

CHAPTER 1

Oil and Gas Law



INTRODUCTION

Oil and gas law is a combination of elements of contract law, property law, and tort law. Oil and gas law is unique given the very nature of oil and gas, and the terms and phrases about this area of law are equally unique. Oil and gas law is also different from the law that applies to the ownership, leasing, and mining of other types of minerals because oil and natural gas are not solid and do not remain in one place. These minerals can move from one place to another, depending on how porous the rock is and what is happening around the deposit. For example, a person may drill an oil well on his property and tap into a large pool of oil. However, that oil deposit may not be under only his property: it could extend to the property of another person. Whose oil is being removed? Did trespass occur? Different words and phrases and different principles apply to this area of law in accordance with the nature of the mineral that is being taken from the ground.

OWNERSHIP OF OIL AND GAS

COMMON LAW PRINCIPLES

At common law, according to the **ad coelum doctrine**, the owner of real property maintained right to the property as it extended from the heavens all the way to the earth's core, including any minerals found in between. The ad coelum doctrine still applies to "hard" minerals (coal, gold, uranium, silver, and the like), but may no longer apply to oil and gas because of their nature: oil and gas may migrate from one piece of property to another.

Two theories are used to determine who owns oil and gas that are underground. One is the **nonownership theory**, which is based on **profit a prendre**: a right to go onto land and take some part of the land or a product of the land. Under the nonownership theory, a person has a right to go onto land and remove any oil or gas from it. Whoever removes the oil or gas from the land is the person who owns it.

The second theory, **ownership in place**, is based on the property principle of **fee simple determinable**. Under fee simple determinable, a person has an estate in property—an ownership interest—unless a stated condition occurs. Under fee simple determinable, if or when a condition occurs, a person loses his or her estate in the property. Applying the principle of fee simple determinable to oil and gas ownership, the owner of the oil or gas is the person on whose land the resource is located. However, if the oil or gas migrates to another person's property, then the original owner no longer owns it. The condition of ownership is that the oil and gas must be on the owner's property; if it moves, then the person whose property it moved to is the new owner. See Exhibit 1-1 for a summary of these common law principles.

EXHIBIT 1-1 COMMON LAW THEORIES OF OWNERSHIP OF OIL AND GAS

Nonownership theory – Based on *profit a prendre*, the right to go onto land and take some part of it. Under the nonownership theory, a person has a right to go onto land and remove any oil or gas. Whoever removes the oil or gas from the land is the person who owns it.

Ownership in Place – The owner of the oil or gas is the person on whose land it is located. However, if the oil or gas migrates—moves—to another person’s property, then the original owner no longer owns it.

OWNERSHIP OF OIL AND GAS PROPERTY

Different terms describe the ownership of property that contains oil, or the interest in the oil or gas that is owned or leased. A **mineral acre** is the full mineral interest in an acre of land; the owner of this interest has the right to all the minerals located in this acre of land. A **mineral interest** is the right to search for, develop, and produce all minerals found in the land, including oil and natural gas. The **surface interest** is the rights to the property other than the mineral interests—that is, the rights to everything on or in the property except any minerals. The surface interest owner’s rights are subject to the mineral interest owner’s right to use the surface to search, develop, and produce minerals. The surface owner *is* entitled to any other substances found in or under the soil that are not minerals. A **top lease** is given on property that already has an existing oil and gas lease. Generally the top lease becomes effective when the existing oil or gas lease expires, if the oil and gas lease expires. See Exhibit 1-2.

EXHIBIT 1-2 INTERESTS IN OIL AND GAS PROPERTY

Mineral Acre – The full mineral interest in an acre of land; the owner of this interest has the right to all the minerals located on or in this acre of land.

Mineral Interest – The right to search for, develop, and produce all minerals found in the land, including oil and natural gas.

Surface Interest – The rights to the property other than the mineral interests; the rights to everything about the property except for any minerals.

Top Lease – A lease that is given on property that already has an existing oil and gas lease.

LANDMAN

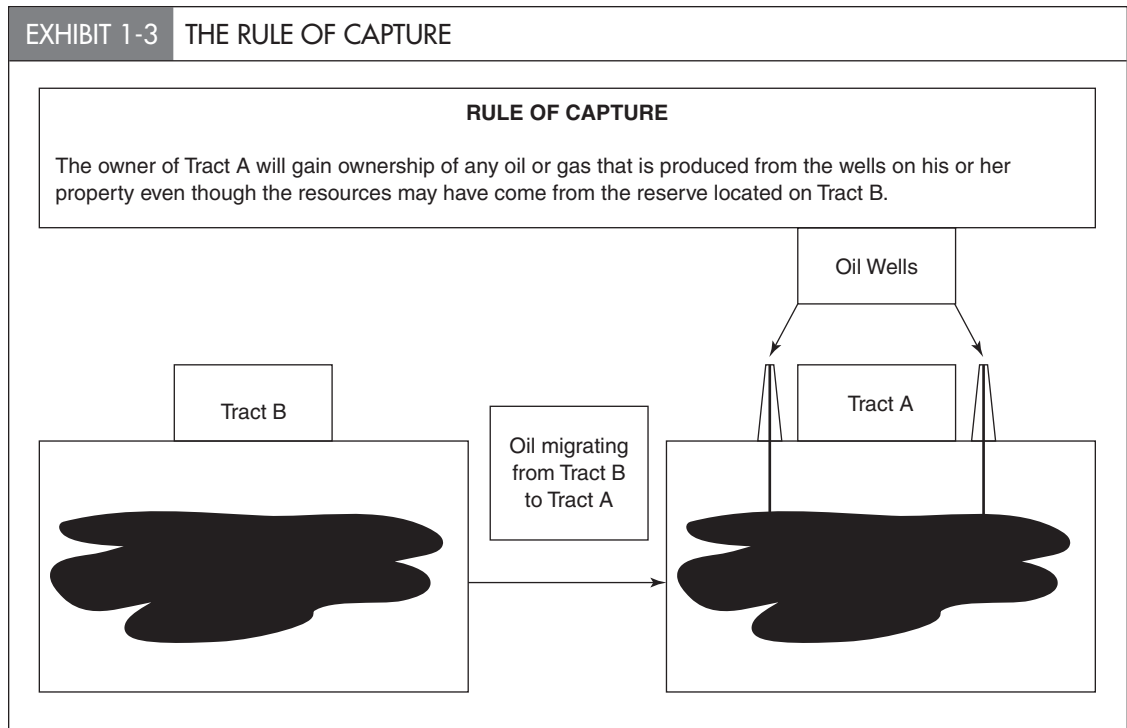
The person who is responsible for finding and developing these different interests is known as a **landman**. This individual acquires oil and gas leases, negotiates for the development of the leased land, and generally manages the leased land.

REMOVAL OF OIL AND GAS

RULE OF CAPTURE

Oil and gas deposits may stretch over several pieces of property with different owners. Whoever taps into a reservoir of oil or gas will be removing these resources from all the

land, not just his or her parcel. Also, oil and gas are fungible: one unit is the same as the other units, so it is impossible to determine the property from which the resources were extracted. For these reasons, the **rule of capture** modifies the ad coelum doctrine and is related to both theories of ownership of oil and gas. This rule states that the owner of a tract of land acquires title to the oil and gas produced from wells drilled on the land even though it may be shown that part of the oil and gas harvested came from adjoining lands. Under rule of capture, there is no liability for “capturing” the oil and gas that drains from another person’s land. See Exhibit 1-3.

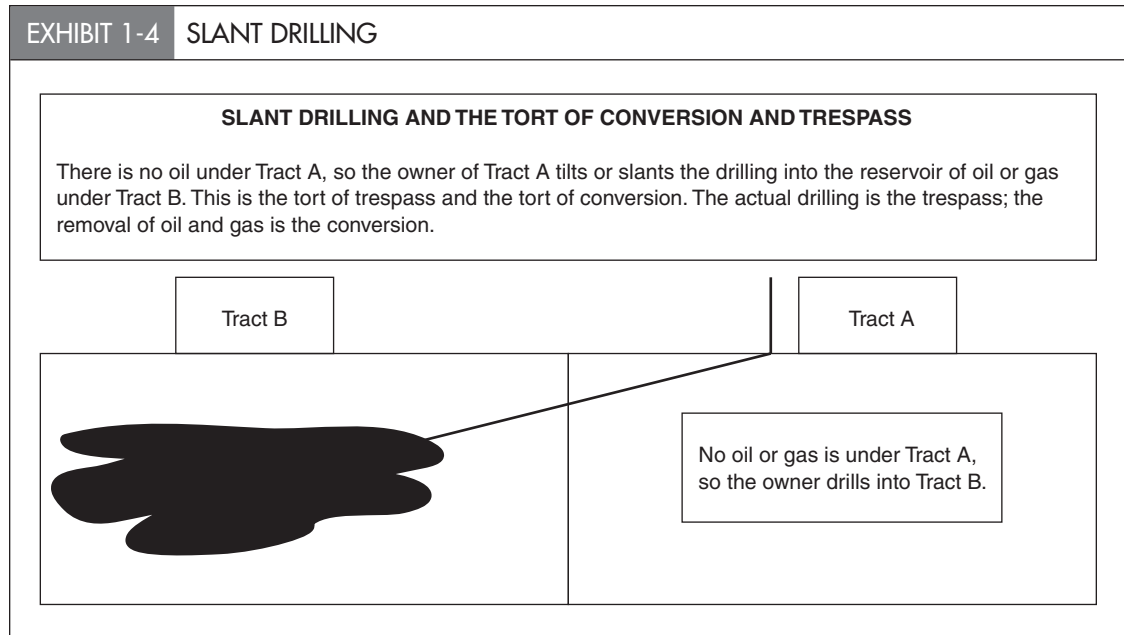


Rule of capture is part of the nonownership theory because the only way a person owns oil or gas is to capture the mineral. Rule of capture is also part of the ownership theory because a person who owns oil and gas may lose that ownership if another person can capture the minerals.

SLANT DRILLING

The rule of capture does not provide a total shield from liability for removing oil and gas from another person’s property. Someone can trespass onto another person’s land and illegally remove oil and gas. One way to do this is to “slant drill” from one piece of property onto another. An owner sets up the drilling rig close to the border of the two pieces of land, but instead of going straight down into his or her own property to search for oil, he or she drills at a slant, angling the operation to drill into the oil reserve that is under neighboring property. If any of the reserve is under the owner’s property, there would be no need to slant drill because of the capture rule. See Exhibit 1-4. Slant drilling is a form of trespassing and can result in the tort of conversion.

EXHIBIT 1-4 SLANT DRILLING



EXCEPTIONS TO THE RULE OF CAPTURE

The rule of capture is not an absolute rule. One exception applies to natural gas or oil that has already been harvested. Natural gas is stored by injecting it into underground storage areas. When it is injected, this gas is not subject to the capture rule. This gas, when it is already captured, remains the property of the person who captured it until that person abandons the gas.

Another limitation on the rule of capture is the **doctrine of correlative rights**, which was first announced in *Elliff v. Texon Drilling Company*. Texon operated oil wells on its property and also drained oil from Elliff's property. Texon was negligent in the operation of one of these wells, causing the well to blow out and burn. The burning of the oil and natural gas caused large quantities of the oil and gas under Elliff's property to be drained away and destroyed. The doctrine of correlative rights states that the right to take oil and gas from another person's property under the rule of capture does not apply when the removal of the oil or gas is done negligently or causes waste. In *Elliff v. Texon Drilling*, Texon was liable because its negligence caused Elliff to suffer a loss. If Texon had not been negligent and the oil well had not blown out and caught fire, then Texon could have removed oil and gas from Elliff's property and not faced liability. A **correlative right** is the right the landowner has to produce oil and gas from his or her own property as long as he or she is not negligent during the production.

CONSERVATION OF OIL AND GAS RESERVES

In order to further limit the rule of capture and to prevent overproduction and waste, conservation statutes exist in many states. Conservation statutes place limits on where drilling can take place and on production methods and amounts. Some examples of such limitations are well spacing rules, gas-to-oil ratios, water-to-oil ratios, and production allowables.

WELL SPACING RULES

Well spacing rules prevent property owners from placing wells close together along the boundaries of their property in order to take advantage of the rule of capture (draining oil

and gas of adjoining property). These rules set out how far the well has to be from the property line and how close to each other different rigs can be on the piece of property.

PRODUCTION ALLOWABLES

In order to prevent the loss of pressure that assists with the production of oil and gas, **gas-to-oil** and **oil-to-water ratios** are used. When the ratios of natural gas to oil or oil to water that are deemed appropriate are exceeded, production is to be reduced. **Production allowables** are limits that are put on daily, weekly, or monthly production of oil or gas. The purpose of production allowables is to prevent overproduction of oil and gas.

UNITIZATION

Sometimes several oil wells are owned by different people, each well producing oil and gas from a common reservoir. To maximize the production of the reservoir, the different wells may be operated jointly, as one unit. Operating oil and gas wells this way is called **unitization**.

However, the result of unitization is that some wells may not be producing as much as they were while others are producing more, or all the wells could be producing less. Because of the possible reduction in oil production, unitization is either voluntary or compulsory. If the owners of the wells agree to this unitization arrangement, the arrangement is **voluntary unitization**. If this arrangement is forced on owners by statute or other means, it is termed **compulsory unitization**. Most often, unitization is compulsory because the individual owners do not want to reduce production from their well; they want to produce as much as they can from their well alone. See Exhibit 1-5 for a summary of the conservation statutes.

EXHIBIT 1-5 OIL AND GAS CONSERVATION STATUTES

CONSERVATION STATUTES

1. **Well Spacing Rules** – How far one well has to be from another and from the property lines.
2. **Gas-to-Oil/Oil-to-Water Ratios** – Ratio of natural gas to oil or oil to water in a well must not exceed set ratios. If ratios are exceeded, production is to be reduced.
3. **Production Allowables** – How much oil or gas can be removed from a well every day, week, or month.
4. **Unitization** – Wells are operated as a unit, regardless of ownership, in order to maximize the amount of oil or gas that can be produced from the field. This can be either voluntary or compulsory.

EXCEPTIONS TO CONSERVATION LAWS

Because of mandatory conservation laws, the correlative rights of some landowners—their right to produce oil and gas from their property—may be interfered with. For example, a well spacing unit statute states that wells must be in the center of the land and that there must be 800 square acres of land between each unit. A landowner who owns a 40-acre tract might be prohibited from drilling on his or her property because a well in the center of that property would be too close to wells someone else has already drilled.

In order to protect these landowners, special provisions are added to conservation statutes. **Exception tract statutes** permit small tract landowners to drill wells on their property even though the land is not large enough or of the proper configuration to meet the requirements of the spacing unit statute. In order to protect small landowners from drainage,

the statutes may contain **compulsory pooling provisions** that allow the small landowner to participate in the drilling operation or receive royalties. A compulsory pooled owner has the following choices:

1. He or she may agree to participate in the drilling and pay his or her share of the costs.
2. He or she may agree to give up operating rights in return for a bonus payment and a royalty approved by the state conservation agency.
3. He or she may **elect to be carried**, which means that the other owners advance the cost of drilling and completion of the well to the small landowner. The carried party will only receive a royalty payment until the other owners have been repaid the money they advanced or some multiple of the money advanced. The small owner may then be paid a share of the proceeds either in addition to or in place of the royalty payments.

INTERESTS IN OIL AND GAS DEPOSITS

SURFACE AND WORKING INTERESTS

When a person owns a piece of property, he or she owns several rights in that property, one of which is the mineral rights. If any of the rights in the property are sold, leased, or otherwise transferred to someone else, then a **severance** has taken place. A severance occurs when one of the rights in the property has been severed—removed and separated from the rest. The **surface interest** is what is left of this bundle of property rights when the mineral interest is severed or transferred.

Working interest is another name for the mineral interest that is created by an oil or gas lease. When the severance is the separation of the mineral interests, other rights and interests are included as part of the severance. One of these rights is the **easement for surface use**. The person who has the mineral rights also has the right to use the surface of the property to search for, develop, and produce the minerals. The owner of the mineral interest has the **right to lease or sell the mineral interest**; he or she can sell or lease the mineral rights to someone else.

The right to lease the mineral interest by the owner of the interest is also called the **executive right**. The mineral interest owner, if the right to lease the property is exercised, has the rights that the lessor receives because of the lease. These include the **bonus** (payments made to induce the signing of the lease), **delay rentals** (payments for maintaining the lease without development), and production payments or **royalties** (the share of the production of the oil or gas that is allocated to the lessor). See Exhibit 1-6.

EXHIBIT 1-6 PROPERTY INTERESTS IN LAND CONTAINING OIL AND GAS

1. **Working Interest** – The actual mineral interest that is created by the oil and gas lease.
2. **Easement for Surface Use** – The owner of the mineral interest also has the right to use the surface of the property to search for, develop, and produce any minerals.
3. **Executive Right** – The owner of the mineral interest can also lease this interest to someone else.
4. **Bonus Payment** – Payment to encourage the signing of the lease.
5. **Delay Rentals** – Payment for maintaining the lease when the land is not being developed.
6. **Royalty** – The percentage of the oil and gas that is produced that goes to the lessor of the property.

ROYALTY INTERESTS

A **royalty interest** is a share of the oil and gas produced from the property that goes to the owner/lessor that is free from the costs of production. This royalty interest is usually expressed in percentages or fractions, not tonnage amounts. For example, the royalty interest may be 6% of the oil and gas produced from the property rather than a definite amount of oil or gas to be produced. A royalty interest is the right to a certain amount of the production, but it does not include a right to search for, develop, and produce minerals. The royalty interest applies only after production of the oil or gas starts.

CLASSIFICATIONS OF ROYALTY INTERESTS

There are different classifications of the royalty interest: the landowner's royalty, the overriding royalty, and a nonparticipating royalty. The **landowner's royalty** is the interest the person who leased the land retains in any oil or gas that is produced from the leased land. The landowner's royalty is the compensation the mineral rights owner receives after production of the oil or gas has begun. An **overriding royalty** is an oil and gas royalty that comes from the lessee's interest in the property. For example, the lessor retains a 50% landowner's royalty and the lessee has a 50% royalty, but there is also a 10% overriding royalty. The 10% overriding royalty comes from the lessee's 50% interest, so the lessee is actually only receiving a 40% royalty.

A **nonparticipating royalty** comes from the mineral interest itself, and entitles the holder to a stated share of production regardless of the terms of any lease. The nonparticipating royalty is usually retained by the mineral interest owner who sold his or her rights to someone else. A **term royalty** also comes from the mineral interest, but it is for a stated period of time or based on a certain condition. For example, an interest for 25 years is for a stated period of time. Alternatively, an interest that states it is for 25 years or as long as there is production, whichever occurs first, is based on a condition. If the wells stop producing before 25 years have elapsed, then the royalty terminates. However, if the well is still producing at 25 years, then the royalty ends at 25 years. Even if the well is producing *after* 25 years, the royalty ends at 25 years. A **perpetual royalty** has no time limit; it can go on forever, or at least as long as the well is producing. With this type of royalty, payments are made as long as the well is producing regardless of how long the well is producing. See Exhibit 1-7 for a summary of these types of royalties.

EXHIBIT 1-7 TYPES OF ROYALTIES

1. **Landowner's Royalty** – The interest a person who *leased* the land retains in any oil or gas that is produced from the leased land.
2. **Overriding Royalty** – The lessor has a landowner's royalty and also receives a percentage of the lessee's share of the oil and gas produced.
3. **Nonparticipating Royalty** – The holder of this royalty receives a share of the oil and gas produced regardless of the terms of the lease.
4. **Term Royalty** – The royalty that is a share of the oil and gas produced is only valid for a certain period of time.
5. **Perpetual Royalty** – The royalty is paid for as long as the property produces oil and gas.

INTEREST IN OIL AND GAS PROPERTY THAT IS FREE FROM PRODUCTION COSTS

A **production payment** interest is a share of the oil and gas production from the property that is free of the costs of production. The person who has this interest does not have to pay any of the costs associated with the production of the oil or gas. But the interest is only until an agreed upon sum has been paid; once this amount is paid, the interest is terminated. A **net profit interest** is an interest in the production that is payable only when there is a net profit. The owner of this interest also does not pay any of the production costs, but he or she receives no money unless there is a net profit. Stipulations regarding whether a net profit exists and how the amount of the net profit is determined are usually included in the agreement.

A **carried interest** is a fractional interest free of some of the costs of production. For example, the interest may be for up to the casing point—the point where a decision must be made to either abandon the drilling or continue and put production pipe (the casing) in the hole and complete the well. The owner of this interest is free from the cost of production up to a designated part of drilling or construction. Once that point is reached, the owner of the interest is responsible for part of the costs associated with the production of the oil or gas.

CLAUSES IN OIL AND GAS LEASES

INTRODUCTION

Instead of buying property that might have oil and gas deposits, companies will lease that property for the purpose of exploration and possible production of oil or gas. The goal the oil industry has in leasing land is to obtain the *right* to develop the land without any *obligation* to develop the land. A second goal is to have the lease exist as long as it is economically feasible to maintain it.

Oil and gas leases are different from standard property leases because the lessee not only has the right to use the premises but also has the right to take things from the premises. The lessee's rights may not end after a set period of time, but may continue depending on production. The lessee's right to use the land is not exclusive: it is subject to the surface owner's using the property provided there is no interference with the mineral lease. Mineral leases also have two broad categories of clauses: essential and defensive.

ESSENTIAL CLAUSES

Essential clauses are the parts of an oil lease that are necessary to have a valid transfer of the mineral interest and to accomplish the fundamental reasons for having the lease. The first essential clause is the **granting clause**, which contains the rights granted by the mineral lease to the lessee. Basically these rights are the right to search for, develop, and produce oil and gas from the property. However, this clause does not impose an *obligation* to do so, it simply creates the *right* to do so. To be valid, the clause must identify three entities:

1. The size of the interest granted
2. The substances covered by the lease
3. The land covered by the lease

A problem in oil and gas leases is insuring that the property is adequately described so that the lessee knows for certain which land he or she has the right to drill on. In order to protect the lessee, the lease may have a **Mother Hubbard clause** or a **cover all clause**. This clause states that the lease is intended to cover all the land owned by the lessor in the area covered by the lease. It may also include **after acquired property**, property purchased after the lease was originally signed. This provision would be included in the **after acquired title clause**.

The **term clause** sets the period of time that the lessee has to exercise the rights given in the granting clause. The **primary term** is the stated length of time the lessee has the right to operate on the premises. The primary term does not create an *obligation* to operate, it just creates the *right* to operate for a set period of time. The purpose is to give the lessee time to get other leases in the same area, perform testing, evaluate whether he or she wants to drill in that area, and arrange the financing for any proposed drilling. The **secondary term** is an extended period of time that is granted once production actually starts. The purpose of the secondary term is to give the lessee the right to hold onto a producing lease as long as it is economically feasible to do so.

The **drilling delay rental clause** gives the lessee the right to maintain the lease during the primary term—the term the lessee has to operate on the property—by either starting drilling or by paying delay rentals. **Delay rentals** are payments the lessee makes to the lessor that maintain the lease during the primary term without actually drilling for oil or gas. There are two types of drilling delay rental clauses. An **unless clause** states that the lease will automatically terminate unless drilling starts or delay rental payments are made prior to the dates specified in the clause. Leases with an unless clause might also include a **notice of nonpayment clause**, which states that the lease will not end because of nonpayment of the delay rentals or other fees until notice of the nonpayment is given and the time is allocated for the fees to be paid. An **or clause** imposes a duty on the lessee to pay the delay rentals if drilling operations have not started. The lessee must start drilling or pay the delay rentals or surrender the lease prior to the due date. A **paid up lease** is a lease where all the delay rentals payments are made in advance. The lease is held by the lessee for the full primary term once the first payment to the lessor is made. See Exhibit 1-8 for a summary of essential clauses.

EXHIBIT 1-8 ESSENTIAL CLAUSES

Clauses that *must* be in a lease to have a valid transfer of a mineral interest.

1. **Granting Clause** – Actually grants the mineral interest lease rights to the lessee.
2. **Cover All Clause** – Lease covers all of the land owned by the lessor in the area that is covered by the lease.
3. **Term Clause** – Period of time that the lessee has to exercise the rights given to him or her by the granting clause.
4. **Drilling Delay Rental Clause** – Lessee retains the right to maintain the lease by either starting drilling or paying to maintain the lease without actually drilling.
5. **Unless Clause** – The lease terminates unless drilling starts or delay payments are made by a certain date.
6. **Or Clause** – Imposes a duty on the lessee to pay delay payments unless drilling starts.

DEFENSIVE CLAUSES

Defensive clauses include dry hole clauses, operations clauses, pooling and unitization clauses, and cessation of production clauses. These clauses will extend the period of the lease without the necessity of production. A **dry hole clause** sets out what the lessee must

do in order to maintain the lease for the remainder of the primary term if the lessee has drilled an unproductive well. Under a dry hole clause, the lease usually can be maintained by paying delay rentals for the rest of the primary term. An **operations clause** protects the lessee against the expiration of the primary term while the lessee is still carrying out drilling operations. The operations clause provides that the lease will remain in effect as long as operations for oil and gas development continue on the property. There are two general types of operations clauses. The first is the **well completion clause**, whereby lessee is allowed to continue with drilling operations that began prior to the primary term expiring and can maintain the lease if the well starts producing. The **continuous operations clause** allows the lessee to continue to drill if drilling commenced prior to the expiration of the primary term, but also allows the lessee to begin other drilling operations on the site. See Exhibit 1-9 for a summary of these defensive clauses.

EXHIBIT 1-9 DEFENSIVE CLAUSES IN OIL AND GAS LEASES

1. **Dry Hole Clause** – How to maintain the lease if an unproductive well is drilled.
2. **Operations Clause** – Lease will remain in effect as long as oil and gas development continues on the property.
3. **Pooling Clause** – Lessee may combine all or parts of the property with other property.
4. **Force Majeure Clause** – Lease cannot be complied with because of one of the stated reasons in the lease.
5. **Shut in Royalty Clause** – Payments are made even if production of oil and gas has stopped.

POOLING

In **pooling**, small tracts of property are brought together for the purpose of drilling a well; this is usually done to comply with well spacing requirements. **Voluntary pooling** occurs when mineral rights owners agree to bring the property together; **compulsory pooling** is the result of an order by an administrative agency. A **pooling clause** gives a power of attorney to the lessee that allows him or her to combine all or part of the leased property with other property for development or operations.

However, lessors are usually not in favor of pooling clauses because pooling may reduce the lessor's royalty. Because of this, a compromise clause known as a **Pugh clause** is sometimes put into the lease. A Pugh clause modifies the typical pooling clause by stating that drilling operations or production from a pooled unit does not preserve the entire lease; the lease can still expire after the primary term. A **unitization clause** gives the lessee the right to unitize the leased property with other property.

FORCE MAJEURE CLAUSE

A **force majeure** (superior force) **clause** relieves the lessee from complying with the duties under the lease if failure to perform the terms of the lease occurs as a result of a circumstance that is listed in the clause. Generally these circumstances are beyond the control of the lessee. Some examples are fires, floods, windstorms, or an inability to hire workers, to obtain needed materials, or to transport the materials to the work site. A **shut in royalty clause** allows the company to stop production at a well that is capable of producing oil or gas and maintain the lease by making monthly payments to the lessor in lieu of production from the well. A shut in royalty clause is general limited to gas because oil is easier to store than natural gas. Oil can be pumped out and stored, while natural gas is “stored” by leaving it in the underground reservoir.

CESSATION OF PRODUCTION CLAUSES

Under an oil and gas lease, once production has begun, the lease will not terminate unless the cessation of production is for an unreasonable period of time. This is known as the **cessation of production** doctrine. Issues regarding cessation of production arise when parties try to interpret what is meant by “unreasonable length of time.” In order to avoid contention, many leases have a **temporary cessation of production clause**. This clause allows for the lease to stay in effect while there is a temporary cessation of production for an agreed upon period of time that is stated in the lease, usually 60 to 90 days.

ADMINISTRATIVE CLAUSES

Some defensive clauses are also termed *administrative clauses* because they help with the administration of the lease. One example is a **warranty clause**, which states that the lessor guarantees that his or her title is not defective and that he or she will defend any claim to the property. If this warranty is breached, the lessor may be liable to the lessee for any and all the payments the lessor has received under the terms of the lease.

A **lesser interest clause** applies if it is discovered that the lessor has less than 100% of the mineral interest that is leased. Under this clause, the lessee is allowed to reduce the lease payments in proportion to the actual interest the lessor has. For example, if it is discovered that the lessor owns only 70% of the mineral interest, then the lessee can reduce payments to the lessor by 30%.

A **subrogation clause** protects the lessee if the lessor fails to pay the mortgage or taxes due on the property. The lessee is allowed to pay the taxes or mortgage or any other lien on the property and then recover the payments he or she has made from any future proceeds under the lease. In other words, if the lessee has to pay the mortgage or taxes, he or she can reduce payments to the lessor by those amounts.

A **surrender clause** allows the lessee to give up the lease on part of the leased premises and maintain the lease on the rest of the property. The lease payments are reduced by the proportion of the property that is surrendered. Property is surrendered because it is determined that the portion of land that is surrendered does not have any oil or gas deposits. A **free gas clause** allows either the lessor or the surface owner to use the gas produced from the property without charge. Usually either the use is limited or the amount of gas that can be used is limited. See Exhibit 1-10 for a summary of administrative clauses.

EXHIBIT 1-10 ADMINISTRATIVE CLAUSES

DEFENSIVE ADMINISTRATIVE CLAUSES

1. **Warranty Clause** – Lessor guarantees that his or her title is not defective and will defend any challenges to the title.
2. **Lesser Interest Clause** – Lease payments are reduced to the actual percentage of the property that is owned by the lessor.
3. **Subrogation Clause** – Lessee is allowed to pay mortgage and taxes and then recover payments made from any future proceeds from the property.
4. **Surrender Clause** – Lessee can give up part of the land covered by the lease and maintain the lease on the rest of the property.
5. **Free Gas Clause** – The lessor or property owner can use the gas produced from the land free of charge.

COVENANTS ATTACHED TO OIL AND GAS LEASES

In oil and gas leases, certain covenants—promises that can impose a burden on the lessee or the lessor or serve to protect the interests of the lessee or the lessor—are implied in the agreement. They are not actually written into the agreement, but are implied by law or by the facts of a particular situation.

REASONABLE PRUDENT OPERATOR STANDARD

The first covenant, the one that tends to serve as a basis for all the other implied covenants, is the **reasonable, prudent operator standard**. This standard requires the lessee to conduct himself or herself as a reasonable, prudent operator would under the same circumstances. A **reasonable, prudent operator** is a competent individual who exhibits due regard for the lessor's interests and who acts in good faith. The reasonable, prudent operator is also reasonable and prudent in matters that relate to the technology and operating practices of the oil and gas industry. This operator has expertise in the exercise of operating rights that most people do not have.

IMPLIED COVENANTS

Certain covenants in an oil and gas lease are implied. One such covenant is the **implied covenant to test**—a covenant that places a requirement on the lessee to test the premises for oil or gas within a reasonable period of time after the lease has been granted. The covenant to test can be avoided by specifically stating the lessee may hold the lease for the primary term without drilling.

The **implied covenant to reasonably develop** requires the lessee to reasonably develop the well. What is “reasonable” development is a fact question, but the essential concept is that an economically motivated, prudent operator will fully develop the resources under his or her control within a reasonable period of time.

The **implied covenant for further exploration** imposes obligations on the lessor only after initial development of a well has taken place. The covenant for further exploration is breached when the lessee fails to explore the undeveloped parts of the property or formations on the property for more oil and gas. The lessor has to prove that there is a reasonable expectation that further exploration will result in new oil or gas wells, and that the lessee is not being prudent by failing or refusing to explore further.

The **implied covenant to protect against drainage** places a duty on the lessee to protect the leased property against drainage of the oil and gas pool. The covenant to protect against drainage usually involves drainage from one tract to a well on another tract that is adjacent to the first tract.

The **implied covenant to market** creates an obligation for the lessee to use due diligence in marketing the gas and oil produced from the field within a reasonable time after production and at a reasonable price. The **implied covenant to operate with reasonable care and due diligence** actually overlaps several of the other implied covenants. Breach of this covenant is usually proven by showing the property had been damaged by either negligence or incompetency, that there was abandonment of a well capable of producing oil or gas in paying quantities, that the lessee failed to use advanced production techniques, or that the lessee failed to seek favorable regulatory action.

OIL AND GAS CONTRACTS

Instead of leases, or in addition to leases, there may be contracts that deal with the production and sale of oil or gas. Because they are contracts, general contract law applies. However, certain types of contracts are unique to the oil and gas industry.

SUPPORT AGREEMENTS

A **support agreement** is a contract that is used to support and encourage a drilling operation. For example, one party agrees to contribute property or money to an oil or gas operation in return for information. This agreement lessens the risk of drilling for one party and provides geological or technological information.

There are three general types of support agreements. The first is a **dry hole agreement**, by which the contributing party promises to pay cash if a dry hole well is dug. In a **bottom hole agreement**, the contributing party promises to pay cash in exchange for geological or drilling information if a well is dug to a certain depth. In an **acreage contribution agreement**, the contributing party agrees to give leases or an interest in the property in the area of the test well in exchange for geological or drilling information if the well is drilled to a certain agreed upon depth. See Exhibit 1-11.

EXHIBIT 1-11	SUPPORT AGREEMENTS
	<ol style="list-style-type: none"> 1. Dry Hole Agreement – Cash will be paid if a dry hole is drilled. 2. Bottom Hole Agreement – Cash will be paid for geological or drilling information if a well is dug to a certain depth. 3. Acreage Contribution Agreement – Gives or leases property in return for geological or drilling information if a well is dug to a certain depth.

FARMOUT AGREEMENT

A **farmout agreement** is a contract wherein an interest in the acreage is given in return for either testing or drilling operations on the acreage. In return for an interest in the property, another person agrees to undertake the testing for oil and gas deposits or for drilling a well. The **farmer** is the person who gives the interest in the acreage; this individual does not have to be the owner of the property, but he or she must be the person who owns the mineral rights to the property. The **farmee** is the person who agrees to test or to drill; he or she does so because this way he or she can obtain an interest in acreage that was not available or at a lower cost than what was posted. The farmee can face different liability if there is a drilling covenant or a drilling condition.

In a **drilling covenant**, the farmee promises to drill, and if he or she fails to drill, he or she can be held liable for the reasonable costs of drilling. In a **drilling condition**, the farmee only gets an interest in the property if he or she drills a test well. If he or she fails to drill the well, then he or she gets no interest in the property, but faces no liability for failure to drill.

OPERATING AGREEMENT

An **operating agreement** is a contract between co-owners or co-tenants of oil and gas property that is being jointly operated. The contract sets out the agreement of the parties regarding initial drilling, future development, future operations, and accounting for the oil and gas, and the sale of the oil and gas. In order to meet the purpose of the contract, each operating agreement must contain the scope of the operator's authority and provide for the initial drilling and development. The **operator** is the person designated by all the owners to be responsible for the operation of the well on a day-to-day basis. The **initial drilling clause** will state when the drilling must begin, what depths are to be reached, and which formations are to be tested for oil and gas reserves.

DRILLING CONTRACTS

A **drilling contract** is an agreement for the drilling of one well or several wells that is entered into with a drilling contractor—a person who owns drilling rigs and equipment—by the persons owning the mineral rights. Types of drilling contracts are classified according to how the drilling contractor is to be compensated for the drilling. The first type is a **day-work contract**, in which the contractor is paid based on the amount of time spent in drilling the well. A **footage contract** pays the contractor according to the number of feet drilled. In a **turnkey contract**, the contractor is compensated for drilling, completing, equipping, and delivering a well to the owners. See Exhibit 1-12.

EXHIBIT 1-12 TYPES OF DRILLING CONTRACTS

HOW THE PERSON WHO IS ACTUALLY DRILLING GETS PAID

1. **Daywork Contract** – Pay is based on how much time is spent actually drilling the well.
2. **Footage Contract** – Pay is based on the number of feet drilled.
3. **Turnkey Contract** – Pay is made for drilling, completing, equipping, and delivering the well to the owners.

GAS CONTRACTS

Some clauses in contracts or leases are unique to the production of gas production and have to do primarily with the price that is paid for the gas produced. A **gas contract** is an agreement for the sale of natural gas either to a pipeline or to an end user. Because gas contracts are usually for long periods of time, there may be provisions or clauses in them that provide for adjustments to the initial price negotiated. These provisions are known as **price escalation clauses** or **escalation clauses**. There are several types of such clauses, determined by the method used to raise or even lower the price of the natural gas.

GAS CONTRACT CLAUSES

An **area rate clause** provides for indefinite price escalation. It allows for the increase of a contract price if *any* regulatory agency permits a higher price for gas sold in the area. A **fixed escalation clause** sets out periodic increases in the price of a stated amount of natu-

ral gas or a stated percentage increase. For example, the clause may state that the price will increase six cents for X amount of natural gas or that X amount of gas will increase by 1.5%.

A **most favored nations clause** allows for the increase in the contract price if any other producer in the established area receives a higher price for natural gas that is of the same quality and the same amount. A **two-party most favored nations clause** allows for the price to be increased only if a higher price is paid by the pipeline purchaser with whom the gas producer has a contract. In other words, there must be an agreement between the seller of the natural gas and the person who is purchasing the gas, and the purchaser must have paid a higher price for natural gas from someone else before the seller can charge a higher price. A **third-party most favored nations clause** allows for the price to be increased if *any* pipeline purchaser pays a higher price. Instead of any producer in the area charging a higher price, the purchaser in the area must pay a higher price before the contract price can be increased.

A **price redetermination clause** allows the contract price to be renegotiated on a periodic basis so the parties to the contract can take into account changed market conditions and price fluctuations. An **index escalation clause** provides for the adjustment of the contract price according to changes in an index or in some price that the parties have agreed to in advance as an appropriate indicator as to the true value of the natural gas.

Because the price of natural gas has been deregulated, causing prices to increase and fluctuate, there are provisions that are put into natural gas contracts to govern these situations. A **deregulation clause** sets out how the price for the gas is to be determined and what obligations the buyer and seller have to each other if natural gas is released from price regulation. The **Federal Energy Regulatory Commission (FERC)** is the agency responsible for the administration of the provisions of the Natural Gas Act and the Natural Gas Policy Act. A **FERC out clause** is a clause that states that the price paid to a producer for gas shall be reduced by the amount that the FERC will not allow to be included in the gas pipeline's cost of service. In other words, if the FERC says a certain amount cannot be included in the cost of service, this amount cannot be passed on to consumers. This additional cost is taken from the amount of money paid to the producer for the gas.

A **market out clause** states that if the contract price for the gas purchased by a pipeline exceeds the amount that will permit the gas to be sold, the contract price will be redetermined. For example, if the price of getting the gas to the pipeline's primary market either meets or exceeds the price the pipeline owner can sell the gas for, then the price he bought it for will be renegotiated. A **price redetermination clause** permits one of the parties to redetermine the price charged for the gas from time to time.

SPLIT STREAM SALES

In some instances, wells that are producing natural gas are co-owned. The co-owners sell their shares of the gas produced to different pipelines under different terms and at different prices. These sales are called **split stream sales**: there is a "stream" of natural gas that is "split" when it is sold to two or more different pipelines. Because of the nature of natural gas, it is impossible to distinguish the gas that is produced for one owner from that which is produced for the other. So when a pipeline purchases gas from one tenant but not the other, the purchaser will receive gas from one of the co-tenants that he or she does not have an agreement with.

To deal with this situation, the industry has come up with the practice of **balancing in kind**. The operator of the well will adjust deliveries from one pipeline to another so that in the long run the different gas deliveries are in balance, each pipeline receiving the amount of gas it is supposed to from the different tenants.

CAUSES OF ACTION

Different causes of action are available to a property owner for violations of his or her rights to oil or gas. If another party slant drills into the property, the owner could sue for trespass and for **damages to the lease value of the property**. The only way to truly tell if there is a deposit of oil or gas underground is to drill for it. If a person slant drills into the property and then determines there is no deposit, then the landowner can sue to recover the difference between the lease value of the property before and after drilling occurred.

Slander of title is the malicious publication of false statements that hurt the plaintiff's title to the property or that cause harm to the quality of the property. The plaintiff must show that the defendant made a false claim of title to the property with malicious intent, and that actual harm resulted. The plaintiff must show the statement was made with deliberate conduct, without reasonable cause, that it was published to another person, and that actual harm was caused.

Assumpsit is an equitable cause of action brought to enforce an implied contract for an oil and gas lease. **Conversion and ejectment** is a cause of action brought against a trespasser seeking to have the trespasser removed from the property (ejectment) and be required to account to the owner the value of the oil and gas sold (conversion).

In some contracts, there may be a **damages clause** that places a duty on the lessee to pay the lessor or the owner of the surface rights for damages caused to the surface by the operation of oil and gas wells. If there is no such clause, the lessee is not liable for reasonable damages caused to the surface caused by obtaining the oil and gas. There are no damages because the lessee has an implied right to use the surface for the operation of the oil and gas field.

SUMMARY

Ownership of oil and gas deposits and the possession of oil and gas leases are very specialized areas of property law. Unique words and phrases are used in this area of law to refer to who owns the land the deposits are under, who owns the deposits themselves, and how ownership of these deposits can be sold or leased. Specific terms are used to describe the leases, the terms of the leases, and the clauses in the leases. There are even terms used to describe how much money will be paid for the oil and gas once it has been obtained and stored.

CHAPTER 1 REVIEW

KEY WORDS AND PHRASES

ad coelum doctrine	essential clause	perpetual royalty
after acquired property	exception tract statutes	pooling clause
after acquired title clause	farmee	price redetermination clause
area rate clause	farmer	primary term
assumpsit	farmout agreement	production allowables
bottom hole agreement	FERC out clause	production interest
cessation of production clause	footage drilling contract	profit a prendre
compulsory pooling	force majeure clause	Pugh clause
compulsory unitization	free gas clause	royalty interest
continuous operations clause	gas balancing agreement	rule of capture
conversion and ejectment	gas contract	severance
correlative right	gas-to-oil ratio	slander of title
cover all clause	granting clause	subrogation clause
damages clause	implied covenant to test	support agreements
daywork drilling contract	landman	surface interest
defensive clause	landowner's royalty	surrender clause
delay rental	lesser interest clause	term clause
deregulation clause	market out clause	term royalty
division order	marketing covenant	top lease
drilling contracts	mineral acre	turnkey drilling contract
drilling delay rental clause	mineral interest	unitization clause
dry hole agreement	mineral servitude	voluntary pooling
dry hole clause	Mother Hubbard clause	voluntary unitization
entirety clause	nonparticipating royalty	warranty clause
escalation clause	oil-to-gas ratio	well completion clause
	operating agreement	well spacing rule
	operations clause	

REVIEW QUESTIONS

SHORT ANSWER

1. What is an area rate clause and what does it control?
2. What is the ad coelum doctrine?
3. What is assumpsit?
4. What is compulsory pooling?
5. What is compulsory unitization?
6. What is a cover all clause?
7. What is a daywork drilling contract?
8. What is an escalation clause?
9. What is an executive right?

10. What is a farmout agreement?
11. What is a dry hold agreement?
12. What is a defensive clause?
13. What is a division order?
14. What is a deregulation clause and to what does it apply?
15. What is a market out clause?
16. What is a surrender clause?
17. What is a term clause?
18. What are production allowables?

FILL IN THE BLANK

1. A royalty that comes from the lessee's interest in the oil and gas is a _____.
2. A way to limit the amount of oil or gas that is removed from a well is the _____.
3. A lessor is allowed to use the gas produced by the property without charge. This is known as _____.
4. The full mineral interest in an acre of land is a _____.
5. Small tracts of land are brought together for the purpose of drilling a well. This is known as _____.
6. The implied covenant to the interest the person who leased the land retains in any oil or gas that is produced is _____.
7. A clause in an oil and gas contract that states that the lease covers all land owned by the lessor in the area covered by the lease is known as _____.
8. The doctrine that states that a person who drilled on his or her land owns all the oil produced from the well even though the oil may have come from another person's property is known as _____.
9. A clause that protects the lessee if the lessor fails to pay the mortgage on the property is known as a _____.
10. A royalty payment based on the amount of oil or gas removed from a well is known as a _____.

FACT SITUATIONS

1. Roger locates oil fields and negotiates contracts for oil and gas leases. What is Roger?
2. Lyle leases part of his land to the Dell Oil Company and part of the land to Wilt, who is a farmer. What type of lease do Dell and Wilt have?
3. Dean is drilling an oil well. He angles the drilling so it goes into another person's property. What is Dean doing?
4. Erica leases her land to an oil company for the development of oil and gas wells. She will be paid based on the amount of oil and gas that is removed from the property. What sort of payment is this?
5. Anwar leases his land to an oil company for the development of oil and gas. He receives a set sum for the property, regardless of the amount of oil and gas that is removed from it. What sort of payment does Anwar receive?

6. Roderigo wants to put as many oil wells on his property as he possibly can in an attempt to maximize his production. What limits the number of oil wells that he can put on his property?
7. Lorna is operating an oil well that is on her property. She harvests the oil under her land as well as that which has seeped into her land from other people's property. Can she legally do this? If she can, what doctrine applies?
8. If a person enters into an oil and gas lease, which clauses are considered necessary parts of the contract?
9. Ramius has property that he is attempting to lease to different oil companies. Geological surveys indicate that there are oil and natural gas deposits on the property. Putkin does not want Ramius to prosper from any oil and gas drilling, so he starts spreading rumors that Ramius does not own the property, that there are liens on the property, and that the geological reports are false. Can Ramius sue Putkin? If so, for what?
10. Sissy finds out that Barry has slant drilled from his property into hers, and has tapped into a reservoir of oil that is on her property. What can she sue Barry for?