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Defining “Production in Paying Quantities”: A Survey of Habendum Clause Cases Throughout the United States

Jessica E. McDonald

Zachary M. Wallen

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DEFINING “PRODUCTION IN PAYING QUANTITIES”: A SURVEY OF HABENDUM CLAUSE CASES THROUGHOUT THE UNITED STATES

JESSICA E. McDONALD AND ZACHARY M. WALLEN*

ABSTRACT

As advances in drilling technology unlock previously inaccessible shale plays, developers seeking their share of the action may purchase existing oil and gas leases whose primary terms expired long ago. While operators pay a premium for the deep rights associated with existing leases, such asset swaps also have the effect of removing from the equation the large up-front landowner bonuses and rentals commonly associated with new Marcellus and Utica leases.¹ This has created considerable tension when landowners who discover that their property is, in fact, covered by an existing lease question whether an old lease is truly “held by production” (“HBP”).² This paper provides a survey of the relevant case law on habendum clause interpretation throughout the United States in order to further clarify jurisdictional variations and identify the similarities that exist regionally and nationally. It provides a look at how much production courts require to uphold an HBP lease and explains the tests the courts use to determine whether the required level of production occurred. Throughout the case law on this issue runs a common theme: courts must carefully balance lessors’ desire to benefit financially from the development of their property with operators’ interest in protecting their investments. Given the variations in the law across the United States, developers must not only anticipate challenges to the HBP leases they buy, but they must also prepare themselves for different results depending on a particular court’s location, history, and jurisprudential precedents.

* Jessica E. McDonald is of counsel and Zachary M. Wallen is an associate at Steptoe & Johnson PLLC in the firm’s Bridgeport, West Virginia office. Both authors would like to give a special thanks to Dominique N. Ranieri for her assistance with this article.

1. See, e.g., Michael Rubinkam, *Lowball gas drill leases haunt Pa.*, ASSOCIATED PRESS (July 23, 2011), <http://news.yahoo.com/ap-enterprise-lowball-gas-drill-leases-haunt-pa-190123364.html> (discussing the wide variation in landowner royalty payments and describing instances of landowner dissatisfaction with older, less lucrative, oil and gas leases in the Marcellus Shale region). See also *T.W. Phillips Gas and Oil Co. v. Jedlicka*, 42 A.3d 261 (Pa. 2012).

2. See Rubinkam, *supra* note 1. See also *Jedlicka*, 42 A.3d at 264.

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I. INTRODUCTION

As advances in drilling technology unlock previously inaccessible shale plays through the United States, many oil and gas developers find themselves shifting their operations to areas of the country where they have never before operated. Because much of the land overlying these deep shale plays remains subject to existing oil and gas leases,³ operators seeking entry into new frontiers often purchase rights to old leases whose primary terms expired decades ago.⁴ While the oil and gas owners will continue to receive royalties from these HBP leases, those royalties are often much lower than those of new leases. These oil and gas owners also do not receive the large up-front bonuses and rentals commonly associated with new leases.⁵ Meanwhile, operators pay a premium for the deep rights associated with existing leases; as such, “held by production” leases are highly desirable commodities amongst industry players. This tension makes the question of whether an old lease is truly “held by production” increasingly contentious.⁶

Because of regional variations in judicial interpretation and precedent, developers may not be able to rely on the same arguments they used in the past in other states when faced with disputes over the validity of an older lease. A new region may open an entirely new set of legal questions, even though actual operational processes remain largely the same. Developers who purchase existing leases must therefore anticipate not only challenges to the HBP leases they buy, but also the possibility of different outcomes depending on where the presiding court sits.

To truly understand what it means for a lease to be held by production, one must examine the construction of a typical oil and gas lease.⁷ The habendum clause in a standard lease contains not only a fixed (or primary) term, but also a secondary term.⁸ The secondary term often allows the lease

3. See generally Caleb A. Fielder, *Marginal Wells and the Doctrine of Production in Paying Quantities*, 57 LANDMAN MAG. 2 (2011).

4. For a more in-depth discussion of the issues concerning oil and gas leases that are purportedly held by production, see generally Timothy M. McKeen & Kristen L. Andrews, *The Effect of Missing Production on Ohio’s Held by Production Oil and Gas Leases*, 73 OHIO ST. L.J. FURTHERMORE 13 (2012).

5. See Rubinkam, *supra* note 1. See also *Jedlicka*, 42 A.3d at 264.

6. See Rubinkam, *supra* note 1. See also *Jedlicka*, 42 A.3d at 264.

7. For a detailed discussion of the history and the evolution of the terms of the standard oil and gas lease, see PATRICK H. MARTIN AND BRUCE M. KRAMER, WILLIAMS & MEYERS, OIL AND GAS LAW, § 601 (2012).

8. 2 EUGENE KUNTZ, A TREATISE OF LAW OF OIL AND GAS, § 26.1 (Rev. Ed. 2011); Fielder, *supra* note 3, at 1.

to continue in perpetuity as long as the developer produces oil or gas from the land.⁹ Particulars vary, but habendum clauses in most older leases allow the lease to continue beyond its primary term for “so long thereafter as oil or gas is ‘produced,’ or ‘produced in paying quantities,’ or ‘found,’ or ‘found in paying quantities,’ or ‘discovered,’ or ‘discovered in paying quantities,’ or ‘can be produced,’ or ‘can be produced in paying quantities.’”¹⁰ While a layperson might interpret these phrases literally, the terms of the habendum clause “have come to be words of art in many jurisdictions, and such words are not necessarily given their literal meaning.”¹¹ For example, in most jurisdictions across the country, courts require production in “paying quantities” even where that exact language is not used in the habendum clause.¹²

This paper will provide a survey of the law on habendum clause interpretation across the United States. We will examine the level of production that courts require to uphold a lease in its secondary term and the tests they employ to determine whether production from a particular leasehold meets their chosen standard. The law on this issue is well developed in midcontinent states such as Texas, Oklahoma, and Louisiana, which have a long and fruitful history of oil and gas development. This is also true in the eastern states that comprise the Marcellus and Utica Shale plays, where oil and gas has been produced since 1859, although much of the relevant case law in those jurisdictions is quite dated, leaving a level of uncertainty in how modern courts will interpret such decisions.

On the other hand, many states throughout the country have only a few cases that discuss habendum clauses at all, and those cases may only address one narrow issue. For those states, we have simply summarized the case law that exists, but we have not attempted to draw broad-scale conclusions as to the state’s position on habendum clauses generally.¹³ In order to make sense of a vast amount of law, we have grouped the case law into geographic regions. This approach offers a look at the range of positions operators may face when moving into a particular operational area.

9. See KUNTZ, *supra* note 8, at §§ 26.1, 26.7. See also Richard C. Maxwell, *Oil and Gas Lessee’s Rights on Failure to Obtain Production During the Primary Term or to Maintain Production Thereafter*, 3 ROCKY MT. MIN. L. INST. 6 (1957).

10. KUNTZ, *supra* note 8, at § 26.5.

11. *Id.*

12. *Id.*

13. We did not find any relevant case law in the following states: Alaska, Connecticut, Delaware, Georgia, Hawaii, Idaho, Iowa, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, North Carolina, Rhode Island, South Carolina, Vermont, Washington, and Wisconsin.

II. ANALYSIS

Whether a lease is deemed “held by production” often boils down to whether it produces in paying quantities. Many courts imply a “paying quantities” requirement even when the lease does not expressly require it. Though most courts now agree that “production” means “production in paying quantities,” the case law on habendum clauses spans a spectrum of decisions that run the gamut from those that allowed a lease to continue where the lessee merely discovered oil and gas during the primary term to those that require that a well be capable of producing in paying quantities to those that mandate that the lessee actually produce, market, and sell the oil and gas. In all these cases, courts attempt to strike a balance between protecting landowners’ interests in benefiting financially from the development of their property and allowing developers enough leeway in their operational decisions so that they will continue to invest in the exploration and development of oil and gas.

On the question of just how much production or development must occur to extend a lease into its secondary term or hold it by production, courts in the Midcontinent generally fall into one of two positions. One side favors a narrow interpretation of secondary term language that requires actual, physical production *and* marketing of oil and gas.¹⁴ Texas courts typically embrace this “actual production” approach.¹⁵ Supporters argue that the “actual production” interpretation discourages operators from using marginally producing wells to hold large tracts of land for speculative purposes and creates incentives to properly develop leased resources.¹⁶ The “capability rule” adopted by Oklahoma courts, on the other hand, focuses on the leasehold’s *capability* of production and does not require the lessee to actually sell oil and gas during the primary term in order to hold the lease.¹⁷ Proponents of this approach argue that giving the operator broad discretion to determine whether or not to continue operations on a particular leasehold “balances the equities between lessee and lessor” and avoids forfeitures by allowing companies that undertake expensive exploration the time and opportunity to recoup their costs.¹⁸

14. Ashleigh L. Boggs, Note, *Anadarko Petroleum Corp. v. Thompson: Interpretation of Oil and Gas Lease Habendum Clauses in Texas and Why Oklahoma Should Maintain Its Divergent Approach to Keep Leases Alive*, 61 OKLA. L. REV. 341, 342 (2008).

15. *Id.* But see *id.* at 358 (discussing the nuances of the Texas Supreme Court’s interpretation of the “capability rule”).

16. *Id.* at 357. See also Fielder, *supra* note 3, at 2.

17. Boggs, *supra* note 14, at 348 (discussing the interpretation of “production” by Oklahoma courts); Fielder, *supra* note 3, at 3.

18. Boggs, *supra* note 14, at 342. See also Fielder, *supra* note 3, at 3.

Most courts concur that the lessee must produce some oil and gas from the land in order for a lease to continue beyond its primary term, but the meaning of the term “produced” varies between states.¹⁹ A few outlying states, such as West Virginia, Illinois and Kentucky, have taken a very operator-friendly approach in the past and allowed a lease to continue into its secondary term based upon the “mere discovery” of oil and gas during the primary term; however, more recent cases in those states show a shift toward requiring at least enough production to pay the lessor a royalty.²⁰ Courts now nearly universally agree that a well produces in “paying quantities” when it “pays a profit, even a small one, over the operating expenses.”²¹ But the tests used to determine whether profit exists, and the application of the results therefrom, vary across the country.²²

A. THE MIDCONTINENT

Midcontinent courts have addressed the issues presented by the habendum clause many times over, thus creating a body of well-developed, nuanced case law.

1. Texas

While the Texas Supreme Court was not the first to address the question of whether “produced” means “produced in paying quantities,” other courts frequently cite its analysis of the issue in *Garcia v. King* as the basis of their interpretive reasoning. The lease at issue in *Garcia* was “for a term of 10 years from this day (called primary term) and as long thereafter as oil, gas and other minerals is produced from said land hereunder.”²³ At the end of the primary term, the lease was producing about twenty-four barrels of oil per month, which, while “susceptible of division . . . was insufficient to yield a profit over and above operating and marketing expenses” and “was barely adequate to pay for his labor in operating the

19. KUNTZ, *supra* note 8, at § 26.5. Courts within the Appalachian region have held “production” to mean the capability of production, rather than actual physical production in paying quantities. See discussion *infra* Part II(B).

20. KUNTZ, *supra* note 8, at § 26.5.

21. *Young v. Forest Oil Co.*, 45 A. 121, 123 (Pa. 1899); Maxwell, *supra* note 9, at 10. See also *Parks v. Sinai Oil Co.*, 201 P. 517, 518 (Okla. 1921); *Garcia v. King*, 164 S.W.2d 509, 510 (Tex. 1942); KUNTZ, *supra* note 9, at § 26.7(d).

22. KUNTZ, *supra* note 8, at § 26.7. This is not as applicable in the Appalachian region, where courts have strictly relied on the good-faith determination of the lessee as the test for whether a given lease has produced in paying quantities, as opposed to the various jurisdictions of the Midcontinent, where some states rely on the same good-faith test, while others also rely on an arithmetic component to determine whether production in paying quantities has occurred. See discussion *infra* Part II(B).

23. *Garcia*, 164 S.W.2d at 510 (explanatory parenthetical in original text).

wells.”²⁴ After receiving about eight cents per day as lease royalty during the primary term, the lessors sued the lessees to cancel the lease.²⁵

At trial, the court found that the lease expired on its terms because “neither oil nor gas was being ‘produced,’ within the meaning of the lease.”²⁶ The court of appeals reversed, holding “that it was an error to construe the word ‘produce’ as to require production in paying quantities.”²⁷ The Texas Supreme Court then had to determine whether the term “‘produced,” when used in a habendum clause, required production “in paying quantities.”²⁸

The court examined a series of holdings from jurisdictions that had previously addressed the issue and found only two cases in which courts indicated that “produced” may not mean “produced in paying quantities.”²⁹ The Supreme Court of Illinois rendered one of these decisions in 1913 in *Gillespie v. Ohio Oil Company*, where the court adhered to the strict letter of the lease and declined to imply a paying quantities requirement.³⁰ The Texas Supreme Court quickly dismissed this case as having been decided “before the oil industry had been fully developed.”³¹

The following dicta, taken from a case decided by the Supreme Court of Kentucky, also appeared to suggest that a “paying quantities” requirement should not be implied:

It will be observed that the lessee is not required to produce oil in paying quantities, but he is required to produce oil or gas one or the other, from the premises. This, of course, means a production of oil or gas in such quantities as to be susceptible of division, so as to pay the landowner a royalty, even though small. A mere showing of oil manifestly is not sufficient, even though produced.

24. *Id.*

25. *Id.*

26. *Id.*

27. *King v. Garcia*, 152 S.W.2d 918, 920 (Tex. Civ. App. 1941) (“To hold that the word ‘produced’ as used in the Habendum clause of the lease here involved is synonymous with the phrase ‘produced in paying quantities,’ would be substituting a limitation upon the determinable fee which is different in legal effect from the limitation agreed upon by the parties. It would amount to an overriding by implication of the intention of the parties expressed in a binding contract.”).

28. *Id.*

29. *Garcia*, 164 S.W.2d at 510-11.

30. *Id.* at 511(citing *Gillespie v. Ohio Oil Co.*, 102 N.E. 1043, 1044 (Ill. 1913)). For a detailed discussion of the *Gillespie* decision, see our Illinois section, discussion *infra* Part II(C)(1).

31. *Id.*

The production must be tangible and substantial, but it need not be great.³²

Despite this statement, however, the well at issue in that particular case produced “only a mere scum of oil, and the court held that this was insufficient to keep the contract in force.”³³ Noting that the Supreme Court of Kentucky’s ultimate holding in the case did not turn on its sentiment that production in paying quantities was unnecessary, the Texas Supreme Court also declined to rely on that case.³⁴

Finding that the weight of authority supported the plaintiffs’ position that production must be in paying quantities, the court also noted the importance of marketing the product, stating: “[t]he term ‘paying quantities’ involves not only the amount of production, but also the ability to market the product at a profit.”³⁵ Returning to the lease at issue, the court pointed out that all of the producing wells on the property, when taken together, failed to produce enough to pay a profit over operating costs when the primary term ended.³⁶ Accordingly, the court held that “the object sought to be accomplished by the continuation” of the lease “had ceased, and the lease had terminated.”³⁷

The Texas Supreme Court expanded on the requirement of production in paying quantities in *Clifton v. Koontz* by creating an explicit two-step approach to determine whether a lease produces in paying quantities.³⁸ The court’s objective two-prong test requires courts to first calculate profits and losses over a reasonable time period. If the lessee’s activities fail to yield a profit over operating expenses and a net loss occurs, the court must then determine whether a reasonable and prudent operator would continue operating the well under the circumstances.³⁹

The operative fact pattern in *Clifton* was that the oil and gas owner, Clifton, sought to cancel the lease on her land by arguing it terminated due to cessation of production in paying quantities.⁴⁰ She argued that the lease failed to produce in paying quantities after sustaining a loss for two consecutive months.⁴¹ The Texas Supreme Court rejected this argument,

32. *Id.* (quoting *Enfield v. Woods*, 248 S.W. 842 (Ky. 1923)). We discuss the quoted *Enfield* decision more particularly in the Kentucky section, discussion *infra* Part II(B)(3).

33. *Garcia*, 164 S.W.2d at 511.

34. *Id.*

35. *Id.* at 512.

36. *Id.*

37. *Id.* at 513.

38. 325 S.W.2d 684, 691 (Tex. 1959).

39. *Id.* (citing *Garcia v. King*, 164 S.W.2d 509, 511 (Tex. 1942)).

40. *Id.* at 687.

41. *Id.* at 688-89.

explaining that “there can be no arbitrary period for determining the question of whether or not a lease has terminated.”⁴²

Clifton offered evidence that for the “period of time from June 1955 through September 1956, the income from the lease was \$3,250.00 and that the total expense of operations during the same period was \$3,466.16—thus, a loss of \$ 216.16 for the sixteen months’ period.”⁴³ The court questioned the time period Clifton used to calculate lease profits derived from the marginal well. Because the lessee began reworking the well on September 12, 1956, the court pointed out that “the evidence that there was a small operating loss for the period of time from July 1956 through September 1956 is not controlling in determining whether or not there had been a cessation of production in paying quantities through July 12, 1956, a date 60 days prior to the beginning of reworking operations.”⁴⁴ The court instead focused on the profits and losses prior to the time the sixty-day period set forth in the cessation of production clause took effect, which occurred before July 12, 1956.⁴⁵ Using month-by-month figures, the court determined that during the relevant period, beginning in June 1955 and continuing through July 12, 1956, the lessee operated at a profit of \$111.25.⁴⁶

When confronted with a marginal well, the court explained:

[T]he standard by which paying quantities is determined is whether or not under all the relevant circumstances a reasonably prudent operator would, for the purpose of making a profit and not merely for speculation, continue to operate a well in the manner in which the well in question was operated.⁴⁷

Therefore, the court concluded:

In determining paying quantities . . . the trial court necessarily must take into consideration all matters which would influence a reasonable and prudent operator. Some of the factors are: The depletion of the reservoir and the price for which the lessee is able to sell his produce, the relative profitableness of other wells in the area, the operating and marketing costs of the lease, his net profit, the lease

42. *Id.* at 690. This has later been construed by Texas courts to be “a reasonable period of time based on the facts of the case; courts have used time periods as brief as six months or as long as two years.” Fielder, *supra* note 3, at 3.

43. *Clifton*, 325 S.W.2d at 689.

44. *Id.*

45. *Id.*

46. *Id.*

47. *Id.* at 691.

provisions, a reasonable period of time under the circumstances, and whether or not the lessee is holding the lease merely for speculative purposes.⁴⁸

In short, the court explained:

Whether there is a reasonable basis for the expectation of profitable returns from the well is the test. If the quantity be sufficient to warrant the use of the gas in the market, and the income therefrom is in excess of the actual marketing cost, and operating costs, the production satisfies the term “in paying quantities.”⁴⁹

This standard allows operations to continue in certain cases, “even though drilling and equipment costs may never be repaid and the undertaking considered as a whole may ultimately result in a loss.”⁵⁰ The court explained that:

The underlying reason for this definition appears to be that when a lessee is making a profit over the actual cash he must expend to produce the lease, he is entitled to continue operating in order to recover the expense of drilling and equipping, although he may never make a profit on the over-all operation.⁵¹

Recognizing such principles, the court rejected Clifton’s contention that the profit and loss figures should include depreciation of the original investment cost as an operating expense, explaining that “[d]epreciation is nothing more than an accounting charge of money spent in purchasing tangible property, and if the investment itself is not to be considered, as is held by this Court, then neither is depreciation.”⁵² Finding that the evidence supported the trial court’s finding that there was production in paying quantities, as well as marketing facilities and the actual sale of gas at a profit, the court held that the lease had not terminated.⁵³

The Texas Supreme Court further explained its position on marketing in its 1960 decision in *Gulf Oil Corp. v. Reid*.⁵⁴ In that case, the lessee began drilling just a few days before the end of the five-year primary term and finally completed the well after the primary term had ended.⁵⁵ While

48. *Id.*

49. *Id.*

50. *Id.*

51. *Id.* at 692.

52. *Id.*

53. *Id.* at 691. The court also discussed several other arguments presented by the petitioners involving breach of the implied covenant to develop and to explore.

54. 337 S.W.2d 267 (Tex. 1960).

55. *Id.* at 268.

the well was clearly capable of production, Gulf Oil capped it (essentially “turning off” production temporarily) due to a lack of marketing facilities.⁵⁶ Approximately a month later, the lessee tendered a shut-in royalty payment that the lessor rejected.⁵⁷ Four months later, the lessee contracted with a pipeline company to sell the gas, and the well produced in paying quantities until the lessor sued to cancel the lease.⁵⁸

The court defined the main issue before it as “whether the so-called ‘shut-in’ royalty payment, tendered after a well capable of producing gas only in paying quantities had been capped, was so timely made as to extend the term of an oil and gas lease after the expiration of the primary term.”⁵⁹ Citing *Garcia*, the court held:

[T]he word “production” as used in the habendum clause of this lease is equivalent to the phrase “production in paying quantities.” The term “paying quantities” embraces not only the amount of production, but also the ability to market the product at a profit. *Garcia et al v. King et al*, 139 Texas 578, 164 S.W. 2d 509, 512. As said in that case, “the object of the contract was to secure the development of the property for the mutual benefit of the parties. It was contemplated that this would be done during the primary term of the contract.” To this sentence we might add the phrase, “or during the extension of the lease term.” Thus, no matter how great the potential production may be or how many million cubic feet of gas may have been flared, there would be no production or production in paying quantities unless there was an available market . . . the fact that there is no available market is not an excuse for failure to produce, and the lease terminates unless some other provision will keep it in force.⁶⁰

Even after capping its well, Gulf Oil actively negotiated with the pipeline company to find a market for its product, but it did not conduct “any manual operations” until after it entered into the pipeline contract five months after completing the well.⁶¹ While the trial court found that Gulf Oil acted diligently in seeking a market, the Texas Supreme Court disagreed:

56. *Id.*

57. *Id.*

58. *Id.*

59. *Id.*

60. *Id.* at 269-70 (citing *Garcia v. King*, 164 S.W. 2d 509, 512 (1942)).

61. *Id.* at 272.

To sum up, there was no production from the well during the term of the lease as extended by drilling operations; the ‘shut-in’ royalty was not paid so as to bring about constructive or contractual production, and no provisions of the lease can be construed to furnish a further extension of the primary term or to make the tender of royalty in this case timely.⁶²

Therefore, the court concluded that the lease terminated.⁶³

In *Anadarko Petroleum Corp. v. Thompson*, the Texas Supreme Court addressed the issue of temporary cessations of production within the framework of the actual production doctrine.⁶⁴ The lease in this case stated that the lease “shall remain in force for a term of one (1) year and as long thereafter as gas is or can be produced,” and it also provided that “if production ceases for any reason, the lease ‘shall not terminate provided lessee resumes operations for drilling a well within sixty (60) days from such cessation.’”⁶⁵ Production first began in 1936, but it “totally ceased for sixty-one days in 1981 and ninety-one days in 1985 while the gas purchaser conducted pipeline repairs. In 1997, Thompson sued for declaration that the lease terminated when production ceased in 1981 and for conversion of damages.”⁶⁶ The trial court ruled in favor of the landowner, Thompson, finding that the lease terminated due to cessation of production.⁶⁷ On appeal, the court of appeals affirmed the trial court’s ruling, holding that the lease’s habendum clause required “actual production in paying quantities . . . [and] that the lease terminated when actual production ceased longer than sixty days.”⁶⁸

Before the Texas Supreme Court, Anadarko argued that “the habendum clause’s plain language allows production *or the capability of production* to sustain the lease” and that “the cessation-of-production clause only applies if the well holding the lease becomes incapable of production.”⁶⁹ Thompson maintained that the “cessation-of-production clause applies whenever actual production ceases rather than when actual production *and* capability of production cease . . . [and that] allowing the capability of production to sustain the lease indefinitely would render the cessation-of-

62. *Id.*

63. *Id.*

64. 94 S.W.3d 550 (Tex. 2002).

65. *Id.* at 553.

66. *Id.*

67. *Id.*

68. *Id.* at 553-54.

69. *Id.* at 555 (emphasis in original text).

production clause meaningless.”⁷⁰ The Texas Supreme Court rejected Thompson’s contention, stating that “the implied duty to manage and administer the lease as a reasonably prudent operator, which encompasses the implied duty to market the gas reasonably, would limit the lessees’ ability to sustain the lease based on a well’s capability of production.”⁷¹ Once it deemed actual production unnecessary to hold the lease so long as the well remained capable of production, the court defined the phrase “capable of production in paying quantities” as “a well that will produce in paying quantities if the well is turned ‘on,’ and it begins flowing, without additional equipment or repair.”⁷²

This body of Texas case law is one of the most developed in the country and serves as an important resource for courts deciding similar cases in areas where the law is less developed. While Texas courts appear to require more from developers than most other jurisdictions, their decisions seem motivated by a desire to promote actual, lucrative development.

2. *Oklahoma*

Oklahoma has its own well-developed case law on habendum clauses that focuses on the capability of production. The Supreme Court of Oklahoma first adopted its “capability rule” in 1958 in *McVicker v. Horn, Robinson & Nathan*, where it declined to imply a duty to market oil and gas during the primary term when the well was readily shown to be capable of production.⁷³ The habendum clause at issue in this case allowed the lessee to continue operating “as long thereafter as oil or gas, or either of them, is produced from said lands by the lessee.”⁷⁴ Although the lessee completed a well five months before the end of the primary term, it neither sold nor marketed any gas from it because the lessor refused to allow the lessee to connect the well to a prospective purchaser’s pipeline.⁷⁵ The lessee

70. *Id.* (emphasis in original text).

71. *Id.* at 557.

72. *Id.* at 558 (quoting *Hydrocarbon Mgmt., Inc. v. Tracker Exploration, Inc.*, 861 N.W.2d 427, 433 (Tex. Civ. App. 1993)).

73. 322 P.2d 410, 412 (Okla. 1958). *See also* *Pack v. Santa Fe Minerals*, 869 P.2d 323, 327 (Okla. 1994) (“The Court then rejected the lessors’ argument that production in paying quantities required the lessees to not only complete a well capable of producing in paying quantities but also remove the product from the ground and market it. Thus, where a well was completed and capable of producing in paying quantities within the primary term, the lease continued, so far as the habendum clause was concerned, as long as the well remained capable of producing in paying quantities, regardless of any marketing of the product.”).

74. *McVicker*, 322 P.2d at 412.

75. *Id.* at 411-12.

maintained that it could produce gas from the well, but had shut it in rather than let it waste the gas into the air.⁷⁶

In resolving this issue, the court cited a 1952 Kansas case, *Tate v. Stanolind Oil & Gas Company*, which stated:

The great weight of authority, however, appears to be in harmony with the view that actual production during the primary term is essential to the extension of the lease beyond that fixed term. This, at least, is true *unless the lease contains some additional provisions indicating an intent to extend the right to produce beyond the primary term.*⁷⁷

The court then explained:

No valid fault can be found with the above statement, but was [sic] say it applies only to production, per se, and as that word is ordinarily defined (not including marketing). To say that *marketing* during the primary term of the lease is essential to its extension beyond said term, *unless the lease contains additional provisions indicating a contrary intent*, is to not only ignore the distinction between producing and marketing, which inheres in the nature of the oil and gas business, but it also ignores the difference between express and implied terms in lease contracts.⁷⁸

The Supreme Court of Oklahoma therefore held that the lease did not terminate for failure to immediately market the gas and that the lessee had a “reasonable time” in which to do so.⁷⁹

Next, the court engaged in a detailed examination of the facts, including the amount of pressure in the well compared to that in a nearby pipeline and the particulars surrounding the lessee’s efforts to find a buyer for the gas.⁸⁰ Finding that the lessee behaved as a prudent operator in light of the circumstances, the court upheld the lease.⁸¹ The court noted, however, that even the most diligent efforts cannot save a lease “where there is no reasonable probability that [those efforts] will be successful, or it appears that others, with less effort, would succeed where they have failed.”⁸²

76. *Id.* at 413.

77. 240 P.2d 465, 468-69 (Kan. 1952) (emphasis added).

78. *McVicker*, 322 P.2d at 413 (emphasis in original text).

79. *Id.* at 414.

80. *Id.* at 414-16.

81. *Id.* at 417.

82. *Id.* at 416.

The Supreme Court of Oklahoma has further refined this rule in subsequent cases, and it remains good law.⁸³ For example, in the 1994 case of *Pack v. Santa Fe Minerals*, the court again upheld the rule promulgated in prior cases that “where a well was completed and capable of producing in paying quantities within the primary term, the lease continued, so far as the habendum clause was concerned, as long as the well remained capable of producing in paying quantities, regardless of any marketing of the product.”⁸⁴ In *Mason v. Ladd Petroleum*, the court examined in detail the expenses to be deducted from production proceeds when determining whether a well produced in paying quantities.⁸⁵ The plaintiffs in that case contended that the lease on their land expired because the well holding it no longer produced in paying quantities.⁸⁶ The habendum clauses at issue allowed the leases to remain in force “for as long as oil or gas is produced.”⁸⁷ Citing its prior decision in *Stewart v. Amerada Hess Corp.*, the court noted that the term “produced,” when used in a habendum clause, “denotes in law production in paying quantities . . . [and] means that the lessee must produce in quantities sufficient to yield a return, however small, in excess of ‘lifting expenses,’ even though well drilling and completion costs might never be repaid.”⁸⁸

Explaining that only expenses directly related to lifting or producing operations can be offset against production proceeds, the court noted that these expenses can include the “costs of operating the pumps, pumpers’ salaries, costs of supervision, gross production taxes, royalties payable to the lessor, electricity, telephone services, repairs.”⁸⁹ On the other hand, the court held that such expenses associated with operating a district office, administrative overhead, and depreciation of items such as casing, tubing, and a Christmas tree were not relevant to the calculation of lifting expenses.⁹⁰ Finding that proceeds exceeded lifting expenses, the court held the leases at issue remained valid.⁹¹

83. For discussion of these subsequent cases, see Boggs, *supra* note 14, at 350.

84. 869 P.2d 323, 326 (Okla. 1994).

85. 630 P.2d 1283, 1284 (Okla. 1981).

86. *Id.*

87. *Id.*

88. *Id.* (quoting *Stewart v. Amerada Hess Corp.*, 604 P.2d 854 (Okla. 1979)).

89. *Id.*

90. *Id.* at 1286.

91. *Id.*

3. *Kansas*

As seen in the *Tate* case cited by the Oklahoma Supreme Court, Kansas courts require “actual production during the primary term as distinct from mere exploration or discovery of oil during such term.”⁹² Kansas courts also use an objective, mathematical computation to determine when a lease produces in paying quantities.

In a 1976 decision, the Kansas Supreme Court specifically rejected a paying quantities analysis based entirely on the lessee’s good-faith judgment and held that a habendum clause that allowed the lease to continue “as much longer as oil or gas is found in paying quantities” required “production in paying quantities.”⁹³ Faced with a lease that produced steadily from 1916 to 1971, after which the only production consisted of “free flow” from lines running between eight wells on the property and a lease tank battery, the court discussed both the subjective and objective standards of determining how much production is enough.⁹⁴ It pointed out that many states choose the subjective standard that leaves this determination solely to the judgment of a reasonably prudent operator because of a belief that a lessee’s self-interest prevents it from continuing to operate at a loss.⁹⁵ However, that test does not protect against the lessee who wants to preserve his interest in hopes of future discoveries in other formations or an upturn in market conditions.⁹⁶ The court explained its belief that the better approach is to follow those cases that apply an objective, mathematical computation, which offers the lessor “some protection when the burdens of the lease far exceed the meager royalty payments, when they fall below the customary delay rental.”⁹⁷ After finding that normal operating costs, in addition to those specifically required by statute—which included restoring the surface around and plugging abandoned wells within six months—far outweighed the gross income from the lease at issue, the court held that the lease expired on its terms.⁹⁸

92. *Tate v. Stanolind Oil & Gas Co.*, 240 P.2d 465, 468 (Kan. 1952).

93. *Reese Enter., Inc. v. Lawson*, 553 P.2d 885, 896-97 (Kan. 1976).

94. *Id.* at 897.

95. *Id.* (citing 2 KUNTZ, A TREATISE ON THE LAW OF OIL AND GAS, §§ 26.7(e), (f), & (g) (1964)).

96. *Id.*

97. *Id.*

98. *Id.* at 899.

4. Louisiana

Louisiana law requires actual production within the primary term to avoid termination, and the mere existence of a well that is capable of producing will not save the lease.⁹⁹ Two older cases illustrate this position, which has since been codified by the Louisiana Mineral Code. Prior to the 1974 enactment of the Louisiana Mineral Code, Louisiana courts used a two-prong test to determine whether production from a lease was adequate.¹⁰⁰ Under that test, the courts compared the amount of royalties being paid to the lessor to the size of other payments due under the lease, including bonuses, delay rentals, and shut-in royalties. They conducted this comparison in order to determine whether the royalties constituted “serious consideration” for the maintenance of the lease—an analysis referred to as the “objective” standard.”¹⁰¹

In *Green v. Standard Oil Co. of Louisiana*, the defendant lessee drilled only one well on the land, which produced so little oil that it normally would have been abandoned.¹⁰² Yet, because the company also operated other wells in the area, its employees could service the poorly producing well at little additional cost.¹⁰³ Standard Oil contended that because it could produce some quantity of oil from the well without incurring additional expenses, it should be allowed to do so.¹⁰⁴ Citing the company’s stated intention not to develop the lease any further, the court stated that the lessee “must either develop with reasonable diligence, or else give up the lease.”¹⁰⁵ The court declared the lease void because the lessee had “manifestly defaulted on its contract.”¹⁰⁶

A similar factual situation gave rise to the dispute in another Louisiana case, *Caldwell v. Alton Oil Co.*¹⁰⁷ In that case, the lessee moved drilling machinery onto the property on the very last day of the primary term but did not actually drill a well until after the primary term expired.¹⁰⁸ Once drilled, the well produced very little.¹⁰⁹ Much like in *Green*, the defendant

99. John M. McCollam, *A Primer for the Practice of Mineral Law Under the New Louisiana Mineral Code*, 50 TUL. L. REV. 732, 800 (1976).

100. See generally *Noel Estate, Inc., v. Murray*, 65 So. 2d 886 (La. 1953); *Brown v. Sugar Creek Syndicate*, 197 So. 583 (La. 1940); *Logan v. Tholl Oil Co., Inc.*, 180 So. 473 (La. 1938).

101. Patrick S. Ottinger, *Production in ‘Paying Quantities’—A Fresh Look*, 65 LA. L. REV. 635, 638-43 (2005); McCollam, *supra* note 98, at 814.

102. 84 So. 211, 212 (La. 1920).

103. *Id.*

104. *Id.*

105. *Id.*

106. *Id.*

107. 108 So. 314 (La. 1926).

108. *Id.* at 314.

109. *Id.*

lessee derived a small profit from the well solely because its other wells in the vicinity allowed it to service the subject well at little cost.¹¹⁰ The lessee argued that its ability to derive a small profit from the well relieved it of its obligation to further develop the property and consequently allowed it to hold the lease.¹¹¹ The Louisiana Supreme Court disagreed and cancelled the lease; the court rested its conclusion on the fact that the lessee failed to comply with the lease's express terms and did not drill a well within one year.¹¹²

After the Louisiana Supreme Court decided *Greene and Caldwell*, Louisiana enacted a statute based largely on the Texas Supreme Court's ruling in *Clifton v. Koontz*, which essentially codified existing Louisiana common law.¹¹³ The relevant section of the Louisiana Mineral Code states:

When a mineral lease is being maintained by production of oil or gas, the production must be in paying quantities. It is considered to be in paying quantities when production allocable to the total original right of the lessee to share in production under the lease is sufficient to induce a reasonably prudent operator to continue production in an effort to secure a return on his investment or to minimize any loss.¹¹⁴

The philosophy that a lessee should not be allowed to selfishly hold a lease for speculative purposes is inherent in this law.¹¹⁵ While Louisiana courts may still consider lease payment information, the current statutory scheme specifically limits its use:

[T]he amount of the royalties being paid may be considered only insofar as it may show the reasonableness of the lessee's expectation in continuing production. The amount need not be a serious or adequate equivalent for continuance of the lease as compared with the amount of the bonus, rentals, or other sums paid to the lessor.¹¹⁶

As a result, Louisiana courts now employ the same reasonable and prudent operator test used in Texas.¹¹⁷

110. *Id.* at 315.

111. *Id.* at 316.

112. *Id.*

113. See LA. REV. STAT. ANN. § 31:124 (1974); Ottinger, *supra* note 100, at 657; McCollam, *supra* note 98, at 814.

114. LA. REV. STAT. ANN. § 31:124 (2012). This section took effect on January 1, 1975.

115. Ottinger, *supra* note 100, at 637.

116. LA. REV. STAT. ANN. § 31:125 (2012); see also McCollam, *supra* note 98, at 814.

117. Ottinger, *supra* note 100, at 657; McCollam, *supra* note 98, at 814.

5. *Alabama*

Alabama has less reported case law on habendum clauses than its neighbors, but it does have an interesting case involving cessation of production in the secondary term of a lease. In *Griffin v. Crutcher-Tufts Corp.*, the lessors granted a lease for a term of five years beginning on January 15, 1975.¹¹⁸ The lessee unitized a portion of the leased acreage and drilled a productive well in the unit, which produced until December 1979. Just two weeks before the end of the primary term, on January 2, 1980, the lessee shut down the well and began “workover” operations.¹¹⁹ These operations proved unsuccessful, and the lessee abandoned the well on April 10, 1980 and began drilling a new well a month later in another location within the unit.¹²⁰ The second well was successful and continued producing.¹²¹ Nonetheless, in September 1980, the lessors notified the lessee that they considered the lease to have expired, and in September 1981, they filed a declaratory judgment action asking the court to declare that the lessees could not continue to hold the lease.¹²²

At issue before the court was the drilling operations clause contained in the lease, which provided that the lease would *not* terminate upon the cessation of production after the discovery of oil or gas, so long as the lessee commenced “additional drilling or reworking operations within 60 days.”¹²³ The clause further provided that even if there was no production at the end of the primary term, the lease could still be held if the lessee was engaged in drilling or reworking operations when the term expired, so long as the period of cessation did not exceed sixty days.¹²⁴ The lessors contended that the clause did not save the lease because the productive well was the second well drilled and not the well the lessee attempted to rework just before the end of the primary term.¹²⁵

The court noted that the production needed to preserve a lease under a drilling operations clause must be obtained from the “particular drilling operations alleged to satisfy the clause.”¹²⁶ The court also rejected the defendants’ contention that the shut-in royalties it paid extended the lease since the shut-in clause specifically stated that it applied during the primary

118. 500 So. 2d 1008, 1009 (Ala. 1986).

119. *Id.*

120. *Id.*

121. *Id.*

122. *Id.*

123. *Id.*

124. *Id.* at 1010.

125. *Id.*

126. *Id.*

term.¹²⁷ Since the gas well at issue was “clearly not capable of production in commercial quantities,” the court held the lease expired once the defendants abandoned the first well.¹²⁸

6. *Arkansas*

In 1986, the Arkansas Supreme Court addressed the question of whether an oil and gas lease should be cancelled for failure to produce in paying quantities. In *Turner v. Reynolds Metals Co.*, Jean Turner leased her land in 1951 for a term of ten years and “thereafter as long as oil, gas or other minerals were produced from the land.”¹²⁹ In 1975, the parties agreed to extend the lease for an additional period, with both a new primary and secondary term.¹³⁰ Having presented evidence of the revenue produced and the quite limited royalties paid on the lease from 1975 through 1982, lessor Turner argued that the lease automatically terminated at the end of the extended secondary term because the well had not produced gas in paying quantities.¹³¹ As a threshold matter, the court stated that a provision in a lease that requires “production” means “production in paying quantities.”¹³² The court considered the expense the lessee paid each month to service the ten wells in the field area where the subject well was located, allocated a share of that expense to each well, and determined that the lessee lost money on the well at issue every year during the secondary term.¹³³ Dismissing the fact that the landowner received free gas for her home during this period as irrelevant, the court held that she was entitled to cancel the lease since it had failed to produce in paying quantities.¹³⁴

In another case, *Ross Explorations, Inc. v. Freedom Energy, Inc.*, the Supreme Court of Arkansas considered how much production amounts to “commercial paying quantities,” which the court said “is determined by what is profitable to the lessee.”¹³⁵ In this case, one working interest owner assigned rights to another after the well holding the lease had been shut in for several months.¹³⁶ The assignee, Ross, contended the lease remained in

127. *Id.* at 1011.

128. *Id.* at 1012.

129. 721 S.W.2d 626, 626 (Ark. 1986).

130. *Id.* at 627. The term of this supplemental agreement was “for a period of at least five years from this date and beyond said five year period for as long as oil and/or gas is produced from the leased lands or lands unitized therewith.” *Id.*

131. *Id.*

132. *Id.*

133. *Id.*

134. *Id.* at 628.

135. 8 S.W.3d 511, 514 (Ark. 2000).

136. *Id.* at 513.

effect, while Freedom Energy, who had meanwhile taken an option to purchase leases from the lessors, argued the lease expired prior to the Ross assignment.¹³⁷ At trial, the court considered evidence for a twenty-four month period, during which the well operated profitably for eight months and at a loss for sixteen months, with a net loss of approximately \$607.00.¹³⁸

On appeal, Ross argued that Freedom Energy failed to meet its burden of showing the lease ceased to produce in commercial paying quantities because it improperly included overhead as a cost and that the court erred by adding non-lifting costs.¹³⁹ As to the question of what costs ought to be considered, the court declared that only direct expenses attributable to operation were relevant, excluding costs such as overhead and those of drilling and equipping the well.¹⁴⁰ The court also rejected Ross’s claim that the two-year production period the court examined was too short, holding that the relevant time period is a reasonable one in light of the circumstances.¹⁴¹ The fact that Ross’s predecessor voluntarily ceased production four months before assigning the well to Ross offered further support to the trial court’s finding that the well ceased to produce in the required quantities, which was affirmed in the Arkansas Supreme Court decision.¹⁴²

7. *Mississippi*

We found no cases in Mississippi that specifically addressed the question of what level of production must exist to hold a lease in its secondary term. A 1959 case, however, took an atypical, plain meaning approach to the interpretation of the word “production.” In *Roberts v. Corum*, the lease at question was “for a term of ten (10) years from [the date of the lease] (called ‘primary term’) and as long thereafter as oil, gas or other mineral is produced from said land or lands with which said land is pooled hereunder.”¹⁴³ The Mississippi Supreme Court declined to hold that the production requirement meant production in “paying quantities.”¹⁴⁴ Instead of engaging in the typical jurisprudential analysis of production implying production in paying quantities, the court held that “it is sounder

137. *Id.*

138. *Id.*

139. *Id.* at 514.

140. *Id.* at 514-15.

141. *Id.* at 516.

142. *Id.* at 516-17.

143. 112 So. 2d 550, 552 (Miss. 1959) (explanatory parenthetical in original text).

144. *Id.* at 554.

policy to adhere to the principles so deeply embedded in our jurisprudence that the plain and unambiguous language of a contract should be construed as written.”¹⁴⁵ To the court, it could not “now write into that contract the words ‘production in paying quantities’ without doing violence to the solemn rights of the parties to make their own agreements.”¹⁴⁶ There is additional case law on record in Mississippi that clearly allows for some cessation of production in the secondary term so long as the temporary stoppage is not for an unreasonable period of time.¹⁴⁷

8. *Nebraska*

In *Long v. Magnolia Petroleum Co.*, the lessors sought the surrender of a lease due to the failure of the defendant to produce oil and gas in paying quantities during the primary term of the lease.¹⁴⁸ The lease had a standard term, but also had an additional section that provided “if, after discovery of oil, liquid hydrocarbons, gas or their respective constituent products, or any of them, the production thereof should cease, this lease shall not terminate if lessee commences additional drilling or reworking operations.”¹⁴⁹ The lessor contended that the word “production,” as used in that clause or anywhere it existed in the lease, meant “production in paying quantities.”¹⁵⁰ The court cited multiple cases where courts addressed the question of whether to imply a “paying quantities” requirement where one was not specifically stated, including *Garcia v. King*, but noted that none of those cases related to the primary term of the lease.¹⁵¹ This case, therefore, did not turn on the meaning of “paying quantities” because the dispute occurred while the lease was still in its primary term. However, the court’s lengthy discussion of the *Garcia* case may be read as an indicator of its position on the question as it pertains to the secondary term. Yet, at the same time, the court also noted that “courts are not at liberty to rewrite the contract made by the parties, nor should the courts add language to that used by the parties and thus change the plain expressed intention of the parties as set out in the contract.”¹⁵² Therefore, how a Nebraska court might come down on a case

145. *Id.* at 555. Without directly citing to case law, the court prefaced that holding by stating that it was “cognizant of the fact that many courts hold to the contrary” concerning the meaning of the word “production.” *Id.*

146. *Id.*

147. *Frost v. Gulf Oil Corp.*, 119 So. 2d 759, 762 (Miss. 1960).

148. 89 N.W.2d 245, 248-49 (Neb. 1958).

149. *Id.* at 252.

150. *Id.* at 254.

151. *Id.* at 255 (citing *Garcia v. King*, 164 S.W.2d 509, 512 (Tex. 1942)).

152. *Id.*

centering on habendum clause interpretation remains left open to interpretation.

B. EASTERN STATES

While courts in the east calculate a lessee’s profits and losses the same way as those in the Midcontinent, they ultimately defer to the good-faith determination of the lessee as to whether continued operations are justified.

1. *Pennsylvania*

With one of the longest histories of commercial oil and gas development in the world,¹⁵³ it is no surprise that the Pennsylvania Supreme Court was the first to tackle the paying quantities question. The “good-faith” test first introduced in the 1899 case of *Young v. Forest Oil Co.* set a definitional standard for what constitutes paying quantities—that a well must produce some amount of oil or gas greater than the amount needed to cover operating costs—and offered a method for determining whether that standard was met.¹⁵⁴ The resulting lessee-centered focus on good faith became the basis for oil and gas drilling regimes throughout the Appalachian basin and remains good law today.

In *Young*, the landowner filed suit after the lessee refused to drill additional wells on his land and asked the court to either declare “a forfeiture of the lease for failure to develop the land” or to require the lessee to sink an additional well on his property.¹⁵⁵ Although the lessee drilled a total of five wells on Young’s fifty-three acre farm, four of which produced oil, Young focused on the area of the farm containing no wells to support his argument that “oil was no longer produced ‘in paying quantities.’”¹⁵⁶

The court declared the “real question” in the case was whether the lessee’s “omission to put a well in that portion of the land was fraudulent,” but it found “not a scintilla of evidence” to support that contention.¹⁵⁷ A

153. The first American commercial oil well was the famous Drake Well, drilled pursuant to a lease dated December 30, 1857. WILLIAMS & MEYERS, *supra* note 7, at § 601.1. The surrounding Oil Creek valley was the world’s largest oil producer from 1859 through 1873.

154. 45 A. 121, 122-23 (Pa. 1899). In another section of the opinion, the Pennsylvania Supreme Court placed great emphasis on the fact that since:

The operator, who has assumed the obligations of the lease, has put his money and labor into the undertaking . . . [he] is entitled to follow his own judgment. If that is exercised in good faith, a different opinion by the lessor, or the experts, or the court, or all combined, is of no consequence, and will not authorize a decree interfering with him.

Id. at 122.

155. *Id.* at 121.

156. *Id.* at 122.

157. *Id.*

well produces in paying quantities, the court explained, if it “pays a profit, even a small one, over the operating expenses,” even though it “may never repay its cost, and the operation as a whole may result in a loss.”¹⁵⁸ Noting that the lessee must be allowed to reduce its loss by profits, however small, the court found the lease valid, holding that “the phrase, ‘paying quantities,’ therefore is to be construed with reference to the operator, and by his judgment when exercised in good faith.”¹⁵⁹

In the 1977 case of *Pemco Gas, Inc. v. Bernardi*, the Armstrong County Court of Common Pleas interpreted a habendum clause that allowed a lease to continue for “as long after commencement of operations as said land is operated for the exploration or production of gas and oil, or as gas and oil is found in paying quantities thereon.”¹⁶⁰ Although the analysis in *Pemco* focuses largely on “commencement of operations” language particular to that lease and is not binding law, we include it here because it shows a tendency for courts to allow a lessee to proceed when the court believes the leasehold is capable of producing.

The original lessee assigned the subject lease to Pemco, a third-party operator, about six months prior to the expiration of the ten-year primary term.¹⁶¹ Pemco then surveyed the site, began negotiating with the lessors and a neighbor about the location of the well site and rights of way, and hired third parties to excavate and drill the well.¹⁶² Just days before the expiration of the primary term, workers cleared the property and brought several pieces of conductor pipe to the site.¹⁶³ Delays at another site prevented the drill rig from arriving until September 1, the day the primary term expired.¹⁶⁴ That very day, the lessors executed a new lease on the property with a different oil and gas firm and informed Pemco that they believed the prior lease had terminated.¹⁶⁵

The court divided its analysis into two issues. First, what types of acts qualify as the “commencement of operations?” And second, did the lessee commence operations with the good-faith intent to drill a well?¹⁶⁶ Noting that Pemco began negotiations nearly three months before the expiration of the lease and continued its preparations until the last day of the lease, the court determined that Pemco “commenced operations within the generally

158. *Id.* at 122-23.

159. *Id.* at 123.

160. 5 Pa. D. & C. 3d 85, 87 (Pa. Com. Pl. 1977).

161. *Id.*

162. *Id.* at 88.

163. *Id.*

164. *Id.* at 89.

165. *Id.*

166. *Id.* at 93.

accepted meaning of that phrase.”¹⁶⁷ The court explained, “if a lessee commences a well within the primary term of a lease and carries on the drilling operations diligently and in good faith, although he does not actually complete the well and secure production until after the end of the primary term, the lease remains in force”¹⁶⁸ Describing the law on the issue of what constitutes “commencement of operations” as fairly clear, the court noted that “actual drilling is not necessary” and “physical acts normally required to be done prior to the commencement of actual drilling, if done in good faith, are sufficient to constitute the commencement of a well or drilling operations.”¹⁶⁹ Finding no evidence of bad faith, the court held that the lease continued into its secondary term as a result of Pemco’s “good faith commencement of operations in preparation for the actual drilling of a gas well.”¹⁷⁰

A recent decision by the Supreme Court of Pennsylvania has reaffirmed and expanded upon the subjective, good-faith test first promulgated in *Young v. Forest Oil* and specifically declined to adopt the objective standard employed by Texas and other midcontinent courts. In *T.W. Phillips Gas and Oil Co. v. Jedlicka*, two lessees filed a declaratory judgment action against landowner Ann Jedlicka when she objected to their plans to drill four additional wells on her land.¹⁷¹ Jedlicka acquired her seventy-acre tract of land in 1979, subject to the terms of an existing 1928 oil and gas lease.¹⁷² The lease’s habendum clause allowed the lessee to continue operating “for a term of two years, and as long thereafter as oil or gas is produced in paying quantities”¹⁷³

At trial, Jedlicka argued that the lessee failed to maintain continuous production in paying quantities because it had sustained a loss of \$40 in 1959.¹⁷⁴ The lessee maintained that production from the wells amounted to production in paying quantities because their profits exceeded operating expenses, and they continued to operate those wells in a good-faith effort to turn a profit.¹⁷⁵ The Pennsylvania Supreme Court granted Jedlicka’s petition for appeal to consider whether the lower court misapplied Pennsylvania’s seminal case on the issue, *Young v. Forest Oil*, by “holding

167. *Id.* at 95.

168. *Id.* at 91-92.

169. *Id.* at 92.

170. *Id.* at 100.

171. 42 A.3d 261, 264 (Pa. 2012).

172. *Id.*

173. *Id.*

174. *Id.*

175. *Id.*

that Pennsylvania employs a purely subjective test to determine whether an oil or gas lease has produced ‘in paying quantities.’”¹⁷⁶

At trial, and again on appeal, Jedlicka asserted that the *Young* decision called for an objective, mathematical calculation of profits minus operating expenses (sometimes referred to as “lifting expenses”).¹⁷⁷ The operator’s subjective, good-faith judgment only comes into play, she argued, where a lease is producing in paying quantities (making a profit) but may not offset its total operating expenses.¹⁷⁸ In making this argument, Jedlicka appears to have been urging the Supreme Court of Pennsylvania to adopt the prudent-operator standard used in Texas and other mid-continent states. Specifically, Jedlicka claimed that because the lessees incurred a net loss in 1959, the lease lapsed into a tenancy at will, which was terminable by the lessor at any time.¹⁷⁹ The lessees, on the other hand, contended that even courts in jurisdictions that embrace an objective standard “have explicitly held that the term to be used in assessing the performance of the lease should be one long enough to ‘provide the information which a prudent operator would take into account in [deciding] whether to continue or abandon operation.’”¹⁸⁰

Rejecting Jedlicka’s contention that a one-year period of loss justifies the conclusion that a well failed to produce in paying quantities, the court held that profits must be measured over a reasonable period of time.¹⁸¹ The question of what amounts to a “reasonable” time period requires a careful review of the individual circumstances of each case and may “be driven by consideration of the good faith judgment of the operator.”¹⁸² Although the court declined to establish a bright-line rule regarding what constitutes a reasonable time period, it provided some guidance, noting that other courts found a two-year period reasonable while a thirteen-year period was not.¹⁸³

The court also explained the rationale behind its preferred subjective standard:

The operator, who has assumed the obligations of the lease, has put his money and labor into the undertaking, and . . . is entitled to follow his own judgment. If that is exercised in good faith, a different opinion by the lessor, or the experts, or the court, or all

176. *Id.* at 266.

177. *Id.* at 270-71.

178. *Id.* at 271.

179. *Id.*

180. *Id.*

181. *Id.* at 275.

182. *Id.* at 276.

183. *Id.*

combined, is of no consequence, and will not authorize a decree interfering with him.¹⁸⁴

The court further explained:

Where . . . production on a well has been marginal or sporadic, such that, over some period, the well’s profits do not exceed its operating expenses, a determination of whether the well has produced in paying quantities requires consideration of the operator’s good faith judgment in maintaining operation of the well. In assessing whether an operator has exercised his judgment in good faith in this regard, a court must consider the reasonableness of the time period during which the operator has continued his operation of the well in an effort to reestablish the well’s profitability.¹⁸⁵

Noting that Jedlicka presented no proof that the lessees acted in bad faith in continuing to operate under the lease, the court upheld the lease.¹⁸⁶

2. *New York*

Courts in New York also defer to an operators’ good-faith judgment in deciding how much profit justifies the continued development of a particular leasehold, although New York has few cases on the issue.¹⁸⁷

3. *Kentucky*

A 1934 Kentucky Court of Appeals case stemming from a claim by a lessee looking to abandon an unprofitable lease illustrates a similar deference to lessees’ good-faith judgment.¹⁸⁸ In *Swiss Oil Corp. v. Riggsby*, the lessor filed suit seeking royalties payable under a 1916 oil and gas lease that allowed the lessee to continue operating “as long as gas or oil is found in paying quantities on said premises,” with payment for gas contingent upon the additional provision that gas be found “in sufficient quantities to transport.”¹⁸⁹ Although the lessee failed to drill any wells on the Riggsby

184. *Id.* at 269 (quoting *Young v. Forest Oil Co.*, 45 A. 121, 122 (Pa. 1899)).

185. *Id.* at 276.

186. *Id.* at 278.

187. *See, e.g.*, *Peckham v. Dunning*, 125 N.Y.S. 2d 895 (N.Y. Sup. Ct. 1953).

188. Habendum clause language has not always been viewed as a constraint on the ability of a lessee to continue operating a lease after the primary term. In the early days of oil and gas development, landowners sometimes argued that the “so long thereafter” language required a lessee to continue operating a lease that the lessee might otherwise choose to abandon. *See, e.g.*, *Swiss Oil Corp. v. Riggsby*, 67 S.W.2d 30, 31 (Ky. Ct. App. 1934).

189. *Id.* at 31.

land, it operated multiple wells on neighboring lands.¹⁹⁰ After contracting with a distribution company to sell gas from all of the surrounding wells and operating at a loss for several months, the lessee cancelled the contract and plugged several wells.¹⁹¹ The lessee then removed its pipeline from the Riggsbys' land and sought to abandon the lease.¹⁹² Experts testified that the gas underlying the Riggsby property alone would have been too little to transport and certainly not enough to turn a profit given the distance between the well and existing pipelines.¹⁹³ Despite this, the lessors argued that the lease terms obligated the lessee to either pay them \$200 per year or drill one or two wells on the premises.¹⁹⁴

The court acknowledged the importance of allowing an experienced operator to determine whether a particular well produces enough gas to market in light of “the distance to the market, the expense of marketing, and every similar circumstance.”¹⁹⁵ Noting that the object of leasing oil and gas is to “secure the oil or gas beneath the surface,” and that “the judgment of an experienced operator or lessee, if exercised in good faith, will prevail as against that of a lessor without experience,” the court held that a lessee may properly abandon a lease once it establishes the absence of gas beneath the surface, or that gas does not exist in paying quantities.¹⁹⁶

In the 1923 decision of *Reynolds v. White Plains Oil & Gas Co.*, the Court of Appeals of Kentucky declined to cancel a lease where the three wells drilled produced only one barrel of oil every other day and the habendum clause allowed the lease to continue “so long thereafter as oil and gas are *produced or operations are continued thereon*.”¹⁹⁷ While the lessor argued that the lease expired because it failed to produce in paying quantities, the court countered:

The expression “in paying quantities” is not employed in the contract, but had it been so employed in the contract lessor would be in no better condition for the general rule is, as laid down in Thornton on Oil & Gas, sections, 148, 149 and 151, that the lessee who at his own expense drills wells, equips them and operates

190. *Id.* at 32.

191. *Id.*

192. *Id.*

193. *Id.* at 33.

194. *Id.* at 31.

195. *Id.*

196. *Id.*

197. 250 S.W. 975, 975 (Ky. Ct. App. 1923) (emphasis added).

them, has the exclusive right to determine when a well is producing oil or gas or both in paying quantities.¹⁹⁸

The court explained that its decision protected the good-faith lessee who prosecuted work for development with reasonable diligence.¹⁹⁹

In *Enfield v. Woods*, the well drilled produced some oil, but even the lessee admitted the amount was very small.²⁰⁰ The lessee attempted to drill deeper, but even then it produced only “mere scum or showing of oil on the barrels or tank into which the well was pumped; that there was not enough oil to stain the ground.”²⁰¹ The lessee contended that he could hold the lease because the habendum clause allowed it to continue “as long thereafter as oil and gas, or either, is produced.”²⁰²

While the court acknowledged that the lease did not require the lessee to produce oil in paying quantities, it stated that the lessee is required to produce oil and gas “in such quantities as to be susceptible of division, so as to pay the landowner a royalty, even though small. A mere showing of oil manifestly is not sufficient even though produced. The production must be tangible and substantial, but it need not be great.”²⁰³ The court acknowledged the position that merely requiring oil and gas to be produced leaves room for a lease to continue where production exists but does not pay.²⁰⁴ Yet, the court went on to say that the general rule “is to hold the expression ‘oil well’ or ‘gas well’ as used in a lease contract to mean an oil well or gas well which can be profitably operated as such.”²⁰⁵ Thus, the court agreed with the trial court’s finding that the well was a non-producer and therefore the lease expired.²⁰⁶

In the 1946 case of *Young v. Dunn*, the Kentucky Court of Appeals made it clear that the lessee need not actually sell gas to hold a lease, although its failure to exercise reasonable diligence in marketing gas could amount to abandonment.²⁰⁷ The Kentucky Court of Appeals reiterated this position in 2000, stating: “consummation of a sale is not necessarily the

198. *Id.* at 976.

199. *Id.*

200. 248 S.W. 842, 842 (Ky. Ct. App. 1923). The *Enfield* decision is also noteworthy as one of the decisions cited by the Texas Supreme Court in arriving at its holding in the seminal case of *Garcia v. King*, 164 S.W.2d 509, 510 (Tex. 1942).

201. *Enfield*, 248 S.W. at 843.

202. *Id.*

203. *Id.*

204. *Id.*

205. *Id.* at 843.

206. *Id.*

207. 194 S.W.2d 378, 379 (Ky. 1946).

determining factor of whether the lessee has marketed the gas.”²⁰⁸ Rather, a court must examine:

[A]ll of the circumstances, such as the absence of a market and the diligence of a lessee in seeking a market, the failure of the lessor to make a demand, the acceptance by a lessor of other benefits under the lease, whether it was necessary to make abnormal expenditures to market the product, and whether the delay was to gain better marketing terms.²⁰⁹

Like the case law history of Illinois and West Virginia discussed more particularly below, this line of Kentucky cases illustrates that the mere discovery position taken by the Kentucky courts early on appears to have softened to a position that more closely resembles the capability rule adopted by Oklahoma courts.

4. *West Virginia*

Like Kentucky, West Virginia courts once required very little production to extend a lease. *South Penn Oil Co. v. Snodgrass*²¹⁰ illustrates the “mere discovery” position the Supreme Court of Appeals of West Virginia took in the early twentieth century. The habendum clause at issue in *Snodgrass* permitted the lessee to continue operating after the ten-year primary term for “as long thereafter as oil or gas or either of them is produced therefrom.”²¹¹ With the end of the primary term less than a week away, South Penn Oil Company discovered oil on the property in trace amounts.²¹² On the very day the primary term expired, South Penn shot a well.²¹³ One week later, it began pumping the well and continued to do so for some time.²¹⁴ Meanwhile, after attempting to terminate the lease by refusing to accept the final delay rental payments, the lessors granted new leases on the property to different developers.²¹⁵ The lessors and the new lessees then joined forces to oust South Penn, who had already paid the lessors around \$2,000 in rentals and drilled a well to a depth of 2,038 feet.²¹⁶ South Penn filed suit against the lessors and the new lessees.

208. *Hiroc Programs, Inc. v. Robertson*, 40 S.W.3d 373, 378 (Ky. Ct. App. 2000) (quoting *Davis v. Cramer*, 837 P.2d 218, 222 (Colo. App. 1992)).

209. *Id.*

210. 76 S.E. 961, 964 (W. Va. 1912).

211. *Id.*

212. *Id.* at 963.

213. *Id.*

214. *Id.*

215. *Id.*

216. *Id.* at 964.

Analyzing the lease language in light of the spirit and purpose of the contract between the parties, the court noted that the habendum clause exists to allow a lessee acting diligently, skillfully, and in good faith to continue operating and to attempt to recover its costs.²¹⁷ Given that purpose, the court said, simply discovering oil—even with only trace amounts of production—vests an interest and gives way to a continued right to explore and produce that oil.²¹⁸ The lessee takes “enormous risks and burdens” by drilling a well, and “[a]dherence to the strict letter of the extension clause would make no allowance for [delays], and inflict disastrous losses upon diligent and honest lessees in many instances—a consequence plainly not within the intent of either party.”²¹⁹ The court declared the lessee’s decision not to drill until the last quarter of the primary term well within its rights under the contract and held that the discovery of oil during the primary term extended the lease into its secondary term.²²⁰

Just five years after deciding *Snodgrass*, the Supreme Court of Appeals of West Virginia noted the importance of being able to actually market the oil and gas produced from the leasehold. That case, *Barbour, Stedman & Co. v. Tompkins*,²²¹ involved a lease for a primary term of five years and “as long thereafter as oil or gas is produced therefrom in paying quantities.”²²² Three to four days before the expiration of the primary term, the lessee discovered gas.²²³ The well produced 100,000 to 500,000 cubic feet of gas per day, which the lessee then sold in the local gas markets.²²⁴ The landowner sued to cancel the lease, arguing that the output did not amount to “paying quantities.”²²⁵

The operative question, the court said, becomes “not how much may be derived from a sale of the gas, but rather whether it may be sold in the market for consumption as fuel with reasonable expectation of profitable returns in excess of costs and expenses.”²²⁶ Again stating that the phrase “in paying quantities” must be considered in light of the lessee’s good-faith judgment, the court held that the lessor cannot forfeit the lease merely

217. *Id.* at 967. For further discussion of the court’s rationale, see KUNTZ, *supra* note 8, at § 26.7(a).

218. *Snodgrass*, 76 S.E. at 967.

219. *Id.*

220. *Id.* at 967-68. The court stated that it was important to make an “allowance for accident or miscalculation as to ability or error or judgment as to conditions” *Id.* at 968.

221. 93 S.E. 1038 (W. Va. 1917).

222. *Id.* at 1038.

223. *Id.* at 1038-39.

224. *Id.* at 1040.

225. *Id.* at 1039-40.

226. *Id.* at 1040.

because “he thinks the quantity of gas discovered therein was not sufficient to constitute a paying well”²²⁷

In a more recent decision, the Supreme Court of Appeals of West Virginia pointed out the importance of the operator’s profit in determining whether a lease is held by production. In *Goodwin v. Wright*, the defendant contended that its lease remained valid during its secondary term solely because the well on the property supplied the lessors with gas for their home.²²⁸ Having granted a lease in 1961 for a primary term of ten years and “as long thereafter as oil or gas, or either of them, is produced from the said lands,” Paul and Dorothy Goodwin sought to terminate the lease in 1974, claiming it had expired on its terms.²²⁹ Both parties agreed that the lessee had not produced oil or gas on the land for four years and that the lessors received no rental payments or royalties after “1968 or 1969,” at least one year before the lessee assigned the lease to the defendant.²³⁰ In turn, the operator argued that the benefit the Goodwins received in the form of free gas for their home justified extending the term of the lease.²³¹

Revisiting the question of whether “produced” means “produced in paying quantities,” the court cited *Garcia v. King*, noting that the landowner’s purpose in executing a lease “is to have the oil and gas on the leased premises produced and marketed so that he may receive his royalty therefrom, and the purpose of the lessee is to discover and produce oil and gas in such quantities as will yield him a profit.”²³² Turning to the lease at issue, the court pointed out that the lessee not only failed to properly pay either rental or royalty, but that it also made no attempt to produce or market the oil or gas.²³³ The court emphasized the fact that “[t]he objective of the lease is not merely to have oil or gas flow from the ground but to obtain production that is commercially profitable to both parties.”²³⁴ Absent paying production, the court noted, the lessee cannot recover its drilling costs. Further, the court pointed out, the lessor contemplates more than the receipt of an ancillary benefit such as free gas for domestic use when granting a lease.²³⁵ Stating that the production required would result

227. *Id.*

228. 255 S.E.2d 924, 925 (W. Va. 1979).

229. *Id.*

230. *Id.*

231. *Id.*

232. *Id.* at 926 (citing *Garcia v. King*, 164 S.W.2d 509 (Tex. 1942)).

233. *Id.* at 927.

234. *Id.* (quoting 3 WILLIAMS, *supra* note 7, at § 605).

235. *Id.*

in a royalty payment to the lessor, the court held that the lease had expired on its terms.²³⁶

C. MIDWESTERN STATES

When addressing questions involving the habendum clause, courts in the Midwest often rely on established law from the Midcontinent or the East.

1. Illinois

In *Gillespie v. Ohio Oil Co.*, another of the cases discussed by the Texas Supreme Court in its *Garcia* holding,²³⁷ the Supreme Court of Illinois considered the issue of requisite production under a lease where the habendum clause did not require production in paying quantities, but rather allowed the lessee to continue operating for five years and “so long thereafter as oil or gas is produced thereon.”²³⁸ Less than a week before the expiration of the primary term, the lessee drilled a well.²³⁹ The well produced twelve barrels of oil per day for the first two days and insignificant amounts thereafter.²⁴⁰ The court stated that the well’s continual oil production, albeit “so small as to make the venture unprofitable,” satisfied the requirements of “the strict letter of the lease,” and the court held that it had not expired by its terms.²⁴¹

In 1980, an Illinois Court of Appeals again analyzed a lease where the habendum clause lacked a “paying quantities” requirement in *Doty v. Key Oil, Inc.*²⁴² Key Oil discovered gas, which it flared, but produced no oil.²⁴³ The lessors demanded release of the lease, and then Key Oil shut in the well.²⁴⁴ At trial, Key Oil blamed its lack of production on the fact that the distance from the well to a pipeline prevented it from profitably marketing the gas.²⁴⁵ The trial court “commented that the flaring of the well appeared to be inconsistent with an intention to produce gas at some later date” and held that the lease had expired on its terms.²⁴⁶ On appeal, Key Oil argued

236. *Id.*

237. *Garcia v. King*, 164 S.W.2d 509, 581-82 (Tex. 1942).

238. 102 N.E. 1043, 1044 (Ill. 1913).

239. *Id.*

240. *Id.*

241. *Id.*

242. 404 N.E.2d 346 (Ill. App. Ct. 1980).

243. *Id.* at 347.

244. *Id.*

245. *Id.*

246. *Id.*

that its payment of shut-in royalties saved the lease.²⁴⁷ The court pointed out that shut-in clauses exist to extend leases where the lessee discovers gas in paying quantities during the primary term but finds no market for it.²⁴⁸ Noting that the prior decision in *Gillespie* contradicted the position of other courts—that “the production necessary to extend a lease must be in paying quantities”—the court distinguished the *Gillespie* decision rather than overruling it.²⁴⁹ While the habendum clause in this case did not require production in paying quantities, a provision referring to the shut-in clause provided that “if such payment or tender is made, this lease shall continue in force and it shall be considered that gas is being produced from the leased premises in paying quantities.”²⁵⁰ When read together, the court said, these clauses revealed the parties’ intent to require production in paying quantities to extend the lease under the habendum clause.²⁵¹ Since Key Oil flared the only gas produced, and it found no oil at all, the court explained that “the lease was not extended under the habendum clause for the simple reason that there was no production whatsoever, in any accepted sense of the term.”²⁵²

An Illinois Court of Appeals once again distinguished *Gillespie* and specifically declined to overrule it in 1984 when considering similar lease language in *Pieszchalski v. Oslanger*.²⁵³ The lessees in that case relied on *Gillespie* at trial, and the trial court declared that *Gillespie* no longer “states the law in Illinois.”²⁵⁴ The Illinois Court of Appeals disagreed, again distinguishing the case by saying: “it does not stand for the proposition these defendants attribute to it, *i.e.*, that any production, however meager, is sufficient in any event to extend an oil and gas lease beyond the primary term under a habendum clause not requiring production of oil or gas in paying quantities.”²⁵⁵ In *Gillespie*, the court explained, the lessee continually produced oil from the well and the habendum clause allowed the lease to continue “so long thereafter as oil or gas was ‘produced.’”²⁵⁶

In the lease at issue in *Pieszchalski*, the lessee pumped the single well until it filled the saltwater pit and then shut it down.²⁵⁷ Although the well

247. *Id.*

248. *Id.*

249. *Id.* at 348.

250. *Id.* at 347.

251. *Id.* at 348.

252. *Id.*

253. 470 N.E.2d 1083 (Ill. App. Ct. 1984).

254. *Id.* at 1089.

255. *Id.*

256. *Id.*

257. *Id.*

produced some oil, no one received any proceeds from the sale of oil.²⁵⁸ Noting that lease construction requires courts to give effect to parties’ intent, the court explained that the lease must also be interpreted in light of its spirit and purpose:

[T]o secure development of the property for the mutual benefit of the parties . . . Obviously, if the lease could no longer be operated at a profit, there were no fruits for them to reap. The lessors should not be required to suffer a continuation of the lease after the expiration of the primary period merely for speculation purposes on the part of the lessees.²⁵⁹

The court upheld the trial court’s finding that the lease failed to produce and therefore terminated on its terms.²⁶⁰

While *Gillespie* remains good law in Illinois, in several subsequent cases, Illinois courts have taken great pains to explain that the rationale applied in *Gillespie* was fact-specific. Furthermore, the reasoning in these later decisions aligns with that of other courts across the country that require payment of royalties to the lessor as a minimum standard for a lease to be held by production.

2. *Indiana*

In the 1905 case of *Manhattan Oil Co. v. Carrell*, the Supreme Court of Indiana interpreted a lease that required the lessee to drill additional wells every ninety days after completing the first well until they completed five wells “if *oil* is found in paying quantities.”²⁶¹ After drilling one producing well, the lessee remained on the land and continued to work that same well for over three years.²⁶² The lessor then sued to recover the penalty due for the lessee’s failure to drill additional wells.²⁶³ The jury instructions used at the trial essentially stated the following:

[I]f oil was found in the test or first well in a sufficient quantity to pay a profit, however small, in excess of the cost of producing it, excluding the cost of drilling the well and of equipment, then oil was found in paying quantities, within the meaning of the contract, and the defendant would be required to drill the four additional wells, even though it became manifest that the oil to be obtained

258. *Id.*

259. *Id.* at 1090.

260. *Id.*

261. 73 N.E. 1084, 1085 (Ind. 1905) (emphasis added).

262. *Id.*

263. *Id.*

would not repay first cost, and the enterprise, as a whole, result in a loss to the defendant.²⁶⁴

Examining the contract in light of the parties' likely purpose and intent, the court stated that additional wells were to be drilled only if oil were found in such quantity that ordinarily prudent persons could "expect a reasonable profit on the *full sum* required to be expended in the prosecution of the enterprise."²⁶⁵ This determination must be left to the lessee, the court said, and made in good faith based upon sound business principles.²⁶⁶

3. *Michigan*

The leases at issue in the 1982 case of *Michigan Wisconsin Pipeline Co. v. Michigan National Bank*, which was decided by the Michigan Court of Appeals, formed part of a gas storage field initially operated by the Michigan Consolidated Gas Company.²⁶⁷ After an interstate transmission company applied to the Michigan Public Service Commission to condemn certain parts of the storage field, the operator cut back production to the amount needed to operate heaters at a compressor station and provide free gas for domestic use in several homes.²⁶⁸ With a condemnation action pending, the lessors challenged the validity of the underlying leases, which contained habendum clauses allowing the leases to continue "as long thereafter as oil and gas; or either of them, is produced by lessee from said land or from a communitized unit."²⁶⁹

The appellants in the case contended that "Consolidated acted as a reasonable and prudent operator in deciding to cut back its market of gas" from the storage field in light of the impending condemnation action.²⁷⁰ Relying on the factors set forth in *Clifton v. Koontz* as to various matters to be considered under that standard, the court explained that the lessor must establish two things to terminate a lease: "first, that the operator/lessee was not making a profit from the operation of the field; second that a reasonably prudent operator would not have continued to operate the field under similar circumstances."²⁷¹ The court agreed that a reasonable and prudent operator would have ceased marketing the gas, since leaving the gas in place and waiting for the condemnation award meant it could obtain a profit

264. *Id.* at 1086.

265. *Id.* (emphasis added).

266. *Id.*

267. 324 N.W.2d 541, 543 (Mich. Ct. App. 1982).

268. *Id.*

269. *Id.*

270. *Id.* at 544.

271. *Id.* at 545 (citing *Clifton v. Koontz*, 325 S.W.2d 684, 691 (Tex. 1959)).

at fair market value just the same as if it sold the gas at market.²⁷² This standard allows an operator to act in its best interests, the court explained, “so long as the interests of the lessor are not substantially impaired,” and the lessors in this case presented no evidence of that.²⁷³ The dissenting judge contended that the reasonable and prudent operator standard did not apply because the operator failed to make shut-in royalty payments.²⁷⁴ The majority rejected this argument, finding instead that production continued during this time and that any temporary cessation that occurred was reasonable.²⁷⁵

4. *Ohio*

Ohio jurisprudence reflects a certain deference to a lessee’s good-faith judgment regarding how much production justifies continued operations but with limitations that hew toward the “actual production” approach favored by Texas courts.²⁷⁶ Take, for example, a 1926 Court of Appeals decision. Having obtained a lease for a primary term of ten years and “as much longer as oil or gas is found in paying quantities,” the lessee-defendant in *Tedrow v. Shaffer* drilled a well not long after taking the lease and pumped a small amount of oil from it.²⁷⁷ For the next seven years, the lessee paid delay rentals to the lessor but failed to further develop the oil and gas.²⁷⁸ One month prior to the expiration of the primary term, the lessee assigned the lease to a developer who promptly entered the premises, built roads, and began pumping oil from the well on the very day the primary term expired.²⁷⁹

Equating the term “found” with the term “produced,” the Court of Appeals explained that “production or finding of oil is a condition precedent to the extension of the definite term.”²⁸⁰ The lessee cannot simply produce oil in paying quantities on the last day of the term; rather, “he must have been producing it in paying quantities for some substantial or reasonable time prior to the final day of such term, so that it clearly appears, when the end of such term comes, that he is in good faith actually finding

272. *Id.*

273. *Id.* at 546.

274. *Id.* at 546-47 (Daniels, J., dissenting).

275. *Id.* at 546 (majority opinion).

276. *See* Fielder, *supra* note 3, at 3.

277. 155 N.E. 510, 510 (Ohio Ct. App. 1926).

278. *Id.*

279. *Id.*

280. *Id.* at 511.

oil in paying quantities.”²⁸¹ Deeming the lessee’s last-ditch efforts inadequate, the court held that the lease had expired.²⁸²

The holding in *Tedrow* remains good law in Ohio. In the 1992 decision of *American Energy Services, Inc. v. Lekan*, the Court of Appeals reaffirmed its decision in *Tedrow*, stating unequivocally that a lessee’s good-faith belief that a well is capable of producing in paying quantities “is not enough to hold a lease in its secondary term. The law of Ohio requires that potential production be translated into actual production.”²⁸³ In that case, the court focused on the fact that the lessee never connected the well to a pipeline and the well produced no oil or gas whatsoever over a period of seventeen years.²⁸⁴ The court also discussed the implied duty to market and explained that the existence of a shut-in royalty clause merely modifies this obligation but “does not negate the duty to use due diligence to sell the production.”²⁸⁵

In *Litton v. Geisler*, the Court of Appeals characterized the production required to extend a lease beyond its primary term as “that quantity which will bring a reasonable pecuniary return in excess of the cost of production, regardless of any particular amount of profit derivable from the operation of the well.”²⁸⁶ It explained that the lessee may determine what quantity satisfies this standard, so long as he exercises his judgment in good faith.²⁸⁷ The court explained that:

[T]he fact it is questionable whether oil wells on land held under a lease operative only so long as oil or gas should be found in paying quantities will ever yield a reasonable profit on the investment is not sufficient ground for vacating the lease; in the absence of fraud, the lessee is the sole judge of this question, and as long as he can make a profit therefrom he will be permitted to do so. The mere fact that a lessee under such a lease has failed to operate the wells for some time, will not be ground for vacating such lease, where such lessee shows good and sufficient reason why it has been impracticable for him to do so.²⁸⁸

281. *Id.*

282. *Id.*

283. 598 N.E.2d 1315, 1320 (Ohio Ct. App. 1992).

284. *Id.* at 1321.

285. *Id.* at 1322.

286. 76 N.E.2d 741, 744 (Ohio Ct. App. 1945) (quoting *Barbour, Stedman & Co. v. Tompkins*, 93 S.E. 1038, 1038 (W. Va. 1917)).

287. *Id.*

288. *Id.* at 743-44.

In *Blausey v. Stein*, the Supreme Court of Ohio explained that the lessee’s ability to minimize his costs should “inure to his benefit in a determination of whether a well produces in paying quantities” and that the lessee should be “allowed to attempt to recoup his initial investment for as long as he continues to derive any financial benefit from production.”²⁸⁹ The property owner in *Blausey* asked the court to find the lease on her land void for failure to produce in paying quantities.²⁹⁰ To support her case, the landowner contended that the lessee operated at a loss for six years because his expenses, including all the labor needed to produce oil from the lease, exceeded the income from the well.²⁹¹

In addressing this claim, the court explained that “the term ‘paying quantities’ . . . has been construed by the weight of authority to mean ‘quantities of oil or gas sufficient to yield a profit, even small, to the lessee over operating expenses, even though the drilling costs, or equipping costs, are not recovered, and even though the undertaking as a whole may thus result in a loss.’”²⁹² The court excluded the lessee’s labor from total operating expenses in the calculation of profits versus costs, which left him with a small income from the sale of oil from the well and satisfied the requirement that oil or gas be “found in paying quantities.”²⁹³

5. *North Dakota*

In the case of *Greenfield v. Thill*, in which the Supreme Court of North Dakota held that a temporary cessation of production during the secondary term does not automatically terminate a defeasible-term interest acquired by deed, the court explained in a footnote that “it is generally recognized that ‘found in paying quantities’ is synonymous with ‘produced in paying quantities.’”²⁹⁴ We found no subsequent reported cases in which the North Dakota Supreme Court explained its view as to the amount of production required to meet this standard or the appropriate test to be applied to see if the standard has been met.

6. *South Dakota*

The Supreme Court of South Dakota discussed the production needed to carry a lease into its secondary term in *Cleveland Stone Co. v.*

289. 400 N.E.2d 408, 410 (Ohio 1980).

290. *Id.*

291. *Id.*

292. *Id.* (quoting Douglas Hale Gross, Annotation, *Meaning of ‘Paying Quantities’ in Oil and Gas Lease*, 43 A.L.R.3d 8 (1972)).

293. *Id.*

294. 521 N.W.2d 87, 92 n.1 (N.D. 1994).

Hollingsworth.²⁹⁵ The defendant lessee cited a West Virginia case, *South Penn Oil Co. v. Snodgrass*,²⁹⁶ which we discussed in detail hereinabove,²⁹⁷ for the proposition that the mere discovery of minerals during the primary term could carry a lease into its secondary term so long as the lessee diligently continued operations.²⁹⁸ The court observed that the trial court seemed “to have been of the opinion that a mere showing of oil was not sufficient, but tangible and substantial production was necessary to extend the term of the lease.”²⁹⁹ However, both the trial court and the Supreme Court of South Dakota decided the case on other grounds.³⁰⁰

D. WESTERN STATES

Western states have the least developed case law on this issue. As a result, we have included cases that address the issue rather narrowly.

1. California

We found very few Supreme Court cases in California regarding habendum clause interpretation,³⁰¹ although several lower courts have addressed the issue.³⁰² For example, in 1932, the Tenth Circuit Court of Appeals stated that a well produced in paying quantities “as long as the returns from a well drilled in accordance with the lease exceed the cost of operation after completion, although the well may never repay the drilling costs, and the operation as a whole may result in a loss.”³⁰³ In 1990, the California Court of Appeals addressed the question of the proper time period to consider when assessing whether a well produced in paying quantities. In *Lough v. Coal Oil, Inc.*, the owner of two lots in Long Beach leased her property to Coal Oil in 1951 for a primary term of twenty years and “so long thereafter as . . . [hydrocarbons were produced] therefrom.”³⁰⁴ Lough sued to quiet title in 1982, arguing, among other things, that the

295. 262 N.W. 171, 172 (S.D. 1935).

296. 76 S.E. 961 (W. Va. 1912).

297. See discussion *supra* Part II(B)(4).

298. *Hollingsworth*, 262 N.W. at 172.

299. *Id.*

300. *Id.*

301. See *Renner v. Huntington-Hawthorne Oil & Gas Co.*, 244 P.2d 895 (Cal. 1952); *Dabney v. Edwards*, 53 P.2d 962 (Cal. 1935).

302. See *Lough v. Coal Oil*, 266 Cal. Rptr. 611 (Cal. Ct. App. 1990); *S. Pac. Land Co. v. Westlake Farms, Inc.*, 233 Cal. Rptr. 794 (Cal. Ct. App. 1987); *Montana-Fresno Oil Co. v. Powell*, 33 Cal. Rptr. 401 (Cal. Ct. App. 1963); *Transport Oil Co. v. Exeter Oil Co.*, 191 P.2d 129 (Cal. Ct. App. 1948).

303. *Denker v. Mid-Continent Petroleum Corp.*, 56 F.2d 725, 727 (10th Cir. 1932).

304. 266 Cal. Rptr. 611, 613 (Cal. Ct. App. 1990) (ellipses and brackets appearing in original text).

1951 lease had terminated for failure to produce in paying quantities.³⁰⁵ At trial, the facts showed that during an eighteen-month period from July 1981 to December 1982, Coal Oil experienced a loss of \$15,846.62 and during a fifty-one-month period from January 1983 to March 1987, the company again suffered serious losses.³⁰⁶ Finding these periods of time adequate to provide a reasonable financial picture of the lease’s profitability, the Court of Appeals upheld the lower court’s finding that the lease terminated for failure to produce in sufficient paying quantities.³⁰⁷

In *San Mateo Community College District v. Half Moon Bay Partnership*, the California Court of Appeals for the Fourth District considered exactly what type of drilling activity was needed to extend a lease past its primary term.³⁰⁸ The habendum clause in the lease at issue provided that the lessee could continue “its operation past the termination date as to each well producing or being drilled at the time and in respect to which lessee is not in default. Lessee’s right to continued operation as to said well(s) shall continue so long as such well(s) shall produce oil in paying quantities.”³⁰⁹ The court held that language of the lease required either a producing well or active drilling of a new well at the end of the primary term in order to extend the lease.³¹⁰

2. *Montana*

In Montana, “oil and gas leases are to be construed liberally in favor of the lessor and strictly against the lessee.”³¹¹ The Supreme Court of Montana stopped short of requiring oil and gas to be sold in order to extend a lease into its secondary term in a 1973 decision where the habendum clause allowed the lease to continue “as long thereafter as oil or gas, or either of them, is produced”³¹² The parties amended the original lease several times, and eventually the habendum clause read: “as long as oil or gas was produced and the lessee exercises reasonable diligence in development.”³¹³ The first well drilled had gas flow of 250,000 to 500,000 cubic feet per day that was never sold commercially, and the lessee began drilling a second well on the last day of the term.³¹⁴

305. *Id.*

306. *Id.*

307. *Id.* at 619.

308. 76 Cal. Rptr.2d 287, 289 (Cal. Ct. App. 1998).

309. *Id.*

310. *Id.* at 294.

311. *Christian v. A. A. Oil Corp.*, 506 P.2d 1369, 1372 (Mont. 1973).

312. *Id.*

313. *Id.* at 1373.

314. *Id.* at 1372.

The court stated that the test for “whether there was sufficient production or whether the lessee was acting with reasonable diligence in producing and marketing the gas from the leased lands is the diligence which would be exercised by the ordinary prudent operator having regard to the interests of both lessor and lessee.”³¹⁵ It further noted that “mere discovery of oil and gas is not sufficient,” but that the discovery of gas in commercial quantities during the primary term satisfied the “thereafter” provision “for a period of time, and thereby extends the lease into the secondary term. After the mineral is discovered the lessee is required to use reasonable diligence in operating the well and marketing the product within a reasonable time.”³¹⁶ Once into the secondary term, the court noted production must be in “paying quantities,” defined as such quantities as will pay a profit over operating expenses.³¹⁷ Although the court did not explicitly adopt the capability rule in this case, its explanation implies that merely operating diligently to produce and market may be enough to extend a lease.

3. *Nevada*

Nevada has no case law concerning “paying quantities” language in reference to oil and gas leases, but it clearly recognizes the concept. Nevada Statutory law provides that “[a] lease may be for a fixed period, and so long thereafter as minerals, oil, gas, or other hydrocarbon substances or geothermal resources are produced in paying quantities from the property leased”³¹⁸

4. *New Mexico*

In *Maralex Resources, Inc. v. Gilbreath*, the New Mexico Supreme Court addressed the question of whether a four-month gap in production terminated a lease that had extended well into its secondary term.³¹⁹ The lessors leased their property in 1959 for five years and “as long thereafter as oil, gas, casinghead gas, or other mineral or any of them is or can be produced.”³²⁰ The lessee drilled only one well on the property, which produced gas continually until December 1990, when the pressure in the well suddenly dropped and failed to force the gas into the pipeline.³²¹ In

315. *Id.* at 1373.

316. *Id.*

317. *Id.* at 1374.

318. NEV. REV. STAT. ANN. § 361.608 (West 2011).

319. 76 P.3d 626, 628 (N.M. 2003).

320. *Id.*

321. *Id.*

January 1991, the lessees took steps to increase the pressure in the well, and production resumed in March 1991.³²²

Meanwhile, the lessee began negotiating a farm-out agreement with plaintiff Maralex Resources, who ordered a title opinion on the Gilbreath’s mineral interest.³²³ The title opinion stated that the lease terminated on its terms due to lack of production from December 1990 until March 1991 because the lessees failed to pay shut-in royalty payments.³²⁴ The lessee then tendered a royalty payment to the lessors for the period of October 1989 to December 1990, but the lessors refused it and executed new leases to Maralex.³²⁵ The new lessee filed suit, claiming that the lease ended when production ceased.³²⁶

Citing *Clifton v. Koontz*, the court stated generally that to hold a lease in its secondary term, production must be in “‘paying quantities,’ such that the income generated from oil and gas production exceeds operating costs,” and the court proceeded to examine whether the lessee maintained the lease via one of the savings clauses.³²⁷ The defendant argued that even if the lessee had paid shut-in royalties once production stopped, the lease would still have died because the well was not “capable” of production in paying quantities.³²⁸ The New Mexico Supreme Court agreed, stating that the shut-in clause in the lease at issue only allowed those payments to save the lease when the well remained capable of producing gas.³²⁹ Finding no evidence that the well could have produced gas, and that the lessees could not rely on any other savings clauses in the lease, the court held that the lease ended when production ceased.³³⁰

5. Oregon

The Supreme Court of Oregon acknowledged the lack of case law on oil and gas leases in the state when it addressed the question of whether a lessee could hold a lease in its secondary term by merely prospecting for minerals in *Freemont Lumber Co. v. Starrel Petroleum*.³³¹ That case also did not involve an oil and gas lease, but the court looked to oil and gas law to help inform its decision, noting “the act required of the lessee for the

322. *Id.* at 628-29.

323. *Id.* at 629.

324. *Id.*

325. *Id.*

326. *Id.*

327. *Id.* at 630 (citing *Clifton v. Koontz*, 325 S.W.2d 684 (Tex. 1959)).

328. *Id.* at 631.

329. *Id.* at 633-34.

330. *Id.* at 635-37.

331. 364 P.2d 773, 774 (Or. 1961).

extension of the lease beyond the definite term is that he be engaged in production of oil or gas from the land, in some quantity, before and at the end of the definite term.”³³² The court’s discussion in this case leaves open the question of just how much production is required to take the lease into its second term.

6. *Wyoming*

Wyoming courts have defined a well as a “commercial producer” when it pays “a profit to the lessee, over operating expenses for its operation . . . even if the profit is small and the costs of development may never be recovered.”³³³

III. CONCLUSION

Throughout the body of case law on habendum clauses in this country runs a common theme: courts must carefully balance lessors’ desire to benefit financially from the development of their property with oil and gas operators’ interest in protecting their investment. The difference lies in what tips the scale to one side or the other. The law in most states in the East—at least on paper—appears to favor operators with its continued reliance on the subjective, good-faith operator standard. Without evidence of some ill intent, courts in the East tend to defer to the operator’s best judgment in deciding whether to continue operating a lease. By contrast, courts in the Midcontinent delve deeply into the particular actions of the lessee, seemingly holding operators to a more stringent standard. Yet, those courts also rely on operators’ judgment embodied in the “prudent operator” test, thus begging the question of whether the tests these courts have taken such care to distinguish actually bring about different results. From the perspective of an operator looking to ensure that a lease remains valid, the focus must be on recognizing this slight distinction and ensuring that one’s leasehold activity and production meets the individual state’s threshold for leases considered to be held by production.

332. *Id.* at 779.

333. *Champion Ventures, Inc. v. Dunn*, 567 P.2d 724, 728 (Wyo. 1977) (citing *Sunburst Oil & Refining Co. v. Callendar*, 274 P. 834 (Mont. 1929)).