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Law of Oil and Gas, IV

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THE LAW OF OIL, AND GAS, IV.*

(4) *The Habendum Clause.*

This clause follows the grant, and is one of the most distinctive features of the modern oil and gas lease. Occasionally the duration of the lease is fixed by the granting clause; some times by a miscellaneous provision appearing therein. But generally speaking, the *habendum* defines the term of the present-day oil and gas lease. At any rate a discussion of the legal effect of the habendum clause which now characterizes these instruments will involve the treatment of every important question which arises under this heading. At the outset we should observe that the clause is the direct result of a natural evolution in the methods and customs of the business. Also that the provision owes its present form to two compelling considerations. The first deals with the situation of the lessor and the second with the situation of the lessee. Manifestly a landowner is reluctant to encumber his land for an indefinite time with an unproductive lease. This statement does not imply that every lease, or even a substantial proportion of the leases taken, must be developed. The industry could not survive if such were the requirement. What is meant is that the lessee shall have a reasonable period for exploration, and if within this interval no wells are drilled or if the wells drilled prove to be nonproductive, then the lease expires, leaving the lessor free to make such disposition of his land as he will. Therefore in formulating a provision fixing the duration of an oil and gas lease the obvious self-interest of the lessor must be taken into account. On the other hand, the sole risk of the venture rests with the lessee. He must enter upon a precarious and uncertain undertaking attended by great financial hazard. In such circumstances the duration of the lease must be sufficiently inviting to induce him to devote his energies and capital to a business wholly speculative in character. Clearly the answer to the predicament of the lessee is this: If he find production within the exploratory period then he should have the enjoyment of his lease during its profitable life. Founded upon these basic considerations the industry finally has evolved the following habendum

* Continued from 18 MICH. L. REV. 773.

clause: "To have and to hold said premises for the purposes aforesaid to and unto the lessee, its successors and assigns, for the term of *five years* from date hereof *and as much longer thereafter as oil or gas shall be produced therefrom in paying quantities.*" It is to be noticed that this clause performs a double function. First of all it provides that the lease shall expire at the end of a limited term of reasonable duration unless the lessee at that time is producing oil or gas in paying quantities. Thus far the provision is for the exclusive benefit of the lessor. Supplementing this, however, is a provision whereby the lessee is vested with the right to hold the lease as long as oil or gas is found in paying quantities upon the condition that the lease is made productive during the fixed term. Therefore the clause serves the peculiar interest of the lessee also. In order to grasp the exact significance of the clause in the economy of our subject we must review the conditions which brought it to its present form.

Broadly speaking, the duration of the oil and gas lease is distinguished by three stages of development. The first period extended from the beginning of the industry until about 1880, and was characterized chiefly by a lease providing for a fixed and definite term, just as was true of all ordinary mining leases of that day. The interval between 1880 and 1900 marked the transition from the early type to the modern lease. Since 1900 it has been the almost universal custom to employ a lease providing for a fixed term of limited duration, with a proviso carrying the lease beyond that term upon the condition that oil or gas is being produced in paying quantities at the end of the stated term. Turning to the initial period, it was to be expected that during the first two or three years of its history the industry should be found groping for an appropriate and adaptable provision to establish the duration of its basic contract. At this time there was no pronounced drift toward uniformity in the term of the lease, although many leases appeared of record during the interval which were to "continue in force until annulled by mutual agreement." Such was the form employed in a lease considered in one of the early Pennsylvania cases.¹ Then again it was provided: "Should oil and salt or either be found in profitable quantities, lease to be perpetual for all

¹ Union Petroleum Co. v. Bliven Petroleum Co., 72 Pa. St. 173 (1872).

purposes therein mentioned.”² Again: “If oil is found, the right to pump to continue as long as rent (royalty) is paid.”³ Setting aside these very early grants, the leases of the era fell into three general classes: First, leases made perpetual by express provision which were subject to forfeiture within the term if operations were not commenced within a stipulated time. Second, leases which were silent as to term, these also providing for the commencement of operations within a specified period, or the forfeiture of the grant. In a lease of this class there was no express provision for the continuance of the grant during the period of production. Although the point has never been squarely decided, it is probable that this right would be implied. Such is the intimation in one jurisdiction at least.⁴ Leases of the two classes just described were exceptional, however, and the period was definitely characterized by a lease for a fixed term, usually ranging from fifteen to twenty-five years, although leases for forty, fifty, and even ninety-nine years were by no means uncommon.⁵

² Rynd v. Rynd Farm Oil Co., 63 Pa. St. 397 (1869).

³ Dark v. Johnston, 55 Pa. St. 164 (1867).

⁴ Tucker v. Watts, 25 Ohio Cir. Ct. Rep. (NS) 320 (1903).

⁵ Chicago & Allegheny Co. v. United States Petroleum Co., 57 Pa. St. 83 (1868), 20 years Karns v. Tanner, 66 Pa. St. 297 (1870), 50 years; Allison's Appeal, 77 Pa. St. 221, (1874), 20 years; Brown v. Vandergrift, 80 Pa. 142 (1875), 20 years; Appeal of Stoughton, 88 Pa. St. 198 (1878), 21 years; Munroe v. Armstrong, 96 Pa. St. 307 (1880), 20 years; Kitchen v. Smith, 101 Pa. St. 452 (1882), 15 years; Duke v. Hague, 107 Pa. St. 57 (1884), 20 years; Brown v. Beecher, 120 Pa. St. 590, 15 Atl. 608 (1888), 15 years; Washington Gas Co. v. Johnson, 123 Pa. St. 576, 16 Atl. 799 (1889), 20 years; Appeal of Wills, 130 Pa. 222, 18 Atl. 721 (1889), 20 years; Thompson v. Ridelsperger, 144 Pa. 416, 22 Atl. 826 (1891), 15 years; Duffield v. Rosenzweig, 144 Pa. 520, 23 Atl. 4 (1891), 15 years; McKnight v. Gas Co., 146 Pa. 185, 23 Atl. 164 (1892), 20 years; Nesbit v. Godfrey, 155 Pa. 251, 25 Atl. 621 (1893), 21 years; Sanders v. Sharp, 153 Pa. 555, 25 Atl. 524 (1893), 20 years; Venture Oil Co. v. Fretts, 152 Pa. St. 451, 25 Atl. 732 (1893), 20 years; McNish v. Stone, 152 Pa. 457, 25 Atl. 732 (1879), 99 years; Williams v. Guffy, 178 Pa. 342, 35 Atl. 875 (1896), 20 years; Mathews v. People's Gas Co., 179 Pa. 165, 36 Atl. 216 (1897), 20 years; Gale v. Oil Run Pet. Co., 6 W. Va. 200 (1873), 20 years; Wood Co. Pet. Co. v. Transportation Co., 28 W. Va. 210, (1886), 15 years; Guffy v. Hukill, 34 W. Va. 49, 11 S. E. 754, (1890), 20 years; Thomas v. Hukill, 34 W. Va. 385, 12 S. E. 522 (1890), 20 years; Hukill v. Myers, 36 W. Va. 639, 15 S. E. 151 (1892), 20 years; Hukill v. Guffy, 37 W. Va. 425, 16 S. E. 544 (1892), 20 years; Haskell v. Sutton, 53 W. Va. 206,

When we consider this type of lease in the light of our present knowledge of the subject it is at once evident that a lease terminating on a definite day in the future is not adapted to the peculiar nature of the business. We know now that a lease will continue to produce oil at a profit for a much longer period than the fifteen, twenty or twenty-five year term provided here. Today wells are still in operation in Pennsylvania which have been producing for fifty years. Wells in that district which have produced for forty years are the rule rather than the exception. In Ohio and West Virginia there are properties which have been producing for thirty or thirty-five years. Even in the more recent oil-producing states there are wells which are from fifteen to twenty years old and which are now being operated at a substantial profit. But manifestly these things were unknown to the early operators. To them the whole enterprise was a precarious experiment at best. It was problematical whether the fields then in operation would ever produce enough petroleum to put the business upon a permanent basis. Furthermore, the vision of these men did not extend beyond the few districts which were then productive. Even the question of an enduring market was shrouded in uncertainty. These conditions in themselves implied a short-term lease. Moreover, it was universally believed that an oil property would exhaust rapidly, and in the light of the experience then possessed by persons engaged in the business this conclusion had some foundation. The area of a lease was decidedly restricted, which fact under ordinary circumstances would enable the lessee to recover the oil content of his property within a much shorter period than was true of the more extensive leases which characterized the industry later. Again, the daily production of the wells was small in comparison with later discoveries, which indicated the probable exhaustion of a property within a comparatively brief period. Above everything the capacity of petroleum to migrate underground was greatly exaggerated in the popular mind. It was believed that one well would drain the oil from a large area speedily and completely. These consider-

44 S. E. 533 (1903), 20 years; Van Etten v. Kelly, 66 Ohio St. 605, 64 N. E. 560 (1902), 15 years; Baumgardner v. Browning, 12 Ohio Cir. Ct. Rep. 73 (1896), 20 years; Wagner v. Mallory, 169 N. Y. 501, 62 N. E. 584 (1902), 40 years.

ations induced the early operators to commit the industry to a lease of limited duration.

When these leases began to expire, however, it became increasingly evident, that a lease of this type was not adapted to the enterprise. The average lessee would find himself in this predicament. Two or three years before the termination of his lease the property would be producing oil in substantial quantities and would give every promise of producing for an indefinite period in the future,—at any rate for a considerable length of time beyond the fixed term of the lease. There would be no provision for renewal, and accordingly the lessee would be faced by the unhappy alternative of surrendering a valuable property or of negotiating a renewal. Usually if this concession were obtainable under any circumstances it would be at a price equivalent to the full value of the lease-hold at the time. In other words, the lessee was put to the necessity of purchasing a property which had been developed at his sole risk and expense. Manifestly this situation alone was sufficient to convince the industry that a lease effective throughout the period of production was an indispensable requisite. But experience had revealed other compelling objections to a lease of this character. It had been demonstrated that the practical method of operating an oil property was this. First, the lessee should continue to drill wells as long as paying wells were found until the property was completely developed. As a result, both parties realized the greatest possible profit from the venture. Secondly, when paying wells were found on adjoining lands the lessee should offset the same promptly in order to protect the leased premises from drainage. But a lease of fixed duration was not adapted to this plan of development. Here a stage would be reached toward the end of the grant when the lessee could not afford to drill additional wells even to protect the land from drainage because the production therefrom within the remaining term of the lease would not be sufficient to pay the cost of drilling. The result was inevitable. During the last two or three years of the lease the lessee would refrain from all drilling operations, contenting himself with the production from the wells drilled previously. On the other hand a lease effective as long as oil or gas should be found justified an uninterrupted course of development, dependent only upon the result

achieved. A further circumstance which was calculated to induce the lessors of that period to renounce the lease of fixed duration was this. As a rule, the removal of the casing from an oil well necessitates the abandonment of the well. Most of these early leases by express stipulation gave the lessee the right to remove the casing from all wells at the termination of the lease. Even in the absence of a provision of this character it was the rule in Pennsylvania that the casing in a well was a trade fixture which the lessee had the right to withdraw upon the termination of the lease.⁶ Occasionally where the parties were unable to agree upon a renewal the lessee would permit the lessor to purchase the casing at cost, but in frequent instances a lessee would draw the casing from his wells at the expiration of his lease, yielding the lessor a dismantled, or perhaps valueless, property. These and numerous other practical considerations unnecessary to mention here, brought both lessors and lessees to the realization that the instrument which was peculiarly adapted to the prosecution of the business was a lease to continue in force as long as oil or gas should be found in paying quantities.

This brings us to the second stage in the development of the term of the oil and gas lease, namely, the transition period. In the late seventies leases for a definite term of years and as long thereafter as oil or gas should be produced in paying quantities began to appear of record in the oil districts of Pennsylvania, West Virginia and Ohio, but the first lease of this character considered in a reported case was made in 1881.⁷ Here the habendum clause provided: "To have and to hold the same for the term of twelve years from this date, *or as long as oil is found in paying quantities.*" Between 1880 and 1890 this type of lease was in somewhat general use in Pennsylvania, West Virginia, Ohio and Indiana,⁸ although

⁶ *Shellar v. Shivers*, 171 Pa. St. 569, 33 Atl. 95 (1895); *Cassell v. Crothers*, 193 Pa. St. 359, 44 Atl. 446 (1899); *Sattler v. Opperman*, 47 Pittsburgh Legal Journal, 205 (1899); *Sattler v. Opperman*, 14 Pa. Super. Ct. Rep. 32 (1900); *Forest Oil Co. v. Hart*, 50 Pittsburgh Legal Journal, 17 (1902); *Smith v. Hickman*, 14 Pa. Super. Ct. Rep. 46 (1900).

⁷ *Eaton v. Alleghany Gas Co.*, 122 N. Y. 416, 25 N. E. 981 (1890).

⁸ *Agerter v. Vandergrift*, 138 Pa. 576, 21 Atl. 202 (1891); *Smiley v. Western Pa. Nat. Gas Co.*, 138 Pa. St. 576, 21 Atl. 1 (1891); *Springer v. Citizens Nat. Gas Co.*, 145 Pa. Ct. 430, 22 Atl. 986 (1891); *Heintz v. Shortt*, 149 Pa. St. 286, 24 Atl. 316 (1892); *Glasgow v. Chartiers Oil Co.*, 152 Pa.

leases of fixed duration were by no means uncommon during this interval.* In the succeeding decade, however, it became the almost

St. 48, 25 Atl. 232 (1892); *Gibson v. Oliver*, 158 Pa. St. 277, 27 Atl. 961 (1893); *Western Pa. Gas Co. v. George*, 161 Pa. St. 47, 28 Atl. 1004 (1894); *Hooks v. Forst*, 165 Pa. St. 238, 30 Atl. 846 (1895); *Shellar v. Shivers*, 171 Pa. St. 569, 33 Atl. 95 (1895); *Double v. Union Heat & Light Co.*, 172 Pa. St. 388, 33 Atl. 694 (1896); *Stage v. Boyer*, 183 Pa. St. 560, 38 Atl. 1035 (1898); *Akin v. Marshall Oil Co.*, 188 Pa. St. 602, 41 Atl. 748 (1898); *Burton v. Forest Oil Co.*, 204 Pa. St. 349, 54 Atl. 266 (1903); *Schaupp v. Hukill*, 34 W. Va. 375, 12 S. E. 501 (1890); *Crawford v. Ritchie*, 43 W. Va. 252, 27 S. E. 220 (1897); *Crawford v. Belleview Nat. Gas Co.*, 183 Pa. St. 227, 38 Atl. 595 (1897); *Jackson v. O'Hara*, 183 Pa. St. 233, 38 Atl. 624 (1897); *Core v. New York Pet. Co.*, 52 W. Va. 76, 43 S. E. 128 (1902); *Toothman v. Courtney*, 62 W. Va. 167, 58 S. E. 915 (1907); *Herrington v. Wood*, 6 Ohio Cir. Ct. Rep. 326 (1892); *Baker v. Stow*, 12 Ohio Cir. Ct. Rep. (N. S.) 489 (1892); *Miller v. Vandergrift*, 12 Ohio Cir. Ct. Rep. (N. S.) 475 (1892); *Northwestern Ohio Nat. Gas Co. v. Whitacre*, 12 Ohio Cir. Ct. Rep. (N. S.) 505 (1892); *Hollister v. Vandergrift*, 12 Ohio Cir. Ct. Rep. (N. S.) 586 (1892); *Emerine v. Steel*, 8 Ohio Cir. Ct. Rep. 381 (1894); *Northwestern Ohio Nat. Gas Co. v. Davis*, 9 Ohio Cir. Ct. Rep. 551 (1895); *Stahl v. Van Vleck*, 53 Ohio St. 136, 41 N. E. 35 (1895); *Simon v. Northwestern Ohio Nat. Gas Co.*, 12 Ohio Cir. Ct. Rep. 170 (1896); *Blair v. Northwestern Nat. Gas Co.*, 12 Ohio Cir. Ct. Rep. 78 (1896); *Woodland Oil Co. v. Crawford*, 55 Ohio St. 161, 44 N. E. 1093 (1896); *Harris v. Ohio Oil Co.*, 57 Ohio St. 118, 48 N. E. 502 (1897); *Northwestern Ohio Nat. Gas Co. v. Ullery*, 68 Ohio St. 259, 67 N. E. 494 (1903); *Evans v. Consumers' Gas Trust Co.*, — Ind. Sup. —, 29 N. E. 398 (1891); *Indianapolis Nat. Gas Co. v. Kibbey*, 135 Ind. 357, 35 N. E. 392 (1893); *Edmonds v. Mounsey*, 15 Ind. App. 399, 44 N. E. 196 (1896); *Indianapolis Gas Co. v. Teters*, 15 Ind. App. 475, 44 N. E. 549 (1896); *American Window Glass Co. v. Williams*, 30 Ind. App. 685, 66 N. E. 912 (1903); *Indiana Nat. Gas & Oil Co. v. Grainger*, 33 Ind. App. 559, 70 N. E. 395 (1904).

**Williams v. Guffy*, 178 Pa. St. 342, 35 Atl. 875 (1896); *Mathews v. People's Gas Co.*, 179 Pa. St. 165, 36 Atl. 216 (1897); *Washington Nat. Gas Co. v. Johnson*, 123 Pa. St. 576, 16 Atl. 799 (1889); *Appeal of Wills*, 130 Pa. St. 222, 18 Atl. 721 (1889); *Brown v. Beecher*, 120 Pa. St. 590, 15 Atl. 608 (1888); *Thompson v. Riddelsperger*, 144 Pa. 416, 22 Atl. 826-827 (1891); *Duffield v. Rosenzweig*, 144 Pa. 520, 23 Atl. 4 (1891); *Nesbitt v. Godfrey*, 155 Pa. 251, 25 Atl. 621 (1893); *Sanders v. Sharp*, 153 Pa. 555, 25 Atl. 524 (1893); *Venture Oil Co. v. Fretts*, 152 Pa. 451, 25 Atl. 732 (1893); *Guffy v. Hukill*, 34 W. Va. 49, 11 S. E. 754 (1890); *Thomas v. Hukill*, 34 W. Va. 385, 12 S. E. 522 (1890); *Hukill v. Myers*, 36 W. Va. 639, 15 S. E. 151 (1892); *Hukill v. Guffy*, 37 W. Va. 425, 16 S. E. 544 (1892); *Haskell v. Sutton*, 53 W. Va. 206, 44 S. E. 533 (1903); *Van Etten v. Kelly*, 66 Ohio St. 605, 64 N. E. 560 (1902); *Baumgardner v. Browning*, 12 Ohio Cir. Ct. Rep. 73 (1896).

universal practice to take leases effective for the producing life of the property. Although the oil industry had thus achieved its own objective it was still reluctant to consent to the type of lease which the peculiar situation of the lessor required, namely, a lease expiring at the end of a fixed term of reasonable duration unless made productive within that period. Three types of leases now came into use which were designed to enable the lessee to hold the lessor's land for a long term or for an indefinite period without development. The first leases of this description were for terms ranging from fifteen to twenty-five years *and as long thereafter as oil or gas should be found.*²⁰ As a rule a lease of this description would contain a provision vesting the lessee with the right to hold the grant for the entire fixed term of fifteen or twenty-five years, as the case might be, without development and upon the payment of a periodical rental only. If production were found during the exploratory period, however, the lease would remain in force as long as that condition continued. In other words, the only change occurring here was that the phrase "as long thereafter as oil or gas shall be found in paying quantities" was added to the limited habendum clause of the fifteen or twenty-five year leases which were then passing into disuse. This innovation accomplished nothing in the direction of reducing the length of the exploratory period. On the other hand leases of this description did not meet the design of the industry completely, because in many cases lessees were bound to the payment of a rental for a long term regardless of the probable value of the property for the purposes of the lease. The situation resulted in an experiment by means of which the industry sought to achieve a twofold object: First, a lease effective for the purpose of exploration as long as the lessee might elect to pay the

²⁰ *Blakley v. Marshall*, 174 Pa. 425, 34 Atl. 564 (1896); *Calhoun v. Neely*, 201 Pa. 97, 50 Atl. 967 (1902); *Wilson v. Philadelphia Co.*, 210 Pa. 484, 60 Atl. 149 (1904); *McIntosh v. Ropp*, 233 Pa. 497, 82 Atl. 949 (1912); *Hukill v. Guffy*, 37 W. Va. 425, 16 S. E. 544 (1892); *Crawford v. Ritchey*, 43 W. Va. 252, 27 S. E. 220 (1897); *Parish Fork Oil Co. v. Bridgewater Gas Co.*, 51 W. Va. 583, 42 S. E. 655 (1902); *South Penn Oil Co. v. Haight*, 71 W. Va. 720, 78 S. E. 759 (1913); *Freeman v. McKay*, — W. Va. —, 98 S. E. 263 (1919); *Siler v. Globe Window Glass Co.*, 21 Ohio Cir. Ct. Rep. 284 (1900); *Munsey v. Marnett Oil & Gas Co.* (Tex. Civ. App.), — Tex. —, 199 S. W. 686 (1917).

stipulated rental, the lessee having the right to retire from the contract when the value of the property no longer justified such payment; secondly, in the event production were realized it was intended that the lease should remain in force as long as oil or gas was produced in paying quantities. The consequence of a lease of this character is immediately apparent. It enabled the lessee to hold the lessor's lands indefinitely without development. In these circumstances two types of leases came into use. In the one case the habendum clause took this form: "To have and to hold the above premises unto the parties of the second part, their heirs and assigns, on the following conditions."¹¹ No term was stated but the rental clause was so phrased as to permit the lessee to hold the lease indefinitely by the payment of the periodical rental. It was also provided that if production were developed during the indefinite term, that is, while the lessee was holding the grant by the payment of rental, the instrument should remain in force as long as oil or gas was produced in paying quantities. This form came into rather general use in West Virginia, Ohio and Indiana.¹² In the other type the habendum clause was in this language: "To have, and to hold said premises for the term of ten years, or thereafter while oil or gas is produced in paying quantities *or the rental paid*."¹³ It is to be noticed that the happening of either one of two conditions would carry the lease beyond the fixed term: First, the finding of production within that period, or, secondly, the payment of the stipulated rental. In other words, the legal effect of this lease was identical with the one involved in *Lowther Oil Co. v. Guffey*. The form was very generally employed in Pennsylvania, West Virginia and Indiana.¹⁴ Neither of these leases withstood

¹¹ *Lowther Oil Co. v. Guffey*, 52 W. Va. 88, 43 S. E. 101 (1902).

¹² *Weaver v. Akin*, 48 W. Va. 456, 37 S. E. 600 (1900); *Johnson v. Armstrong*, 81 W. Va. 399, 94 S. E. 753 (1917); *Thaw v. Gaffney*, 75 W. Va. 220, 83 S. E. 983 (1914); *Wilson v. Reserve Gas Co.*, 78 W. Va. 329, 88 S. E. 1075 (1916); *Central Ohio Gas Co. v. Eckert*, 70 Ohio St. 127, 71 N. E. 281 (1904); *Carr v. Huntington Light Co.*, 33 Ind. App. 1, 70 N. E. 552 (1904); *Indiana Nat. Gas Co. v. Leer*, 34 Ind. App. 61, 72 N. E. 283 (1904); *Diehl v. Ohio Oil Co.*, 12 Ohio Cir. Ct. Rep. (N.S.) 539 (1892), 20 O. C. D. 750.

¹³ *Burton v. Forest Oil Co.*, 204 Pa. St. 349, 54 Atl. 266 (1903).

¹⁴ *Letherman v. Oliver*, 151 Pa. St. 646, 25 Atl. 309 (1892); *Western Pa. Gas Co. v. George*, 161 Pa. St. 47, 28 Atl. 1004 (1894); *Summerville v. Apollo Gas Co.*, 207 Pa. 334, 56 Atl. 876 (1904); *Barnsdall v. Bradford Gas*

the scrutiny of the courts. The rule was everywhere adopted that when a lessee had the apparent right to hold a lease indefinitely upon the payment of a rental alone the lessor might demand a well, give the lessee a reasonable time to perform, and failure to drill was ground for the cancellation of the lease.¹⁵ This judicial announcement brought the industry to the adoption of the habendum clause which now characterizes the oil and gas lease. Otherwise stated, when the courts decided that a lessee could not hold his lease indefinitely by the mere payment of a rental, the only alternative was

Co., 225 Pa. 338, 74 Atl. 207 (1909); *Burgan v. South Penn Oil Co.*, 243 Pa. 128, 89 Atl. 823 (1914); *McKean Nat. Gas Co. v. Wolcott*, 254 Pa. 323, 98 Atl. 955 (1916); *Schaupp v. Hukill*, 34 W. Va. 375, 12 S. E. 501 (1890); *Bettman v. Harness*, 42 W. Va. 433, 26 S. E. 271 (1896); *Myers v. Carnahan*, 61 W. Va. 414, 57 S. E. 134 (1907); *Pyle v. Henderson*, 65 W. Va. 39, 63 S. E. 762 (1909); *Eastern Oil Co. v. Coulehan*, 65 W. Va. 531, 64 S. E. 836 (1909); *American Window Glass Co. v. Williams* 30 Ind. App. 685, 66 N. E. 912 (1903); *Indiana Nat. Gas Co. v. Grainger*, 33 Ind. App. 559, 70 N. E. 395 (1904); *Consumers' Gas Co. v. Worth*, 163 Ind. 141, 71 N. E. 489 (1904); *Consumers' Gas Co. v. Ink*, 163 Ind. 174, 71 N. E. 477 (1904); *LaFayette Gas Co. v. Kelsay*, 164 Ind. 563, 74 N. E. 7 (1905); *Indiana Nat. Gas Co. v. Beales*, 166 Ind. 684, 76 N. E. 520 (1906); *Campbell v. Rock Oil Co.*, 151 Fed. 191 (1907).

¹⁵ *Consumers' Gas Co. v. Crystal Window Glass Co.*, 163 Ind. 190, 70 N. E. 366 (1904); *Consumers' Gas Co. v. Howard*, 163 Ind. 170, 71 N. E. 493 (1904); *Logansport Gas Co. v. Seegar*, 165 Ind. 1, 74 N. E. 500 (1905); *New American Oil Co. v. Wolff*, 166 Ind. 704, 76 N. E. 255 (1906); *Puritan Oil Co. v. Myers*, 39 Ind. App. 695, 80 N. E. 851 (1907); *Consumers' Gas Co. v. Ink*, 168 Ind. 174, 71 N. E. 477 (1904); *Consumers' Gas Co. v. Worth*, 163 Ind. 141, 71 N. E. 489 (1904); *LaFayette Gas Co. v. Kelsay*, 164 Ind. 563, 74 N. E. 7 (1905); *Indiana Nat. Gas Co. v. Beales*, 166 Ind. 684, 76 N. E. 520 (1906); *American Window Glass Co. v. Indiana Nat. Gas Co.*, 37 Ind. App. 439, 76 N. E. 1006 (1906); *Campbell v. Rock Oil Co.*, 151 Fed. 191 (1907); *Wilson v. Reserve Gas Co.*, 78 W. Va. 329, 88 S. E. 1075 (1916); *Johnson v. Armstrong*, 81 W. Va. 399, 94 S. E. 753 (1918).

These cases were decided on the theory that where the lessee has the right to hold the lease indefinitely by the payment of a rental, the courts will imply a condition for the development of the lease, this to be put into operation upon the lessor's demand for a well, within a reasonable time, and failure on part of the lessee to comply.

In *Bettman v. Harness*, 42 W. Va. 433, 26 S. E. 271 (1896), the habendum clause read: "To have and to hold the said premises for said purposes during and until the full term of two years next ensuing, and as much longer as oil or gas is found in paying quantities, or the rental paid thereon."

to provide that the lease should terminate at the end of a definite term of reasonable duration unless production were found meanwhile.

Having traced the evolution of the habendum clause to its present form, a critical examination of the modern clause becomes necessary. At the beginning there was no uniformity in the phraseology of the provision.¹⁶ Now, however, the habendum clause

In order to strike down the right of the lessee to hold the lease beyond the two-year term by the payment of rental, the court construed the word "or" as "and," stating that the word "rental" as here used meant the royalty provided for in the lease in the event of production and that the term did not refer to the commutation money payable during the exploratory period.

To the same effect: *Western Pa. Gas Co. v. George*, 161 Pa. St. 47, 28 Atl. 1004 (1894); *American Window Glass Co. v. Indiana Nat. Gas Co.*, *supra*.

¹⁶"To have and to hold the same unto the lessee for the term of two years from date and as long thereafter as oil or gas is found in paying quantities, *not exceeding in the whole the term of twenty-five years.*" *Brown v. Fowler*, 65 Ohio St. 507, 63 N. E. 76 (1902).

"To have and to hold the said premises * * * for, during and until the full term of fifteen years next ensuing, *with the right of renewal thereafter so long as oil shall continue to be found in sufficient quantities to operate.*" *Heintz v. Shortt*, 149 Pa. St. 286, 24 Atl. 316 (1892).

"Three years and as long thereafter as oil or gas shall *continue* to be found in paying quantities." *McMillan v. Philadelphia Co.*, 159 Pa. St. 142, 28 Atl. 220 (1893).

"To have and to hold said premises for and during the term of one year from this date * * * It is further agreed that should a paying production of oil or gas be found on said land within said term of one year, the lessor agrees to extend this lease from year to year so long as said production continues." *Crawford v. Bellevue Gas Co.*, 183 Pa. St. 227, 38 Atl. 595 (1897).

"Ninety days from date and as much longer as oil or gas is found, *operated and produced* in paying quantities." *Detlor v. Holland*, 57 Ohio St. 492, 49 N. E. 690 (1898).

"Contract to commence at and run from date of signing, and terminate whenever, in the assumption of the lessee, sufficient oil or gas cannot be produced to use the same profitably for mercantile purposes." *American Steel Co. v. Tate*, 33 Ind. App. 504, 71 N. E. 189 (1904).

"Two years, or for such time as oil or gas shall be found in paying quantities." *Iams v. Carnegie Nat. Gas Co.*, 194 Pa. St. 72, 45 Atl. 54 (1899).

"This contract shall be deemed to commence from date of signing, and shall be deemed to have terminated whenever natural gas ceases to be used

usually assumes the form originally set forth in this paper, the only variation being that in some leases the grant will be for a definite term of years and as long thereafter as oil or gas is *found* in paying quantities, while in others the lease will be for a definite term of years and as long thereafter as oil or gas shall be *produced* in paying quantities.¹⁷ The courts attribute the same legal effect to these two phrases. For simplicity of statement the original or definite term of the modern lease will be designated here as the "exploratory period." Obviously the length of this period will depend upon the peculiar condition of the property at the time the lease is made. If the land is in the neighborhood of production or if other circumstances indicate that the tract is oil-bearing, it is the natural disposition of the lessor to restrict the duration of the exploratory period. Accordingly we find that in the developed fields the duration of the fixed term ranges from sixty days in extreme cases to two years.¹⁸ This means, of course, that a lease of this character terminates within the short term set forth therein unless

generally for manufacturing purposes." *Indianapolis Gas Co. v. Kibbey*, 135 Ind. 357, 35 N. E. 392 (1893).

"Five years from date of lease and as much longer thereafter as oil or gas is *found therein or said premises developed or operated.*" *Doornbos v. Warwick*, 104 Kan. 102, 177 Pac. 527 (1919).

"Five years from date of lease and as much longer as the rent for failure to commence operations is paid, and as long after the commencement of operations as said premises are operated for the production of oil and gas." *Myers v. Carnahan*, 61 W. Va. 414, 57 S. E. 134 (1907).

"Five years from date of lease or as long as oil or gas shall be found in paying quantities or the said second party or its assigns continue to operate a pipeline over or through the land." *Simon v. Northwestern Ohio Gas Co.*, 12 Ohio Cir. Ct. Rep. 170 (1896).

¹⁷ *Jamison v. Carnegie Nat. Gas. Co.*, 77 W. Va. 30, 87 S. E. 451 (1915); *Core v. New York Pet. Co.*, 52 W. Va. 276, 43 S. E. 128 (1903); *Balfour v. Russell*, 167 Pa. St. 287, 31 Atl. 570 (1895); *Hooks v. Forst*, 165 Pa. 238, 30 Atl. 846 (1895); *Smiley v. Gallagher*, 164 Pa. St. 498, 30 Atl. 713 (1894); *Gibson v. Oliver*, 158 Pa. 277, 27 Atl. 961 (1893); *Marshall v. Forest Oil Co.*, 198 Pa. 83, 47 Atl. 927 (1901); *Dinsmoor v. Combs*, 177 Ky. 740, 198 S. W. 58 (1917); *Jamison Coal Co. v. Carnegie Gas Co.*, 77 W. Va. 30, 87 S. E. 451 (1915).

In the following cases the leases involved were effective for a period of sixty days from date and as long thereafter as oil or gas should be produced:

¹⁸ *Simon v. Northwestern Gas Co.*, 12 Ohio Cir. Ct. Rep. 170 (1896);

the property is made productive within that time. On the other hand, where wildcat territory is involved, the lessee will not agree to a short exploratory period. In such circumstances it is usual to provide for a lease effective for a term of five or ten years and as long thereafter as oil or gas shall be found, the lessee having the right to maintain the lease for the original term by the payment of a periodical rental, and the alternative right to surrender the instrument when the prospective value of the lands covered thereby no longer justifies the payment of the prescribed rental.

With these basic considerations in mind we are brought to the task of determining the legal effect of this provision in its several phases. First of all it must be understood that we are not dealing with the abandonment, forfeiture, or surrender of an oil and gas lease at some period within the life of the instrument. All these matters will be treated elsewhere. The sole question which concerns us here is the divestiture of the lessee's title by the *expiration* of the term provided for in the lease. Before approaching the broader aspects of the subject certain incidental questions should be disposed of. Usually the extension clause assumes one of these

Duffield v. Russell, 19 Ohio Cir. Ct. Rep. 266 (1899); Murdock-West Co. v. Logan, 69 Ohio St. 514, 69 N. E. 984 (1904).

Ninety days and as long thereafter: Evans v. Consumers' Gas Co., — Ind. —, 29 N. E. 398 (1891); Detlor v. Holland, 57 Ohio St. 492, 49 N. E. 690 (1898).

Six months and as long thereafter: Consumers' Gas Co. v. Worth, 163 Ind. 141, 71 N. E. 489 (1904); Consumers' Gas Co. v. Ink, 168 Ind. 174, 71 N. E. 477 (1904).

One year and as long thereafter: Crawford v. Bellevue Gas Co., 183 Pa. St. 227, 38 Atl. 595 (1897); Noble v. Western Pa. Gas Co., 255 Pa. 512, 100 Atl. 480 (1917); Updegraff v. Blue Creek Coal Co., 74 W. Va. 316, 81 S. E. 1050 (1914); Horse Creek Coal Co. v. Trees, 75 W. Va. 559, 84 S. E. 376 (1915); Paxton v. Benedum-Trees Oil Co., 80 W. Va. 187, 94 S. E. 472 (1917); Ohio Fuel Oil Co. v. Greenleaf, — W. Va. —, 99 S. E. 274 (1919); Harrington v. Wood, 6 Ohio Cir. Ct. Rep. 326 (1892); Chaney v. Ohio Oil Co., 32 Ind. App. 193, 69 N. E. 477 (1904).

Two years and as long thereafter: Midland Gas Co. v. Jefferson County Gas Co., 237 Pa. 602, 85 Atl. 853 (1912); Gillespie v. American Zinc Co., 247 Pa. 222, 93 Atl. 272 (1915); Harness v. Eastern Oil Co., 49 W. Va. 232, 38 S. E. 662 (1901); Core v. New York Pet. Co., 52 W. Va. 27, 43 S. E. 128 (1903); Petty v. United Fuel Co., 76 W. Va. 268, 85 S. E. 523 (1915); Lawson v. Kirchner, 50 W. Va. 344, 40 S. E. 344 (1901).

forms: "As long thereafter as oil or gas is *found* in paying quantities," "as long thereafter as oil or gas is *produced* in paying quantities," "as long thereafter as oil or gas is *produced*." The rule is settled that the two clauses first mentioned are identical in their legal effect.¹⁹ On the other hand the early decisions in West Virginia intimate a distinction between the first two clauses and the last, which omits the phrase "paying quantities."²⁰ Later, however, the West Virginia court said: "'Produced', 'produced in paying quantities', 'found in paying quantities' must mean about the same thing, else substance will be subordinated to shadow or mere technicality."²¹ It is held that the "thereafter" clause determines the character of the estate created by an oil and gas lease.²² On principle, however, the clause simply enlarges or extends an estate already created. This conclusion is also supported by authority.²³ In New York the court declares that the words "as long thereafter as oil or gas shall be found" are words of limitation.²⁴ The validity of the clause under consideration is seldom challenged. In a Kansas case the contention was made that the "thereafter" clause ren-

¹⁹ South Penn Oil Co. v. Snodgrass, 71 W. Va. 438, 76 S. E. 961 (1912); Murdock-West Co. v. Logan, 69 Ohio St. 514, 69 N. E. 984 (1904); Young v. Forest Oil Co., 194 Pa. St. 243, 45 Atl. 121 (1899).

²⁰ Eastern Oil Co. v. Coulehan, 65 W. Va. 531, 64 S. E. 836 (1909); McGraw Oil Co. v. Kennedy, 65 W. Va. 595, 64 S. E. 1027 (1909). Contra: Gillespie v. Ohio Oil Co., 260 Ill. 169, 102 N. E. 1043 (1913).

²¹ South Penn Oil Co. v. Snodgrass, *supra*. For an interesting discussion of the meaning of the term "found" as here used, see Smith v. Hickman, 14 Pa. Super. Ct. Rep. 46 (1900).

²² Rynd v. Rynd Farm Oil Co., 63 Pa. St. 397 (1869). Here a similar provision was involved and the lessee was producing oil in paying quantities. It was held that the clause created a perpetual license. In Bruner v. Hicks, 230 Ill. 556, 82 N. E. 888 (1907), it was held that the use of the clause "as long thereafter as oil or gas shall be found" had the effect of vesting the lessee with a freehold interest because of the indefinite and indeterminate period provided for in the grant.

²³ South Penn Oil Co. v. Snodgrass, *supra*; Barbour, Stedman Co. v. Tompkins, 81 W. Va. 116, 93 S. E. 1038 (1917); Chaney v. Ohio & Indiana Oil Co., 32 Ind. App. 193, 69 N. E. 477 (1904); Johnson v. Armstrong, 81 W. Va. 399, 94 S. E. 753 (1918); Cassell v. Crothers, 193 Pa. St. 359, 44 Atl. 446 (1899).

²⁴ Eaton v. Alleghany Gas Co., 122 N. Y. 416, 25 N. E. 981 (1890); Conkling v. Krandusky, 112 N. Y. Supp. 13 (1908).

dered the lease void on the ground of uncertainty. The court, in overruling this objection, said: "We have not been referred to any adjudicated cases involving the validity of gas or oil contracts like the one at bar where leases containing such stipulations have been held void for uncertainty.²⁵ The only other case where the validity of the oil and gas lease has been assailed on account of the duration of the term is where it is contended that the lease violates the rule against perpetuities. On principle this assault is justifiable only in those jurisdictions which hold that no estate vests until discovery, or that a new and additional estate vests upon discovery. Moreover, the doctrine if sustainable there would be limited to the so-called "no term" lease which the lessee has the right to maintain indefinitely by the payment of a rental, or to a lease of fixed term extending beyond the period of twenty-one years. In this respect the phrase "as long thereafter as oil or gas shall be found in paying quantities" is not involved. Even in the case of a "no term" lease it is held that the instrument does not violate the rule against perpetuities because the lessor may refuse the rental, demand a well, and forfeit the lease if the well is not drilled within a reasonable time.²⁶ No American court has held that an oil and gas lease is invalid merely for the reason that it is effective for a definite term and as long thereafter as oil or gas shall be found.

Dismissing these preliminary matters, the principal question involved in the present inquiry may be thus stated. When and under what conditions does a lease of this character terminate? As a practical matter the modern habendum clause is important in the following circumstances: First, where the lessee fails to develop the property in any manner during the exploratory period; second, when the well or wells drilled by him during that time are

²⁵ *Dickey v. Coffeyville Brick Co.*, 69 Kan. 106, 76 Pac. 398 (1904). But see *United Fuel Supply Co. v. Volcanic Oil & Gas Co.*, 20 Ont. Weekly Rep. 78, where a lease of this type was involved, and where the court, denominating the instrument an option, held that it was invalid on the ground of remoteness.

²⁶ *Wilson v. Reserve Gas. Co.*, 78 W. Va. 329, 88 S. E. 1075 (1916); *Johnson v. Armstrong*, 81 W. Va. 399, 94 S. E. 753 (1918). For an interesting discussion of this question by Professor James W. Simonson, of the West Virginia University, see 25 WEST VIRGINIA LAW QUARTERLY, p. 30; also note relating to the same subject, 25 WEST VIRGINIA LAW QUARTERLY, p. 236.

non-productive; third, when the well or wells drilled during the exploratory period cease to produce before the end of the definite term. Ignoring the possibility of the forfeiture, abandonment, or surrender of the grant within the definite term, the question upon principle is susceptible of but one answer. The plain intent of the clause is that the lease shall terminate absolutely upon the happening of any one of the three contingencies just mentioned. Such, precisely, is the universal holding of the courts.²⁷ It is equally

²⁷ Conkling v. Krandsusky, 112 N. Y. Supp. 13; Eaton v. Alleghany Gas Co., 122 N. Y. 416, 25 N. E. 981 (1890); Shellar v. Shivers, 171 Pa. St. 569, 33 Atl. 95 (1895); Riddle v. Mellon, 147 Pa. St. 30, 23 Atl. 241 (1892); Western Pa. Gas Co. v. George, 161 Pa. St. 47, 28 Atl. 1004 (1894); Cassell v. Crothers, 193 Pa. St. 359, 44 Atl. 446 (1899); Glasgow v. Chartiers Oil Co., 152 Pa. St. 48, 25 Atl. 232 (1892); Double v. Union Light & Heat Co., 172 Pa. St. 388, 33 Atl. 694 (1896); Young v. Forest Oil Co., 194 Pa. St. 243, 45 Atl. 121 (1899); Smith v. Hickman, 14 Pa. Super. Ct. Rep. 46 (1900); Balfour v. Russell, 167 Pa. St. 287, 31 Atl. 570 (1895); Summerville v. Apollo Gas Co., 207 Pa. 334, 56 Atl. 876 (1904); Foster v. Elk Fork Oil Co., 90 Fed. 178 (1898); Barnsdall v. Boley, 119 Fed. 191 (1902); Bettman v. Harness, 42 W. Va. 433, 26 S. E. 271 (1896); McGraw Oil Co. v. Kennedy, 65 W. Va. 595, 64 S. E. 1027 (1909); Eastern Oil Co. v. Coulehan, 65 W. Va. 531, 64 S. E. 836 (1909); Barbour, Stedman Co. v. Tompkins, 81 W. Va. 116, 93 S. E. 1038 (1917); Ohio Fuel Oil Co. v. Greenleaf, — W. Va. —, 99 S. E. 274 (1919); Ash Grove Lime Co. v. Chanute Brick Co., 100 Kan. 547, 164 Pac. 1087 (1917); Baldwin v. Blue Stem Oil Co., — Kan. —, 189 Pac. 920 (1920); Buffalo Valley Oil Co. v. Jones, 75 Kan. 18, 88 Pac. 537 (1907); Collins v. Mt. Pleasant Oil Co., 85 Kan. 483, 118 Pac. 54 (1911); Roach v. Junction Oil Co., 75 Okla. 220, 179 Pac. 934 (1919); Strange v. Hicks, 11 Okla. App. 369, 188 Pac. 347 (1920); Dickey v. Coffeyville Brick Co., 69 Kan. 106, 76 Pac. 398 (1904); Simon v. Northwestern Ohio Gas Co., 12 Ohio Cir. Ct. Rep. 170 (1896); Brown v. Fowler, 65 Ohio St. 507, 63 N. E. 76 (1902); Murdock-West Co. v. Logan, 69 Ohio St. 514, 69 N. E. 984 (1904); Detlor v. Holland, 57 Ohio St. 492, 49 N. E. 690 (1898); Northwestern Ohio Nat. Gas Co. v. Whitacre, 30 C. C. Rep. 737 (1892); Northwestern Ohio Gas Co. v. Tiffin, 59 Ohio St. 420, 54 N. E. 77 (1899); Poe v. Ulrey, 233 Ill. 56, 84 N. E. 46 (1908); Gillespie v. Ohio Oil Co., 260 Ill. 169, 102 N. E. 1043 (1913); Chaney v. Ohio Oil Co., 32 Ind. App. 193, 69 N. E. 477 (1904); Indiana Nat. Gas Co. v. Beales, 166 Ind. 684, 74 N. E. 551 (1905); American Window Glass Co. v. Indiana Nat. Gas Co., 37 Ind. App. 439, 76 N. E. 1006 (1906); Indiana Nat. Gas Co. v. Pierce, 34 Ind. App. 523, 68 N. E. 691 (1903), 73 N. E. 194 (1905); Nabors v. Producers' Oil Co., 140 La. 985, 74 So. 527 (1917); Prowant v. Sealy, 11 Okla. App. 10, 187 Pac. 235 (1920); Zeller v. Book, 7 Ohio Cir. Ct. Rep. (N.S.) 429 (1905); Hol-

clear both upon principle and under the authorities just cited, that if the lessee is producing oil or gas in paying quantities at the expiration of the definite term, the lease shall remain in force as long as that condition continues. Thus, in *Brown v. Fowler*²⁸ it is said: "This clause means that the term of the lease is limited to two years (the definite or exploratory term), but that if within the two years oil or gas shall be found, then the lease shall run as much longer thereafter as oil or gas shall be found in paying quantities; but if no oil or gas shall be found within the two years, the lease shall, at the end of the two years, terminate, not by forfeiture, but by *expiration* of terms; and after the expiration of said two years no further drilling can be done under the lease." In an Indiana case it is said: "Such a clause will be construed as meaning that if the term is enlarged it must be by the production of gas or oil in paying quantities within the term specified; if such a contingency does not happen then the lease expires and is of no avail to either party."²⁹ In *Murdock-West Co. v. Logan*^{29a} the court observes: "In order to continue their lease beyond the stipulated time it was necessary for the lessees to find oil in paying quantities. For this purpose it was not sufficient to complete a well having some indications of oil or a well which might be developed into a well producing oil in paying quantities, but the lessees must actually find oil in paying quantities, and this is the same as obtaining and producing it in paying quantities."

Thus far the decisions are in complete harmony, but there are other situations of almost equal importance which evidence a certain divergence in the adjudicated cases. The general rule is this. Where the fixed term has expired and where the lessee seeks to hold the leased premises under the extension clause he not only must be engaged in producing oil or gas but the production must be in paying quantities.³⁰ This necessitates that we ascertain the exact meaning of the phrase "paying quantities" as employed here. In

Ister v. Vandergrift, 12 Ohio Cir. Ct. Rep. (N.S.) 586 (1892); *Hazel Green Oil Co. v. Collier*, 33 Ky. L. Rep. 495, 110 S. W. 343 (1908); *American Window Glass Co. v. Williams*, 30 Ind. App. 685, 66 N. E. 912 (1903).

²⁸ *Brown v. Fowler*, *supra*.

²⁹ *Chaney v. Ohio & Indiana Oil Co.*, *supra*.

^{29a} *Murdock-West Co. v. Logan*, *supra*.

³⁰ See cases cited under note 27.

the law of oil and gas the term has two distinct meanings. It frequently happens that a lessee will agree to proceed with the drilling of the property as long as the wells encountered produce oil in paying quantities. Then again there is always an implied condition or covenant in the lease which requires the lessee to offset paying wells on adjoining lands. In either case the rule is settled that the well must be of such capacity as to reasonably insure a profit over the original cost of drilling and equipping the well, and also a profit over the expense of operation. In other words, two factors are taken into consideration: first, the initial cost of the well, and secondly, the cost of operation.³¹ On the other hand where the term appears in the habendum clause or in any other provision establishing the duration of the lease, the initial cost of the well is disregarded and the lessee has the right to hold the lease as long as the well or wells pay a profit, however small, over the cost of operation.³² In *Young v.*

³¹ *Osborn v. Finkelstein*, — Ind. —, 126 N. E. 11 (1920); *Ohio Fuel Supply Co. v. Shilling*, — Ohio —, 127 N. E. 873 (1920); *Hart v. Standard Oil Co.*, — La. —, 84 So. 169 (1920); *Aycock v. Paraffine Oil Co.*, — Tex. —, 210 S. W. 851 (1919); *Ardizzone v. Archer*, — Okla. —, 178 Pac. 263 (1919); *Pelham Petroleum Co. v. North*, — Okla. —, 188 Pac. 1069 (1920); *Eastern Oil Co. v. Beatty*, — Okla. —, 177 Pac. 104 (1918); *Manhattan Oil Co. v. Carrell*, 164 Ind. 526, 73 N. E. 1084 (1905).

In *Montgomery v. Hickok*, 188 Ill. App. 348 (1914), however, it is held that where a sum of money was payable upon the completion of a paying well, the cost of drilling and equipping the well is not to be taken into consideration.

But where the parties define the term "paying quantities" as meaning a well of a designated capacity, this definition must control. *McLean v. Kishi* (Tex. Civ. App.), 173 S. W. 502 (1915).

³² *Cassell v. Crothers*, 193 Pa. St. 359, 44 Atl. 446 (1899); *Young v. Forest Oil Co.*, 194 Pa. St. 243, 45 Atl. 121 (1899); *South Penn Oil Co. v. Snodgrass*, 71 W. Va. 438, 76 S. E. 961 (1912); *Barbour, Stedman Co. v. Tompkins*, 81 W. Va. 116, 93 S. E. 1038 (1917); *McGraw Oil Co. v. Kennedy*, 65 W. Va. 595, 64 S. E. 1027 (1909); *Eastern Oil Co. v. Coulehan*, 65 W. Va. 531, 64 S. E. 836 (1909); *Jennings v. Carbon Co.*, 73 W. Va. 215, 80 S. E. 368 (1913); *Dickey v. Coffeyville Vitrified Brick Co.*, 69 Kan. 106, 76 Pac. 398 (1904); *Pelham Petroleum Co. v. North*, *supra*; *Barnsdall v. Boley*, 119 Fed. 191 (1902); *Lowther Oil Co. v. Miller-Sibley Oil Co.*, 53 W. Va. 501, 44 S. E. 433 (1903); *Hollister v. Vandergrift*, 12 Ohio Cir. Ct. Rep. (N. S.) 586 (1892); *Zeller v. Book*, 7 Ohio Cir. Ct. Rep. (N. S.) 429 (1905); *Herrington v. Wood*, 6 Ohio Cir. Ct. Rep. 326 (1892). In determining whether a well is producing oil or gas in paying quantities in

Forest Oil Company the court said: "But if the well, being down, pays a profit, even a small one, over the operating expenses, it is producing in paying quantities, although it may never repay its cost, and the operations as a whole may result in a loss. Few wells except the very largest repay their cost under a considerable time. Many never do, but that is no reason why the first loss should not be reduced by profits, however small, in continuing to operate." This quotation furnishes the test to determine when a lease of this character expires. If the production is sufficient to yield a profit, however small, over the daily operating expenses, the lease remains in force. On the other hand the lease terminates when this condition no longer obtains. While this is clearly the general rule when the "thereafter" clause includes the phrase "in paying quantities," there is a conflict on the question where these words are omitted. As heretofore stated, the courts of Pennsylvania, West Virginia and Ohio apparently hold that there is no difference in the legal effect of a clause containing the phrase "produced in paying quantities" and one limited to the use of the word "produced." The Supreme Court of Illinois, however, draws a distinction between the two provisions.³³ Here the lease involved was for five years and "so long thereafter as oil or gas is *produced* thereon." A producing well was drilled within the definite term, but it was not a paying well in the sense already indicated. The court said: "Oil was produced continuously after the drilling of the well. It is true that the quantity produced was so small as to make the venture un-

the sense here used, the judgment of the lessee, if exercised in good faith, is given great, if not controlling, weight. *Barbour v. Tompkins, supra*; *McGraw Oil Co. v. Kennedy, supra*; *Bay State Pet. Co. v. South Penn Lubricating Co.*, 121 Ky. 637, 87 S. W. 1102 (1905); *Summerville v. Apollo Gas Co.*, 207 Pa. 334, 56 Atl. 876 (1904); *Lowther Oil Co. v. Miller-Sibley Co.*, *supra*; *Urpman v. Lowther Oil Co.*, 53 W. Va. 501, 44 S. E. 433 (1903); *Zeller v. Book, supra*; *Young v. Forest Oil Co.*, 194 Pa. St. 243, 45 Atl. 121 (1899).

³³ *Gillespie v. Ohio Oil Co.*, 260 Ill. 169, 102 N. E. 1043 (1913). In *South Penn Oil Co. v. Snodgrass*, 71 W. Va. 438, 76 S. E. 961 (1912), the "thereafter" clause was restricted to the word "produced." In criticizing the holding of the Court of Appeals of West Virginia in this case, Professor Simon-ton observes that this decision should have been founded upon the principle announced in the *Gillespie* case. "Extension of Term of Oil Lease through Discovery of Oil in less than 'Paying Quantities.'" WEST VIRGINIA LAW QUARTERLY, Vol. 25, p. 79.

profitable, but the *strict letter* of the lease was complied with, and it had not expired by its own terms." Under this holding a lease of this class remains in force as long as a well produces oil, even though the oil is being produced at a loss to the lessee. This conclusion is sound upon principle. If the lessor intends that the lease shall terminate when it ceases to produce oil in paying quantities, such intention should be manifested by a positive stipulation to that effect.

But the notable exception to the prevailing rule that a lease of this type terminates at the end of the exploratory period unless at that time the lessee is producing oil in *paying quantities* is found in West Virginia. In *South Penn Oil Co. v. Snodgrass*,³⁴ the lease was for a term of ten years and as long thereafter as oil or gas should be produced, the phrase "paying quantities" being omitted. In other words the lease was of the same character as the one considered by the Supreme Court of Illinois in the *Gillespie* case. Shortly before the expiration of the definite term the lessee drilled an oil well, but the well was not producing in paying quantities at the expiration of the stated term, or at any time thereafter. The lessee, however, continued to pump the well at intervals, and there was no evidence of an intention on his part to abandon the well. The fixed term expired December 14, 1909. In the meanwhile a paying well came in on adjacent lands, and on the 18th day of December, 1909, which was after the expiration of the specified term, the lessee made location for a second well on the leased premises, this being an offset to the paying well on the adjoining tract. The statement of the case implies that it was the bona fide intention of the lessee to proceed with the drilling of the second well. The day the location for this well was made, however, the lessor executed a second lease to third parties on the theory that the prior lease had terminated through the failure of the lessee to produce oil or gas in paying quantities at the expiration of the exploratory period. The lessor and the junior lessee sought to oust the senior lessee, who thereupon brought this action in equity to cancel the second lease as a cloud on his title, and to restrain the lessor and the subsequent lessee from interfering with his possession under the former lease. The court stated the question in this wise: "Whether the mere discovery of oil within the term created by the lease (a) without pro-

³⁴ *South Penn Oil Co. v. Snodgrass, supra.*

duction thereof, or (b) in quantity too slight for profitable production suffices to extend the term beyond the period of ten years under the phrase "as long thereafter as oil or gas or either of them is produced therefrom by the party of the second part." Manifestly, this question was susceptible of an affirmative answer upon the principle that the extension clause was dependent upon the mere production of oil, and not upon the production of oil in paying quantities. But the court expressly rejected this view of the case, and founded its decision upon broader ground. After considering the reasoning of certain decisions which hold that a lease of this type terminates absolutely at the expiration of the specific term unless the lessee is producing oil or gas in paying quantities,³⁵ the court declared that these cases accorded too much force and effect to the letter of the habendum clause, and did violence to the spirit of the entire contract. The court continued: "The main purpose of the lessor is to obtain diligent and skillful effort to make his mines yield him a profit after the fixed term as well as within it. If the lessee, having discovered minerals within the term or contemporaneously with the expiration thereof, continues operations with diligence, he thereby obviously executes the chief purpose of the lease, and would be clearly within his rights if within the term. To regard it as compliance within the prescribed condition after the fixed term would be entirely consistent with the idea of extension or continuation of the tenancy, which is undoubtedly the major office or function of the clause. *May we not, therefore, say the qualifying clause 'as oil or gas is produced' really means 'as long as the premises are diligently and efficiently operated, provided the minerals shall have been discovered within the fixed term'*, which construction harmonizes the more completely and naturally with the manifest purpose of the parties as indicated by the other provisions of the lease, their situation, and the surrounding circumstances." Viewing the question in this light, the court then held that if the lessee discovers oil within the fixed term and if at the end of such term he is continuing his search diligently, the lease remains in force as long as he perseveres in his effort to find oil or gas. When this decision is given practical application it would sus-

³⁵ Cassell v. Crothers, 193 Pa. St. 359, 44 Atl. 446 (1899); Murdock-West Co. v. Logan, 69 Ohio St. 514, 69 N. E. 984 (1904); Barnsdall v. Boley, 119 Fed. 191 (1902).

tain a lease in either of the following situations: First, where the lessee, at the expiration of the definite term, is making no effort to produce oil from the discovery well but is diligently engaged in the drilling of another well or in operations leading to that result; secondly, where the lessee, at the expiration of the definite term, is producing oil from the discovery well but not in paying quantities, and where, at the same time, he is engaged in further operations of the character just alluded to. This decision is contrary to the overwhelming weight of authority upon the question. Moreover, it is utterly unsound in principle. In a brief dissenting opinion Judge Robinson said: "This decision makes the contract between the parties to be other than that which they must have contemplated when the lease was executed." This observation strikes at the heart of the majority opinion. The fundamental error evident here lies in the fact that the court confused the function of the drilling clause with the office of the habendum clause. The sole office of the habendum clause is to fix the duration of the lease. On the other hand, different provisions determine the measure of diligence to be exercised by the lessee in the development of the property. As a rule the obligation to drill during the specific term is set forth expressly. Where this is not the case, it arises by legal implication. After the expiration of the fixed term and where the lease is held by production under the "thereafter" clause, the obligation for further drilling is usually implied. In either event the right to drill is restricted to the term of the lease as established by the habendum clause. Where a lease is for a definite term of years and as long thereafter as oil or gas is produced in paying quantities, the plain intent of the contract is that the lease shall terminate at the end of the definite term unless oil is being produced in the prescribed quantity. Where the lease is for a definite term of years and as long thereafter as oil or gas is produced, it is equally clear that the lease shall terminate at the end of the definite term unless oil or gas is being produced in some quantity. In the latter situation the lessee would not be permitted to hold the lease indefinitely by the operation of a nonpaying well, as the law would imply an obligation requiring the lessee to conduct further operations. In brief, it is just as reasonable to say that a lease of fixed duration without the "thereafter" clause will remain in force after the expiration of the stipulated term if drilling operations are then in progress, as it is

to say that such operations would extend a lease of the character under discussion here. Such, precisely, is the view of Professor Simonton, of the University of West Virginia, in his criticism of this decision.³⁶ Notwithstanding the obvious posture of this question upon principle and authority, the Supreme Court of Appeals of West Virginia, in a later decision, adheres to the doctrine of the *Snodgrass* case.³⁷

Remembering that the lessee in the *Snodgrass* case was making some effort to produce oil at the expiration of the definite term and several days thereafter made a location for a second well which he intended to drill until his possession was threatened by the lessor and the junior lessee, this expression from the opinion is pertinent: "Is the situation here such as may occur under any oil and gas lease, drawn as this one was? If so, both parties must have intended an equitable and just result under the circumstances, if the terms used will permit it, for they must be deemed to have foreseen and contemplated it. It is matter of common knowledge that no man can estimate the exact time within which a well can be completed, and that delays due to accidents, trivial and grave, and other causes beyond the possibility of accurate anticipation, will occur. Adherence to the strict letter of the extension clause would make no allowance for any of these, and inflict disastrous losses upon diligent and honest lessees in many instances,—a consequence plainly not within the intent of either party." This deduction is wholly unwarranted. A lease of this type by express and positive provision contemplates the enlargement of the specific term upon one of two clearly defined conditions: First, the actual production of oil in paying quantities at the expiration of the exploratory period, or, secondly, the actual production of oil or gas in some quantity at that time. Only by doing violence to the explicit provisions of the contract can it be said that a mere discovery before the expiration of the limited term and drilling operations at the time of such expiration shall have the effect of carrying the lease as long as operations are carried on. It is true that the drilling of an oil well is attended by such uncertainty that no one can anticipate the length of time which will be required to complete the undertaking. But the answer to the situation is readily apparent. The lessee must com-

³⁶ WEST VIRGINIA LAW QUARTERLY, Vol. 25, p. 79.

³⁷ Ohio Fuel Oil Co. v. Greenleaf, — W. Va. —, 99 S. E. 274 (1919).

mence his well in ample time to enable him to complete it within the definite term of the lease, or he must provide against the contingency which the Court describes by an appropriate term in his contract.³⁸ The latter alternative is becoming an established custom in the business. In Oklahoma, Kansas, and Texas the following habendum clause is very generally employed:

"To have and to hold all and singular the rights and privileges granted hereunder to and unto the lessee, its successors and assigns, for the term of five years from date hereof (a) and as much longer thereafter as oil or gas shall be produced therefrom, (b) or royalties paid hereunder, (c) or as much longer thereafter as the lessee in good faith shall conduct drilling operations thereon, and should production result from such operations this lease shall remain in force as long as oil or gas shall be produced."

It is to be noticed that the first phrase is identical with the one appearing in the lease considered in the *Snodgrass* case, that is, the words "in paying quantities" are omitted. The second provision is designed to protect the lessee in this situation. Frequently a well producing gas will be found during the fixed term, and this will be the only production developed. Many times there will be no market for the gas, which necessitates the shutting in of the well. As the ordinary lease contemplates actual production for the enlargement of the term, there might be some question about the lessee's right to hold the lease without producing the gas and yielding the lessor his royalty. Under this provision the lessee has the right to hold his lease after the fixed term by the payment of the gas royalty

³⁸In *Baldwin v. Blue Stem Oil Co.*, — Kan. —, 189 Pac. 920 (1920), the lessee commenced a well in ample time to enable him to complete it before the expiration of the fixed term, but the completion of the well was interfered with by weather conditions and a shortage of water. Holding that this was not a defense, and that the lessee should have protected himself against these contingencies by a proper provision in the lease, the court said: "The lessee * * * contracted positively that he would do certain work within a certain time, and that after that time his rights in the premises should cease unless oil or gas should be produced from the land. Neither was produced." Upon the basis of this holding the lease was cancelled. *McLean v. Kishi* (Tex. Civ. App.), 173 S. W. 502 (1915).

stipulated in the instrument, whether the gas is produced and marketed or not. This precise question will be treated at greater length later. The third condition for extension meets the doctrine of the *Snodgrass* case squarely. There, upon the ground of legal implication, it was decided that development in process at the termination of the exploratory period would hold the lease as long as operations were continued. Here, by express stipulation, the lessee has that right. The validity of this third condition is upheld in a recent Oklahoma case.³⁹ Here the habendum clause assumed this form: "To have and to hold the same for and during the term of three years from the date hereof, and as much longer thereafter as oil or gas is found therein, or said premises developed or operated." The lessee was not producing oil or gas at the end of the three-year term. Shortly before this period expired he commenced the drilling of a well on the leased premises which was in process of completion at the time the definite term ended. The drilling of this well was proceeded with until production in paying quantities was found. In the meanwhile, however, the lessor executed another lease to a third party on the theory that the prior lease had expired at the end of the three-year term. The senior lessee brought an action in equity to sustain his title. It was urged here that the phrase "or premises developed or operated" added nothing to the legal effect of the habendum clause, that this expression meant that the premises must be developed or operated within the three-year term alone, and that production was the only circumstance which would carry the lease beyond the definite term. It must be conceded that these words are not free from ambiguity. At any rate the alternative right of extension lacked the clearness and precision of statement which characterizes the broader habendum clause first quoted. Notwithstanding this situation, the court found that the parties must have had some definite purpose in view when they employed the phrase "premises developed or operated" in the disjunctive; that accordingly there were two conditions for the enlargement of the term, first, actual production at the end of the three-year period, or secondly, development work in progress at that time. In as much as the lessee had complied with the second condition for the enlargement of the term, the title of the senior lessee was upheld. Other clauses of similar import appear in the

³⁹ *Prowant v. Sealy*, 11 Okla. App. 10, 187 Pac. 235 (1920).

books.⁴⁰ Finally, then, where a lessee intends to hold his lease beyond the definite term by drilling operations alone, an appropriate provision to that effect should be embodied in the lease.

Having considered the major questions which are involved in our present inquiry, attention should be directed to certain matters of incidental concern. It some times happens that a producing well is completed on or about the last day of the fixed term. Therefore it is important to ascertain the exact duration of the exploratory period. In determining this question it is held that the day the lease is dated must be excluded from the term.⁴¹ Where a lease covers the oil deposits alone, the finding of natural gas within the exploratory period will not extend the term.⁴² Upon the principle that the rights of the lessee are indivisible, and where the lease covers several different tracts of land, it is decided that the finding of oil or gas in paying quantities on any one of the tracts covered by the lease extends the term as to all tracts embraced within the lease.⁴³ In *Stahl v. VanVleck*⁴⁴ the lease was for five years and as long thereafter as oil or gas should be produced in paying quan-

⁴⁰ *Doornbos v. Warwick*, 104 Kan. 102, 177 Pac. 527 (1919): "Five years from date of lease and as much longer thereafter as oil or gas is found therein or said premises developed or operated."

Myers v. Carnahan, 61 W. Va. 414, 57 S. E. 134 (1907): "Five years from date of lease and as much longer as the rent for failure to commence operations is paid, and as long after the commencement of operations as said premises are operated for the production of oil and gas."

Simon v. Northwestern Ohio Gas Co., 12 Ohio Cir. Ct. Rep. 170 (1896): "Five years from date of lease or as long as oil or gas shall be found in paying quantities or the said second party or its assigns continue to operate a pipeline over or through the land."

⁴¹ *Eastern Oil Co. v. Coulehan*, 65 W. Va. 531, 64 S. E. 836 (1909).

⁴² *Truby v. Palmer*, 3 Pa. Super. Ct. Cas. 156, 6 Atl. 74 (1886); *Allen v. Palmer*, 136 Pa. St. 556, 20 Atl. 516 (1890).

⁴³ *Pierce Oil Corporation v. Schacht*, — Okla. —, 181 Pac. 731 (1919); *Harness v. Eastern Oil Co.*, 49 W. Va. 232, 38 S. E. 662 (1901); *Lynch v. Davis*, 79 W. Va. 437, 92 S. E. 427 (1917); *South Penn Oil Co. v. Snodgrass*, 71 W. Va. 438, 76 S. E. 961 (1912); *Brewster v. Lanyon Zinc Co.*, 140 Fed. 801 (1905); *Gypsy Oil Co. v. Cover*, — Okla. —, 189 Pac. 540 (1920); *Nabors v. Producers' Oil Co.*, 140 La. 985, 74 So. 527 (1917).

⁴⁴ *Stahl v. Van Vleck*, 53 Ohio St. 136, 41 N. E. 35 (1895).

In *Turner v. Seep*, 167 Fed. 646 (1909), the lessee had a period of sixty days from the termination of the lease within which to remove all material from the lease. The lease was cancelled, and in the decree the lessee was

tities. During the fixed term the lessee commenced a well in ample time to complete it before the expiration of the term. The lessor, claiming a forfeiture, obtained an injunction restraining the lessee from further operations. While the writ was in effect the fixed term of the lease expired. Upon appeal the writ was discharged, and the court held that the lessee, at the close of the litigation, was entitled to as much time to complete his well as still remained of his term when the injunction was issued. Where it is stated that a lease shall remain in force for the same length of time as a lease on adjoining premises, it is held that the term is made definite and certain by reference.⁴⁵ Even though the completion of a well within the fixed term may be prevented by a shortage of water, weather conditions, or other unexpected happenings, the lease expires at the end of the exploratory period unless, contemporaneously therewith, oil or gas is being produced in paying quantities.⁴⁶ On the other hand, if the delay in the completion of the well within the fixed term is attributable to the conduct of the lessor, he may be estopped to assert that the lease has terminated.⁴⁷ Where a "no term" lease provided that it should remain in force as long as oil or gas was produced and where the lessee drilled a nonpaying well, it was held that he had a reasonable time from the completion of the well to resume the work of development.⁴⁸ If a lessee before the expiration of the specific term finds gas in paying quantities in a shallow sand he may drill the well to a deeper sand, although the operation extends beyond the definite terms of the lease. Then if

given sixty days to remove his property. See also *Midland Oil Co. v. Turner*, 179 Fed. 74 (1910).

⁴⁵ *Butler v. City of Iola*, 100 Kan. 111, 163 Pac. 652 (1917).

⁴⁶ *Baldwin v. Blue Stem Oil Co.*, — Kan. —, 189 Pac. 921 (1920).

The same principle is announced in *Diehl v. Ohio Oil Co.*, 12 Ohio Cir. Ct. Rep. (N. S.) 539 (1892), although here the lessee was given the right to complete the well, together with the use of an acre of ground for that purpose, and the court held that if production were found the lessee should account for the royalty therefrom. This decision was based upon equitable considerations, and is unsound in principle.

⁴⁷ *Riddle v. Mellon*, 147 Pa. St. 30, 23 Atl. 241 (1892); *Ohio Fuel Oil Co. v. Greenleaf*, — W. Va. —, 99 S. E. 274 (1919); *Eastern Oil Co. v. Coulehan*, 65 W. Va. 531, 64 S. E. 836 (1909); *Strange v. Hicks*, 11 Okla. App. 369, 188 Pac. 347 (1920). *Herrington v. Wood*, 6 Ohio Cir. Ct. Rep. 326 (1892).

⁴⁸ *Diehl v. Ohio Oil Co.*, 12 Ohio Cir. Ct. Rep. (N. S.) 539 (1892).

he find production in the deeper sand his lease remains in force as long as oil or gas is produced. If the well proves nonproductive in the deeper sand and the lessee then proceeds to utilize the gas from the shallow sand, the extension clause becomes effective.⁴⁹

An important question which remains is this: If a lessee completes a well capable of producing oil or gas in paying quantities and then refrains from operating the well, may he still hold his lease under the usual "thereafter" clause? The answer to this query depends upon whether the well produces oil or gas. An oil well differs from a gas well in the following particulars. Ordinarily there is a ready market for petroleum. On the other hand, the marketing of natural gas is attended with more or less uncertainty. Unless a gas well is in the neighborhood of a city or town utilizing natural gas, or near a gas pipeline supplying more remote places, there is little or no opportunity to dispose of the gas production. No one will undertake the expensive operation of installing a gas pipeline until a large reserve supply of natural gas has been developed. Until these facilities are provided a gas well must remain idle.⁵⁰ Then, in the second place, the lessor's oil royalty consists of a share of the production which in itself implies the continued operation of the well in order that the lessor shall receive the benefits of his contract. In the case of gas wells, however, the usual royalty is an annual cash rental for each well. Therefore, should the lessee pay the stipulated rental and yet refrain from the operation of the well, the lessor is receiving the same compensation which he would receive if the gas were being produced. For these reasons the rule in this respect diverges. The principle is well established that a lessee seeking to hold his lease under the "thereafter" clause must operate the oil wells on his premises with reasonable diligence.⁵¹ On the other hand, even where the "thereafter" clause provides that the lease shall remain in force as long as oil

⁴⁹ *Eastern Oil Co. v. Coulehan*, 65 W. Va. 531, 64 S. E. 836 (1909); *Roach v. Junction Oil & Gas Co.*, — Okla. —, 179 Pac. 934 (1919).

⁵⁰ *Strange v. Hicks*, 11 Okla. App. 369, 188 Pac. 347 (1920).

⁵¹ *Murdock-West Co. v. Logan*, 690 O. S. 514, 69 N. E. 984 (1904); *Provant v. Sealy*, 11 Okla. App. 10, 187 Pac. 235 (1920); *Collins v. Mt. Pleasant Oil & Gas Co.*, 85 Kan. 483, 118 Pac. 54 (1911). In this case it is said: "Now the contract between the parties contemplates that the lessee shall not only explore and discover, but that if oil in paying quantities is discovered, they shall operate and produce oil, so that the lessors can have

or gas shall be produced in paying quantities, which implies the necessity of continuous production, it is held that a lessee holding a lease under a gas well alone may refrain from the operation of the well upon the condition that he pays or tenders the stipulated gas royalties.⁵²

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(To be continued)

their share of the oil produced." In *Zeller v. Book*, 7 Ohio Cir. Ct. Rep. (N. S.) 429 (1905), where the operation of the property was stopped by causes beyond the control of the lessee, the court refused to hold that the lease had terminated.

⁵²*Summerville v. Apollo Gas Co.*, 207 Pa. 334, 56 Atl. 876 (1904); *McGraw Oil Co. v. Kennedy*, 65 W. Va. 595, 64 S. E. 1027 (1909). In *Strange v. Hicks*, 11 Okla. App. 369, 188 Pac. 347 (1920), however, where the only provision for the payment of the gas royalty was conditioned upon the use of the gas, the court held that the case was open to oral proof as to whether the parties intended that the lease might be held by a gas well under the "thereafter" clause without the actual production of gas or the payment of the stipulated royalty. See also *Herrington v. Wood*, 6 Ohio Cir. Ct. Rep. 326 (1892).