Pugh clauses date back to 1947. Oil and gas leases typically perpetuate for long periods of time; it is not unusual to have a lease last for many decades. So while horizontal drilling is a recent technological advancement, the original leases that many of these horizontal drilling operations are occurring on are operating under an older, vertical Pugh

127. *See, e.g.*, Fisher v. Walker, 683 S.W.2d 885, 888 (Tex. App.—El Paso 1985, writ ref’d n.r.e.). Though not using the terminology, the *Fisher* court first endorsed the legal effect of horizontal Pugh clauses. *See id.*

128. *See supra* note 127 and accompanying text.

129. *See Duhon*, 961 F.2d at 1208. The hypothetical horizontal Pugh clause’s language is adapted from a clause analyzed by the Fifth Circuit in *Duhon*. *See id.* at 1208-10.

130. *Martin & Kramer, Manual, supra* note 37, at 446.

131. The language of this lease is adapted from a traditional (vertical) Pugh clause. *Hemingway, supra* note 124, at 397 n.41.

132. *See Martin & Kramer, Manual, supra* note 37, at 791 (dating Pugh clauses to 1947); *Duhon*, 961 F.2d at 1209 ("Horizontal Pugh clauses . . . are relatively recent innovations in oil and gas leases.").

133. *See Martin & Kramer, Oil and Gas Law, supra* note 118, § 601.4.
clause regime. Because it takes fewer horizontal wells to produce much larger amounts of acreage than can be produced with the same number of vertical wells, this can leave more portions of bottom leases to expire under the old vertical Pugh clauses. Thus, old vertical Pugh clauses can result in partial bottom lease expiration, giving way for a top lease to come into existence.

4. When a Bottom Lease Expires: What Is Top Leasing?

Top leases are oil and gas leases that take effect only upon expiration or termination of a preexisting lease. Applying what has been previously discussed, it is therefore possible for top leases to come into effect under a variety of circumstances either during the primary or secondary term. For example, during the primary term of an “unless” lease, failure to either pay royalty or commence drilling operations automatically terminates the lease. Additionally, any violation which results in cancellation or termination of the “bottom,” or original, lease would also bring a top lease into existence.

Not surprisingly, areas of high competition for production, such as the Texas shale plays, also have high rates of top leasing. By altering the top lease in minor ways, such as by removing a lessor’s covenant to quiet title, top leases have flourished even in the face of potential legal issues.
III. TITLE FAILURE AND BAD FAITH POOLING IN THE NEW BLACK GOLD ENVIRONMENT: POSSIBLE EFFECTS ON THE BOTTOM LEASE

A. How Does Pooling Work in Texas?

Given the widespread leasing of mineral interests in the shale plays, many lessors understand that individual tracts of land are typically pooled with other tracts.\textsuperscript{143} Pooling allows for many small tracts to be grouped and treated as a single production unit for oil and gas production.\textsuperscript{144} Each lessor contributing to the pool receives payment according to their proportion of the amount of land contributed to the pool, regardless of where the production point in the pool is actually located.\textsuperscript{145}

Pooling is essentially the grouping of two or more tracts so that “exploration and production of oil and gas” may proceed.\textsuperscript{146} After a lease has been pooled, the Texas Railroad Commission (RRC) treats the pool as a single tract for production purposes.\textsuperscript{147} Lessors can therefore seek production even if the tract would be insufficient to meet the regulatory requirements without pooling, for example, if the land were too small to meet the RRC’s minimum acreage or spacing requirements.\textsuperscript{148} Lessees, on the other hand, sustain production on all pooled leases by drilling a single well.\textsuperscript{149}

Pooling also provides a host of other benefits.\textsuperscript{150} For example, per-well profits may be heightened by increasing the regulatory “production allowables”—the “amount of minerals that the RRC allows to be produced from that well.”\textsuperscript{151} Operators benefit additionally by avoiding the time and

\begin{itemize}
\item \textsuperscript{143} Lisa K. Vaughn, \textit{One for All and All for All?: Pooling and Other Groupings of Mineral Interests in Texas}, SHANNON, GRACEY, RATLIFF & MILLER, LLP, at 1 (July 2010) (on file with author).
\item \textsuperscript{144} See id.
\item \textsuperscript{145} See id.
\item \textsuperscript{146} Id. While the term “pooling” will be employed generally, “more properly ‘pooling’ means the bringing together of small tracts sufficient for the granting of a well permit under applicable spacing rules.” MARTIN & KRAMER, OIL AND GAS LAW, supra note 118, § 901. Separately, “unitization” refers to “the joint operation of all or some part of a producing reservoir.” Id. The two terms, however, have been so confused in practice that they have become an “inextricable tangle.” Vaughn, supra note 143, at 2. While the two terms maintain technically distinct meanings, they are often interchangeably used to “describe cross-conveyances of mineral or royalty interests by separate owners in order to share the income from production of wells drilled anywhere on the consolidated tract.” Id. (quoting London v. Merriman, 756 S.W.2d 736, 739 n.1 (Tex. App.—Corpus Christi 1988, writ denied)). While the effect of the confusion is unknown, pooling particularly refers to gathering acreage to meet RRC spacing requirements, thereby increasing production allowables and minimizing the number of wells required to be drilled for production to sustain the pooled acreage. Id. Unitization particularly describes groupings of tracts and pools with a common supply source, unitized so that the underlying source may be more effectively exploited. Id.
\item \textsuperscript{147} Vaughn, supra note 143, at 1.
\item \textsuperscript{148} Id.
\item \textsuperscript{149} Id.
\item \textsuperscript{150} Id.
\item \textsuperscript{151} Id.
\end{itemize}
expense of applying for regulatory exceptions to RRC rules. Operators may also avoid lawsuits alleging trespass or various breaches of duties by pooling.

In Texas, pooling is considered to be “a transfer of interest in property from” the lessor to the lessee. Therefore, pooling cannot be accomplished without some sort of express authorization from the lessor. Lessor most often grant this authorization in the mineral lease by including pooling clauses.

The terms of pooling clauses vary, but they are often “anticipatory or general in nature” because of an operator’s inability to foresee future circumstances and regulations at the time of drafting. Texas courts therefore look to the intent of the parties to authorize pooling when construing pooling clauses even if the clause itself is defective. A lessee’s abilities and duties regarding pooling are governed by the agreement authorizing pooling as well as the lessee’s implied duties. In Texas, lessees must strictly comply with express terms in the pooling agreement for the pool to be valid.

B. Bad Faith Pooling: Causes and Consequences

Texas courts agree that the most important implied duty regarding pooling is the duty of lessees to act in good faith. Courts impose the duty of good faith on lessees because lessor and lessee interests “are frequently in conflict.” The duty of good faith does not establish a fiduciary relationship or a relationship where the lessor’s interests are superior. Instead, the lessee must take both the interests of the lessor and lessee into account when making good faith decisions.

152  Id.  For example, operators typically must apply for an exception to a rule governing spacing requirements of wells from the edge of the leased property. Id.
153  Id.
154  Id. at 3.
155  Id.
156  Id. at 3-4; see also Se. Pipe Line Co. v. Tichacek, 997 S.W.2d 166, 170 (Tex. 1999) (reciting a general overview of pooling concepts); Jones v. Killingsworth, 403 S.W.2d 325, 327-28 (Tex. 1965) (discussing how to construe pooling clauses within mineral leases).
157  Vaughn, supra note 143, at 4; see also Killingsworth, 403 S.W.2d at 331 (Hamilton, J., dissenting) (arguing for a liberal interpretation of pooling clauses due to unforeseeable circumstances).
158  See, e.g., Tiller v. Fields, 301 S.W.2d 185, 189-90 (Tex. App.—Texarkana 1957, no writ).
159  Vaughn, supra note 143, at 6. The lessee’s implied duties have previously been discussed. See supra Part II.C.1.
160  See, e.g., Browning Oil Co. v. Luecke, 38 S.W.3d 625, 640 (Tex. App.—Austin 2000, pet. denied).
161  See, e.g., Tichacek, 997 S.W.2d at 171.
162  Vela v. Pennzoil Producing Co., 723 S.W.2d 199, 206 (Tex. App.—San Antonio 1986, writ ref’d n.r.e.) (“[Lessee] must exercise its power in good faith, taking into account the interest of both the lessor and lessee.”).
163  See id.
164  See id.
Good faith is typically a fact question that depends on the circumstances of the case. Even a lessee’s genuine belief that it acted in good faith is not dispositive on resolution of the issue. The fact finder employs the reasonably prudent operator test to determine if the lessee acted in good faith. The reasonably prudent operator test is an objective test that asks “whether [the lessee] exercised the right and option of pooling as a reasonably prudent operator would do under the same or similar circumstances.”

An example of where a court found bad faith pooling exists in Amoco Production Co. v. Underwood. Lessors alleged that lessees sought to “advance their own pecuniary interest without regard to the rights of [lessors] and the other mineral owners in and under the affected lands” by denying the lessors the ability to lease to other lessees. The court’s bad faith pooling finding resulted in the lessee completely losing the leases; thus, a showing of bad faith can be very costly to a lessee.

Courts may also impose on a lessee a “duty to pool” as part of the implied covenant to protect against drainage. This is a developing concept, departing from the traditional requirement of the duty of protection that lessees merely drill offset wells to prevent drainage. The Texas Supreme Court tied the duty to pool to the reasonably prudent operator standard when pooling in order to avoid drainage.

C. Examples of Problematic Pooling and Pugh Clauses

Myriad examples of the potential for title failure can be found in commonly used mineral lease provisions. The following section explores four situations where title failure or bad faith pooling potentially occur in the Texas shale plays.

165. See id. at 205.
166. See Elliott v. Davis, 553 S.W.2d 223, 226 (Tex. Civ. App.—Amarillo 1977, writ ref’d n.r.e.).
168. Id.
170. Id. at 511.
171. Id. at 512-13.
175. See, e.g., infra Part III.C.1.
176. See, e.g., infra Part III.C.1.
1. **Unit-Sizing Issues: Larger Oil Unit Size Permitted, But Not Required, by RRC**

A typical pooling clause that does not specifically take horizontal drilling into consideration is as follows:

Lessee is hereby granted the right, at its option, to pool or unitize any land covered by this lease with any other land covered by this lease, and/or with any other land, lease or leases, as to any or all minerals or horizons, so as to establish units containing not more than 80 surface acres, plus 10% acreage tolerance; provided, however, units may be established as to any one or more horizons, or existing units may be enlarged as to any one or more horizons, so as to contain not more than 640 surface acres plus 10% acreage tolerance, if limited to one or more of the following: (1) gas, other than casinghead gas, (2) liquid hydrocarbons (condensate) which are not liquids in the subsurface reservoir, (3) minerals produced from wells classified as gas wells by the conservation agency having jurisdiction. **If larger units than any of those herein permitted, either at the time established, or after enlargement, are required under any governmental rule or order, for the drilling or operation of a well at a regular location, or for obtaining maximum allowable from any well to be drilled, drilling, or already drilled, any such unit may be established or enlarged to conform to the size required by such governmental order or rule.**  

The RRC is the regulatory agency in Texas that regulates the establishment, sizing, and enlargement of pooled units. In regulating the creation and maintenance of pooled units, the RRC’s primary responsibilities include: the prevention of the waste of hydrocarbon resources; the protection of water resources, both surface and subsurface; and ensuring that all mineral owners have the opportunity to develop their fair share of minerals attributable to their interests.

The above lease clause allows an oil unit to be established to contain not more than eighty acres, plus 10% acreage tolerance (i.e., a maximum total of eighty-eight acres). However, field rules promulgated by the RRC for the field in which the leased acreage is located may actually allow

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178. See *TEX. NAT. RES. CODE ANN.* § 81.051 (West 2011).
180. See supra text accompanying note 177.
a larger oil unit. For example, the Eagleville Field Rules (located in the Eagle Ford Shale play), provide in pertinent part:

If after the drilling of the last well on any lease and the assignment of acreage to each well thereon in accordance with the regulations of the Commission there remains an additional unassigned acreage of less than EIGHTY (80) acres, then in such event the remaining unassigned acreage up to and including a total of FORTY (40) acres may be assigned as tolerance acreage to the last well drilled on such lease or may be distributed among any group of wells located thereon, so long as the proration units resulting from the inclusion of such additional acreage meet the limitations prescribed by the Commission.

The above Field Rules promulgated by the RRC allow a pooled unit for oil of up to 120 acres, but the Field Rules do not require a 120-acre unit for the drilling at a regular location or to obtain a maximum allowable. The lessee’s right to pool is subject to the express authorization granted in the lease, which states pooling provisions must be strictly adhered to. As a result, a strict reading of the lease language in conjunction with the particular field rule cited above could lead to a lessee exceeding the pooling authority as set forth in the lease, resulting in a potential title failure. The pooling of 120 acres under the field rules could be an invalid pooling, because such pooling would not have been done in accordance with the method and purposes specified in the lease. In the event that all or part of the subject lease is not being held by means other than the pooling and the applicable unit well, then a title failure may be the result. If a fact finder finds that a reasonably prudent operator would not have pooled more than eighty-eight acres under the terms of the lease in combination with the field rules, bad faith pooling potentially results.

181. See, e.g., infra note 182 and accompanying text. Field rules are rules crafted by the RRC to specifically modify RRC requirements within designated fields (i.e., particular shale plays). See MARTIN & KRAMER, MANUAL, supra note 37, at 351.


183. See supra text accompanying note 182.


185. See supra text accompanying notes 177, 182.

186. See Tichacek, 997 S.W.2d at 170; Killingsworth, 403 S.W.2d at 327.

187. See Killingsworth, 403 S.W.2d at 328.

188. See supra Part III.B.
2. Maximum Gas Unit Size Affected by Horizontal Wellbore

Referring again to the same lease clause set forth in Part III.C.1, with the exception of changing the maximum gas unit size in the lease from 640 acres (plus 10% tolerance) to 320 acres (plus 10% tolerance), the existence of a horizontal wellbore could definitely result in invalid pooling should the field rules provide for a larger sized gas unit than allowed by the applicable lease terms. Field rules could conceptually provide for a much larger unit than the base unit amount, depending on the distance of the horizontal wellbore between take points:

Rule 3: . . . No proration unit shall consist of more than THREE HUNDRED TWENTY (320) acres; provided that, tolerance acreage of ten (10) percent shall be allowed for each standard proration unit so that an amount not to exceed a maximum of THREE HUNDRED FIFTY TWO (352) acres may be assigned. . . .

Notwithstanding the above, the acreage assigned to a gas well which has been drilled as a horizontal drainhole may contain more than THREE HUNDRED TWENTY (320) acres providing that the following formula is utilized to determine the proper assignment of acreage:

\[ A = (L \times 0.16249) + 320 \text{ acres} \]

Where: \( A \) = calculated area assignable, if available, to a horizontal drainhole for proration purposes rounded up to the next whole number evenly divisible by 40 acres;

\( L \) = the horizontal drainhole distance measured in feet between the first take point and the last take point.

**The acreage assigned to a horizontal drainhole well shall not exceed 640 acres.**

The two farthest points in any horizontal drainhole well proration unit shall be determined by the formula:

\[ \text{Maximum Diagonal} = 475.933 \sqrt{A} \]

Where \( A \) = the acres actually assigned to the proration unit.\(^{190}\)

Assuming that the lease provided for a maximum unit size of 352 acres (320 acres plus 10% tolerance), a pooled gas unit as set forth in the first paragraph of Rule 3 of the field rules above would not exceed the maximum size as set forth in the lease; therefore, the pooling would be valid.\(^{191}\) Should the lessee, however, utilize the rest of the provisions of Rule 3 as set forth above for a horizontal wellbore and attempt to create a pooled unit of 640 acres, the lessee may once again be caught up in invalid pooling (and

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189. See discussion infra notes 191-94.


191. See supra text accompanying note 190.
resulting title failure), because according to the field rules, the maximum unit size “*may* contain more than THREE HUNDRED TWENTY (320) acres [plus 10% tolerance].”\textsuperscript{192} The larger gas unit size for the horizontal wellbore is not *required* under the field rules.\textsuperscript{193} If a fact finder determines that a reasonably prudent operator under the circumstances would not have pooled more than 352 acres under the terms of the lease in combination with the field rules, bad faith pooling potentially results.\textsuperscript{194}

3. Unit-Sizing: Restrictions on Pooling with Non-Lease Acreage

In *Browning Oil Company, Inc. v. Luecke*, the mineral leases executed in 1979 provided the following pooling clause:

4. Lessee, at its option, is hereby given the right and power to pool or combine the acreage covered by this lease or any portion thereof as to oil and gas, or either of them, with any other land covered by this lease, and/or with any other land, lease or leases in the immediate vicinity thereof to the extent hereinafter stipulated.\textsuperscript{195}

The lease also included an anti-dilution provision, which provided that a pooled unit involving the leased acreage

Must include at least sixty percent of the acreage from the tract on which the well was drilled:

“14. Notwithstanding paragraph number four (4) hereof, if any pooled unit is created with respect to any well drilled on the land covered hereby, at least sixty percent (60%) of such pooled unit shall consist of the land covered hereby.”\textsuperscript{196}

The lessee argued that the field rules precluded the formation of pooled units in accordance with the anti-dilution provisions above.\textsuperscript{197} The lessee drilled two horizontal wells, which it contended was in compliance with the field rules.\textsuperscript{198} The lessors argued that, regardless of the field rules, the purported units for the horizontal wells violated the pooling provisions in the leases.\textsuperscript{199} The court held that the lessees breached the pooling

\textsuperscript{192} See Hawkville (Eagle Ford Shale) Field, *supra* note 190.
\textsuperscript{193} See id.
\textsuperscript{194} See *supra* Part III.B.
\textsuperscript{195} Browning Oil Co. v. Luecke, 38 S.W.3d 625, 636-37 (Tex. App.—Austin 2000, no pet.).
\textsuperscript{196} Id. at 637.
\textsuperscript{197} Id. at 641.
\textsuperscript{198} Id. at 638, 641.
\textsuperscript{199} Id. at 639.
provisions and rendered the pooled units invalid with respect to the lessors’ land.\textsuperscript{200}

\textit{Luecke} is the only case that has directly discussed the conflict between the language of a lease and the field rules in the context of horizontal drilling—finding leases trump field rules.\textsuperscript{201} If an operator identifies a potential problem with the lease, they must protect themselves by amending the lease.\textsuperscript{202} Because horizontal drilling logically requires larger units, the question becomes: what if the lease was executed prior to the development of horizontal drilling?\textsuperscript{203} Although the possibility of horizontal wells may not have been contemplated at the time the lease was drafted, without an express limitation in the lease of the anti-dilution provisions to vertical wells, the provision applies to unforeseen horizontal wells.\textsuperscript{204} As a consequence, a fact finder could determine that the lessee pooled in bad faith if the anti-dilution provisions were not strictly followed.\textsuperscript{205}

4. \textit{The Impact of Oil Well vs. Gas Well Classification on Unit Validity}

Lessee is hereby granted the right, at its option, to pool or unitize any land covered by this lease with any other land covered by this lease, and/or with any other land, lease, or leases, as to any or all minerals or horizons, so as to establish units containing not more than 80 surface acres, plus 10\% acreage tolerance; provided, however, units may be established as to any one or more horizons, or existing units may be enlarged as to any one or more horizons, so as to contain not more than 640 surface acres plus 10\% acreage tolerance, if limited to one or more of the following: (1) gas, other than casinghead gas, (2) liquid hydrocarbons (condensate) which are not liquids in the subsurface reservoir, (3) minerals produced from wells classified as gas wells by the conservation agency having jurisdiction.\textsuperscript{206}

The Eagle Ford Shale was originally announced as a gas play in 2008.\textsuperscript{207} Since then, it has become clear that there are three distinct windows within the Eagle Ford: a dry gas window, a wet gas window, and an oil window.\textsuperscript{208} The liquids portion of the Eagle Ford is massive.\textsuperscript{209}

\begin{itemize}
  \item \textsuperscript{200} \textit{Id.} at 643.
  \item \textsuperscript{201} \textit{See id.} at 638. \textit{See generally} Stephen Taylor Dennis, Comment, Browning Oil Co. v. Luecke: \textit{Has Texas Illuminated a Dark Distinction Between Vertical and Horizontal Drilling?}, 34 ST. MARY’S L.J. 215 (2002) (arguing that \textit{Luecke} provides a guide for Texas as well as other states).
  \item \textsuperscript{202} \textit{See Luecke}, 38 S.W.3d at 638.
  \item \textsuperscript{203} \textit{See id.}
  \item \textsuperscript{204} \textit{See id.}
  \item \textsuperscript{205} \textit{See supra} notes 201-04 and accompanying text.
  \item \textsuperscript{206} \textit{See Oil, Gas and Mineral Lease, supra note} 177.
  \item \textsuperscript{208} \textit{See id.}
\end{itemize}
Given that there are three different possible types of production—dry gas, wet gas, or oil—and different maximum sizes of pooled units allowed by the lease depending on whether it is dry gas, wet gas, or oil, what happens when a well permitted by the RRC as a gas well later turns out to be an oil well, or vice versa? Apparently, non-drillsite tracts may be lost if the primary terms of a lease have expired:

There is no second chance if a lessee forms a gas unit but completes an oil well instead. The Texas Supreme Court held that the non-pooled oil well is not a “dry hole” under the dry hole/reworking clause of the lease in question and, therefore, the lessee’s commencement of drilling operations on a non-drillsite tract of the gas unit within the authorized 60 day period did not perpetuate such non-drillsite lands.210

The completion of a producing oil well on a unit authorized for gas only, but not located on a particular lessor’s premises, will not prolong the life of the oil and gas lease.211 A producer in the Eagle Ford faces a difficult decision: how should the producer classify a well without knowing if it is dry gas, wet gas, or oil?212 Given that the life of the lease will not prolong if a lessee permits incorrectly, a reasonably prudent operator should attempt to conduct operations early enough in the primary term that, regardless of how long it takes to ascertain a well’s proper classification, lessees can reclassify without their lease terminating.213 Given the high competition in the plays, insufficient availability of horizontal rigs, and uncertainty of classification, practically speaking, many leases are likely to terminate due to improper classification.214

IV. ARE TOP LEASES VALID WHEN ALL OR PART OF THE BOTTOM LEASE HAS EXPIRED?

A. Reconsidering Top Leases

As noted earlier, top leases come into existence only upon expiration of the original lease.215 If a Pugh clause operates to partially sever a lease,
the top lease comes into effect as to the part of the bottom lease that expired.\textsuperscript{216} The top lease would remain a top lease as to the non-expired portion of the bottom lease until the remaining portion of the bottom lease expires.\textsuperscript{217}

Cancellation of a lease may also occur if any of the implied conditions required to sustain a lease are not met.\textsuperscript{218} Further, if express provisions of the lease are not satisfied, the lease will expire on its own terms.\textsuperscript{219} Given a lessee’s reluctance to part with leases, lessors often bring suits seeking cancellation in the event of a breach.\textsuperscript{220}

There are, however, unsettled legal issues regarding the validity of top leases upon the expiration, termination, or cancellation of the bottom lease.\textsuperscript{221} The highly competitive nature of leasing in the shale plays, combined with fact situations and lease clauses yet untried in Texas courts, has created an atmosphere where the potential litigation could be worth billions.\textsuperscript{222}

\textbf{B. Does Top Leasing Violate Texas’s Rule Against Perpetuities When the Bottom Lease Expires?}

The Texas Constitution expressly proscribes perpetuities.\textsuperscript{223} The Texas Rule Against Perpetuities (the Rule) requires that an interest vest “within twenty-one years after the death of some life or lives in being at the time of the conveyance” for the interest to be valid.\textsuperscript{224} When vesting does not depend upon a life in being at the time of conveyance, an interest must vest within twenty-one years of execution of the instrument.\textsuperscript{225} Once challenged, Texas courts void a conveyance if under “any possible contingency the grant or devise could violate the Rule” from the date the instrument was executed.\textsuperscript{226}

\textsuperscript{216} See id.
\textsuperscript{217} See id.
\textsuperscript{218} See supra Part II.C.1.
\textsuperscript{219} See MARTIN & KRAMER, MANUAL, supra note 37, at 734 (defining the “power of termination” as “[t]he power or right of a grantor or lessor to re-enter the estate granted or leased upon the occurrence of a stated event or breach of a condition and terminate the granted or leased estate”).
\textsuperscript{220} See id. at 111. A cancellation decree is “[a]n equitable decree of a court nullifying a lease” that can be entered either against a lease which was originally void or one which voids by its terms. See id. Cancellation may also occur on the grounds of “fraud, incapacity, illegality, insufficient writing to satisfy the statute of frauds, failure to pay delay rentals under an unless lease and expiration of the primary term without production.” Id.
\textsuperscript{221} See infra Part IV.B-C.
\textsuperscript{222} See infra Part IV.B-C.
\textsuperscript{223} TEX. CONST. art. I, § 26 (“Perpetuities . . . are contrary to the genius of a free government, and shall never be allowed . . . in this State.”).
\textsuperscript{224} Peveto v. Starkey, 645 S.W.2d 770, 772 (Tex. 1982) (citing Foshee v. Republic Nat’l Bank of Dallas, 617 S.W.2d 675, 677 (Tex. 1981)).
\textsuperscript{225} See Roach, supra note 142, at 401.
\textsuperscript{226} Peveto, 645 S.W.2d at 772 (citing Brooker v. Brooker, 106 S.W.2d 247, 254 (Tex. 1937)).
In *Peveto v. Starkey*, the Texas Supreme Court held that a nonparticipating royalty deed that contained one clause reading, “this grant shall become effective only upon the expiration of [Peveto’s] . . . Deed . . . .” violated the Rule. 227 While *Peveto* did not speak to top leases, one Texas appellate court analogized *Peveto’s* reasoning to top leases. 228 In *Hamman v. Bright & Co.*, the appellate court reasoned:

[Lessors] expressed an intent to preclude a present conveyance of any interest whatsoever to the lessee, by stating that any interest or estate owned by them under the bottom leases was to remain vested in them throughout the existence of the bottom leases, and free of all claims and demands by [the top lessee]. These top leases were made subject to, and specifically designated to commence after and subsequent to the expiration of, the bottom leases . . . .

Thus, although [lessors] owned possibilities of reverter at the time of the conveyances, under the express language of these top leases, they did not make present conveyances of their interests. Instead, the top leases conveyed interests that would vest in the grantee only upon termination of the bottom leases . . . . Consequently, the interests conveyed by the top leases had the potential for vesting outside the period provided by the Rule, and are void . . . . 229

The court’s rationale can be simplified. 230 The lessors executed a top lease that only vested in the top lessee upon the expiration of the bottom lease—a springing executory interest subject to the Rule. 231 Because it is possible that the original lease could last longer than the twenty-one years contemplated by the Rule, the Rule is violated. 232 Thus, the top lease in *Hamman* was null and void. 233

Other Texas cases remain silent as to the validity of top leases with respect to the Rule. 234 Thus, the current legal framework in Texas is based upon one Texas Supreme Court analogy and one appellate court case, which

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227. *Id.* (alteration in original) (“This additional clause causes the Jones-Starkey deed to violate the Rule.”).
228. *See id.* (voiding a top royalty deed pursuant to the Rule); *Hamman v. Bright & Co.*, 924 S.W.2d 168, 172-73 (Tex. App.—Amarillo 1996, writ granted), *vacated pursuant to settlement*, 938 S.W.2d 718 (Tex. 1997).
229. *Hamman*, 924 S.W.2d at 172-73.
230. *See infra* text accompanying notes 231-33.
231. *See Hamman*, 924 S.W.2d at 172-73.
232. *See id.*
233. *See id.; see also* TEX. CONST. art. I, § 26.
234. *See* RICHARD C. MAXWELL, PATRICK H. MARTIN & BRUCE M. KRAMER, OIL AND GAS: CASES AND MATERIALS 692 (8th ed. 2007) (“Although . . . top leasing is a common and longstanding practice, there are relatively few cases dealing with the Rule problem. Most top lease cases do not discuss the Rule.”).
is probably not good law. Consequently, the state of the law is ambiguous and ripe for litigation.

Whether or not all top leases are invalid as a violation of the Rule depends on the particular language utilized by the parties in the lease, and one scholar has suggested alternative drafting schemes to avoid the application of the Rule in Texas top leases. The particular language of the contract is essential to a determination of a Rule violation because the controlling questions of validity—“the nature of the estate conveyed and the time it vested”—are established by the parties’ draftsmanship. Thus, language that transfers the lessors’ possibility of reverter rather than an executory interest circumvents the Rule entirely.

In a seminal discussion of the Rule with respect to top leases, Nelson Roach offers two alternative methods to draft top leases to avoid application of the Rule. Roach initially suggests a provision stating, “This lease is to become effective immediately upon termination of the [present lease], but no longer than 21 years from this date, otherwise this lease shall then be null and void.” This avoids a cloud on title of the bottom lessor’s interest while avoiding the Rule by expressly stating that the interest cannot vest outside of the perpetuity period. Alternatively, Roach suggests that lessors grant the possibility of reverter rather than a future interest by using language such as “subject to the outstanding lease in [lessee].”

While drafting can “aid draftsman of future top leases,” executed top leases are left with the language as written. Thus, Roach proposes that Texas courts adopt the cy pres doctrine in construing top leases. While there are no statutory barriers to the adoption of the doctrine with respect to top leases, no Texas court has applied the doctrine outside of the trust context. But the doctrine’s application could potentially save a lease by allowing the court to reform it to ensure it does not violate the Rule.

The cy pres equitable doctrine is “a process that courts can use to reform a conveyance of an interest that violates” the Rule. It operates by determining the general and specific intent, and, when the specific intent violates the Rule, confirming the instrument according to the general

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235. See cases cited supra note 228.
236. See Peveto v. Starkey, 645 S.W.2d 770, 770 (Tex. 1982); Hamman, 924 S.W.2d at 172-73.
237. See Hamman, 924 S.W.2d at 172-73; Roach, supra note 142, at 399.
238. Roach, supra note 142, at 402.
239. See id. at 401-02.
240. Id. at 410.
241. Id.
242. Id.
243. Id.
244. Id.
245. Id. at 411-12.
246. See id.
247. See id.
248. Id.
“General intent” refers to what property and interests pass to which persons. “Specific intent” refers to the time that estates must vest. The Texas *cy pres* doctrine as codified in the property code requires liberal construction of the general intent of the creator. The statute demands that a court “shall” reform violative interests while maintaining the remainder of the interests as written. Because an oil and gas lease is an interest in land, it falls within the statute.

Any top lease that is drafted to ensure transfer of the possibility of reverter circumvents and does not violate the Rule, regardless of whether a bottom lessee pooled in bad faith. On the other hand, any top lease which is not particularly drafted to circumvent the Rule is probably susceptible to invalidation.

In the context of bad faith pooling, courts should more willingly adopt *cy pres* reformation. For example, a hypothetical top lessee institutes suit against a bottom lessee seeking a declaration of rights to a particular piece of property. If the bottom lessee exercised pooling power pursuant to a problematic clause discussed in Part III.C, the top lessee could seek a determination that the bottom lessee had pooled in bad faith, thereby resulting in termination of the bottom lease.

If, however, the top lease’s language violated the Rule—indeed, the bottom lessee’s bad faith—it is possible that neither party would maintain rights with respect to the property at issue. Given the general intent expressed between the lessor and the top lessee that the top lease was to come into existence upon termination of the bottom lease, the doctrine of *cy pres* is potentially applicable. In a situation where such a general intent exists and the court determines bad faith on the part of the bottom lessee, courts should utilize the doctrine of *cy pres* to ensure the continued validity of the top lease.

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249. *Id.*
250. *Id.*
251. *Id.*
252. TEX. PROP. CODE ANN. § 5.043(a) (West 2009).
253. *Id.* § 5.043(c).
254. See id. § 5.043(d).
255. See supra note 243 and accompanying text.
256. See supra notes 240-43 and accompanying text.
257. See supra note 171 and accompanying text.
258. See supra text accompanying notes 235-38.
259. See supra text accompanying notes 248-54.
C. Can Top Leasing Constitute Tortious Interference with Contractual Relations?

Tortious interference with a contract is forbidden under Texas law.\textsuperscript{260} The elements for tortious interference are: (1) the existence of a valid contract; (2) defendant “willfully and intentionally interfered with that contract”\textsuperscript{261}; (3) the interference proximately caused the plaintiff’s injury; and (4) the plaintiff incurred actual damage or loss.\textsuperscript{261}

Some top leases prohibit a mineral owner from amending the bottom lease.\textsuperscript{262} The language of the top lease may, therefore, constitute liability for tortious interference with a contract if it creates a “hindrance” and there are no applicable defenses.\textsuperscript{263} Therefore, a bottom lessee is the most likely party to pursue a tortious interference claim, arguing that the top lease language preventing extension, amendment, or modification of the bottom lease interferes with the bottom lease. Liability, however, does not attach for tortious interference with a contract that is unenforceable for violation of public policy.\textsuperscript{264}

To prove that a top lease tortiously interferes with a bottom lease, a bottom lessee must first prove the existence of a valid contract.\textsuperscript{265} An oil and gas lease is considered a contract.\textsuperscript{266} Therefore, the bottom lessee must only prove the validity of the particular contract in order to satisfy this element.\textsuperscript{267} The bottom lessee is thereby placed in a potentially vulnerable position—arguing that the bottom lease was simultaneously valid and that the lease’s invalidity was proximately caused by the top lessee because of the top lease’s anti-amendment provision.\textsuperscript{268} But because validity is determined when the tort occurred—at the time the top lease is executed—a bottom lessee should determine the order in which events proceeded to demonstrate lease validity.\textsuperscript{269} Figure 3 simplifies the individualized process each lease will require by asking whether invalidity occurred before the tort

\textsuperscript{260} See Butnaru v. Ford Motor Co., 84 S.W.3d 198, 207 (Tex. 2002).
\textsuperscript{261} See id.
\textsuperscript{262} See, e.g., George A. Snell, III, Drafting Tips for Oil & Gas Leases and Conveyances, SNELL LAW FIRM 1, 18 (1998), http://www.georgesnell.com/SnellDraftingTips.pdf (“Lessors covenant and agree not to extend, amend or modify the prior lease.”).
\textsuperscript{264} Cf. Travel Masters, Inc. v. Star Tours, Inc., 827 S.W.2d 830, 833 (Tex. 1991). A Texas statute subsequently superseded the underlying at-will employment contract, but the legal application stated remains the law. See Alex Sheshunoff Mgmt. Servs., L.P. v. Johnson, 209 S.W.3d 644 (Tex. 2006).
\textsuperscript{265} See Butnaru, 84 S.W.3d at 207.
\textsuperscript{266} Hitzelberger v. Samoan Oil Corp., 948 S.W.2d 497, 503 (Tex. App.—Waco 1997, pet. denied).
\textsuperscript{267} See Butnaru, 84 S.W.3d at 207.
\textsuperscript{268} See id.
(i.e., the bottom lease violated the Rule), or whether invalidity occurred after the tort (i.e., the bottom lessee pooled in bad faith). 270

As Figure 3 demonstrates, regardless of whether the bottom lease is actually valid, the element can be satisfied by showing that it was at least valid at the time the top lease was executed. 271 Thus, the element can be satisfied as long as any invalidity of the bottom lease occurred subsequent to the introduction of a top lease attempting to prohibit amendment or modification of the bottom lease.

Second, a bottom lessee must show that the top lessee “willfully and intentionally interfered with th[e] contract.” 272 Because tortious interference is an intentional tort, a defendant must “knowingly” induce a contracting party to breach its contractual obligations. 273 A defendant must

Footnotes:
270. See id.
271. See supra note 270 and accompanying text.
272. See Butnaru, 84 S.W.3d at 207.
273. See Browning-Ferris, Inc. v. Reyna, 865 S.W.2d 925, 927 (Tex. 1993).
have knowledge of a plaintiff’s contractual interests, or the facts must suggest to a reasonable person the existence of contractual interests.\textsuperscript{274} Although knowledge is a condition for tort liability, actual knowledge is not required.\textsuperscript{275} Instead, it is sufficient for a plaintiff to prove that the defendant knew of facts which would, upon inquiry, have led to complete disclosure of the contractual relationship.\textsuperscript{276}

Unlike the actual notice requirement that a defendant have knowledge of all facts a reasonable inquiry would have disclosed, the duty of inquiry “extends only to those matters that are fairly suggested by the facts really known; circumstances that may merely arouse suspicion . . . are generally . . . insufficient.”\textsuperscript{277} Sufficiency depends on whether there is a connection between the facts known and the facts to be known; the former indicates the existence of the latter.\textsuperscript{278} Further, if the circumstances are sufficient to provide notice of an independent matter from the notice sought to be charged, the notice will be deemed insufficient.\textsuperscript{279}

In \textit{Top Value Enterprises, Inc. v. Carlson Marketing Group, Inc.}, plaintiff provided grocers trading stamps under a licensing agreement.\textsuperscript{280} Defendant, learning of the grocers’ dissatisfaction, solicited the grocers to contract with their trading stamp company instead.\textsuperscript{281} Plaintiff’s contracts were eventually cancelled, and plaintiff alleged that defendant tortiously interfered with its licensing agreement by entering into an alternative agreement with the same grocers.\textsuperscript{282} It was common knowledge in the trading-stamp industry that grocers operated under well-known, written license agreements.\textsuperscript{283} Although the plaintiff’s license agreement did not contain an exclusivity provision, the agreements were considered exclusive because it would be economically impracticable for grocers to distribute competing types of stamps.\textsuperscript{284} The evidence supported a finding that defendant knew or should have known of the existence of the license agreement and its terms, which was sufficient notice for liability.\textsuperscript{285}

\begin{footnotesize}
\begin{enumerate}
\item[274.] See, e.g., Kelly v. Galveston Cnty., 520 S.W.2d 507, 513 (Tex. App.—Houston [14th Dist.] 1975, no writ) (“It is not necessary that a defendant in a case of interference with contract rights have actual knowledge of the contract and its terms. It is enough that the defendant had facts from which a reasonable person would conclude the existence of a contract.”).
\item[276.] Id.
\item[278.] See id.
\item[279.] See id.
\item[280.] Top Value Enters., Inc. v. Carlson Mktg. Grp., Inc., 703 S.W.2d 806, 808 (Tex. App.—El Paso 1986, writ ref’d n.r.e.).
\item[281.] Id.
\item[282.] See id. at 807-09.
\item[283.] See id. at 809-10.
\item[284.] See id. Of note, a practitioner could utilize \textit{Top Value} to argue that even a top lease without an express anti-amendment clause tortuously interferes. \textit{See id.}
\item[285.] See id. at 810.
\end{enumerate}
\end{footnotesize}
Mere suspicion, however, is insufficient to support an action for tortious interference.\textsuperscript{286} Contrary to the result in \textit{Top Value}, in \textit{Steinmetz \& Associates v. Crow}, the court determined that a defendant’s knowledge that a plaintiff develops real estate and owns property in the same area is insufficient to show that a plaintiff demonstrated an interest in a particular piece of property.\textsuperscript{287} Rather, the knowledge only raised a suspicion that a plaintiff may already have a contract on the property and that no further inquiry was required.

Returning to the situation at hand, a top lessee must acknowledge actual notice of a bottom lease at the time of drafting to avoid the Rule or to ensure it is not liable for clouding title.\textsuperscript{289} Even if there is no actual knowledge of the particularities, a top lessee is certainly put to inquiry notice based on its knowledge of the bottom lease—the very interest the top lessee seeks to obtain.\textsuperscript{290}

Third, a bottom lessee must prove that its injury was proximately caused by the top lessee.\textsuperscript{291} Normal negligence principles of proximate causation apply in this determination.\textsuperscript{292} The bottom lessee must prove that the top lessee actively sought to persuade the lessor to breach its contract.\textsuperscript{293} The severity of the top lease language at issue may determine whether or not this element is met.\textsuperscript{294} But to ascertain the level of influence exercised by the top lessee, the parties should attempt to locate the locus of the top lessee’s intervention.\textsuperscript{295}

Take, for example, basic language at issue reading that the lessor may not “extend, amend or modify the prior lease.”\textsuperscript{296} A bottom lessee should argue that the injury flows from the top lessee’s actions in executing the language of the lease itself. By emphasizing the top lease as the proximate cause, the potential action seeking to induce a breach of the bottom lease is the contract itself. In this situation, the severity of language is not important—rather, the mere existence of language tending to deny the bottom lessee the ability to amend or modify the bottom lease is an active involvement tending to force a breach of the bottom lease.

\begin{footnotes}
\item 286. 41 TEX. JUR. 2d Notice § 5 (1963).
\item 287. \textit{See Steinmetz \& Assoc., Inc. v. Crow}, 700 S.W.2d 276, 280-81 (Tex. App.—San Antonio 1985, writ ref’d n.r.e.).
\item 288. \textit{See id. at 280.}
\item 289. \textit{See supra Part IV.B.}
\item 290. \textit{See supra note 277 and accompanying text.}
\item 291. \textit{See Butnaru v. Ford Motor Co.}, 84 S.W.3d 198, 207 (Tex. 2002).
\item 293. \textit{See Davis v. HydPro, Inc.}, 839 S.W.2d 137, 139-40 (Tex. App.—Eastland 1992, writ denied).
\item 294. \textit{See id.} The more active it appears from the face of the document that the top lessee is trying to ensure the demise of the bottom lessee, the stronger the bottom lessee’s argument for proximate causation is. \textit{See id.}
\item 295. \textit{See supra note 291 and accompanying text.}
\item 296. \textit{See supra note 262.}
\end{footnotes}
On the other hand, a top lessee should argue that the lease itself does not constitute actions influencing the breach. Instead, the top lessee should argue that additional actions beyond merely entering a contract are required. Though a more amorphous argument, this may be the better argument because if the action of entering the lease itself constituted the proximate injury, there would be little distinction between this element and the prior. Further, the top lessee’s argument could be buffered by facts, such as those tending to demonstrate that the top lessee and the lessor were not involved in extensive negotiations; or, alternatively, that negotiations were primarily driven by the lessor.

Given that this element seeks to impose an additional requirement beyond the others, a court should be reluctant to accept the argument that the lease language itself is sufficient to satisfy the element. Rather, a court should insist on independent facts that suggest that not only did the top lessee include language denying the lessor from modification or amendment, but also that it took some affirmative action to ensure termination of the bottom lease.

The fourth and final element of a tortious interference claim is that the bottom lessee suffers actual damage or loss. A bottom lessee may recover any actual damages as though there were a breach of contract, placing the bottom lessee in the same economic position the bottom lessee would have been in had the contract been performed. If no development has proceeded on the land, proving damages will be more difficult as they may be considered too speculative. If, however, termination occurred due to failure of title as discussed in Part II.C, actual damages should be easily ascertained. Even if a bottom lessee has difficulty ascertaining with exactness its lost profits, courts accept evidence of the defendant’s subsequent profits as evidence of the profits the bottom lessee would have made. Thus, proving damages in the context of top leasing should prove the easiest element to satisfy.

Given the large number of top leases executed in the Texas shale plays, a large diversity of factual situations will probably exist. While a tortious interference action by a bottom lessee cannot result in top lease

\[297\] See supra text accompanying note 296.
\[299\] See Browning-Ferris, Inc. v. Reyna, 852 S.W.2d 540, 549 (Tex. App.—San Antonio 1992), rev’d on other grounds, 865 S.W.2d 925 (Tex. 1993).
\[300\] See RESTATEMENT (SECOND) OF TORTS § 774A (1979).
\[301\] Contra supra text accompanying note 300.
\[303\] See supra note 302 and accompanying text.
\[304\] See supra Part II.
cancellation, a bottom lessee with the right facts is likely to prevail upon a tortious interference claim.\footnote{See Browning-Ferris, Inc. v. Reyna, 852 S.W.2d 540, 549 (Tex. App.—San Antonio 1992), rev’d on other grounds, 865 S.W.2d 925 (Tex. 1993).}

V. POTENTIAL SOLUTIONS

A. Preventing Bottom Lease Termination: An Ounce of Prevention in Drafting

Lessees often seek to protect their lease from being topped by the inclusion of a right of first refusal clause, also called a “preferential right.”\footnote{See Richard Gillman & William B. Burford, 28A West’s Legal Forms, Specialized Forms § 22:41, at 7 n.3 (4th ed. 2010); see also Martin & Kramer, Manual, supra note 37, at 737-40 (describing a preferential right of purchase as one synonymous with a first refusal clause, reserving to parties in a pooling agreement the right “to buy any part of a committed working interest” it aims to sell).}

A preferential rights clause provides that if a lessor receives a bona fide offer of a potential top lease that the lessor is willing to accept, the lessor must provide notice to the original lessee of the offer with notice of all relevant information (name and address of the potential top lessee, the price offered, and all other terms and conditions) so that the original lessee has the right to choose whether or not to buy those rights in lieu of the offeror.\footnote{See Gillman & Burford, supra note 306, § 22:41, at 5.} Consequently, the clause essentially ensures that a bottom lessee top leases the original lease before anyone else can.\footnote{See id.}

In a competitive black gold rush environment, a preferential rights clause is unlikely to have the chilling effect intended on potential top lessees.\footnote{See supra note 306 and accompanying text. But see Gillman & Burford, supra note 306, § 22:41, at 7 n.3.}

Still, potential lessees can protect themselves by including a preferential rights clause.\footnote{See Gillman & Burford, supra note 306, § 22:41, at 5.} All potential lessees should include a preferential rights clause in all leases they enter into in order to protect against costly termination.\footnote{See id.}

By implementing such a basic protection from the beginning of the lease, the lessee ensures some level of control over the amount of loss that ultimately may occur if title fails.\footnote{See supra notes 306-10 and accompanying text.}

In contrast, a lessee who has already entered into a lease with a lessor faces a tougher course of action if they wish to protect their lease because they must either amend the lease or face possible title failure.\footnote{Cf. supra text accompanying note 244 (asserting that top lessees that have executed are left with the contract language as written).}

A lessee wishing to amend their lease must pay a lessor additional consideration (as
a practicality, at a premium) to buy the additional protection. A lessee wishing to risk title failure takes the results as they come. Hence, a lessee must balance the risk of loss against the cost of modifying the lease to determine whether or not to amend the lease. For example, if a lessee determines that, on balance, the value of the underlying lease and the risk of title failure are both very high, the lessee should enter negotiations to amend the original lease to include a preferential right.

B. Balancing Top Lease and Bottom Lease Interests in the Aftermath

![Diagram]

Figure 4.

Among other policies, Texas expressly adopts prevention of waste as a primary public policy regarding exploration and production of oil and gas. Stemming from the concept of waste, Texas favors exploration and production. By applying cy pres, the underlying Texas oil and gas policy favoring production is fulfilled because it ensures the existence of an effective lease so that development may proceed. Further, parties may more accurately calculate and rely upon top lease validity if courts consistently applied the Rule and reformed via cy pres doctrine rather than wringing their hands over ways to avoid potentially inequitable results from the application, misapplication, or non-application of the Rule.

Given the equitable nature of cy pres, while top lessees that act wrongfully should not be rewarded, Texas policies favoring exploration and

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315. See supra Part I.C.1.
316. See supra text accompanying notes 314-15.
318. See id.
319. See Roach, supra note 142, at 410-12.
320. See id. at 412.
production should prevail over minor acts of top lessee misconduct.\textsuperscript{321} Even leases which may violate the Rule should be read as not violating the Rule to ensure this result. Despite this, extreme instances of misconduct should not be entitled to favorable \textit{cy pres} treatment. Application of the reasonably prudent operator standard to determine whether bad faith pooling occurred is helpful in determining whether reformation is appropriate.\textsuperscript{322} Equitable proceedings allow the court to account for both the large-scale consequences of potentially catastrophic precedent (i.e., potential invalidation of all top leases) and for the considerations between the parties to the suit.

Regardless of whether a lease does not violate the Rule or if it does not violate because of \textit{cy pres} reformation, a bottom lessee who sought to amend or modify a lease but was intentionally blocked by a top lessee is entitled to seek compensation for losses sustained on account of the tortious interference, as illustrated in Figure 4.\textsuperscript{323} Bottom lessees should carefully balance the risks associated with being top leased.\textsuperscript{324} Should they forego amendment, accept the risk, and ultimately lose a lease, they must accept the consequences of their actions.\textsuperscript{325} If, however, bottom lessees attempt to lower risk through affirmative action and are blocked, they should be at least partially protected from loss by an action for tortious interference.\textsuperscript{326}

VI. CONCLUSION

The inherent conflict between new oil and gas exploration and production technology and old legal documents and doctrines is currently playing out in the Texas shale black gold rush.\textsuperscript{327} Given the ambiguity relating to the validity of top leases, it is inevitable that parties with competing interests will seek to maximize self-interest either by attempting to ensure title failure—thereby bringing a valid top lease into existence—or by ensuring invalidity of the top lease.\textsuperscript{328} Given Texas’s express public policy favoring production, the practicalities of thousands of top leases in the plays, and the codification of the \textit{cy pres} doctrine, top leases should be construed to not violate the Rule wherever possible, given the particular language of the lease.\textsuperscript{329}

\begin{enumerate}
\item 321. See supra note 318 and accompanying text.
\item 322. See supra note 165 and accompanying text.
\item 323. See supra Part IV.C.
\item 324. See supra text accompanying notes 317-23.
\item 325. See supra text accompanying note 324.
\item 326. See supra text accompanying note 325.
\item 327. See discussion supra Parts II-V.
\item 328. See discussion supra Parts III.C, IV.B.
\item 329. See supra Part IV.B.
\end{enumerate}
Bottom lessees who seek to rectify problems with their leases should not, however, be left without recourse. Through the inclusion of preferential rights clauses in future leases, leaseholders can protect themselves from potentially large losses because of the occurrence of unexpected title failure while a top lease is in existence. Further, in the event that a top lessee attempts to ensure that the top lease comes into existence by denying the bottom lessee the ability to amend, a bottom lessee may seek damages from the top lessee under a claim for tortious interference. By ensuring that both policy and practicalities are respected, a new legal regime recognizing the changing circumstances may bring some order and understanding to a situation which is difficult to comprehend.

330. See supra Part IV.C.
331. See supra Part V.A.
332. See supra Part V.B.
333. See supra text accompanying notes 1, 329-32