GLOSSARY OF OIL AND GAS TERMS

Acreage-Contribution Agreement A support agreement by which the contributing party agrees to contribute leases or interests in leases in the area of a test well to a drilling party in exchange for information, if the drilling party drills to an agreed depth and develops the information. See also Support Agreements.

Ad Coelum Doctrine The common-law doctrine that the owner of land owns everything above and below the property's boundaries from the heavens to the core of the earth—including all the elements therein. The complete maxim is cujus est solum, ejus est usque ad coelum et ad inferos [Latin "to whomsoever the soil belongs, he owns also to the sky and to the depths"] The doctrine is still accepted as the governing principle for hard minerals, but has been replaced in the United States by the rule of capture for fugacious minerals such as oil and gas.

After-Acquired-Title Clause An oil and gas lease clause that extends the coverage of the lease to any interest in the described property acquired after the lease. A common formulation is "This lease covers all the interest now owned by or hereafter vested in the lessor. . . ."

Apportionment Rule The rule followed in a minority of states (including California, Mississippi, and Pennsylvania) that royalties that accrue under a lease on property that is subdivided after the lease

grant are shared by the owners of the property proportionately to their interest in the property. See also *Non-Apportionment Rule*.

Area-Rate Clause An indefinite price adjustment clause found in some long-term gas contracts that provides for increase of the contract price if any regulatory agency permits or prescribes a higher price for gas sold in the same area. Under the regulatory scheme of the Natural Gas Act, from 1961 to 1978, maximum prices were set on an area basis. Area-rate clauses were drafted to permit sellers to collect the highest price permitted by the regulatory authority in the relevant area.

Assignment Clause Another name for the *Change-of-Ownership Clause*.

Associated Gas Natural gas that is found in reservoirs along with and produced with oil. Historically, much associated gas was flared because there was no readily available market.

Bonus A payment to induce a lessor to execute the lease.

Bottom-Hole Agreement A contract in which the contributing party agrees to make a cash contribution to the drilling party in exchange for geological or drilling information, if the receiving party drills to an agreed depth and conducts agreed tests. See also *Support Agreements*.

Capture-and-Hold Rule The conventional analysis that "production" occurs for royalty-calculation purposes when oil or gas is captured and held at the wellhead or on the lease. By this view,

the costs of transporting, compressing, and processing, as well as severance and gross-production taxes, are charged proportionately against the royalty interest where royalty is determined by working back from a downstream price or value. See also *Marketable-Product Rule*.

Carried Interest A fractional interest, usually in an oil and gas lease, free of some or all costs, which are borne or *carried* by the remainder of the working interest owners. A common arrangement in drilling ventures is that the promoter is carried to the casing point for 1/4 of the working interest; i.e., the investors will pay 100% of the drilling costs for 75% of the working interest. The promoter will bear its 25% share of completion and operating costs under such an arrangement.

Casing An industry term for pipe placed in a wellbore hole. Surface casing protects potable waters against pollution from drilling and producing operations. Intermediate casing protects deeper formations. Production casing is the pipe through which oil and gas is produced.

Casinghead Gas Gas produced from the casinghead (the top of the pipe) of an oil well. Casinghead gas is natural gas held in solution with oil in the production formation. At production or shortly after, the gas separates from the oil.

Casing Point The point at which a well has been drilled to the desired depth and the owners must decide whether or not to place production pipe, called *casing*, in the hole and proceed to complete and equip the well for production.

Cessation-of-Production Clause An oil and gas lease savings clause that specifies what a lessee must do to maintain the lease in the event that production ceases. The purpose of the cessation-of-production clause is to make more certain the temporary-cessation-of-production doctrine. See also Temporary-Cessation-of-Production Doctrine.

Change-of-Ownership Clause An oil and gas lease clause specifying what notice must be given by the lessor or its assignee to the lessee of changes in ownership to bind the lessee to recognize them. The purpose of the clause is to protect a lease holder against the consequences of making an improper payment under the lease. Sometimes called an *Assignment Clause*.

Coalbed Methane Natural gas extracted from coal beds. Methane released from coal mining is a major contributor to global warming, as well as a safety hazard. Technology now makes it a major unconventional resource.

Condensate The "wet" element of natural gas that may be removed as a liquid. Used interchangeably with *Distillate* and *Natural Gasoline*.

Continuous-Operations Clause A form of *Operations Clause*.

Contribution Agreement Another name for a *Support Agreement*.

Correlative-Rights Doctrine A corollary to the rule of capture, that the right to capture oil and gas from potentially producing formations under one's property is subject to the concomitant duty to exercise the right without negligence or waste. See also *Rule of Capture*.

Cost Depletion Recovery of one's tax basis in a producing oil or gas well by deducting basis proportionately over the producing life of the well. See also *Percentage Depletion*.

Cover-All Clause Another name for a *Mother Hubbard Clause*.

Damages Clause A lease clause that imposes a duty on the lease holder to pay the lessor or the surface owner for damage, usually of a specified type, to the surface. Often damages clauses are limited to "growing crops." In the absence of a damages clause the lease holder has no legal obligation to pay for "reasonable" damage to the surface necessary to obtain oil and gas; the lessee has an implied right to use the surface for oil and gas operations.

Daywork Drilling Contract A drilling contract under which the lease operator compensates the drilling contractor on the basis of the amount of time the contractor spends conducting drilling operations. Essentially, the lease operator hires the contractor's drilling rig and staff to work under the lease operator's direction. A daywork drilling contract gives broad discretion to the lease operator to give instructions to the drilling contractor how to conduct drilling operations. Courts impose broad liability upon the lease operator as a result of its broad discretion. See also *Drilling Contracts*.

Delay Rental A payment from the lease holder to the lessor to maintain the lease from period to period during the primary term without drilling. See also *Delay-Rental Clause*, "Unless" Lease, "Or" Lease, and Paid-Up Lease.

Delay-Rental Clause An oil and gas lease clause giving the lessee the right to maintain the lease from period to period during the primary term either by commencing drilling operations or by paying delay rentals. Leases contain delay-rental clauses because courts have held that they avoid any implied covenant to drill a test well on the premises; a lessee who has the express right to maintain a lease by paying rentals has no implied obligation to drill. They are accepted by lessors because they provide for periodic rental payments. See also "Unless" Lease and "Or" Lease.

Distillate See *Condensate*. Also, any product of the process of distillation.

Division Order An authorization to one who has a fund for distribution from persons entitled to the fund directing how the fund is to be distributed. In the oil and gas industry, division orders are entered into by both working interest owners and royalty owners to sell oil and to give instructions for payments under a lease.

Double-Fraction Problem A common interpretative problem in conveyances that arises when one who owns a fractional interest conveys or reserves a fraction using language that is unclear whether the grant or reservation is a fraction of what the grantor owns or a fraction of the whole.

For example, if one who owns an undivided 1/2 interest in minerals conveys "an undivided 1/2 interest in the minerals," it is uncertain whether the grantor intended to convey a half interest in 100% of the minerals or half of the grantor's half.

Drilling Contracts Agreements for the drilling of a well or wells entered into between drilling contractors, who own drilling rigs and associated equipment, and persons or entities owning or operating mineral or lease rights. Drilling contracts are generally structured to provide compensation on a daywork, footage, or turnkey basis. The compensation provision typically controls the scope of discretion given to the operator to direct the contractor and the amount of potential liability imposed on the operator, as well as method of payment. See also *Daywork Drilling Contract*, *Footage Drilling Contract*, and *Turnkey Drilling Contract*.

Dry-Hole Agreement A contract in which the contributing party agrees to make a cash contribution to the drilling party in exchange for geological or drilling information, if the well drilled is a dry hole. See also *Support Agreements*.

Dry-Hole Clause A provision in an oil and gas lease specifying what a lessee must do to maintain the lease for the remainder of the primary term after drilling an unproductive well. A dry-hole clause is intended to make clear that the lease may be maintained by payment of delay rentals for the remainder of the primary term.

Duhig Rule A rule of title interpretation developed to deal with the frequent problem of overconveyances of fractional interests. The court in Duhig v. Peavy-Moore Lumber Co., Inc., 135 Tex. 503, 144 S.W.2d 878 (1940), first stated the rule, which provides that where a grantor does not own enough interest to give full effect both to the granted interest and to a reserved interest, courts will give priority to the granted interest (rather than to the reserved interest) until the granted interest is fully satisfied. The Duhig rule is generally limited to conveyances by warranty deed.

Economic-Out Clause Another name for a gascontract *Market-Out* Clause.

Entirety Clause A clause in an oil and gas lease or in a deed that states the agreement of the parties that royalties are to be apportioned in the event that the property is subdivided after the lease is granted. The purpose of the clause is to avoid the *Non-Apportionment Rule*.

Executive Right The right to lease specified land or mineral rights. The executive right is one of the incidents of the *Mineral Interest*.

Farmout Agreement An agreement by which one who owns an oil and gas lease (the farmor) agrees to assign to another (the farmee) an interest in the lease in return for drilling and testing operations on the lease or payment for them.

Favored-Nations Clause A contract clause that provides for adjustment of the contract price upward if another seller in the area receives a higher price.

Often seen in gas contracts and sometimes in oil and gas leases.

Fee Interest A property interest of potentially infinite duration. Sometimes used in the oil and gas industry, to refer to ownership of both the surface interest and the mineral interest.

FERC The Federal Energy Regulatory Commission, the successor agency to the Federal Power Commission (FPC). FERC is the agency responsible for administering the Natural Gas Act.

FERC-Out Clause A gas-contract clause that provides that the price paid to the producer shall be reduced (or the contract terminated) to the extent that the Federal Energy Regulatory Commission or other regulatory agencies will not permit it to be included in the regulated purchaser's cost of service (and, in effect, passed on to consumers).

Fixed-Term Lease An oil and gas lease for a fixed period of time—e.g., 20 years—perhaps renewable for an additional period of time, but without the indefinite "so long thereafter" provision commonly found in leases.

Footage Drilling Contract A drilling contract under which the drilling contractor is compensated on the basis of the footage drilled. The drilling contractor is hired by the lease operator to drill to a specified formation or depth and is given broad discretion to make the management decisions necessary to accomplish the task. The risk of unexpected delays, as well as most liabilities, is

upon the drilling contractor rather than the lease operator.

Force-Majeure Clause A lease or contract clause that provides that the lessee will not be held to be in breach if the lessee is prevented from performing by force majeure (literally, "superior force"). Typically, force-majeure clauses expressly indicate problems beyond the reasonable control of the lessee that will excuse performance.

Free-Gas Clause An oil and gas lease clause, found commonly in leases on properties in colder states, that entitles the lessor or the surface owner to use without charge gas produced from the leased property. Free-gas clauses are usually limited either as to the uses permitted (e.g., domestic heating and light) or as to the quantity that may be taken (e.g., not more than 300 MCF per year) or both.

Freestone Rider Another name for a Pugh Clause.

Fugacious Mineral A mineral whose liquid or gaseous nature permits it to move from place to place in response to pressure differentials and rock permeability. Oil and natural gas are fugacious minerals

Further-Exploration Covenant An implied oil and gas lease promise that, once production has been obtained from the leased premises, the lessee will continue to explore other parts of the property and other formations under it. In some jurisdictions courts have said that the covenant for further exploration does not exist independently of the implied covenant for reasonable development. See also Reasonable-Development Covenant and Reasonably-Prudent-Operator Standard.

Gas-Balancing Agreement A contract among owners of the production of a gas well setting forth their agreement for the balancing of production if one owner sells more of the gas stream than other owners.

Gas Contract An agreement for the sale of natural gas.

Gas-Oil Ratio A limit to a *Production Allowable* that requires an operator to stop producing when it produces more than a designated ratio of gas to oil; e.g., 2000 cubic feet of gas to one barrel of oil. A gas-oil ratio is designed to preserve the reservoir pressure.

Granting Clause The clause in the oil and gas lease that spells out what rights are given by the lessor to the lessee. Typically, an oil and gas lease granting clause will specify what kinds of uses are permitted and what substances covered by the lease.

Greatest-Possible-Estate Rule The interpretive rule that a deed or lease transfers the greatest possible interest to the grantee and reserves only that which it expressly reserves. See also 100% Rule.

Habendum Clause The clause in an oil and gas lease that defines how long the interest granted to the lessee will extend. Modern oil and gas leases typically provide for a primary term, a fixed number of years during which the lessee has no obligation to

develop the premises, and a secondary term for "so long thereafter as oil and gas produced" once development takes place.

Horsehead See Pumping Unit.

Hydraulic Fracturing A production-stimulation technique that improves the permeability of a formation containing oil or natural gas by breaking it, typically using a mixture of water, chemicals, and proppants under high pressure. Sometimes referred to as *fracing* or *fracking*.

Implied Covenant. An implied promise, usually in an oil and gas lease, that imposes obligations on one of the parties, usually the lessee. Though courts describe lease implied covenants differently, there are at least six: (1) the covenant to test the premises, (2) the covenant to reasonably develop, (3) the covenant to further explore, (4) the covenant to protect against drainage, (5) the covenant to market, and (6) the covenant of diligent and proper operation.

"Lease implied covenants arise from the ongoing relationship of the lessor and lessee created by the lease. The lease gives the lessee the exclusive cost-bearing right to explore and develop the leased property, potentially in perpetuity. The lessor has a cost-free interest in production or revenues or value, but no right to drill or produce. Because the typical oil and gas lease makes the lessor's royalty—the major compensation for grant of the lease—dependent upon the quantity and quality of the lessee's actions on the property, courts have concluded

that the lessee has an obligation to perform certain unstated obligations..." John S. Lowe, Owen L. Anderson, Ernest E. Smith, David E. Pierce, and Christopher S. Kulander, *Cases and Materials on Oil and Gas Law* 178 (West 6th ed. 2012).

Intangible-Drilling Costs Costs that (1) are incurred incident to and necessary for the drilling oil and gas wells and preparing them for production, and (2) that have no salvage value. By § 612 of the Internal Revenue Code, intangible-drilling costs may be deducted in the year paid rather than capitalized and depreciated.

Landman A position in the oil and gas industry responsible for acquiring oil and gas leases, curing title, negotiating arrangements for development, and managing leased properties. A landman may be either male or female.

Landowner's Royalty The share of production or production revenues or value, free of costs of production, provided for the lessor in the royalty clause of the oil and gas lease. See also *Royalty Interest*.

Leasehold Interest Another name for the *Working Interest* in a lease.

Leasehold Royalty Another name for the *Landowner's Royalty*.

Lesser-Interest Clause A lease clause that permits a lessee to reduce payments under a lease proportionately if the lessor has less than 100% of

the mineral interest. Sometimes called a *Proportionate-Reduction Clause*.

Marketable-Product Rule The rule that "production" for royalty-calculation purposes is not complete until a lessee has both captured and held the product and made it marketable. Until there is a "marketable product," the lessee must bear all costs associated with capturing and handling oil and gas. See also *Capture-and-Hold Rule*.

Market-Out Clause A long-term gas-contract clause that provides that if the contract price for gas purchased (plus certain costs incurred in getting it to market) exceeds an amount that will permit the gas purchaser to resell it profitably, the contract price will be reset. Often market-out clauses are drafted by referring to competing fuels, e.g., fuel oil.

Marketing Covenant The promise implied in oil and gas leases that the lessee will market the production from the lease within a reasonable time and at a reasonable price. See also *Reasonably-Prudent-Operator Standard*.

Maximum-Efficient Rate of Production The amount that a well can produce in a given time without damaging reservoir pressure or structure. An increase of production beyond the "MER," as it is often called, will decrease the amount of oil or gas ultimately recoverable. See also *Production Allowable*.

MMBtu The abbreviation for one million British Thermal Units, one of the standard heat-based units of measurement for natural gas.

MCF The abbreviation for one thousand cubic feet, one of the standard volumetric units of measurement for natural gas.

Mineral Acre The full mineral interest in one acre of land.

Mineral Interest The right to search for, develop, and produce oil and gas (and other minerals) from land, as well as (in some states) the right to present possession of the oil and gas in place. The mineral interest is granted by an oil and gas lease. See also Fee Interest and Surface Interest.

Mineral Servitude Under the Louisiana Mineral Code, a charge upon land in favor of a person or another tract of land that creates a limited right to use of the land to explore for and produce minerals. Generally equivalent to a severed mineral interest in a common-law state.

Mother Hubbard Clause A lease clause that protects the lessee against errors in description of property by providing that the lease covers all the land owned by the lessor in the area. Sometimes called a *Cover-All Clause*. Sometimes combined with an After-Acquired-Title clause.

Natural Gasoline See Condensate.

Net-Profits Interest A share of production or production revenues or value free of the costs of production, to the extent that there is a net profit. The methodology of defining *net profits* is crucial to a net-profits interest.

Non-Apportionment Rule The rule—followed in the majority of states—that royalties accruing under a lease on property that has been subdivided after the lease grant are not to be shared by the owners of the various subdivisions but belong exclusively to the owner of the subdivision where the producing well is located. The non-apportionment rule may be modified in an oil and gas lease by an *Entirety Clause*. See also *Apportionment Rule*.

Non-Associated Gas Natural gas found in fields that contain no substantial amounts of oil.

Non-Executive Right An oil and gas interest that does not possess the right to lease; e.g., a royalty interest, a non-executive mineral interest.

Non-Ownership Theory The characterization of oil and gas rights that a severed mineral interest owner has merely a right to search, develop and produce oil and gas from land, but not a present right to possess the oil and gas in place. Because there is no right to present possession, the interest of a severed mineral interest owner in a non-ownership theory state is akin to a *profit a prendre*, a right to use the land and remove items of value from it. Adopted in California, Louisiana and Oklahoma, as well as various other producing states. See also *Ownership-In-Place Theory*.

Nonparticipating Royalty A share of production, or the value or proceeds of production, free of the costs of production, carved out of the mineral interest. A nonparticipating-royalty owner is entitled to the stated share of production or cash

without regard to the terms of any lease. Nonparticipating royalties are often retained by feesimple owners or mineral-interest owners who sell their rights. See also *Royalty* and *Overriding Royalty*.

No-Term Lease A lease that allows a lessee to extend the primary term indefinitely by paying delay rentals or nominal fixed royalties.

Obstruction An equitable doctrine that suspends the running of time under a lease or extends the lease for a reasonable time if the lessor or one claiming through the lessor interferes with rights granted by the lease. Some courts apply the obstruction doctrine to interference by a severed surface owner.

Oil Payment Another term for a *Production Payment*.

100% Rule The principle of legal interpretation that a land description that is not limited is considered to describe 100% of both the surface and the minerals. See also the *Greatest-Possible-Estate Rule*.

Operating Agreement A contract among owners of the leasehold interests in a producing oil or gas well or wells setting forth the parties' agreement about drilling, development, operations, and accounting.

Operations Clause A clause frequently found in oil and gas leases providing that the lease will continue so long as operations for oil and gas development continue on the premises. Two

common variations are the well-completion clause and the continuous-operations clause. A well-completion clause provides that a lessee who starts drilling before the lease terminates has the right to complete the well and to maintain the lease if the drilling achieves production. A continuous-operations clause gives a lessee the right not only to continue drilling a well begun before termination but also to commence additional wells.

"Or" Lease An oil and gas lease with a delay-rental clause structured so that the lessee promises to commence drilling operations or to pay delay rentals from time to time during the primary term. If the lessee fails to do one or the other, the lease does not automatically terminate; instead the lessee is liable to pay the delay rental.

Overriding Royalty A share of production, or the value or proceeds of production, free of the costs of production, carved out of a lessee's interest under an oil and gas lease. Overriding-royalty interests are frequently used to compensate those who have helped to structure a drilling venture. An overriding-royalty interest terminates when the underlying lease terminates. See also *Royalty* and *Nonparticipating Royalty*.

Ownership-in-Place Theory The characterization of oil and gas rights that a fee-simple or mineral-interest owner owns the right to present possession of the oil and gas in place as well as the right to use the land surface to search, develop and produce from the property. Adopted in Texas, New Mexico, Kansas, Mississippi, and other major producing

states. The rights of a severed mineral-interest owner to oil and gas in these states are often described as an estate in fee simple absolute, but ownership of specific oil and gas molecules is subject to the rule of capture even in ownership-in-place theory states. See also *Non-Ownership Theory*.

Paid-Up Lease An oil and gas lease that does not provide for delay-rental payment. The lease is effective for the whole period of the primary term.

Partition The division of undivided interests, in kind or by sale, by voluntary agreement or judicial action.

Paying Quantities An amount of production that is marginally profitable in that operating revenues exceed operating costs over a reasonable period. Generally the standard to extend and maintain a lease during the secondary term.

Percentage Depletion A provision of § 611 of the Internal Revenue Code that permits a taxpayer who owns an economic interest in a producing oil or gas well to deduct a specified percentage of the gross income from the well in lieu of depleting the actual basis. See also *Cost Depletion*.

Permeability A reference to the degree of interconnectivity of the pore space in a petroleum formation. The higher the permeability, the easier it is for oil or gas in the formation to move in response to pressure.

Petroleum Conservation Law A state law that limits the rule of capture and defines the correlative-rights doctrine by regulating the drilling

and operation of oil and gas wells. Petroleum conservation laws are intended to prevent waste and protect correlative rights.

Pooling Bringing together, either by voluntary agreement (voluntary pooling) or by order of an administrative agency (compulsory or forced pooling), small tracts or fractional interests to drill a well. Pooling is usually undertaken to comply with well-spacing requirements established by state law or regulation. Pooling is usually associated with drilling a single well and operating that well by primary-production techniques, while *Unitization* usually involves numerous wells using secondary or tertiary-recovery techniques, though the terms are sometimes used interchangeably.

Pooling Clause A clause found in most leases that grants the lessee the power to combine part or all of the leased acreage with other properties for exploration, development, or operation. A pooling clause is different from a *Unitization Clause* primarily in that it is usually subject to acreage limitations that make unitized operations difficult.

Porosity A reference to the amount of space between the grains of sedimentary rock in which petroleum may be found. The higher the porosity, the more room for oil or gas to be held.

Prescription A Louisiana doctrine that extinguishes unused mineral servitudes after 10 years. To interrupt the running of the prescription period, there must be operations to discover or produce on the land or land pooled with it.

Price-Adjustment Clause A long-term gas contract provision providing for adjustment of the base price provided for in the agreement. Adjustment may be up or down.

Price-Renegotiation Clause A clause in a gas contract providing for price renegotiation from time to time or upon election of one of the parties.

Primary Recovery Oil or gas production that occurs because of the pressure differential between the formation where the oil or gas is located and the borehole, though the primary recovery includes oil produced using pumping units or other artificial-lift mechanisms. See also *Secondary Recovery* and *Tertiary Recovery*.

Primary Term The option period—set by the oil and gas lease habendum clause—during which the lessee retains the right to search, develop and produce from the premises without having any obligation to do so. The primary term should be sufficiently long to permit the lessee to evaluate the property and make arrangements to drill it. In practice, the primary term may extend for 24 hours or 25 years, depending upon how much competition there is for leases in the area. See also *Habendum Clause* and *Secondary Term*.

Production Allowable Limits on production of oil and gas to prevent overproduction and share it equitably among the common owners. See also *Maximum-Efficient Rate of Production*.

Production Payment A share of production or the value or proceeds of production from property, free

of the costs of production, that terminates when an agreed amount or sum has been paid; e.g., "1/5 of all oil and gas produced and saved from said land until the market value at the well of such production shall aggregate One Million Dollars...." See also *Oil Payment*.

Profit a Prendre At common law, the right to enter the land of another and take away some fruit of the soil. In many states mineral rights or oil and gas leases are classified as profits a prendre.

Proportionate-Reduction Clause Another name for the *Lesser-Interest Clause*.

Protection Covenant The promise implied in an oil and gas lease that the lessee will protect the premises against drainage by drilling a producing well to the reservoir that is subject to drainage, if a reasonably prudent operator would do so. See also Reasonably-Prudent-Operator Standard.

Pugh Clause A lease clause (sometimes called a *Freestone Rider* in Texas) modifying the effect of most lease pooling clauses by severing pooled portions of the lease from unpooled portions of the lease so that drilling or production on a pooled portion will not maintain the lease as to unpooled portions.

Pumping Unit Equipment used to pump oil to the surface when the pressure differential between the pressure in the formation and in the borehole is insufficient to cause oil to rise up the borehole to the surface. Sometimes called a *pumpjack* or *horsehead*.

Pumpjack Another term for a *pumping unit*.

Reasonable-Development Covenant The promise implied in oil and gas leases that, once a lessee obtains production, the lessee will continue to develop the premises as would a reasonably prudent operator rather than merely holding the lease by the production already obtained. See also Further-Exploration Covenant.

Reasonably-Prudent-Operator Standard The test generally applied to determine a lessee's compliance with implied lease covenants. The term refers to what a reasonable, competent operator in the oil and gas industry, acting in good faith and with economic motivation, and taking into account the lessor's interests as well as its own, would do under the circumstances. Also called the reasonable-prudent-operator standard and the prudent-operator standard.

Regulatory-Out Clause Another name for a *FERC-Out Clause*

Rental-Division Order A stipulation signed by those entitled to delay rentals stipulating their interests and how much rental each is to receive.

Reservoir The term used to describe a geologic formation in which oil and gas is trapped.

Royalty Interest A share of production, or the value or proceeds of production, free of the costs of production, when and if there is production. Royalty is usually expressed as a fraction; e.g., 1/6. A royalty-interest owner has no right to operate the property, and therefore no right to lease or to share in bonus or delay rentals. In some states a royalty

owner has the right of access and egress to take the royalty production. There are several different, but related, kinds of royalty interests. See e.g., Landowner's Royalty, Nonparticipating Royalty, and Overriding Royalty.

Rule of Capture The fundamental principle of oil and gas law that there is no liability for capturing oil and gas that drains from another's lands. The owner of mineral rights in a tract of land acquires title to the oil and gas produced from wells drilled on the land, though part of the oil and gas may have migrated from adjoining lands.

Secondary Recovery The second stage of oil or gas production, typically involving injection of water or gas or both to maintain or restore a high pressure differential between the formation where the oil or gas is located and the borehole. See also *Primary Recovery* and *Tertiary Recovery*.

Secondary Term The term of the oil and gas lease after production has been established, typically "as long thereafter as oil and gas is produced from the premises." See also *Habendum Clause* and *Primary Term*.

Separator Equipment used at the well site to separate oil, water, and gas produced in solution with oil. Basic separators simply heat oil to speed the natural separation process. More complex separators may use chemicals.

Severance A transfer or reservation of a part of the "bundle of rights" that make up property ownership. Mineral rights are frequently "severed" from surface

rights in property that may contain oil and gas or other minerals.

Shale A fine-grained sedimentary rock that can be a rich source of oil and natural gas. Shale-gas and shale-oil production have rejuvenated the petroleum industry in the United States and may soon make the United States energy independent.

Shut-In Royalty Clause A lease provision permitting the lessee to maintain the lease while there is no production from the premises because wells capable of production are not producing. The lessee pays the lessor a "shut-in royalty" in lieu of production.

Subrogation Clause A lease provision permitting the lessee to pay taxes, mortgages, or other encumbrances on the leased property and to recover those payments out of future proceeds from the lease

Support Agreements Contracts in the oil and gas industry that encourage and "support" exploratory or development operations. Generally, one party agrees to contribute money or property to another if the other will drill a well on leases that it holds and provide the contributing party with information from tests conducted. For the contributing party, a support agreement is a purchase of geological or technological information. For the party receiving the support, the contribution lessens the cost or the risk of drilling operations. For further discussion, see *Contribution Agreement*, *Acreage-Contribution Agreement*, *Bottom-Hole Agreement*, and *Dry-Hole Agreement*.

Surface Interest All rights to property other than the mineral interest. The surface interest has the right to the surface subject to the right of the mineral-interest owner to use it to search for, develop, and produce minerals. The surface interest is entitled to all substances found in or under the soil that are not defined as minerals.

Surrender Clause A clause commonly found in an oil and gas lease authorizing a lessee to release its rights to all or any portion of the leased premises at any time and be relieved of further obligations relating to the acreage surrendered.

Take-or-Pay Clause A gas-contract clause that requires the buyer either to purchase and take agreed quantities of gas, or to pay for the gas even though it has not taken it.

Temporary-Cessation-of-Production Doctrine The rule that an oil and gas lease term "for so long thereafter as oil and gas are produced" will not terminate once the lease owner attains production unless the cessation of production is for an "unreasonable" length of time, taking into account all of the facts and circumstances. See also Cessation-of-Production Clause.

Term Clause Another name for the *Habendum Clause*.

Term Interest A mineral interest or royalty interest that is not perpetual. A term interest may be for a fixed term (e.g., for 25 years) or a defeasible term (e.g., for 25 years and so long thereafter as there is production from the premises).

Tertiary Recovery The third stage of oil or gas production, involving injection of chemicals, hydrocarbons, carbon dioxide, or steam to maintain formation pressure and to improve the flow of oil and gas through the formation to the borehole. Sometimes called *enhanced recovery*. See also *Primary Recovery* and *Secondary Recovery*.

Top Lease A lease granted on property already subject to an oil and gas lease. Generally, a top lease grants rights if and when the existing lease expires.

Turnkey Drilling Contract A drilling contract under which a drilling contractor agrees to perform stated functions for an agreed price. The lease operator has little or no discretion to instruct the drilling contractor and little or no liability exposure for the contractor's actions.

Unconventional Resource A petroleum resource that is different from those historically produced, either with respect to the characteristics of the reservoir or the production techniques being used. As this is written, coalbed methane, shale gas, shale oil, and oil-sands production are all considered unconventional resources.

Unitization Bringing together some or all of the well-spacing units over a producing reservoir for joint operations, either by agreement of the owners (voluntary unitization) or order bv administrative agency (compulsory or unitization). Unitization is usually undertaken after primary production has begun to fall substantially to permit efficient secondary tertiary-recovery operations. In the oil and gas industry, the term is sometimes used interchangeably with *Pooling*.

Unitization Clause A lease provision granting the lessee the right to unitize the leased premises, generally for secondary or tertiary-recovery operations. Unitization clauses are unusual in leases; generally mineral owners resist including them because of the discretion they give lessees. See also *Pooling Clause*.

"Unless" Lease An oil and gas lease with a delayrental clause structured as a special limitation to the primary term. The lease automatically terminates, though the lessee has no liability for its failure to perform, "unless" the lessee pays delay rentals or commences drilling operations.

Warranty Clause A deed or lease clause by which a grantor guarantees that title has no defects and agrees to defend it. If the warranty is breached, the grantor may be liable to the grantee to the extent that the grantor has received payments. The presence of a warranty clause in a mineral deed or oil and gas lease may also cause after-acquired interests to pass from the grantor to the grantee by application of estoppel by deed.

Water-Oil Ratio A limit to a *Production Allowable* that requires an operator to stop producing when it produces more than a designated ratio of water to oil; e.g., six barrels to one. A water-oil ratio is designed to preserve the pressure in a water-drive reservoir.

Well-Completion Clause See Operations Clause.

Working Interest The rights to the mineral interest granted by an oil and gas lease, so-called because the lessee acquires the right to work on the leased property to search, develop, and produce oil and gas (and the obligation to pay all costs). Sometimes called *Leasehold Interest*.