

# What is Production and Production in Paying Quantities?

HOUSTON ASSOCIATION OF PROFESSIONAL LANDMEN

57th Annual Technical Workshop

April 7, 2026

Houston, Texas

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## Presentation Summary

- I. Duration of an Oil and Gas Lease Generally
- II. The Production in Paying Quantities Doctrine
- III. Total Cessation of Production
- IV. Savings Clauses
- V. Potential Defenses to Lease Termination Claims



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# I. Duration of an Oil and Gas Lease Generally

## **I. Duration of an Oil and Gas Lease Generally**

- Texas courts generally view the lessee's interest under an oil and gas lease as a fee simple determinable estate in the oil and gas in place.
- Meanwhile, the lessor retains a possibility of reverter.



## I. Duration of an Oil and Gas Lease Generally

- Oil and gas leases almost always contain a habendum clause, which is used to create the property interests owned by the parties to the lease.
- The primary term is a fixed term of years, generally ranging from one to five years, during which the lessee has the right, without the obligation, to explore for oil and gas on the leased premises.
- The secondary term is an extended period of time the lease is maintained if the lessee explores and develops the leased premises.



## I. Duration of an Oil and Gas Lease Generally

- The “thereafter” or “production” language in the habendum clause operates as a special limitation upon the lessee’s estate.
- Once production ceases in the secondary term (absent an express or implied savings provision), the leasehold estate automatically terminates and the lessor is once again the owner of the fee simple absolute.



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## II. The Production in Paying Quantities Doctrine



## II. The Production in Paying Quantities Doctrine

- Nearly all jurisdictions, including Texas, have adopted the rule that production must be “in paying quantities,” even where the lease habendum clause does not state as much.

# II. The Production in Paying Quantities Doctrine

139 Tex. 578  
Supreme Court of Texas.

GARCIA et al.

v.

KING et al.

No. 7905.

July 15, 1942.

Rehearing Denied Oct. 7, 1942.

It will be noted that the lease provides in effect, that it shall run for a period of ten years, and as long thereafter as oil is 'produced' from the land. It does not provide, as is ordinarily the case, that the production must be 'in paying quantities' in order to continue the lease in force after the expiration of the primary term. At the end of the primary period the lease was producing only about 24 barrels of oil per month. This quantity was susceptible of division, but was insufficient to yield a profit over and above operating and marketing expenses. It becomes necessary for us to determine what is meant by the term 'produced,' as used in the lease. It is the plaintiffs' contention that the term 'produced' means the same thing as 'produced in paying quantities,' while the defendants contend that the terms of the contract are met if enough oil is produced to be susceptible of division. So far as we have been able to determine, the question has not heretofore been passed on in this State.

# II. The Production in Paying Quantities Doctrine

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4 5 It should be noted that we are here dealing with a situation in which under normal conditions, all of the producing wells on the lease in question at the time of the termination of the primary period were not producing enough oil or gas to pay a profit over and above the cost of operating the wells. In order to understand and properly interpret the language used by the parties we must consider the objects and purposes intended to be accomplished by them in entering into the contract. The object of the contract was to secure development of the property for the mutual benefit of the parties. It was contemplated that this would be done during the primary period of the contract. So far as the lessees were concerned, the object in providing for a continuation of the lease for **\*\*513** an indefinite time after the expiration of the primary period was to allow the lessees to reap the full fruits of the investments made by them in developing the property. 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. Since the lease was no longer yielding a profit to the lessees at **\*586** the termination of the primary period, the object sought to be accomplished by the continuation thereof had ceased, and the lease had terminated.



## II. The Production in Paying Quantities Doctrine

- In 1959, the Supreme Court of Texas expanded the production in paying quantities doctrine to its modern-day application, adopting a two-prong approach in *Clifton v. Koontz* to determine whether the lessee has maintained production in paying quantities sufficient to perpetuate its lease.



## II. The Production in Paying Quantities Doctrine

- Prong One

- Did a well on the lease make a profit, no matter how small, over a reasonable period of time after subtracting operating and marketing costs (but excluding capital costs) from gross revenue?

## II. The Production in Paying Quantities Doctrine

- Prong One

- Revenue includes all income attributable to the lessee's working interest, inclusive of any overriding royalties.

## II. The Production in Paying Quantities Doctrine

- Prong One

- Expenses deducted from revenue:
  - Operating, marketing, treating, and transportation charges, including the cost of connecting the well to a pipeline;
  - Charges for labor and repairs;
  - Ad valorem taxes;
  - Overhead charges directly traceable to producing and marketing of production;
  - Depreciation of salvageable production equipment; and
  - Royalty payments.

## II. The Production in Paying Quantities Doctrine

- **Prong One**

- Expenses not deducted from revenue:
  - Original costs of drilling, completing, and equipping the well;
  - Reworking expenses; and
  - Depreciation of original capital expenditures to drill and complete the well.

## II. The Production in Paying Quantities Doctrine

- Prong One

- Reasonable Period of Time

- Texas courts have made it clear that there is no set arbitrary time period that is “reasonable.”
- Courts have held a wide variety of time periods to be reasonable, ranging from a few months to years.
- The issue of “reasonableness” depends on the circumstances of the matter at hand.



## II. The Production in Paying Quantities Doctrine

- Prong One

- Reasonable Period of Time

- In *BP Am. Prod. Co. v. Laddex, Ltd.*, the jury was instructed to consider a 15-month period under which to determine if there was production in paying quantities.
- The Supreme Court of Texas held that setting out this arbitrary time period was improper.

## II. The Production in Paying Quantities Doctrine

- **Prong One**

- The party seeking to terminate the lease bears the burden of proof on prong one of the *Clifton* test.
- If the well made a profit over that time period, then the well is deemed to be producing in paying quantities even if it could never repay the initial capital costs or make the entire enterprise profitable. No need to proceed to the second prong.

## II. The Production in Paying Quantities Doctrine

- Prong Two

- If the well failed to make a profit over a reasonable period of time, would a reasonable and prudent operator continue to operate the well in the manner in which it is being operated for profit and not merely for speculation?

## II. The Production in Paying Quantities Doctrine

- Prong Two

- Non-exhaustive list of factors to consider:
  - Is the reservoir depleted?
  - Has the well or lease been fully developed?
  - Is the well or lease capable of producing a quantity of oil or gas in the future that could be sold for a profit?
  - The price for which the product can be sold.
  - The relative profitability of wells in the area.
  - Operating and marketing costs of the lease.
  - Lease provisions.
  - Reasonable period of time under the circumstances.
  - Is the lessee holding the lease for speculative purposes?

## II. The Production in Paying Quantities Doctrine

- **Prong Two**

- The party seeking lease termination also bears the burden of proof on prong two.
- If the answer to the second prong is “yes,” then the lessee may continue operating the well in the manner in which it has previously been operated without risking lease termination.
- If the answer is “no,” however, the lessee must immediately commence drilling or reworking operations as set forth in any lease savings clause for the specific purpose of restoring production from the lease.

## II. The Production in Paying Quantities Doctrine

- Proper Unit of Measurement

- Must the lessee produce both oil *and* gas in paying quantities in order to perpetuate the leasehold, or is the production of either substance, considered alone, sufficient?
- All of the commentators that have addressed this issue agree that the production of either oil *or* gas in paying quantities should perpetuate the typical oil and gas lease beyond the primary term as to all leased substances.



## II. The Production in Paying Quantities Doctrine

2 Kuntz, Law of Oil and Gas § 26.7 (2022)

### [t] Concurrent production of other substances and operation of other wells.

In most oil and gas leases, the habendum clause refers to oil and gas in the disjunctive in connection with the requirement of production, and it is not necessary that both oil and gas be found and produced under such a clause in order to extend the lease as to both substances.<sup>79</sup> If production of oil in paying quantities will satisfy the habendum clause as to both oil and gas if no gas is produced, it should necessarily follow that the production of oil in paying quantities will satisfy the habendum clause even though gas is also produced but in quantities less than paying quantities. Conversely, it should also necessarily follow that the production of gas in paying quantities will satisfy the habendum clause of the lease even though oil is also produced but in quantities less than paying quantities.

In such situation it would be nothing short of ridiculous to require the lessee to forego producing the substance which is produced unprofitably in order to hold the lease. It would be to the lessor's advantage to produce all such substances, and, subject to a duty of diligent operation, the lessee should be free to exercise his

## II. The Production in Paying Quantities Doctrine

- Proper Unit of Measurement

- Where there is more than one well situated on the lease, must the entire lease be profitable in the aggregate, or will the lease be extended so long as there is at least one profitable well on the lease?
- Commentators also agree that the production in paying quantities test should be conducted on a well-by-well basis rather than a lease-wide basis.



## II. The Production in Paying Quantities Doctrine

3 Williams & Meyers, Oil and Gas Law § 604§ 604.6(g) (2022)

not be held to terminate so long as production of either oil *or* gas is at a profit. Further, there are strong policy reasons for the same holding even in the case where the clause reads “oil *and* gas”; that is, it is suggested that so long as any well on the premises operates at a profit, the lease should not be held to terminate automatically, even if operations on the entire leasehold are at a loss, since a contrary holding occasions economic waste to our society by placing a premium on the closing down of wells which by reason of factors believed by the lessee to be temporary in character are operating at a loss.<sup>2</sup>



## II. The Production in Paying Quantities Doctrine

2 Kuntz, Law of Oil and Gas § 26.7 (2022)

Further, it would appear to be immaterial that the entire operation is unprofitable if either oil or gas is produced in paying quantities, or if one well is producing in paying quantities although another well or wells may be operating at a loss. If the lessee chooses, for reasons of his own, to engage in a concurrent losing operation on the lease which cancels out his profit from producing either oil or gas, from any well or wells, it should be his privilege to do so.

## II. The Production in Paying Quantities Doctrine

- **Capable of Producing in Paying Quantities**

- Earlier oil and gas leases sometimes provided that the lease “shall remain in force for a term of (1) year and as long thereafter as the lease is capable of producing in paying quantities.”
- A well is “capable” of producing in paying or commercial quantities when it will produce in paying quantities if the well is turned “on,” and it begins flowing, without additional equipment or repair.



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## **III. Total Cessation of Production**



## III. Total Cessation of Production

- The production in paying quantities test only applies in instances where there is at least marginal production on the lease.
- But what if the lease ceases producing entirely? Does the lease terminate automatically for lack of production?



## III. Total Cessation of Production

- Oil and gas wells, by their nature, do not produce constantly.
- Inevitably, there are cessations of production from time to time due to mechanical breakdowns, market conditions, reworking operations, or other problems.
- Acting on the premise that the parties must have contemplated that production interruptions would occur from time to time, courts in several states, including Texas, generally recognize an implied lease term, the temporary cessation of production doctrine, which applies when a lease completely ceases production.



## III. Total Cessation of Production

- Implied Temporary Cessation of Production Doctrine
  - Cause of the cessation
    - Historically, Texas courts reserved the temporary cessation of production doctrine for instances in which the cause of the cessation was sudden or unavoidable.
    - However, the Supreme Court of Texas's 2004 decision in *Ridge Oil Co., Inc. v. Guinn Investments, Inc.* casts doubt on the ongoing relevance of the “cause” requirement in the temporary cessation of production analysis.



## III. Total Cessation of Production

- Implied Temporary Cessation of Production Doctrine
  - Duration of the cessation
    - As the name implies, the temporary cessation of production doctrine does not apply unless the cessation is, in fact, temporary in nature—meaning there must eventually be production in paying or commercial quantities again.
    - What constitutes a “reasonable time” is a fact-intensive inquiry that depends, in part, on the reason for the stoppage.



## III. Total Cessation of Production

- Implied Temporary Cessation of Production Doctrine
  - Diligence in restoring production
    - The lessee's diligence in working to regain production is another important factor courts consider in determining whether the temporary cessation of production doctrine is applicable.
    - Where the lessee proceeds expeditiously and in good faith to restore production, courts will likely hold that the doctrine applies.
    - Though immediate efforts that do, in fact, restore production within a reasonable period of time will usually permit the lessee to utilize the doctrine, the test is inherently fact-intensive and dependent on the circumstances presented in a particular case.



## III. Total Cessation of Production

- **Express Cessation of Production Clause**

- Because of the lack of predictability of the application of the common law temporary cessation doctrine, modern oil and gas leases often contain an express cessation of production clause.
- If after the discovery of oil or gas, production has ceased from any cause, the cessation of production clause will allow the lessee some length of time (usually between 60 to 120 days) to begin drilling or reworking operations.
- When a lease contains a cessation of production clause, the terms of the oil and gas lease will control, thereby precluding application of the temporary cessation of production doctrine.



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## IV. Savings Clauses



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- Although the habendum clause generally controls the lease's duration, other clauses may extend the term of the lease.
- The category of clauses that might extend the duration of an oil and gas lease beyond the primary term in the absence of production or production in paying quantities, which are generally known as “savings clauses,” include, among other clauses, the dry hole clause, the shut-in clause, and the force majeure clause.



## IV. Savings Clauses

- **Dry Hole Clause**

- The dry hole clause allows the lessee to keep a lease in effect following the drilling of a dry hole but requires the lessee to commence drilling operations for a subsequent well within a stated period of time.
- The policy behind the dry hole clause recognizes the speculative nature of oil and gas exploration and affords the lessee additional time to drill in a different location in an attempt to obtain production.

## IV. Savings Clauses

- **Shut-in Clause**

- The shut-in clause states that if the lessee drills a well during the primary term which is capable of producing covered minerals in paying quantities, and the well is shut-in (usually for lack of a market, for maintenance, or because no pipeline has been constructed to transport the gas), the lease will not expire and will be held in force so long as the lessee makes the negotiated nominal payment.
- It is common to see limitations to the term under which shut-in royalties can extend the lease, often by two years in the aggregate.



## IV. Savings Clauses

- **Shut-in Clause**

- Texas courts have held that shut-in royalty payments cannot extend the term of the lease if the well was not capable of producing at the time it was shut-in without additional work.
- Further, courts have held that a shut-in clause cannot save a lease if it has already terminated because the shut-in well had already ceased to produce in paying quantities.



## IV. Savings Clauses

- **Force Majeure Clause**

- The purpose of the force majeure clause is to prevent termination of the lease due to lack of production or production in paying quantities when the cessation is beyond the control of the lessee.
- The clause typically sets out a list of events deemed to be acts of God and, therefore, beyond the lessee's control.
- There is often a limitation to the duration of time that a lessee can rely on force majeure to maintain the lease.



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## V. Potential Defenses to Lease Termination Claims



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- Even if a lease has terminated for failure to produce in paying quantities or a total cessation of production, and no savings clause would otherwise perpetuate the lease, there are a number of defenses available to operators who have been sued for lease termination, including ratification and/or revivor and adverse possession.
- An operator can also assert the affirmative defense of repudiation to suspend leasehold requirements during the pendency of an existing lease where the lessor denies that the lease remains in full force and effect.



## V. Potential Defenses to Lease Termination Claims

- **Ratification and/or Revivor**

- Ratification occurs where a party recognizes the validity of a contract by acting under it, performing it, or affirmatively acknowledging it.
- Revivor, on the other hand, applies when a subsequent instrument executed by a mineral owner makes explicit reference to a terminated lease and clearly acknowledges the validity of the lease.



## V. Potential Defenses to Lease Termination Claims

- **Ratification and/or Revivor**

- As long as (1) a formal instrument is executed, which (2) clearly recognizes the validity of a prior instrument and (3) specifically references the prior instrument to be given life, then it will operate as a ratification if the prior instrument was never valid to begin with, or it will operate as a revivor if the prior instrument was initially valid but subsequently terminated.



## V. Potential Defenses to Lease Termination Claims

- **Ratification and/or Revivor**

- Texas courts have held that ratification and/or revivor of an oil and gas lease can occur merely by making a subsequent deed “subject to the terms of said lease” after the lease expires, by the mere execution of division orders if detrimental reliance is found on the part of the lessee, and by “acceptance under an oil and gas lease (such as a lease royalty payment under a lease that has lapsed) in addition to an instrument in writing such as a ratification of a unit or pooling agreement.”

## V. Potential Defenses to Lease Termination Claims

- **Adverse Possession**

- Adverse possession, more formally, title by possession or title by limitations, is a legal doctrine providing that title to real property is given to the occupier of another's land upon the occupier's possession of the land for a statutory period of time.
- In order to mature title to a mineral estate through adverse possession after severance of the mineral and surface estates, actual possession must occur.
- The Texas courts that have addressed the issue tend to agree that to support an adverse possession claim to the mineral estate underneath a tract of land, there must be drilling and production from wells located on that particular tract.
- *Natural Gas Pipeline Co. of Am. v. Pool.*



## V. Potential Defenses to Lease Termination Claims

- **Repudiation**

- Under Texas law, a lessor’s repudiation of a lease “relieves the lessee of any obligation to conduct any operation on the land in order to maintain the lease in force pending a judicial resolution between the lessee and the lessor over the validity of the lease.”
- Texas courts have found repudiation where the lessor executed a top lease with a third party, where a lessor notified the lessee in writing that its lease expired, where a lessor told the lessee’s secretary “that the lease had expired because of non-production, and that he wanted a release of the lease,” and where the lessor filed suit to have the lessee’s lease declared terminated.
- An operator, when faced with a claim for lease termination, can utilize the doctrine to perpetuate or otherwise extend a lease without securing production or conducting savings clause activities in the event the lessor has repudiated the lease.



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# Questions?

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