

THE LAW OFFICE OF RALPH A. CANTAFIO, P.C.

Ralph A. Cantafio, P.C.

Also licensed in North Carolina, Pennsylvania, Utah and Wyoming

Mark J. Fischer, Esq.

Reed F. Morris, P.C.

P. Elizabeth Wittemyer, Esq.

Lindsey E. Bates, P.C.

The Chieftain Building

345 Lincoln Avenue, Suite 202

P. O. Box 774567

Steamboat Springs, Colorado 80477

TELEPHONE (970) 879-4567

FACSIMILE (970) 879-4511

www.cantafiolaw.com

Richard L. Eddington, Esq., Of Counsel

Also licensed in Texas

UNDERSTANDING AND NEGOTIATING THE OIL AND GAS LEASE

By Ralph A. Cantafio¹ and Rosanna Slingerland²

OVERVIEW

Exploration and development of petroleum related resources is again occurring at an accelerated rate. Shale and other resources once considered un-explorable (for instance, coal-based methane and “tight gas”) now make up next to half of the demand for natural gas in the United States. Increased prices for crude oil and the development of new technologies make it possible and profitable to drill for petroleum at greater depths. Improved technologies, including fracing³, have enabled natural resource producers to increase their yields from wells. Improved tools in data gathering, including the use of satellite technology and computer software imagery to interpret that same, has also helped locate new areas in Colorado, Utah, and Wyoming which possess geology favorable for discovery of new oil and gas reserves. Converting North America’s fleet of 18-wheel trucks to natural gas, as some have advocated, would alone reduce the importing of oil in the United States by as much as fifty percent (50%). As a result, many landowners who have never thought twice about their mineral rights are having to make decisions for the first time as to these mineral interests having not only considerable economic, but life style consequences.

OBJECTIVES OF PUBLICATION

We are providing information to help others better understand the oil and gas exploration and production process and related leasing considerations. Everyone, including natural resource producers, benefit from this educational effort. An educated public is less apprehensive about the process of exploring for and developing oil and gas resources and, hence, easier to communicate and negotiate with. The availability of this information will hopefully reduce the number of disputes caused by fundamental misunderstandings as to the leasing process and the need for certain customary clauses. These clauses are not only the foundation of the leasing arrangement, but are important to both the landowner and the company in an efficient and productive project.

¹ Ralph A. Cantafio is licensed to practice law in, among other states, Colorado, Utah, and Wyoming. The Law Offices of Ralph A. Cantafio, P.C. are located in Craig and Steamboat Springs, Colorado. Ralph A. Cantafio, Esq. has practiced law full-time in northwestern Colorado since 1986. He is a graduate of the University of Colorado School of Law and has a Masters of Science in Mineral Economics from the Colorado School of Mines. Mr. Cantafio is also President of Ralph A. Cantafio, P.C.

² Rosanna Slingerland is a graduate of the University of Northern Colorado with a B.S. in Applied Geography. She is a graduate of Steamboat Springs High School and was born in Craig, Colorado. Ms. Slingerland is also Consultant and paralegal for Ralph A. Cantafio, P.C.

³ Fracing, pronounced “fracking” involves hydraulic fracturing to release typically natural gas trapped in rock formations. It is the blasting of a cocktail of chemicals and other materials into the rock to shatter it into thousands of pieces that allow gas to seep to the well for extraction. A “proponent”, such as sand, then stops the gas from escaping.

The goals of this paper include:

1. The providing of a basic written tool so lay people can better understand the natural resource exploration and production process, particularly those with little or no experience in the same.
2. An introduction to landowners and surface users of customary clauses typically encountered in oil and gas leases.
3. A review and explanation as to certain clauses discussing how these work in the exploration and development process.
4. The providing of basic strategies to negotiate the same.

Much of that contained in this paper is legal in nature. It is not expected that most are going to absorb the same in a single sitting. It is also expected that the reader will want to examine other sources to better understand the concepts being introduced in this paper. The key theme in this paper is simply to expose the reader to a number of concepts and help assist in the process of acclimation to the same. This is not intended to be a point of arrival, but merely a point for departure. The goal is to be able to provide a landowner or a surface user with basic tools so that meaningful discussion and conversations with landman, attorneys and neighbors can ensue. In the simplest terms an oil and gas lease is only a form of contract. Without a basic understanding of the typical terms and conditions contained in that contract and why these terms and conditions are customarily part of that contract, it is impossible to meaningfully engage in the negotiation process. In fact, it is practically impossible to even know what questions one should ask. We hope we provide a resource to curtail that problem.

IS AN OIL AND GAS LEASE RIGHT FOR ME?

The lessor and lessee to a lease should at the onset have an understanding that development of the property for oil and/or gas is their mutual objective. If it is the objective of the landowner to not have the property developed for that purpose – understanding that typically their property could be developed without their consent if a request for a pooling unit or other similar approach is undertaken – then the best approach is to not engage in the lease negotiation process. If the land owner is a tried and true environmentalist that detests the oil and gas industry, it is important to be honest. It is very counterproductive to enter in a lease to secure the benefit of a bonus payment only to fight the company at every turn of events when they move forward with actual development. That being said, the terms and conditions of any lease by its very nature is going to have to allow the company adequate latitude to carry out efficient exploration, development and drilling. This is not to suggest that the landowner must be a milquetoast in its negotiations or in the actual implementation of the lease. Rather, we encourage those who execute a lease to act in good faith as to both the lease negotiation process and the actual development of resources. If one is not willing to act in good faith, do not negotiate a lease.

NEED FOR LEGAL ADVICE

While this paper touches on legal issues, it is not any substitute for legal advice. Each situation is unique and the most prudent approach as to legal issues is to retain the services of an attorney that is experienced in the matter at hand. We certainly hope that this paper will assist you in working with others – including your attorney. However, it is not the intent of this paper to replace the work of an attorney. It also bears mention that it is the nature of this paper that the comments and observations are somewhat general in nature. As each oil and gas producing state is different, always make sure you are familiar with the laws in your state. Lastly, the old adage that “an ounce of prevention is worth a pound of cure” is absolute true. A lawyer will be best able to assist you in the negotiation phase. Once a lease is signed, the rules of engagement are established. Many a lawyer has lamented that he only wished he had been retained earlier. By retaining an attorney early, you will be placing yourself in the strongest legal position possible. Further, what are small problems at the drafting stage that can be easily remedied can become difficult problems that are very expensive fix later – if they indeed can be fixed at all.

SHOULD A LANDOWNERS LEASE?

Unless one is an ardent environmentalist, landowners find out they may incur some minor risks and inconveniences by leasing their oil and gas rights. However, if oil and gas are found, the disadvantages and burdens will likely be small compared to the royalties received. Consequently, the decision is not whether to lease, but rather when and to whom.

WHEN TO LEASE?

When there exists little or no competition for leases, the landowner must decide whether to accept a standing offer or wait until competition results in future higher delay rentals, bonuses and royalties. If an initial offer is accepted, the landowner may give up the chance of later leasing at a larger bonus, higher rentals and higher royalties. However, if the landowner decides to hold out for higher returns, he may not ever get an offer. Where there is little competition for leases, most landowners are interested in getting exploration started in the area and many of them can be expected to sign leases at the first opportunity if the lease is reasonably and meets their needs.

TO WHOM SHOULD LANDOWNERS LEASE?

If there is competition for leases, landowners may have a chance to choose between two or more prospective companies. Comparing the merits of the prospective companies, the lease rates and bonuses offered and various provisions of the lease will help decide.

However, there are other factors to consider:

1. Landowners should deal with a well-financed, well-managed company that has shown the ability to carry out an effective exploration and development program. However, this may be difficult to

determine because companies often obtain leases through brokers and the landman you are negotiating with has nothing to do with the developer.

2. If lease terms are somewhat equal, landowners should try to deal with the broker or company that has leased the most land in the area. Development may be delayed if two or more companies are competing for leases.
3. If landowners own only part of the mineral rights in a tract, they should try to lease to the same broker or company holding the leases from the other mineral owners. This will avoid problems that often arise when two or more companies control fractional interests in the same tract.

Once signed, a lease becomes a binding contract between the landowner and the company. Therefore, landowners should avoid making hasty decisions. They should gather all relevant information and find out what their neighbors have been offered and what they decided to do. Should a decision no longer be delayed, the landowner should think through the probable outcome of each decision before making a choice. A landowner should also notify the holder of any mortgage against the land before signing the lease. Some mortgages have terms that require that any payment from mineral leases must be used to pay the mortgage. Landowners should carefully check bank references and other credentials of the broker or company representative before signing any document. They should also discuss their individual situation with their attorney, tax consultant, or credit source. Doing a Google search as to the company and the landman is a must.

THE PARTIES TO THE LEASE

As they say, “you can’t tell the players without a scorecard”. The parties to a lease (i.e. those that enter into the oil and gas lease) are called the lessee and lessor. The lessee is the person or company to whom the mineral rights are leased. The lessor is the landowner and/or mineral owner who is leasing the mineral rights for the purpose of development. To keep this publication in layman’s terms, the lessee will be generally called the company and the lessor will be called the landowner. Not to offend any reader, but where applicable, we are going to use the masculine pronoun “he”. We are also for the most part going to be referring to an oil and gas lease simply as “the lease”.

It is also assumed throughout this paper that the landowner owns all the mineral rights in question. As we will see, one person or group may own the mineral rights and another person or group may own the surface right to the same property. Where it is necessary to deviate from this basic approach, we will try to clarify what we are trying to explain in the hopes of avoiding confusion. Toward the end of this paper, we have included a section as to circumstances where more than one person owns the same minerals. That topic for now can wait.

OIL AND GAS EXPLORATION AND PRODUCTION

Most are at least somewhat familiar with the oil and gas exploration and its production. Yet, it is important that we begin with a common base of understanding as to the steps involved in exploring and producing oil and gas. We believe that a common understanding of these essential points will assist in the understanding as to why certain provisions are included in the lease and how these realties impact

the precise terms and conditions of the lease a prudent landowner may wish to include for their benefit and protection. Understanding the actual steps in the exploration and production of oil or gas are worthy of degrees in subjects such as geology and petroleum engineering. Hence, to admit that what is being presented here as to exploration and development is a simplification is a significant understatement at best. However, we include this section to assist in understanding of the initial interest, the leasing process, the undergoing of geophysical testing to determine whether the site in question is meritorious of drilling, drilling, and (presuming there is sufficient quantity and adequate quality of resource) well production. As one can imagine, the entire process is not without significant financial risk.

IDENTIFICATION OF PROPERTIES WORTHY OF INTEREST
TO THE OIL AND GAS DEVELOPER

Before any prospect can be explored, an operator or developer must first identify the properties that are worthy of investment. This is important because the cost of drilling a well can well exceed \$1 Million. Determining which properties might be appropriate for investment can be accomplished as follows:

1. Conducting stratigraphic analysis, utilizing geophysical techniques, reviewing historic geological maps and literature, and viewing photo-geographical mapping along with onsite inspection and examination of rock strata out-croppings may indicate if oil and gas deposits exist in a particular area. One area in which scientific development has been extraordinary over the past number of years includes the use and interpretation of satellite generated information.
2. Using previous exploration activity in a particular area; even under circumstances where previous investigation or even drilling was not overly successful or entirely unsuccessful. Often, reevaluation of old data is not the case of anything being overlooked. Rather this is a testament to the great improvements that have been made over the years as to a myriad of technologies in locating resources that can be developed. It is simply the case that what at one time might have been analysis of a prospect that was not worthy of investment is now a prospect worthy of investment. This might involve the securing of additional data in advance of exploration to determine if other oil and gas deposits may have been overlooked.
3. Although as time goes by this is not the tool it once was, interest in a given property sometimes is the result of nothing more than intuition. As odd as it may sound, the oil and gas industry is legendary with those – particularly wildcatters – with an incredible record of success in areas that did not previously attract interest based often on nothing more than a keen eye for topography. Because of the cost, this is done very infrequently these days, but one would be surprised how often when making a decision as to two or three prospects some in the industry will rely on a hunch as opposed to scientific information in its purest form.

LEASING

After identifying the area in which exploration might be appropriate, the next substantial step is to determine who owns the real property in question and, if possible, securing a lease to permit actual exploration. Leases are typically acquired by a landman. While landman perform a wide breath of activities in the oil and gas industry, one of the more typical functions that fall to a landman is to secure leases from the landowners.

Landman first are provided a general area in which to focus their energies. This area can often be up to several thousand acres. Traditionally, the landman next consults with the county real estate records (in Colorado – that is the Clerk and Records Office). Today, many counties have their records online and these can be accessed by the internet. Irrespective of whether the landman conducts his research in person or by computer, the landman nonetheless researches the public record to determine the identity of the mineral ownership in that particular area. The landman will determine not only who owns the surface of the land, but who actually owns the mineral rights. Because the ownership rights to the minerals can be severed from those of the surface (a topic to be discussed later), it is not as easy as knocking on doors to identify the individuals which have the legal rights to lease mineral interests.

After ownership interests have been determined, the landman will next enter into negotiation to secure the necessary leases with the landowners. Initial compensation typically will be in the form of a bonus and a delay rental payment offered by the landman to the landowner in return for a signed lease.

It is important to understand and appreciate that leases are a form of contract. This is typically the document that affords to the company the legal right to explore for and to extract oil and gas. Each lease is negotiated and agreed upon individually. Although some think and believe there is one form of lease, nothing could be further from the truth. While it is true most leases have the same organization, their terms and conditions are the product of negotiation and it is often the case that neighbors dealing with the same company have leases that are not anything close to being identical.

COMPETITION FOR LEASES

There at least hypothetically exists the geological potential for the development of oil and gas almost anywhere. However, the reality is that certain areas have a higher likelihood of development and others very little. Even in the context of a single county, it is not it is not uncommon to see certain parts of a county subject to significant interest and other parts of the same county virtually ignored. It is also the case that when dealing with natural gas the location of existing gas lines to ultimately transport product has much to do with exploration for the simple reason that the movement of natural gas from the wellhead to the market is physically different than the movement of oil. The location of pipelines alone can make it unlikely that payments for leases involving the production of natural gas will become competitive until the potential exists for production that can be integrated into established transportation systems. Thus, particularly as to natural gas, logistical access to transportation tends to impose a pattern of leasing activity that spreads outward from discoveries of previous and significant quantities of oil and gas. Even so, large areas quite distant from existing wells may be leased if they have any production potential at all. This is in part a result of the manner in which the oil and gas industry collects and inventories leased properties for future development. It may easily be the case that there is interest in

developing your property. However, in many instances it is the reality that the interest is not a current interest, but instead an interest several years down the road.

Also, the interest may not be in that developer ever drilling a well on your property, but using that lease at some time in the future for a trade – the same way a baseball team may develop a first baseman – not so much to play him at first base, but to some day trade him for a pitcher or outfielder.

Certain companies are well prepared to invest in the cost of holding large lease acreages not because they are going to ever drill, but rather hoping that other successful exploration by other companies will cause a portion of their holdings to in the future become extremely valuable. For instance, there have been many instances where a successful wildcat well is drilled a significant distance from previous production, resulting in an increase in leasing activity nearby. This phenomenon also has been observed when new data from geophysical testing gives a favorable result of potential new deposits. However, while certain drilling information is readily available by review of local and state governmental agencies, most of these results are proprietary in nature and the results of geophysical tests are seldom made known to competitors in the industry, let alone the general public.

To suggest that all of this has a rather clandestine nature is probably a bit of an overstatement. However, the securing of information is expensive and like anything that is acquired at cost, it is naïve to think that the party securing the information is going to just give it away. The nature of the acquisition of information as to exploration and development affects the intensity of leasing activity; even though those specifics are not going to be known to the landowner. However, because of the sheer value of a successful project, neither distance from any existing production wells nor any lack of recent exploratory activity could ever be taken as reliable indicators of production potential. Interest in developing any particular geographical area is best determined by consulting as many sources as possible.

Some of the best sources are neighboring mineral owners. It is rarely the case that you are being contacted, but that your neighbor is not. Particularly when considering the depths of the thousands of feet that drilling, particularly natural gas, is going to involve, the precise location of the first well may often not be a primary concern of the landman when he first contacts you. As such, it is a safe bet that if you are being contacted – so too are all of your neighbors; typically by the same landman. In addition, one can consult the internet, oil industry journals, and – most importantly – some county and state officials responsible for the issuing of the permits for the various phases of the exploration and production process. Education and knowledge is your greatest asset.

GEOPHYSICAL TESTING

After (1) the initial exploration so as to identify that the property in question is a suitable target for exploration and, hopefully, development and (2) the successful negotiation of an oil and gas lease, a company can next move to more advanced phases of exploration. They can begin these activities immediately (weather permitting) or they may postpone additional exploration. This postponement can be caused by anything from again analyzing their information, to seeking additional data, to finding financial partners to reduce risk, to waiting on financing, to . . . many others. A company may desire to first wait to learn of the success or failure of other areas to consider the results of other activity. Also,

current projects by the company or its partners may delay or take priority over new projects. For instance, it might be the case that an existing project requires a cash infusion – expected or otherwise – that results in the delay or even elimination of a given project. The decision process is far less than static.

Irrespective, whenever it is that the time to advance the project has arrived, only then will the company commence further geophysical exploration to secure additional and more reliable information. Among other things, the substructures of the earth are studied in greater detail to identify accumulations of oil and gas to increase the likelihood of a successful project.

PERMIT MAN

Prior to exploration, there is a vast array of documents that need be signed and approved. This process is different from state-to-state, so it is important to make sure that you are aware of the requirements that exist where your property is located⁴. However, for the purposes of this paper setting forth a general course of events will probably suffice. Above and beyond the lease, often surface use agreements (another form of contract worthy of a paper in length and detail as this) are often negotiated between the company and the surface user (sometimes owners and sometimes tenants). While these surface use agreements are very detailed, they tend to address issues including compensation for the disruption of land and damage to personal property.

Typically, each geophysical crew has a permit man or landman who negotiates these contracts. This person also contacts the proper authorities to satisfy legal requirements, arrange transportation and housing for the crew, and informs the crew as to the location of streams, wells, buildings and other areas designated by the surface owner as being sensitive to geophysical testing.

SEISMIC EXPLORATION

Seismographic Testing provides a direct mechanism of acquiring subsurface structural information without drilling a well. Strong shock waves, generated by several different means at or near the earth's surface at a selected and designated point, penetrate the earth's crust to intentionally create waves to reflect back to the surface from the subsurface rock layers. These reflected signals are recorded and a printed record is secured to establish the depth at which various underground formations can be measured and otherwise quantified. This information is used to establish patterns in the rock formations beneath such as faults, anticlines and folds. These are the area where oil and gas deposits tend to accumulate. Seismic shock waves are often created by detonating explosives at the bottom of shot holes. The number of shot holes per mile varies based upon the type of geophysical information desired and numerous other criteria. After the explosives are detonated, a hole-plugging and cleanup crew finishes the operation. The information provided is proprietary in nature and can be quite valuable – even if there is no drilling by the company in that immediate vicinity.

⁴ By and large, when in doubt, look to the law in the state in which the real property in question is located. Beware if your property straddles a state line, you can have a project subject to two sets of laws.

CONSENT FOR SEISMIC TESTING

Prior to Seismic Testing, it is very common for property owners and their tenants to receive contracts that on one hand permit seismic testing in exchange for compensation (which is typically very small), but on the other provide for a waiver of all claims in the event there is damage resulting from that testing. Often these documents are received in the mail, although being approached personally by a landman or other company representative is not at all uncommon. While damage resulting from seismic testing is rare, it is not impossible. From the point of view of the mineral owner, particularly where there is a small lot and a dwelling involved, the benefit of signing these agreements is negligible compared to the cost even in the unlikely event there is seismic related damage. On the other hand, where there is large acreage and no dwellings, the money received could not always be said to be inconsequential and because the chance of damage is so relatively small, entering into such a contract may be a wise business decision.

As one might expect, these are contracts and if you are inclined to sign the same – make sure you have a competent oil and gas lawyer review the document. Also, these documents are not necessarily a “take it or leave it” variety and – at a bare minimum – never hesitate to discuss modification of the proposed terms with the appropriate company representative.

CONSIDERATIONS AS TO SEISMIC AGREEMENTS

While state and local rules and regulations typically provide considerable protection for the surface owner and tenant, the following issues listed below may help reduce potential conflicts between the parties involved. Remember, the company is just as anxious as anyone to avoid future problems if advance planning can minimize future complications and poison relations:

1. Remember that the company that is the lessee is rarely the entity actually performing this testing. Independent geophysical testing companies are typically hired by oil and gas producers to conduct testing so as to obtain a great deal of technical information all in a very short period of time. These geophysical testing companies have their own schedules and they typically are coming from a different project on a fixed schedule and as soon as they are completed with their work at hand they are moving on to the next project. Even so, attempt to schedule operations to minimize conflicts to both parties. Also, the byword as to all of these things is to document. Make sure to secure names, telephone numbers (office and cell), fax numbers, and E-mail addresses so that you can be actively engaged. If you have an appointment scheduled, try to send a confirming e-mail stating the date, time and location of the meeting. If there is a meeting, outline what was agreed to and discussed – even if this is just bullet points and send a letter by fax or email documenting the same. These writings not only can become invaluable if there is a dispute, but they also tend to memorialize agreements and understandings. Not every dispute is the result of any unscrupulous behavior. Sometime people – especially busy people that have many tasks for which they are responsible occurring simultaneously – simply do not encode communications to remember the same.
2. Make sure the permit man or landman is made of aware of areas sensitive to testing and explain your specific concerns. Remember, these seismic tests tend to cover large areas and if vigilant

land owners or tenants are not pointing these issues as to sensitive land in advance they may easily be overlooked; not because anyone is being negligent or mean spirited, but because of the size of these projects and the many competing logistics over which the company performing the work is responsible.

3. Physically and in person review the area to be tested with the landman or permit man. Where appropriate suggest routes to be driven to minimize damage to roads, range, and cropland. Typically, those performing the testing want to avoid problems and want to minimize conflict between land occupants and agents of the seismic testing crew or crews.
4. Be a good neighbor by telling the landman or permit man if any area that is to be tested is leased to others. This is very important in instances where there are no leases that are part of the public record that would put third parties on notice of the same. For instance, if the company representative sees cattle on a range and is not told the land is leased for grazing, common sense will often lead the company to just presume that the cattle are part of the operation down the road or with the neighbor up the street. Good communication benefits both your neighbors and the oil and gas producers.
5. As mentioned above, make certain to secure the name, address and all pertinent information of the company representative to contact if any problems have to be corrected after the testing is finished. Because it is typical that the representative of the company doing the seismic testing is a field representative and will be moving from location to location (sometimes out of cell phone range) try to get the name of a project coordinator or other responsible individual at the home office as an alternative contact.
6. Make sure to emphasize cleaning of any and all seismographic equipment before testing. This will tend to minimize the potential threat of the inadvertent spread of noxious weeds from a different area into yours. No one is intentionally trying to introduce new or different noxious weeds onto your property. However, particularly as crews can come from a long distance to do their work, it is an easy way to accelerate the introduction and allow the migration of a host of problems that can be easily minimized. This is a wise suggestion for all equipment being brought into your property no matter the phase of exploration or development.

DRILLING

So that the reader has a general appreciating of the drilling process, we attempt in a very simple way to set out the course of events as the developer moves from the more paper work oriented tasks necessary to move forward with the process of oil and gas drilling to the actually work in the field. Probably the best education one can have is a discussion with a rough neck or someone that actually works in the oil patch. Almost universally they are more than happy to tell you all they know about the industry and how the process actually works. In fact, they will be able to provide much more detail than that set forth in this paper. However, at the risk of being too generic, we attempt to provide a general course of events as to what can be expected as projects move into actual drilling related field work.

After oil and gas leases as well as surface use agreements have been signed and necessary geophysical work has been completed with the results analyzed, there still exist a multitude of other factors that must be considered and examined prior to the making of a final decision as to whether to drill. Keep in mind; it will cost well more than a million dollars to drill a well and the last thing the developer wants for himself or his investors is to come up with a dry hole⁵. Also remember the timing must be right and all of the appropriate drilling equipment and personnel available or the venture may be postponed or even cancelled. Locating drilling rigs became a significant issue in certain regions in 2007. It is axiomatic that without a drilling rig, there can be no well drilled. Lastly, there are many non-financial issues such as addressing potential impact on the environment and making sure there is compliance with applicable local and county regulations.

Again, each state is different, so make sure you are well aware (no pun intended) of what is required in the state and even the county in which the property in question is located. Generally speaking before drilling commences, state law typically requires the developer to first notify both surface owner and other adjacent land owners in writing that the drilling process is about to start. It is not uncommon that the Notice must also be provided in a local newspaper regularly published in that community. It cannot be stressed enough to make sure to check and make sure you understand your state laws, as well as your local newspaper. However, certain general notice requirements tend to exist. The notice must often outline the plan of work to provide information as to the nature of the operations that are planned by the company. This information is intended to help the surface owner evaluate the potential effect that drilling operations will have on the surface owner's use of the property and the use of the property of adjoining land owners and users. Typically, there will be a prescribed form approved by the State Regulatory Agency advising the surface owner and adjacent land owners of legal rights. The options available to landowners and adjacent property owner often must be included in the notice consistent with the applicable state law. Please do not complain as to the outcomes of these meetings if you or a representative of yours does not ever bother to attend.

SURVEY TEAM AND CIVIL ENGINEERING WORK

The survey team is an essential part of the pre-drilling preparation stage. As one might expect, they survey the site and stake out precisely where the drilling will take place. They also provide the location of roads and other applicable sites to insure access to and from the actual drilling locations that will be used by heavy equipment, personnel, suppliers, etc.

Once the surveyors have completed their assignments, work-crews come in with earth-moving equipment to build roads, level off the location, and dig pits and trenches along with the cellar for the rig which will house some of the drilling equipment. When completed, the drilling rig and supplies can be moved in and set into operation.

TIGHT HOLES AND TIGHT HOLE PROVISION

The term tight hole has two traditional industry definitions. A tight hole has been defined as a well in which there are no caves or cavities in the earth at the bottom of the hole. However, in this paper the

⁵ A dry hole is a completed well that does not produce oil and/or gas. To qualify as a dry hole, the well must be completed.

term is used where the performance data is closely guarded. As in, "he played his cards tight to his vest". Landowners need to be aware of circumstances where the developer seeks a lease term where operation information is denied to third parties. This can include being denied physical access to the derrick floor and holding confidential well logs and other similar information. In negotiation, a company sometimes seeks to include a tight hole provision as to this information. Conversely, there is nothing that prevents a landowner from asking for a separate lease provision mandating the turnover of similar material by the company in the event of a dry hole or at the end of the primary term (primary term will be discussed later) if there is not production.

There are states where if the this provision is requested, state regulatory agencies must approve such a provision in writing as this type of information is thought not to be proprietary in nature, but should be considered part of the public domain. In certain states where such a provision is approved, this drilling and well production information is kept confidential and will not be released to anyone other than the operator of the well for a given number of months. As always, make sure you are familiar with the laws in the state in which the well is located.

WELL PRODUCTION

The decision as to whether a given well is considered to be producing or non-producing is made when drilling reaches pre-calculated producing zones. Merely because oil and gas is located does not mean such will be produced from that well. Drilling wells is about making a profit, not exploration for the sake of exploration.

Essentially, before drilling begins it is established that at a certain point, if the well is going to be producing, certain benchmarks will be satisfied. At or before that predetermined point, if adequate amounts of oil or gas are not found at the surface in the drilling mud, further tests can be performed to further quantify and examine the mud taken from what are hoped to be the petroleum containing-formations. Two types of tests are traditionally used in this capacity: the drill stem test and well logging. If drilling does not yield information consistent with an adequate discovery of a petroleum related deposits, the well is plugged with cement and abandoned.

It is important to note that, as alluded to above, this does not mean that there is no oil or gas at all discovered. Rather, it means that there is not either oil or gas in adequate quantity or quality to make further attempted production economically prudent.

When a well proves to be productive, well completion moves forward and production equipment is next installed. At that point the drilling rig has served its purpose and is dismantled so it can be relocated to its next drilling site. Many productive wells actually flow without any man made assistance as a result of natural subsurface pressures. Where there is adequate natural subsurface pressure, a production devise referred to as a "Christmas tree" is installed on the well head. On oils with adequate quantity and quality of oil or gas where there is not adequate subsurface pressure resulting in so called non-flowing wells, different types of pumps must be installed to force the product to the surface.

Once actual production begins, the well's productivity is gauged. Data is produced hourly and daily as to the volume of gas or oil being produced. These readings are not extremely crucial in calculating

royalties; they are also important in making additional determinations as to the predicted duration of well production and in developing an initial maintenance schedule so as to best attempt to make certain the well with well will produce with maximum productivity. As one might expect, these initial projections and schedules are periodically revisited so that the same can be reworked to insure continued efficient operation of the well. As planned, work-over crews clean the well by removing unnecessary waste fluids and soiled sands which over the course of time gather in the hole as part of the production process. Today, it is common to refracture – or as it is said “refract” the well – in an attempt to more efficiently open cracks in the formation to allow the oil or gas to flow more freely. Matters pertaining to the “refract” process alone merits an entire paper as this is a particularly controversial issue in many states.

Storage tanks often have to be constructed at the well site with pipelines or tank trucks utilized to move crude oil or natural gas to market. Trucking and pipelines each have their own costs and benefits.. Truck transportation not only increases the historic traffic on what have heretofore been less used rural roads and bridges, but the roads – particularly when only dirt – will now require significantly greater maintenance. Anyone who has lived on or regularly used dirt roads know that these need to be regularly graded or they become so rutted that not only will they become very rough, but the speed to be traveled must be greatly reduced. All of this increases the cost to local government for maintenance. While some of these increased costs are satisfied by oil and gas related taxes, generally the cost of increased maintenance (not to mention the need to on many occasions upgrade existing roads) is probably a net loss when it comes to the roads themselves (although in all fairness the same taxes can be a windfall to other local entities such as school districts). On the other hand, before pipelines can even be installed rights-of-way need to be obtained. This can not only cause time consuming and expensive lawsuits, but can also be complicated where pipelines cross public roads or other utilities or where rights-of way need to be shared with existing utilities. Although pipelines tend to be more expensive up front, they really tend to be cheaper in the long run. Ultimately, it is a combination of the location, size and anticipated life of the field in question that dictates which method will be ultimately used.

LEASE PROVISIONS

The list of issues that might be explored in an oil and gas lease or a surface use agreement are as numerous and diverse as there are properties. There exists no list of terms and conditions that will or can take into account each and every circumstance that might apply to a given land owner. Also, even in consulting with any such list not all terms and conditions will apply to every landowner. The need for competent legal advice in evaluating the various alternatives should be evident.

Before making any final decision as to a proposal as to a lease, the landowner and his attorney should discuss all of the terms and conditions that are important to that landowner. It is essential to identify those lease provisions that will adequately protect the landowner's interests with the company's realistic ability to implement an effective exploration and development program. After all, a good lease is a contract that defines a working relationship that in some instances may last for decades. It is important to be reasonable and to be able to make appropriate compromises.

Irrespective, there are some terms that are universal in virtually all of these negotiations. An overview might be helpful. The landowner must always be concerned with how long to lease his mineral interest,

how much will be received in the form of a bonus, how much he is entitled to receive in delay rental payments, and what percentage will his royalties along with how the royalties are to be calculated, and what form of legal protection may be needed to the landowner in the event that there is litigation concerning some phase of the oil and gas development. A few of the lease clauses relate to the drilling process that include rights and restrictions on how the surface of the land may be used. These terms and conditions can be in a lease or in a surface use agreement. Also related are provisions concerning the right to use of various resources by both the landowner and the company during the production phase. An important provision relating to the lease includes production and how to address the issue of gas from a producing well that cannot be sold. A term typically negotiated involves how production is divided when a number of wells are pumping from the same oil or gas reservoir. It is these more general clauses we will now discuss.

BASIC TERMINOLOGY

A basic understanding of mineral rights and how they differ from surface rights as well as the legal implications of the separation of one from the other must be mastered before any discussion of leasing provisions can be meaningfully undertaken. Mineral Rights can be defined as the right of ownership of mineral resources which underlie a tract of land. Precisely what are and what are not minerals is not a topic being addressed for the time being and such distinction really is not at this point necessary to master or understand these two types of legal rights. For now, we can associate with rights of mineral ownership the right to explore, develop, and produce the mineral resource. In most states, oil and gas are legally treated as minerals – like copper and coal.

Surface rights are, on the other hand, the rights to use the surface. This use can be for agricultural, residential, etc. What complicates the circumstance is that most tend to think that the individual with the surface rights also always own the mineral rights. While the mineral rights can be owned by the surface owner so that the rights can be said to be unified, the surface owner and the mineral owner need not be the same. Often, they are not.

Severed mineral rights are mineral rights that are owned by those that do not own surface rights. Hence, one can live in North Carolina and own the mineral rights for property in, say, Colorado. This severance can occur in several different ways, but the simplest way this occurs is when the owner of both mineral and surface rights legally conveys all or a portion of the mineral rights he owns. This is typically accomplished by mineral deed. As is the case with most real estate transactions, the deed is recorded with the Clerk and Recorder or similar government office that registers deeds and becomes a part of the title to the land involved.

Mineral interests can also be created by severance. Severance by mineral reservation occurs when an individual owning both the mineral and surface rights legally transfers the surface rights of the property, but retains all or a portion of the mineral rights. These reservations are recorded and are part of any title to the land involved.

When the mineral rights are severed from the surface rights, whether by reservation or by deed, the mineral rights are dominant. This is the part that many people have trouble understanding and, quite frankly, the basic notion can be a bit counterintuitive. When it is said that the mineral rights are

dominant and that the surface rights are subordinate or junior this means that it is the owner of the mineral rights that has the right to use as much of the surface as is reasonably necessary to explore, produce and transport the minerals. However, the right of the mineral owner is not unlimited in nature and the mineral rights owner must, at least in Colorado and Texas, consider the rights of the surface owner and is required to exercise that degree of care and use which is just consideration for the rights of the surface owner in what is referred to as the accommodation doctrine. The right of the mineral estate is dominant even if the historic use of the surface is inconsistent with the rights of the minerals. Hence, just because a property has been used for ranching for 125 years does not because of a “first in time, first in right” analysis mean that the historic ranch use now has the dominant estate.

WHY LEASE

A landowner who owns all of the mineral rights has the right to develop any deposits on his or her land. However, few owners attempt to develop oil and gas on their own property. The answer as to why is actually very practical and somewhat obvious. These mineral rights tend to be leased because of the tremendous costs involved in exploration and development, not to mention the significant expertise needed to successfully navigate all of the challenges involved in a successful oil and gas project. For close to a hundred now most landowners lease these mineral rights to oil and gas companies because these entities have the necessary capital and technical knowledge as well as personnel for successful exploration and ultimately profitable production. As a result, the petroleum industry is and has historically been based largely on leasing, rather than outright development by those with the ownership of mineral rights. While there exist companies seeking to buy mineral rights, most development is done by way of lease.

KNOW WHAT MINERAL RIGHTS ARE OWNED

Landowners may not own all of the mineral rights under the land they own. Because of possible previous separation of mineral rights from surface rights, it is strongly recommended that landowners put together a list of what land they own and the percentage of mineral rights remaining with each surface title. This provides a starting point for decision-making. Compiling a list is not always easy. One might want to engage the services of a land title insurance company to secure information. Often landowners need advice from a competent attorney to interpret the legal wording pertaining to each deed or other document to determine what interest they may have.

TYPES OF OIL AND GAS LEASE FORMS

When mineral rights are leased, the legal rights and duties of the landowners depend in large part upon the terms of the lease. Therefore, extreme care must be taken to insure that the unique needs of each landowner are met. Each company representative or landman normally uses a pre-drafted agreement which has proven suitable to them in the past. Most of these lease forms are characterized by brevity and simplicity and are meant to cover most average situations. They tend to be a variation of which is known as a “Producer’s 88”. Since each leasing situation is unique, some of these pre-drafted agreements are not in the best interest of the landowner. Also, some companies may be using lease forms which are applicable to unique situations in other states that can create problems for the landowners in others. Virtually every provision of a lease is negotiable. Even though the company

representative or landman soliciting the lease may not have the authority to make changes, this does not mean those certain clauses, or even the complete lease itself, may not be altered. However, the landowner's ability to negotiate more favorable terms will vary in each situation.

IMPLIED COVENANTS

It is important to understand that an oil and gas lease is not a contract requiring the company to drill. In reality, it is a contract that allows a company to drill if it so elects. While courts in a number of jurisdictions have ruled that an oil and gas lease implies that the company is obligated to do certain things, the breach of the implied covenant does not in most instances result in damages.

The implied covenants in an oil and gas lease include:

1. The duty to drill an initial well,
2. The duty to protect the real property subject to the lease from drainage of oil or gas beneath it from competing drilling from that which occurs as a result of wells on adjacent land,
3. The duty to develop the oil and gas lease after development of commercially viable wells by drilling additional wells,
4. The duty to produce and market the oil and gas produced on the leased property, and
5. The duty to use reasonable care in the conduct of its oil and gas related operations.

While it is called an oil and gas lease, the contract really acts like an option. The fact is that as a historic matter there are thousands, hundreds of thousands, and more oil and gas leases where there was no drilling even attempted. The penalty is not damages based upon a breach of contract theory. Rather, the consequence is the elapsing of the lease at the end of the primary term. As a result, when leasing property it is important to make certain that the company really has an interest in drilling on your property. Otherwise, the only compensation you may receive might be the bonus payment you secure at the time of executing your lease.

STATE REGULATIONS

The drilling, exploration and development wells and the producing of oil and gas are often regulated by state regulatory agencies. In Texas this is the Texas Railroad Commission. In Colorado it is the Colorado Oil and Gas Conservation Commission.

Although each state is different, these state agencies tend to have similar the authority to regulate:

1. A wide spectrum of activities related to the drilling, producing and plugging of wells;
2. The chemical treatment of materials used in the drilling of wells;

3. The spacing of wells;
4. Operations utilized to increase the recovery of product from the wells; and
5. The disposal of salt (brine) water and other, numerous oil field wastes.

So as to maximize efficiency of oil and gas resources, state agencies as set forth in statutes typically also have the legal authority to limit and to allocate the production of oil and gas from any field, pool or area. The goal is to minimize waste. Although these legal authorities attempt to provide protection to owners of mineral rights and those with related surface rights, lease negotiations are still necessary to address numerous and somewhat unique situations not otherwise subject to state law, statute or regulation.

No typical landowner (in effect, one who is not an oil and gas lawyer or a landman) could possibly hope to incorporate all of the considerations necessary to incorporate state law and simultaneously consider the breath of that subject to state regulatory agencies in a lease. However, when drafting a lease or surface use agreement it is important to recognize that no two real properties are alike and for a lease to be fair to all parties the lease should attempt to focus upon terms and conditions that are relevant to the real property in question and the anticipated development of the resource.

HOW TO LEASE MINERAL ACRES

It is almost always the case that it will be the company that presents a form of a lease to start the negotiation process. They will find you and they will target you. Although the number of acres subject to the lease is subject to change, either by negotiation or as a result of further due diligence prior to the payment of bonus moneys, many landowners are not aware that they are not forced to lease all of the acreage they own. A landowner can lease as much or as little of this land as he wants. Landowners are well served to be careful in determining exactly how many mineral acres under their ownership should be leased. This decision can often reduce the likelihood of numerous complications and disputes amongst and between landowners and oil companies throughout the development, drilling and production process.

It is also important to understand the concept of a mineral acre. It is the mineral acre that determines the amount of the royalty and the bonus payment. A short example ought to suffice. Suppose a rancher owns 320 acres and inherited the property from his father. Further suppose that the rancher's father deeded away a $\frac{3}{4}$ interest of all the mineral rights on the property. Even though the rancher here owns all 320 acres of the surface, if the bonus is \$200.00/acre then the company is going to pay to the rancher not a \$64,000.00 bonus (\$200.00/acre for 320 surface acres) but rather \$16,000.00 (\$200.00/acre for 80 mineral acres; i.e. $\frac{1}{4}$ of the 320 acres). As one might suspect, it is very important to know exactly how many mineral acres are owned at the inception of negotiation. It is also important to understand that the key concept is mineral acres – not surface ownership.

It is also important to have an understanding of things such as the Mother Hubbard Clause, the Cover All Clause and the Pac Man Clause⁶. These clauses address the circumstance where the amount of acreage subject to the oil and gas lease can be either increased or decreased where it turns out that the owner owns either more or less than anticipated. These terms tend to be especially problematic where the company claims adjacent acreages when mineral acres are divided between multiple mineral owners and leased in small tracts. These clauses are neither inherently good nor bad. Rather, mention of the same is made because it is important to understand the terms and conditions of the lease and how the acreage leased can contract or expand when these types of provisions are included.

WHAT ARE MINERALS?

The granting clause is typically the very first clause of a lease and this is the part of the lease that spells out the purpose of the lease and, if drafted correctly, specifically describes the natural resources which can be explored for and produced under the terms of the lease. As a matter of the common law, most states take the position that no mineral lease may be interpreted to convey or transfer any mineral interest to any except those minerals specifically identified in the lease itself. Most state laws take the position that where minerals are specified, the lease includes not only the specified mineral, but by implication also includes all compounds, derivatives and byproducts of the same. Typical language used to be more specific would include as to oil and gas "... all associated hydrocarbons produced in a liquid or gaseous form so named shall be deemed to be included in the mineral named." As one might suspect, certain landowners attempt to lease only for minerals that the company demands, retaining the legal rights to others by omitting mention of all other minerals. This creates an opportunity for the landowner at some future point in time a chance to lease these other minerals (thereby securing additional bonus or rental payments). Sometime a granting clause simply states something like "oil and gas and related hydrocarbons". This tends to satisfy a company drilling for oil and/or gas while reserving for the owner the right to lease or convey other types of mineral interests.

Some approaches as to a narrower drafting of the granting clause might incorporate:

1. If the right to develop other minerals beyond oil and gas are granted in the lease (please recall, even though it is called an oil and gas lease that by virtue of the granting clause the minerals leased for development can far exceed oil or gas), consideration as to addressing in the royalty clause a different percentage share the landowner will receive for the production of substances discovered in commercial quantities might be appropriate. The royalty from oil and gas might be different from, say, uranium. There is no reason that the royalty as to one substance must be the same as that of another.
2. Particularly where the surface owner and the mineral owner are not the same individual or entity and a split estate exists, one might specify that the types of development or extraction methods that can be used by the company so that the developer of the natural resources cannot merely strip away nor substantially destroy the surface and instead be limited to constructing only

⁶ Cover All Clause or Mother Hubbard Clause is commonly included in contemporary leases to meet the problem of adequately describing strips of land owned by a lessor contiguous to the land specifically described by the lease and intended to be covered by the lease. A typical clause will follow the specific description of the land leased and will provide, "It being intended to include herein all lands and interests therein contiguous to or appurtenant to said described lands owned or claimed by lessor". There are innumerable variations in the language of such clauses.

facilities necessary for the exploration, drilling, development and production process. As pointed out previously, one should never blindly presume that every surface owner appreciates that all of the substances lying under the surface do not necessarily belong to him and that it is the mineral owner that actually must develop for natural resources.

PAYMENTS RECEIVED

In exchange for leasing the legal rights to explore for and produce oil and gas, the landowner typically receives compensation in the form of a bonus payment and delay rental payments before any well is drilled or any royalties after production is paid. It is often the case that the bonus payment is the only compensation that the landowner ever receives as a result of the lease. Many leases never see any drilling activity. If there is drilling, not every hole yields production of resources in a paying quantity. Hence, these up front type payments are extremely important.

BONUS PAYMENT

At the time the oil and gas lease is executed, the company usually pays the landowner an initial cash bonus in so many dollars per mineral acre. The actual amount paid by the company to the landowner or mineral owner is generally not shown in the lease. This is because to the extent the lease ever is made public, the company does not want others – whether neighbors or other competitors – to know what exactly was paid. The lease will often refer to only nominal consideration using language such as “one dollar and other valuable considerations.” Bonus payments act as consideration so that the company can hold the lease without any development for a period of time before the company must either actually drill or elect to pay delay rentals. Not every lease includes a delay rental clause. As discussed later, it is common for the company to use a “paid up” lease. Competition for oil and gas leases between companies largely determines the amount of bonus offered. So too can the bonus depend on the amount of bonus money left in the landman's budget – in effect, a landman that has paid smaller bonuses at the beginning of a play may have more money to pay later signing lessors. Irrespective, simple supply and demand result in the reality that the more the intense the competition – for whatever the reason - the larger the bonus.

SIGHT DRAFT

When the landowner executes the lease, the landman or other company representative sometimes gives the landowner a sight draft equal to the amount of the bonus. It is not uncommon for a company to send a form of lease and include a sight draft with the same to provide tangible evidence of the money a landowner might receive. A sight draft, however, is not a check. Anyone who takes a sight draft down to the bank attempting to cash the same will elicit little more than laughter – although some sight drafts do sometimes look like real, negotiable checks. Sight drafts are used to provide the company time to recheck the identity of owners of the minerals as well as the precise amount of mineral acres that will be subject to the lease. One can think of this as a final opportunity for the company to make sure it is certain as to ownership related matters before finalizing the bonus payment. More standard forms of lease – at least standard from the point of view of the company – typically allow alterations to the granting clause so that the lease is consistent with that recorded in the public record. Typically the sight draft will provide a window of time before the same can and will be made “good”.

After receiving the sight draft from the landowner the landowner takes it to his bank. The landowner's bank next forwards the same to the bank for the company. The collection bank – here the company bank - then notifies the company that a sight draft has arrived and they have the amount of time specified in the sight draft to honor the draft and make payment. If all is satisfactory from the point of view of the company, the company sends a check in the amount of the draft to its collection bank and the sight draft is honored and made payable to the landowner through his bank. Sight drafts can be as long or short as the parties agree based upon various and specific circumstances. It is important to at least be aware that there is a practice that is known as short drafting.

In short drafting the time between presentation of the sight draft is used by the company to broker the lease to another for a greater amount. To avoid this practice during the time pending when the sight draft is clearing, landowners should make sure they have a writing from their landman that the lease will not be recorded until such time as actual payment is made to the owner. No reputable landman will record the lease under these circumstances. As an alternative, the landowner can insist upon retaining the original lease and then providing the same with the sight draft to their bank and submit these documents to the bank with specific, written instructions that the lease will be provided to the company until there is payment in full as to the sight draft.

The practice of short-drafting occurs when a landman, typically representing a so-called independent, outbids other landman and companies for the lease in question. Using the period of time provided in the sight draft, the landman records the lease and then attempts to assign the lease. If there is an assignment, the sight draft is paid and the landowner is none the wiser. Under these circumstances, if the lease is not assigned or otherwise conveyed, one can expect a multitude of reasons as to why the sight draft is not being honored as agreed and represented. Should this occur the landowner may not only have lost an opportunity to lease, but now must engage legal counsel to cure title as to the improperly recorded lease.

In summary in those instances where a sight draft is presented:

1. Remember that a sight draft is not a check, but only a promise to pay a sum certain at an agreed time in the future. The draft can only be "cashed" as set forth above.
2. By definition it takes time for the sight draft process to result in actual payment. In the language of the Uniform Commercial Code it is not a negotiable instrument that has a bearer quality. Your presentation to your collection bank merely notifies others that the sight draft has been presented for ultimate payment. The actual process of payment ends when the time set forth on the draft has elapsed and now the company leasing must cover the check with its own payment to its own bank so as to cover the draft. Also, do not be alarmed if it takes an additional couple of days for the draft to get from the landowner's bank to the collection bank and return. To avoid unnecessary delay make sure your collection bank is in communication with the company bank as to the arrival of the draft, payment and all other issues concerning the actual payment process.
3. When the sight draft is ultimately paid to the landowner, the amount received by the landowner might be at odds from the amount shown on the sight draft. This is because the sight draft will be based upon the mineral acres set forth in the lease. Where the lease allows for an adjustment

of mineral acreage, the amount of the payment will change accordingly. Landman usually communicate all of this to the landowner as soon as any discrepancy in mineral acreage is discovered – in large part to maintain good and professional relationships with its landowners. However, the world is far from perfect and sometime the first time the landowner realizes there has been a deviation as to the mineral acres is when the sight draft is actually paid. As an alternative solution, there is nothing that requires a bonus payment to be determined on a per mineral acre basis – although that certainly is the custom. A “flat fee” can be negotiated whereby the bonus is a fixed amount – whether or not the actual acreage is more or less.

LEASE OPTION

If the landowner is not willing to accept a sight draft or is otherwise not willing to accept the verbal assurances of payment by the landman, an alternative might be to enter into a lease option. This is structured exactly like an option to buy stock or real estate. A written contract, this option to lease would be structured whereby the company would purchase an option for a fixed price and then would have the right to exercise the option itself during a stated period of time for payment in full another fixed price at which time the would be formally executed. As in any option, here the landowner keeps the option payment whether or not the lease is executed or not. Hence, if the company – for whatever reason – decides not to exercise that lease, the landowner not only keeps the money paid, but is free to then enter into leases with others. Because the option can be exercised by the company based upon a fixed time, this affords to the company adequate opportunity to review the state of the title and investigate any matter they so choose before making payment in full on the lease. As always, when exercise legal documents make sure that you are adequately advised by legal counsel as to the specifics. The old adage that an “ounce of prevention is worth a pound of cure” is very true. Particularly in this age where virtually any document can be copied from the internet, it is all too common that what would have been a legal bill of several hundreds of dollars to draft documents currently the first time becomes thousands of dollars for the lawyer to have to cure defective legal instruments.

DELAY RENTAL PAYMENT

Oil and gas leases sometimes contain a delay rental clause (although it is this authors observation that “Paid up” leases are the trend); it makes sense to make sure the reader is familiar with certain terms before we go any further. The primary term is the period set forth in the lease where the lease continues even though there is no production in paying quantities as a result of drilling operations and activities. If there is first drilling and then production in paying quantities the lease continues indefinitely after the expiration of the primary term in what is called the secondary term. Setting aside for a moment issues that may come about as a result of a multitude of savings clauses the [shut in well clause, drilling operation clause, etc., (to be discussed later)] continued production and the payment of royalties keep the secondary term the lease in place for as long as production is ongoing and royalty payments timely made. However, where the primary term is for a period of, for example, 5 years, there is typically a delay rental clause that will keep the primary term ongoing despite the failure to drill or the failure to produce in paying quantities as a result of the delay rental clause. Hence, using the example above, if the primary term is 5 years and there is a delay rental clause that permits the payment of delay rental in a fixed amount if drilling has not commenced in a given year, the payment of “rent” as specified in the delay rental clause allows the company additional time to drill during the primary term upon the

payment of rent as specified in the delay rental clause. Thus, the company may delay the commencement of the drilling during the primary term of the lease by instead paying and the landowner receiving the delay rental payment.

The amount owed pursuant to the delay rental clause is typically set forth in a fixed amount of dollars per acre and is often paid annually and on the anniversary of the lease. However, just as there is nothing improper as to having a flat-sum bonus, there is nothing wrong with agreeing to flat-sum delay rental payment in the lease. The called for delay rental payment offered is typically very low in relationship to the bonus payment. Of course, all of this is subject to negotiation. Further, this illustrates why it is important for a landowner at the time of signing any lease to make sure to calendar important benchmark dates in the lease itself. If delay rental payments are due on a certain date, the landowner will want to have that date in his calendar to keep on top of the administration of the lease.

The issue often comes up as to what exactly must a company do to be considered to have started a well such that the company is not responsible for payment of the delay rental (the same question often comes about as to the activities the company must perform to satisfy its drilling requirements prior to the end of the primary term). Often the delay rental clause will include language whereby the company is not required to pay delay rentals on a lease so long as the company has "commenced a well". How is one to interpret this provision? Is the term commencing a well satisfied by starting to excavate a slush pit, or how about starting to stake a road to access a well site, or simply having a surveyor go out to stake out a well location? After all, these are all activities that must be performed in advance of the process of actual drilling.

The better practice rather than leaving the same as an ambiguity is to use well understood benchmarks in the lease itself. Simply define the phrase "commence the drilling of a well" as actually spudding⁷ in a well. There is going to be little disputing as to whether or not spudding has occurred to satisfy the delay rental clause. It is also worth mentioning that from the point of view of the company and because the delay rental clause is typically not a large dollar payment item that a company if in doubt should merely remit the timely payment to avoid a dispute.

As set forth above, once production in paying quantities is achieved, the secondary term of the lease comes into effect. After production, the payment of delay rentals is no longer necessary as the term no longer applies. Instead, royalties are paid to the landowner for their share of the production.

RENTAL DEPOSITORY

To avoid confusion as to whether or not delay rentals are timely made, it is often the case that the company will want to designate a rental depository. This is simply the bank identified as the agent acting on behalf of the landowner in accepting the payment of any delay rentals. Because of any number of issues concerning the manner in which banks are regulated, the bank will act as a fair broker to identify when the payment was received. It is of note that the bank does not act on behalf of the owner to extend or ratify a lease should it receive late payment of delay rentals and merely provides to the landowner a credit upon his account as to the delay rental payment when paid – although certainly

⁷ Spudding is defined as the first boring of the hole in the drilling of a well.

the role of the bank as to acceptance of late payments and the implications of the same can be agreed to if the parties so desire. Further, the lease may specify that the landowner may change the identity of the rental bank by providing written notice to the bank. Typically, to change the identity of the bank receiving such payment request is made to the company and the company will have prepared a change of depository document which will be duly executed and returned by the landowner to the company.

THE ROYALTY CLAUSE

From a financial point of view, the royalty clause is no doubt the most important term and condition to the owner because it is this provision that establishes the financial entitlement to the landowner when there is extraction of resources in a paying quantity. For years, individuals would comment that there existed a standard royalty in the oil and gas industry of 1/8th share. Well, if that was true then – it certainly is not true anymore. In our current energy environment it is common to see royalties of up to 1/5th. This will vary between regions. These higher royalties are noted as producers – often of natural gas – are creating greater financial incentive for mineral owners to lease.

Setting aside for a moment the numbers themselves, above and beyond the royalty itself is the equally and perhaps more important issue as to exactly how the royalty is calculated. It can easily be the case that because of the terms and conditions of the lease and specifically the royalty clause, all other things being equal the landowner with the 1/8th royalty can receive more money than the landowner with the 1/5th royalty all based upon precisely how the payment of royalty is calculated. As one can image, the precise terms of royalty clauses can vary greatly from lease to lease. However, several basic factors should be considered by the landowner.

Most importantly, specify exactly which costs, if any, can be deducted from the landowner's royalty payment. This is a core concept because issues as to the revenue derived from the production of oil and gas at somewhat straight forward. Simply put, the gross is not where the difficulty typically arises. Rather it is the net resulting from the subtraction of costs that often reduces the amount from which the royalty is calculated.

The topic of costs is probably in and of itself worthy of a paper itself. However, in the simplest terms costs can be divided into two separate and general categories. The costs encountered throughout the exploration, drilling, production and marketing stages are divided into (1) the costs paid by the company alone versus (2) the costs that are shared by the company and landowner.

What are the costs that are those of the company alone? While the explanation here is a bit generic in nature, typically the company alone is responsible for all of the expenses through the production stage.

By process of elimination, the royalty clause ought to then focus on the expenses that occur after production. Again, the formula to determine how royalty payments are made is a function of negotiation. Those expenses realized post production can be shared between the landowner and the company or the post production costs can be paid in full by the company alone all as a result of the precise terms and conditions as articulated in the lease. As one can readily appreciate the amount actually received by the land owner will depend in part on the royalty, but is also a product of the shared

expenses. Some comment that the royalty payment will depend partly upon “where the lease fixes the royalty”.

If the lease itself is silent as to the matter of shared post production costs, the determination of costs so as to calculate the ultimate royalty is implied to be fixed "at the well". Based upon this set of circumstances the royalty payment is calculated without deduction of any production or post production costs. On the other hand, should the lease “fix” the determination of the royalty "in the pipeline", “at the place of sale”, or at other delivery points, the cost of transporting the production to the point of delivery may be shared. It is the sharing of this cost between the landowner and the company that reduces the net upon which the royalty is calculated. These transportation costs may include a multitude of items including compression expenses required to transport product into the purchaser's pipeline, expenses related to additives necessary to make product salable during the process of transport and delivery or expenses attendant to the measuring production – among others.

Separate issues arise as to how royalty compensation is valued or received. Three methods generally are generally recognized.

DETERMINING VALUE OF PRODUCTION USING THE MARKET PRICE

A value dependent on market price or market value is determined by the oil or gas value as reflected in the marketplace, typically established at the mouth of the well in question. Should there be no market at the well, then the market price prevailing in the field will be instead used as a proxy. When there is no field market or field price that is applicable, then the value instead can be established by the comparable sales set at marketing outlets based upon like time, quantity, and quality. Ultimately, if there these are no comparable sales, the actual value of the substance could be used.

The market price method has historically been popular with landowners because this method tends to allow the revenue to follow an upward price trend for oil and gas. However, there are some associated complications of which landowners should be keenly aware when using this market place method. Because there sometimes does not exist the reliability of an actual market established by true supply and demand the prices posted at wells or fields can be said to be arbitrary. They can be fixed in the truest sense of that term artificially and substantially at a price less (or more) than the prices paid for comparable minerals at other wells or fields. In such cases, it may be possible to ultimately secure a higher valuation for the determination of royalty payments, but in worst case scenario only after to resort to expensive court proceedings that include the payment of legal fees and the cost of the securing of expert witnesses in the field of accounting in the oil and gas industry.

To avoid these types of problems, if the market place is being used to determine royalty the company and the landowner should specify in the lease precisely what benchmark they are actually using for determining how the market price or value will be established and this formula should be included in the lease. Otherwise, it can be safely predicted that the oil and gas lease is going to be interpreted to utilize a method to minimize the payment of royalties to the landowner while maximizing the profit to the company. As we can imagine, the assistance of competent legal counsel can be of great assistance in drafting such a clause.

PROCEEDS

The proceeds method establishes the royalty owed to the landowner to be based upon the actual revenue derived from the sale of the mineral and typically determined by contract between the company and a third party end user. For instance, if natural gas was being provided to the City of Colorado Springs based upon a contract whereby the City of Colorado Springs agreed to purchase the entirety of the output of a given well, the revenue from that contract would be used to calculate the royalty owed to the landowner. As one can imagine, the resulting sales price may or may not represent the mineral's actual value at any given time – high or low. A further clarification by an example may help. If the contract in question were a fixed price entered into in 2007, the value then paid would have been reflective of the true market value at that time. However, for the years 2008 and 2009, that fixed price based on 2007 would have provided a windfall to the company and the landowner. Today there has been some recovery in the price of natural gas compared to the 2008 and 2009 and no windfall would be noted. However, if in the year 2013 the price of natural gas increases by a factor of, say, three, then Colorado Springs will be then benefitting from purchasing at less than market value and the company as well as the landowner will be receiving a shortfall.

Previously, royalties based on proceeds have been very popular. This method gave greater flexibility to the company in marketing the product, particularly that of natural gas, because they could count on a fixed price. By committing gas to these longer term contracts, the company could also insure the landowner of a constant, dependable royalty income over time. The disadvantage is that the proceeds are not immediately sensitive to a declining or rising market. When the value decreases from the point in time the contract is executed the advantage is to the company. On the other hand, when prices increase, the advantage swings to the other side.

IN KIND PAYMENT

In kind generally refers to payment being made not in dollars, but by instead substituting goods or services. This method of royalty determination provides an alternative to address a lease whose royalty would be otherwise based upon the proceeds method – although it can be used no matter the circumstance. A landowner can negotiate a term providing to the landowner the option to take royalties either as determined by proceeds (see the above paragraph) or in kind. This alternative of in kind payment allows the landowner a “win –win” option. The in kind option allows the landowner during times where the market prices rise above any long-term contract price to take his share of royalty in kind so as to then seek a market outlet. Whenever the market price falls below the price established any long-term commitment, the landowner's share can be taken in proceeds. Whenever the price of the contract is below that of the market, the landowner can then take no money, but product in kind.

Obviously, this lends itself more readily to oil than natural gas. If the landowner has this in kind option for natural gas and decided not to sell the natural gas to the same party that the company is already selling to, the landowner would have to put in his own gathering line system and possibly his own processing plant. That would almost certainly be cost prohibitive. Therefore, the use of an in kind method as royalty would be impractical. However, whether natural gas or oil, if the product can be used onsite – as in the case of a working ranch – the options are slightly more practical.

ADDITIONAL COMMENTS

Issues concerning the terms and conditions of royalties can be very difficult for those not in the oil and gas industry. It is important to appreciate that the field is sufficiently complicated that there are Certified Public Accounts that specialize in issues related solely to the oil and gas industry. It is axiomatic that where there are accountants that specialize in this field – not to mention landman, oil and gas lawyers and a subset of oil and gas lawyers that focus on oil and gas related tax issues – the complexities and nuances are numerous. Hence, our goal of the above explanation of the various methods of establishing royalties is not to make anyone an instant expert on the topic. Rather the goal is to make the reader aware of these complexities and that merely signing any lease without understanding its terms and conditions thoroughly is done at the peril of the landowner.

TYPES OF A ROYALTY CLAUSE

The royalty clause can be segregated into three general types - the oil royalty, the gas royalty, and the royalty for casing-head gas.

The oil royalty clause typically authorizes payment of the royalty either in kind (delivery of the royalty oil to the credit of the owner in the pipeline) or in money (based on the market value of the oil). As outlined previously, the costs of developing a gathering and processing system by a private individual to market his or her share of any natural gas produced makes the use of an in kind gas royalty impractical as to natural gas. As one might expect, gas royalty clauses usually provide only for payment in money.

As set forth above, special care must be utilized in examining any gas royalty clause. The landowner may want to limit or prohibit the company from deducting certain kinds of post production costs for processing, treating, dehydrating, compressing, etc., before the company starts paying the royalty.

CANCELLATION OF LEASE FOR NONPAYMENT OF ROYALTIES

Few states allow the landowner to cancel the lease for nonpayment of royalties. There is a public policy against allowing a lease to be terminated by a breach of contract because of late payment of royalties. It is not believed to be a sufficiently egregious breach to allow this type of more draconian relief. It is also felt by many that this type of consequence should a landowner be allowed to claim a breach of contract resulting in lease cancellation would have a chilling effect on the industry in making decision to drill. Termination of a lease for a late royalty payment is seen as a far too extreme. States that do permit cancellation as a result of a failure to make royalty payments allow lease cancellation under very narrow circumstances along the lines of, "if the equities of the case so require it". Hence, only if absolute fundamental fairness results in the conclusion that a lease should terminate as a result of a failure to pay royalties will that extreme step of termination be taken.

As a practical matter, cancellation statutes tend to protect industry – which is understandable. Typically, if the company misses a royalty payment, but later acknowledges the fact and pays the royalty plus interest, an equitable result could not be said to include the cancellation of the lease. Only if a landowner could prove some kind of bad faith on the part of the company, may he have a case for cancellation. That is, however, a very high legal standard indeed.

Generally, the issue of late payment should be addressed in the lease itself. There is nothing improper as to a higher interest in the event of a default. Further, a provision providing for the payment of attorneys fees and costs incurred by the landowner – even if no suit is filed – ought to be considered.

RECOMMENDATIONS

The following is list of factors that might also be considered when negotiating a royalty clause. As set forth in other sections in this paper, this list is not meant to be exhaustive and is provided so that the reader can become better acquainted with issues that merit discussion during lease negotiations.

1. Specifically establish what, if any, post-production costs are going to be allowed to be deducted in the formula to determine the royalty payment.
2. Establish the date and frequency as to which royalty payments are to be made. Establish a process and the consequences when royalty payments are not timely made.
3. Establish whether royalties should be paid by the company on product lost as a result of leakage, fire or other reasons which can be attributed to the company's negligence.
4. Establish ability, but not an obligation, to take royalties for oil production in kind.
5. Establish ability, but not an obligation, for the landowner to take royalties in kind and have access to free natural gas.
6. Establish precisely what circumstances – if any – allow the company to use water, oil or gas found or produced on the leased premises.
7. As outlined earlier, address differing royalty percentages for substances other than oil and gas that might be included in the granting clause.

WORKING INTERESTS AND OVERRIDING ROYALTY INTERESTS

An overriding royalty interest is created out of the interest of the company, not the landowner. It is the company that possesses the working interest. The working interest - also referred to as the leasehold interest – originates with the right to the minerals as granted in the lease. Because the lease holder traditionally works the property – it is referred to as the working interest. These overriding royalty interests are typically used by the company as the holder of the working interest to compensate landman, lawyers, geologists and others that are engaged by the company to advance the drilling project. As this working interest and, hence, the overriding royalty interest is derived from the lease itself, once the lease terminates – so too does any expectation of an overriding royalty interest.

Generally speaking, the landowner has very little interest in matters pertaining to the overriding royalty interest as such is not being paid out of his share of the royalties. Still there are occasions where a landowner might negotiate his own overriding royalty interest and should at least have a basic

understanding of the same. If nothing else, the overriding royalty clause explains why to a certain extent both the landman and the landowner have an interest in seeing that a given lease sees ultimately production in a paying amount. After all, each will be receiving compensation based upon the payment of a royalty.

Not only is overriding royalty interest paid from the share of production belonging to the company, is usually paid free of any costs of operation by the company.

An overriding royalty may also be used to compensate a new company subleasing the land where the original lessee does not wish to develop the oil and gas and instead "farms out"⁸ the lease. In this instance, the company that originally leases the property will reserve an overriding interest as part of the farm out agreement. This overriding royalty typically does not share in any of the exploration or production costs.

DIVISION ORDERS

A division order is a statement drafted by parties who claim an interest in a property and further sets forth precisely how moneys derived from the production of resources are going to be distributed amongst and between the various parties. Division orders are designed to protect the company that produces the oil or gas as well as those who actually distribute moneys due by actually warranting title to production and indemnifying the producing company for payments made. It is typically not a requirement that the recipient of royalties sign the division order. In fact, these division orders are not even deemed to be contracts. It can be thought of that it is the division order that is the document that implements the terms and conditions of the lease as to payments due upon the same.

The division order is typically prepared by representatives specially trained in this activity on behalf of the company buying the oil and gas. Those representatives calculate the fractions and the percentages determining the precise share of production which each royalty owner is entitled to receive. When the division order is signed and returned by the royalty owner, the division order acknowledges that the calculations made by the company and the royalty paid is correct. Anyone that has seen a division order appreciates that these are extremely complex. In fact, unless trained in the industry these can sometimes be beyond being understood.

A landowner should sign a division order only if:

1. the company will not pay royalties unless the order is signed, and
2. the division order merely recites and divides the competing interests under circumstances where the landowner knows that his interest is correctly stated. If the order requires the landowner to (A) confirm the accuracy of the order or come to any legal conclusions as to the underlying lease or any other contract, or (B) confirm the legal accuracy of any formula on how royalties are to be

⁸ "Farms out" is slang for entering into a farm out agreement. A farm out agreement is a very common form of agreement between operators, whereby the owner of a lease not desirous of drilling at the time agrees to assign the lease or some portion of it (in common or in severalty) to another operator who is desirous of drilling the tract. The assignor in such a deal may or may not retain an overriding royalty or production payment. The primary characteristic of the farm out is the obligation of the assignee to drill one or more wells on the assigned acreage as a prerequisite to completion of the transfer to him.

paid or determined, or (C) otherwise attest that statements or representations are true and accurate under circumstances where the landowner either knows them not to be true or has no real idea as to whether said statements are true or not then it is strongly recommended to not sign any division order. As always when it comes to a legal document, consult a lawyer before signing the same as the execution of a document represent that you have read and understood the legal implications of signing the same.

LENGTH OF LEASE

Oil and gas leases are generally divided into two separate time periods: the primary term and the secondary term.

THE PRIMARY TERM

The primary term is a fixed number of years as negotiated by the parties establishing a period of time during which actual drilling operations must begin or delay rentals must be paid (to the extent this is not a paid up lease). If drilling operations are not started within the primary term, the lease will terminate. An example may help. Let's presume the primary term is for three years and there is an annual proviso for delay rentals that must be paid on each subsequent anniversary date of the signing of the lease. If the lease were signed on January 1, 2011, if there were no drilling then delay rentals would be due on January 1, 2012 and January 1, 2013 with the lease expiring on January 1, 2014 (as payment of delay rental at the end of the primary term does not extend the lease).

SCHEDULING AND DELAY RENTAL PAYMENTS

Although the company will tend to do so anyway, landowners should be sure that the company identifies which lease is being paid the delay rental payment. This is particularly true where the landowner has multiple properties with leases. It is wise to remember that the oil and gas industry is a business. The company is going to run its operation as a business – so too should the landowner. As mentioned previously, having important dates on the calendar in advance is an important organization tool. So too is ready access to all important documents – such as the lease. Open a file and know where the file can be found in an instances notice.

By making sure the landowner is aligning the lease in question with the rental payment, the landlord is acting in a businesslike fashion. Good organization will assist a landowner in keeping track of several different leases on their land. This will also assist family members and heirs if the landowner should die unexpectedly.

Landowners should record the date by which delay rental payments must be received. If a check is received make sure to keep a copy of the same before depositing your check. If you receive the check late, consult an attorney before cashing the check as the negotiating (i.e. cashing) of a late payment check may be construed as a matter of law as a ratification (i.e. a forgiveness) and a lease perhaps otherwise subject to termination may not terminate.

PRODUCTION DEFINED

As set forth above, drilling must be commenced and, if completed, production must be established by the end of the primary term or else the lease will terminate. We have discussed previously what may or may not satisfy the requirement as to drilling. What satisfies the term as to production?

Any law student who has taken a class on oil and gas law will have studied a number of cases exploring the gray areas as to what does and does not constitute drilling and production. The term production as it is interpreted to take the lease from the primary term into the secondary term has been defined to include production in paying quantities over a reasonable period of time. The term has been further interpreted to mean that the company must profit after deducting current operating expenses and marketing costs, but may not include any portion of the drilling costs. Basically, this rationale takes into account that both the lessee and lessor look at the lease through the lens of an economic transaction. It is a financial assessment that looks first to operating revenues and operating costs over a reasonable amount of time to determine profit. If it is established that there exists a profit, the analysis next shifts to determine whether a prudent operator expecting to make a profit would continue to operate the well. After all, if the profit on a well is \$1.00 per year, one could hardly fault a company for not wanting to shut in the same. As one might suspect, while the black letter law is simple to state, its actual application is a bit more complicated and generally speaking all of this tends to be assessed on a case-by-case basis in all but the most obvious cases.

SECONDARY TERM

If production has been established, the lease will continue into its secondary term. Generally, the full clause will read, "This lease will remain in force and effect for a term of _____ years and as long thereafter as substances covered by the lease are produced." It is the latter part of the above term (i.e. after the word "and") that is referred to as the Secondary Term. The purpose of the secondary term is to provide the lessee a right to hold a producing lease for as long as it is financially viable to do so. As the reader will note, the secondary term is not set forth in a fixed time period, as is the case with primary term. Hence, as set forth immediately above, what constitutes production and when does production cease are questions frequently asked to determine the point in time when the secondary term begins and lease terminates. That discussion is left by this author for another day.

RECOMMENDATION AS TO DRAFTING THE PRIMARY AND SECONDARY TERMS

A landowner might want to consider the following when drafting language as to the primary and secondary terms.

1. Understand that the company will want as long a primary term as possible. Instead, the landowner will want a primary term as short as reasonably possible to encourage earlier exploration. Considering the current energy situation, it would be unwise to sign a lease covering a period of more than five years.
2. If the primary term cannot be shortened, try to negotiate a higher annual delay rental payment.

3. Although it is doubtful anyone will propose the same, do not amend any delay rental clause that allows for the lease to terminate unless the company timely pays delay rental payments.
4. A landowner may want to consider requesting a paid up lease. These leases are very common these days. A paid up lease is effective during the entirety of the primary term without the payment of any delay rentals. Essentially, the right to drill during the primary term is paid in advance – hence “paid up”. Such a lease benefits both the company and the landowner because both know exactly what the duration of the primary term of the lease are going to be and that there is going to be no payments due to the landowner other than those paid at the time of executing the lease. Because there are no delay rental payments, the landowner should request a somewhat higher bonus.

EXTENSION OF PRIMARY AND SECONDARY TERMS

As discussed, the primary term is for a fixed period of time. However, there exist circumstances where the lease may not survive through the primary term. As mentioned previously, the implied covenants of the lease and the delay rental clause balance the relative interests of the company and the landowner regardless. The lease is interpreted so that the landowner has a reasonable expectation that:

1. there will be prompt exploration on the leased property,
2. if there is no exploration then the landowner will receive delay rentals (unless “paid up”), and
3. if there is no exploration and there is no payment of any delay damages clause then the lease will terminate and the landowner will be free to lease the mineral rights to another developer.

This balancing of interests results in a circumstance where the company is able to on the one hand reserve the land during the primary term without expensive exploration, but on the other hand is assured of being able to continue the lease after the primary term if commercial production is obtained. However, these clauses fail to cover certain fact patterns of concern to the company. Hence, a discussion as to what are referred to as the “savings clauses” is appropriate.

There exist above what have already been discussed a series of so called savings clauses designed to reduce the company's financial risks regarding disputes as to whether the lease has terminated. These savings clauses have become standard features in leases. The primary and sometimes the secondary term of the lease may be extended contractually by the following:

1. the drilling operations clauses,
2. the shut-in clauses,
3. the dry hole clauses,
4. the cessation of production clauses, or

5. the Force Majeure clause.

DRILLING OPERATIONS CLAUSE

Although there are many variations of this clause, the gist of the same all provide that a lease will continue so long as operations for oil and gas continue on the leased property. This clause is intended to protect the company where a well was started before the end of the primary term, but there exists no producing well until after the primary term had expired. The drilling operations clause states the lease will continue and remain in effect just as though the well had been completed before the primary term of the lease expired so long as drilling operations are ongoing.

A cousin of the drilling operations clause is the continuous drilling operations clause. This clause allows the company to preserve the lease by continuous drilling operations which ultimately lead to a producing well - even though the producing well is different from the one partially completed at the end of the primary term and even if such continuous drilling occurs after the expiration of the primary term.

SHUT-IN CLAUSE

The Shut-in Royalty Clause allows the company to maintain the lease – including after the primary term – even where there is no production despite the existence of wells capable of production, but are instead “shut in”. In lieu of actual production of that well and the payment of a royalty, instead the company makes payment of a “shut in royalty” at a rate prescribed in the lease. The shut-in clause allows the lease to remain in effect (sometimes during both the primary and secondary terms) whenever gas or oil from a producing well is not, for whatever reason, being sold or used by the company. It may be that the price of the commodity is not adequate to support production. Such may be “shut in” because a pipeline is expected to be installed, but has not moved forward to the point providing transportation of the product in question. The examples are about as diverse as one can conceive.

If a shut-in well is classified as a producing well under the lease provisions, the lease will not terminate. However, a shut-in royalty must be paid. It is important to negotiate a sum approximating the lost value of the royalty not received. This from a drafting point of view can be a bit arbitrary. Some suggest that the shut in royalty should be in an amount somewhat akin to the delay rental payment. To this author, that seems generous to the company. In any event, a shut-in royalty payment should be scheduled to be paid each year to keep the lease in effect. Sometimes a limit on how long a well can be shut in is negotiated.

Landowners sometimes find it difficult to accept the invoking of a shut-in clause by the company. Rarely, if ever, will a company divulge exactly the financial circumstances leading to the decision to shut in a well. However, due to the current energy environment and the reality of the high cost of bringing a well into production, shut-in provisions are used rarely and when used are used judiciously.

Even so, landowners may wish to consider the following to more clearly customize this clause.

1. Make certain that shut-in royalties are required during both the primary and secondary terms. Sometimes these clauses are drafted in such a way that shut-in royalties are due if such occurs in

the primary term, but not should a well be shut-in (i.e. become non-productive) in the secondary term the applicability of the same is enigmatic.

2. Place a maximum number of years on the shut-in clause - for example, no more than three years or three years beyond the primary term.
3. Progressively increase the shut-in royalty for each year the gas or oil is shut-in. This may motivate a company to move the well back into production.
4. Permit the shut-in to continue as to that well, but only for a specified number of acres immediately surrounding the well. This allows the shut-in well to satisfy the primary or secondary term (as the case may be) as to that small acreage, but not as to the remainder of the leased land without further development. The remainder of the leased area would be permitted to revert to the owner in this case of a failure to drill or produce and that property can be leased by the landowner.
5. Outline the circumstances when the shut-in clause may go into effect. Examples may include lack of market, lack of an available pipeline, government restrictions, or other factors mutually agreed upon before the lease is signed. While there is an implied covenant of good faith and fair dealing as to the decision of the company to shut-in, it is better to draft definitions so that subjectivity as to what may and may not be shut-in is minimized.
6. Draft language so as to terminate the shut-in provision automatically whenever a well is located on an adjacent spacing unit and completed within the same producing reservoir. So the theory goes, once such competing well begins producing and selling gas or oil in marketable quantities there exists no reason that the well in question ought to remain shut-in.
7. Have an attorney familiar with oil and gas law select wording of the shut-in clause to make sure the provision allows the lease to automatically terminate if shut-in royalties are not paid.

DRY-HOLE CLAUSE

Suppose the company starts a well during the primary term, but abandons it as a dry hole. If the company does not commence another well within a reasonable amount of time, does the lease terminate or can the company continue the lease by paying delay rentals? If the lease can be continued, when is the next delay rental payment due? Dry-hole provisions are intended to provide answers to these questions. Dry-hole provisions extend the primary term of the lease, but only in certain instances.

A dry-hole clause sets forth the specifics as to what the company must do to maintain its lease after drilling a dry hole. The general theory is that the company ought not be punished for drilling a dry hole and instead ought to be afforded additional time to drill.

Basically the dry-hole clause will provide that if oil or gas has not been discovered because a dry hole is drilled, the lease will not terminate even though the primary term has expired so long as the company

renews drilling efforts or is re-working operations⁹ of the dry-hole within a certain period of time thereafter. One can think of this as a term that expands the duration of the primary term. In the event the primary term has not expired and more than the stated period remains, the company may be given two other options to extend the primary term if included in the dry-hole clause. In instances where there is a paid up lease, this clause comes into play only where the primary term is about to expire. Where there is a delay rental clause, so long as the primary term is not about to expire the company can simply pay the next delay rental payment which comes due. Depending on the precise language of the lease in question, the company may also start drilling or re-working operations on or before the applicable date.

Depending on the amount of time remaining in the primary term as defined by the completion date of the dry hole, it may be that the lease will continue until the end of the primary term even though the company makes no attempt to drill or act otherwise and no delay rentals are paid. It is also quite possible at least in theory for the primary term to be extended indefinitely via the dry-hole provisions by the exploration and drilling activities of the company. This is so because even if the company has not discovered any oil or gas and is in the process of drilling or re-working operations even after the primary term ends, the lease will continue in force for so long as the company faithfully renews drilling or re-working operations within a stated number of days after completing each dry hole as the lease directs. None of this should be problematic to the landowner as the continued efforts to find resources in a producing quality and quantity ought not to be encouraged. That is particularly so because it is often the case that once a dry hole is drilled on a property; there can be a stigma whereby others are not going to be willing to invest money to develop in areas where others have already failed.

CESSATION OF PRODUCTION CLAUSE

This savings clause addresses the circumstance where a producing well ceases to be productive. It provides to the company a period of time to keep the lease by drilling a different well. While this could occur in the primary term, this more frequently occurs in the secondary term. Moreover, whether this cessation is going to be permanent or temporary is often not immediately obvious. Here, drafting a time period to start new drilling is tricky. Recall that the secondary term continues basically “for so long as oil and gas are produced” and that production has not ceased for an “unreasonable” amount of time based on all of the pertinent facts and circumstances.

Before we move on, please consider a circumstance where production ceases not because the resource in that area is exhausted. Suppose production in paying quantities cease for a prolonged period of time due to some reason other than exhaustion of the oil or gas in the ground. Here, reasons may include change in government regulations making the cost of the well unreasonably expensive, a breakdown of equipment requiring significant capital investment, or a decline in market price (such as seen several years ago). These types of events could happen during either the primary or secondary term. If these events happen during the primary term, can the company still keep the lease in force without having to start drilling a new well or pay a delay rental? If these events occur during the secondary term, does the lease now terminate for lack of production?

⁹ Reworking operations is work performed on a well after its completion to secure production where there has been none, restart production that has ceased, or increase production.

The cessation of production clause is intended to clarify the positions of the company and the landowner in these situations. Cessation of production clauses are very similar to the dry-hole provisions. The main difference between the two is that the cessation of production clause applies after oil and gas have been discovered produced. Typically, a lease will provide that if oil and gas production should cease for any reason, the lease will not terminate if the company reworks an existing well or commences the drilling of a new well within a certain period of time (which are similar to those seen dry-hole clauses).

FORCE MAJEURE CLAUSE

Force Majeure is literally a "superior force" some refer to it as an "act of God". Leases typically contain a provision meant to protect the company from the loss of its lease whenever the cause halting their operations is simply beyond their control. This provision is the Force Majeure clause.

From the company's point of view, this provision has taken on added significance in recent years. We can start with acts beyond man. Anyone remember Hurricane Katrina?

Then there are man made obstacles - complying with the rules and regulations of the Regulatory Agencies, addressing new township and county zoning regulations, securing road permits, meeting state bonding requirements, and a host of other factors affecting their operations. The law in place at the time the lease is signed may or may not be in effect at the time of the undertaking of drilling. Many of these factors are beyond a company's control.

It appears that the general intent of the Force Majeure provision is similar to the Cessation of Production clause. More specifically, providing to the company a time to rework a well or drill a new well. However, a Force Majeure clause provides a broader type of coverage in that the cessation of drilling operations here is the result of causes beyond the company's control. Interestingly, although the Force Majeure clause has a long history, its use in the oil and gas industry is relatively new and thus there exist precious few court cases applying this in the industry.

If the clause is proposed in a lease by the company, the landowner may wish to consider:

1. Avoid the inclusion of the actual words "force majeure." Its legal meaning in obvious cases is universal (see Hurricane Katrina as the prototypical use of the doctrine) but in the grey areas the term itself is ambiguous and might be more confusing than helpful.
2. Define the concept using only the simplest of terms. None of this is perfect, but one might simply state, "If drilling, working or production operations are delayed or interrupted for causes reasonably beyond the company's control..."
3. Require from the company a timely, written notice any time a sustained work stoppage occurs – this is a good drafting hint whether discussing Force Majeure or any of the various savings clauses. Require that the notice state with specificity whether the stoppage was related to causes beyond the company's control or to the dry hole, shut-in, or cessation of production provisions of the lease. Furthermore, have the notice contain supportive evidence of the company's reliance on the particular provision. Lastly, make sure there is a provision that requires the company to

inform you whether the cessation is temporary or permanent, as well as when a cessation thought originally to be temporary has become permanent.

4. If an unavoidable stoppage should occur during the primary term of the lease, decide whether delay rental payments will become due and whether the primary term will be extended for the period of the delay.
5. Place a maximum limit on the amount of time any savings clause can remain in effect. The goal is to be fair to the company and allow the company time to move forward to develop a producing well that is profitable to the company and the landowner – not create a loophole so the company can unilaterally and indefinitely tie up your property.
6. Determine and state a reasonable time frame in which operations must be resumed once the cause of the cessation is removed or a process to determine the same.
7. Do not allow the company to use the Force Majeure provision (or any of the savings clauses for that matter) in situations where the company has failed to comply with the rules and regulations. By all means, if there are new rules or regulations that create an honest cause for delay – that is one thing. However, if these provisions are being used to frustrate the goals of the landowner – that is simply abusive.

SURFACE USE

With few exceptions, the granting of a lease carries with it the implied right to use as much of the surface area as is reasonably necessary to explore and produce the oil and gas. That is the black letter law in every jurisdiction and defines the dominant and subservient (or junior) estates discussed earlier in this paper. Above and beyond the common law as set forth above, the parties can always contract for further and other safeguards and protections. Although it may not seem to be so, most companies are more than willing to sit down and negotiate terms and conditions as to the use of the surface to make sure the parties have a meeting of the minds as to the use of the property before any development commences. A good surface use agreement tends to minimize the likelihood of disputes in general and avoid litigation.

RECOMMENDATIONS

Even though the company may be held liable for surface damages and also be held responsible for the payment of compensation, the inconvenience of unwanted structures and entries upon the surface area by the company may be avoided to some degree by the following:

1. Do not allow the company to have any unrestricted right to build permanent facilities such as power stations, storage tanks or employee's quarters. State in the lease or surface use agreement that the prior written consent of the landowner is needed for both the construction and location of such structures and sites. You will need to add that consent not to be unreasonably withheld.

2. Make sure to have specific terms and conditions as to the details of development and include a map of the proposed lease area showing where roads, pipelines, telephone lines, salt water sites and even wells may be located. This is so even if the map is simply on the back of a cocktail napkin and is not produced by a surveyor.
3. Depending on the precise circumstances, additional compensation ought to be made payable to the surface user for road rights-of-way, pipeline easements, additional well pads, etc. Define this compensation in advance, if possible.
4. For convenience and safety issues do not permit a well pad within some stipulated distance of a dwelling or water wells.
5. Provide that all underground pipelines and telephone lines must be buried below plow depth even if no agriculture is involved. If exceptions to this provision are necessary, permit them only after securing the landowner's written consent.
6. Require the company to use the double ditch method or other methods of increased safety for laying any pipe if the area above the pipeline is to be cultivated or grazed. Double ditching requires the placement of top soil on one side of the ditch and the subsoil on the other. Require the company when backfilling to replace subsoil first.
7. Address whether the company's structures and equipment must be removed or be forfeited when the well is abandoned. If these structures are going to be removed, a reasonable amount of time should be allowed. Damage must be addressed. By all means, do not become a junkyard. Make sure that the landowner and not the company is determining what stays and what goes. It goes without saying that if the company is removing structures and equipment they brought onto the property it is the company that is solely responsible for the cost of removal. However, if the landowner wants to keep a structure, they should be allowed that latitude.
8. When a well is determined to be no longer producing, make sure that all the procedures approved by your state regulatory agency are strictly followed in plugging the well¹⁰. These procedures include restoring the drill site as nearly as practical to its original condition. Similar procedures apply to pits built to contain drilling mud and the accumulation of drill cuttings during the drilling process. If these general regulations fail to cover unique individual circumstances, provisions for an agreed upon level of reclamation should be contained in the lease or surface use agreement. Most states have websites that provide all of this information to any interested persons. Make sure in the course of negotiations you become familiar with these requirements.
9. State regulations universally require that the company must take appropriate steps to prevent livestock from gaining access to pits used to store saltwater liquids or brine. The safety reason as to the protecting supply of food to the public ought to be obvious. If additional fences, gates and cattle guards are necessary, identify in the lease the responsibility of the company for the construction and maintenance of these items. Specify the type of fence and the materials to be

¹⁰ The plugging of a well is the sealing off of the fluids in the strata penetrated by a well so that the fluid from one strata does not escape into any on the surface. This is usually accomplished by introducing mud and cement into the hole.

used. Virtually all states strictly prohibit companies from allowing saltwater liquids or brines from flowing over the surface of the land or into streams. State law also typically authorizes its agencies to regulate any underground disposal of oil field brine. Any company planning to dispose of salt water in underground formations must obtain a permit from the proper state authority. They must also follow accepted storage procedures and report monthly regarding amounts of salt water injected, injection pressures, etc.

OPERATIONS WITH ADJACENT PROPERTY

The right of the company to operate conjointly with neighboring lands is included in most standard lease forms, but is a right sometimes abused. This provision allows the company to build roads and pipelines across the landowner's land to be used to operate wells on adjacent properties. Other provisions sometimes negotiated in leases allow the use of small adjoining tracts of land which the landowner also owns even though that property is not identified in the granting clause or otherwise (see the section as to Cover All Clauses) permit the company to drill on adjoining land without requiring counter-drainage. While these terms are often necessary from the point of view of the company, the landowner may wish to restrict their use to protect his own interest. The lease could provide that these powers be granted by separate agreements when and if use of these properties would be of interest to both parties.

DAMAGES

When the company goes beyond what is reasonably necessary in the exploration, drilling, and production process and damages the surface, the company becomes liable for damages.

Some states have laws setting forth specific requirements concerning surface damages and allow for disruption payments compensating the surface owner and others negatively affected by the drilling process. Regulations pertaining to the company's responsibility to the surface owner often include:

1. The mineral developer must compensate the surface owner for any loss of agricultural production, any lost land value, and any lost value of improvements caused by drilling operations.
2. The amount of damages may be determined by any formula mutually agreeable between the surface owner and the company. This includes liquidated damages (i.e. damages in a defined amount) where damages would be otherwise difficult to calculate or determine.
3. When determining damages, consideration should be given to the period of time during which the loss occurs and the surface owner may elect to be paid damages in annual installments over a period of time. For instance, if soil is rendered sterile so that there will not be any production of agricultural product until the soil is removed and replaced, it might be appropriate for the company to pay the surface owner a fixed amount yearly to approximate the loss as opposed to the payment of a lump sum.
4. The payments should compensate for losses, directly or indirectly, affected by drilling operations. A direct loss would be the inability to grow, say, hay on acreage because of a well

pad. Indirect loss might be losses that result from the failure to receive payment from the sale of that hay.

5. That compensation must be paid to the actual surface owner and cannot be assigned to others except to a tenant of the damaged surface area. For example, it is unfair for damages to be paid to mineral owner of a severed estate when it is the surface user that really suffers the consequences.

LIABILITY CONCERNS

It is appropriate to establish that the company independently inherits liability to third parties as a result of its drilling operations. Hence, if the company acts in such a way to cause damage to your neighbors, the company is liable and not you the landowner.

State law is far from universal, but typical of state laws include:

1. The company is responsible for all damages to persons or property, both real and personal, caused by the lack of the exercise of ordinary care by the company, including nuisance caused by drilling operations.
2. To receive compensation, the injured party must notify the company of the damages within a specified time after the injury is known. This involves what is referred to as the Statute of Limitations and also defines the deadline by which a lawsuit must be filed or the claim is waived.
3. That within a defined time after the company receives notice of damages, the company must make a written offer of settlement to the damaged party.
4. If the settlement offer is unsatisfactory or no reply is received, the damaged party may bring legal action for compensation in court.

In addition to the protection afforded by state law, the landowner may also want to consider the following terms and conditions when negotiating a lease or surface use agreement:

1. Outline a process to be used in determining damages. In the event the parties cannot agree independently as to damages, consider providing for mediation, arbitration, or some other means form of alternative dispute resolution.
2. Particularly where production involves more than one property owner, attempt to address in advance the method to determine how payments will be distributed among respective surface owners and/or tenants of the effected surface area.

Remember to always refer to the specific laws of the state in which the real property in question is located.

RESOURCE USE - COMPANY'S FREE USE OF RESOURCES

Related to the implied right of the company to make reasonable use of the surface of the leased land in its extraction related activities, a company - absent a contrary provision in the lease - maintains the implied right to use other available resources reasonably necessary for its oil and gas operations.

Water is essential to the entire drilling and production process. Water is used in numerous ways. In fact, a significant paper addressing only the use of water in the extraction of oil and gas could be easily drafted. For instance and as outlined previously, water is used in the preparation of drilling mud. Also, modern production technology includes a secondary recovery technique referred to water flooding. In that process, water is injected into a partially depleted oil bearing formation. The water is used to wash oil out of the rock and into the well. As one might imagine an increased use of this technique could interfere with the supply of water to the owner's irrigation or domestic wells. Because of large amounts of water that can be used in these and other processes to extract oil and gas, landowners should pay very close attention to any lease provisions providing free water or any water to the company for its operations. Please also pay careful attention if coal bed methane is being extracted as this process is very water intensive. Particularly in areas where water is scarce or where dry land farming is common, certain limitations ought to be considered as to these water uses.

The following suggestions may be helpful:

1. If free water rights are granted to the company, limit its use to only that which benefits your leased property – not the leased property of others. A landowner may want to specifically limit the free use of any water to just salt water or water of no use for humans, animals or agriculture.
2. Do not allow the company to take water from existing wells, tanks, ponds or reservoirs without written permission and compensation.
3. Come to an agreement that any water used by the company cannot negatively impact the quantity or the quality of the supply of water for domestic, livestock or agricultural purposes.
4. If recovery techniques are being used by the company that involve the utilization of floodwater processes, deny the company the use of any water suitable for drinking by animals or humans. Be explicit that that such water must come only from non-fresh water sources.
5. If water is to be purchased from the landowner by the company, state exactly how the price will be determined.
6. State in the in the lease whether the leased land can be used for any underground storage of any liquid whatsoever.

LANDOWNER'S USE OF RESOURCES

There may be instances where landowners themselves can benefit from the use of equipment utilized by the company in the drilling process or from the use of water and gas produced. Landowners might consider including the following provisions in their lease:

1. State in the lease that the landowner should have access to free natural gas. Many leases allow the owner the free use of gas for domestic purposes. Less common, but perhaps desirable for many agricultural operators, is a so-called irrigation gas clause. This clause permits the landowner to receive at an agreed price natural gas necessary to operate pumps and other related agricultural equipment for irrigation purposes.
2. Require the company to notify the landowner in writing of all water-bearing formations discovered in the drill hole. If the well in question is not a producer of oil or gas, this would provide to the landowner the option to require the company to leave as much casing and tubing in place as is required to withdraw any remaining gas, but allow for extraction of fresh water for domestic or agricultural purposes. When a well can safely be used as a freshwater resource, most states require the landowner is to provided an application for freshwater. Thereafter, most states require and the company will insist that the landowner assume any and all future liability for such use. A landowner will need to do his homework.

POOLING

Pooling is the bringing together by voluntary agreement (voluntary pooling) or by order of an administrative agency (compulsory or forced pooling) smaller tracts or fractional interests to drill a well. Pooling is typically 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 as a single unit irrespective of the actual ownership of the properties that comprise that unit. Pooling as a term is used interchangeably with that of unitization.

It is the Pooling Clause that permits the lessee to combine all of part of the leased acreage with other properties for this single development.

Pooling is a communitization or joining together of two or more surface tracts in an oil field whereby the various owners or mineral interests agree to share the expected benefits from a specific oil reservoir located under their lands. Without bogging down too much in the geology, in any given oil field there may be more than one oil reservoir at one level, or there may be a number of separate oil reservoirs stacked at different levels. Pooling is necessary because much of the oil in a reservoir or related spacing unit could be removed by a single well on just one of the tracts within the unit. This would be harmful to the owners of the other tracts who may otherwise also wish to drill a well to protect their interests. However, drilling additional wells would be harmful and unnecessary – one might say wasteful. An alternative is to form a pooling arrangement whereby the owners of interest within a specific area share in the production from one or more wells according to the proportion of total mineral interests owned within that area.

As mentioned above, landowners may be subject to either voluntary or compulsory pooling arrangements. For example, some state regulations prohibit the drilling of more than one well to the same oil reservoir on a spacing unit unless an exception is made by the state agency. However, the owners of interest in a specific oil reservoir under an area larger than the initial spacing unit, and located outside of an area that has not yet been pooled, can voluntarily agree to pool their interests and share proportionately in the production from that reservoir. Voluntary pooling requires the free consent of the owners of mineral interests and is generally found in the context of most lease forms. The reason the pooling clause is included is to minimize any potential problems for the company when it comes time to pool.

STATE REGULATIONS

No state regulations as to pooling are exactly the same, but all seem to adopt some basic tenements. Sometimes it's impossible to secure all of the interested owners to agree to a particular pooling arrangement. When this happens, any of the persons possessing an interest in the spacing unit in question may apply to their state agency for an order that will pool all impacted interests. The state agency must first hold a public hearing on the matter after notice has been given. Presuming the applicable criteria are met, after the hearing the state agency will issue a pooling order which provides for the just and reasonable division of the proceeds from production from wells in the spacing unit among all of the interest owners. Any new well drilled in this pooled area or any other pooled area must conform to the spacing authorized by the state agency.

Again, always refer to the laws of the state where the real property is located.

POSSIBLE PROBLEMS

By entering either type of pooling arrangement – voluntary or compulsory - the landowner may find the interpretation and application of some of the original lease provisions substantially changed or, in fact, inapplicable. For example, a typical pooling clause could enlarge the company's implied right to make reasonable use of the leased land to enable the company to use water from that land for the production of oil and gas from a well on other land included in the pooled unit. Also, the owner on whose land the well is situated could experience a heavy burden of surface use typical of production, yet that owner will receive only a proportionate share of the royalties. At the same time, a separate property that is part of the unit may have no surface interference at all, but receive royalty in a pro rata amount exactly like the property that has been drilled upon and negatively impacted.

If specific damages as a result of this situation are not covered by state law pertaining to surface damages and disruption, the owner may want to add specific provisions in the lease to address these circumstances. It also appears that by establishing a pooling arrangement, the company may be able to exercise a great deal of control over a considerable amount of leased land by drilling and establishing production on only a small part of the total pooled area. This problem will be addressed in the future section with the mention of a Pugh Clause.

RECOMMENDATIONS

Legally, there is little the landowner can do to avoid compulsory pooling. However, the landowner can exercise caution in granting the company the unrestricted right to pool the leased mineral interests. The following suggestions may be helpful.

If the landowner is successful in leasing small tracts, he may want to try to eliminate the general pooling clause from the lease. If this is not accomplished, the company will be able to exercise their rights under the pooling clause and pool all of the various small leases. General pooling provisions usually have language which allows the company to pool the mineral interests covered by the lease with other land or leases in the immediate vicinity for the production of gas and oil when in the company's judgment it is advisable to do so. The problem with granting this broad authority is that after pooling, any production, drilling or re-working operations on a well located on any portion of the pooled land could be interpreted as being undertaken on any part of the leased land. By including the leased parcels in a pool, the company may be able to eliminate the need for paying delay rental payments, not have to drill on the leased property during the primary term, reduce the proportionate share of royalties to the respective landowners, and still maintain all of the leases by drilling and establishing production on any part of the pooled area (as opposed to the leased property). The "active" well need not be located on any portion of the land originally leased in small tracts to place the lease into the secondary term; the well could be located on adjacent land in a pooled. If larger acreages are leased, the landowner may want to negotiate a Pugh Clause.

THE PUGH CLAUSE

A Pugh Clause provides for the severance of the lease into separate tracts whenever less than all of the leased land is included in a single pool or unit. Phrased differently, a Pugh Clause allows the part of the leased property that is part of a pooled unit to be characterized as being placed into the secondary term and held by production, but treat the rest of the leased property not part of the pooled unit as stronger to the original lease. Hence, the part of the leased premises that is part of the pool is a stranger to the lease. This is referred to as a Horizontal Pugh Clause. Beware; an effective Pugh Clause is difficult to both draft and negotiate. Leasing mineral interests in small tracts is a suitable and much more realistic alternative.

Also consider as mentioned earlier, there may be several separate oil reservoirs stacked at different levels under the same surface area. The insertion of a Pugh Clause can also divide the lease into separate producing formations or levels when only one formation is included in a single pool. This is referred to as a Vertical Pugh Clause. However, this type of clause, especially in wildcat rich areas, would be extremely difficult, if not impossible, to negotiate. As before, leasing the surface area in small tracts is a more realistic alternative and should take care of most of the problems a landowner might encounter.

UNITIZATION

Similar to pooling, state agencies often also regulate the joining together of various mineral interests in a specific reservoir to increase the ultimate recovery of oil and gas. While the terms pooling and unitization are used interchangeably in the industry and as an administrative matter are very similar, the

difference is the unitization is usually undertaken after the primary production has begun to fall of substantially. Thus, unitization is more likely to be undertaken so as to attempt secondary recovery operations.

A practical example of unitization might be helpful. A secondary recovery operation may involve pressure-maintenance or repressuring operations, cycling operations, etc. For example, there may be four wells in a 160-acre unit. The owners of interest may agree to shut down one well, decrease production in two wells, all so as to increase production in the remaining well in an attempt to extract as much product as possible from the entire 160-acre unit. Another scenario might include an agreement by the owners of interest to drill a single new well in the center of the existing four wells so as to pump water into the old wells hoping to force more oil to the new well. In general, the orders set forth by the state agency pertaining to a requested plan of unitization must protect and safeguard the respective rights of all the properties impacted. Typically, an acceptable plan must avoid waste while providing a reasonable probability of increased recovery from the reservoir in question than would otherwise be recovered.

As a matter of economic principal the costs of unitization must not exceed the value of the additional oil and gas recovered – otherwise there is simply no financial incentive to unitize in the first place. Any owner of interest may propose a plan for unitization and request the state agency to approve it. Before the state agency will approve the unitization plan, at least a certain percent of the owners of interest must sign or ratify the proposed unitization agreement. Again, check your local state law.

LEGAL LIABILITY

Landowners should seek competent legal advice concerning their legal liability throughout the exploration and production process. Indemnification Clauses are highly advised. An Indemnification Agreement requires the lessee to “step into the shoes” of the landowner so as to defend and if necessary satisfy any claims or judgments. The reality is that if there is a claim – let us for the sake of argument presume it is a claim of an environmental nature – the party asserting the claim is going to pursue any party that might be legally responsible; no matter how small the likelihood of recovery against that party. Even if the claim against the landowner is ultimately without merit, the mere cost of litigation defense can run into the tens, if not hundreds of thousands of dollars. Particularly where all the operation decisions as to drilling are made by the company, no landowner wants any exposure to the defense of a lawsuit or the payment of a claim.

ADDITIONAL MATTERS

Before concluding our review of lease terms, it probably makes sense to review certain other clauses.

ASSIGNMENT CLAUSE

Without prohibition otherwise, typically leases contain a clause permitting both the landowner and the company the unrestricted privilege of assigning their respective rights under the lease. If no mention is made of an assignment, typically that lease can be assigned. To a large extent these provisions are for

the company's benefit as assignment is very common of lessees. For example, it is customary practice in the oil and gas industry for independent landmen to lease a large area and then assign the leases to an oil company. Consequently, the ultimate developer-producer may not necessarily be the original company or person leasing the mineral rights. At times, the landowner may find the original lease tract being subdivided among several developers. To keep avoid these types of complications, the landowner may seek to incorporate some of the following suggestions:

1. Simply deny the right of assignment without first having the company securing your written consent. If this is not feasible, negotiate a term whereby any assignment is not binding upon the landowner until the landowner is first notified in writing. The company will only in the rarest case agree to the prohibition of an assignment or significant limitations. Remember, the assignment of leases is the lifeblood of the oil and gas industry.
2. Never release the original company leasing the mineral rights from liability for a default on any assigned portion of the lease or leased area. State that a default on any transferred part of the lease is a default on the whole and that liability remains with the original lessee and each lessee that takes on assignment thereafter, jointly and severably. Why? It may be the case that the party that benefits from the assignment of the lease does not have the financial wherewithal to satisfy debts or pay liabilities.

WARRANTY CLAUSE

Leases generally will contain provisions binding the landowner to defend interest in, or title to, the leased premises should a dispute ever arise over ownership. This is known as the warranty clause. To avoid any possible expense in a legal action, landowners should omit any language which requires that they will warrant or defend title to the land. Since most oil companies or landmen conduct preliminary investigation as to the ownership of mineral interests prior to any lease negotiations and, if not, certainly before the bonus check is paid, it is the company that is in the best position to research the state of the title. Where the company universally has conducted detailed investigations before paying any initial bonus, the warranty clause should never be necessary.

OTHER LEGAL CONSIDERATIONS

This paper concludes with a proverbial laundry list of topics that bear mention. Consistent with the rest of the paper, these subjects are explained so that the reader can acquaint themselves with as many issues as possible. While these issues certainly do arise, they do not necessarily arise as consistently as other referenced in this paper. However, each was still deemed worthy of some analysis.

TIME LIMIT TO SETTLE VIOLATIONS AND ATTORNEYS FEES

The landowner may want the lease to provide that if the company does not correct any violation of an agreement contained in the lease within a fixed number days after the landowner gives written notice, the company must reimburse the landowner for his reasonable attorney fees and costs incurred by the default. This is important because it is the typical case that the company is going to be in a much better financial position to pay out ten thousand dollars or more on attorneys to cure or fight through default

issues. Because absent a contractual shifting of the obligation to pay attorneys fees results in each side incurring the fees and costs themselves, simple economics will dictate that without an attorneys clause many defaults will not be corrected because there is no money for the landowner to pay his attorney.

AMBIGUOUS TERMS IN A LEASE

The universal rule of contract law is that contracts in the case of ambiguity will be interpreted against the party who drafts the document. This rule of construction exists to encourage the one drafting a contract to be clear and concise or ... suffer the penalty. Typically, it is the person writing a lease as a normal course of their business who has the obligation to avoid ambiguities about the terms of such leases. An ambiguity arising after signing cannot be interpreted in favor of the company and against the landowner since the landowner does not ordinarily have the specialized knowledge to avoid such ambiguities at the time of signing.

SECURITY AGAINST CLAIMS

Landowners may want to require the company to give security against future loss, save and hold the landowner harmless from all claims, demands, and causes of action stemming from activities undertaken by the company or the company's employees, agents, contractors and subcontractors during operations conducted on the leased premises. If possible, require the company to post bond (above and beyond any state requirements) and carry comprehensive liability insurance of a specified amount as added security from such claims.

TOP LEASING

A Top Lease is a lease granted on a property already subject to an oil and gas lease. This lease grants rights if and when the existing lease expires. Top leasing is a highly competitive practice whereby oil and gas minerals already legally bound under an existing lease are leased again. In general, this type of leasing is used in areas where existing leases are about expire in the near future. An advance payment, usually considered part of the bonus, is offered the landowner when the top lease is signed. When the existing lease expires, the new lease becomes binding at which time the balance of the bonus money is paid. The top leasing company will lose its advance payment if the company owning the existing lease decides to drill for oil or gas before the lease expires or the primary term is otherwise satisfied – including that allowed by the various savings clauses. The Top lease is itself a lease. The landowner and the company proposing the top lease do not necessarily enter into new negotiations when the existing first lease lapses. Negotiations certainly can take place to make sure the new top lease meets the needs of the company while providing adequate returns and protection for the landowner. In any event, input from an attorney familiar with oil and gas leasing procedures is strongly recommended in these negotiations.

Lastly, before entering into a top lease a landowner needs to read his existing lease. Many leases require that if a landowner is approached by third parties as to a new lease during the existence of the ongoing lease, the landowner has an obligation to inform his existing lessee of this new offer to lease in writing.

MINERAL RIGHTS CO-OWNERSHIP

Generally speaking, joint ownership of mineral interests will fall into two categories, joint tenancy and tenancy in common. While as a legal proposition there are similarities and differences between the two, the most significant difference involves a right of survivorship. An example might help. If Billy and Tommy own a property as joint tenants and Billy dies before Tommy, Billy now owns the entirety of the property because of the right of survivorship. On the other hand, if they are tenants-in-common and Billy dies before Tommy, Tommy continues to own only half and Billy's interest will then be conveyed consistent with his will or – if without a will – consistent with the state laws involving intestacy.

If the mineral rights are at one point in time those of a joint tenancy, that joint tenancy is said to have been severed by the granting of a deed. Again an example, if Billy and Tommy are joint tenants and Billy decides to convey the same to himself as a tenant in common, that act alone has severed the joint tenancy.

Whether owned by joint tenancy or tenancy in common, each owner is said to own 100% of the property. Think of it as a roommate in college. So long as one roommate invites in a guest, he has that right whether the other roommate has agreed or not. Typically, so long as any owner signs a lease, the company has a right to develop the property. Of course, each landowner is free to move ahead and bargain on their own. As a practical matter, it is the preference of the company to secure the approval of all owners of a property to a lease or if not all - then as many as possible. Irrespective, each owner is free to bargain for as large a cash bonus or other benefits as can be obtained. While it may be advantageous for all owners to lease to the same company, there is no need for them to even do that.

When the mineral rights are owned by several persons, difficulties can arise in getting them all to execute a lease. This could happen because a person has disappeared, a person might be a minor and not have the capacity to sign a contract, a person might refuse to execute the lease, or, well ... the list could go on forever.

Some states permit the owners of one-half or more of the mineral interests to ask a court for an Order allowing them to develop the oil and gas. This process protects the interests of the majority owners and those of the minority. If approved, all owners, both known and unknown, are made parties to the lease. If the petition is approved by the court, non signing owners are guaranteed their proportionate benefits from the lease.

LIFE ESTATE

A life estate is an interest in real property defined by the life of another. Although not widely used, such ownership of real property exists. As life estate could provide for the use of a property for the life of a father at which time of the father's death the right of the life tenant to use the property elapses. Leasing under these circumstances is complicated. Life tenants and remainder men must usually join in executing or ratifying an oil and gas lease. They may agree how to divide the proceeds in the lease itself or in a separate agreement. In the absence of such an agreement, state law provides guidance for computing the share of each one. However, by and by most companies are not typically interested in

leasing a life estate without the execution of a lease by both the life tenant and remaindermen in only the most exigent of circumstances.

GUARDIANSHIP OR TRUSTEE

Leasing complications also arise when mineral rights are controlled by a guardian or trustee. Generally, a court Order is needed to allow the guardian or trustee to execute a lease. Although this is not terribly complicated, it requires the filing of a legal action. This will result in legal fees and delay, but the legal fees are typically modest and the delay tolerable.

SUMMARY

We have attempted to provide some basic information as to the oil and gas industry. Because of the diverse topics discussed, this is general information. While this paper represents general trends, the law in each state is different. Thus, what is attempted is the identifying of issues so that landowners and others can begin conversations with at least a general appreciation of the issues that may need to be considered. Although our approach is not perfect, we hope this paper at least assists the reader in understanding and participating in the process of entering into leases and other documents commonly observed in the oil and gas industry.

REFERENCES

American Association of Professional Landmen, Oil and Gas Land Reference Volume (9th Ed.) (2010).

Richard W. Hemingway, The Law of Oil and Gas, West Publishing (3rd Ed.) (1991).

Norman J. Hyne, Ph.D., Nontechnical Guide to Petroleum Geology, Exploration, Drilling and Production, (2nd Ed.) PennWell (2001)

John S. Lowe, Oil and Gas Law, Thomson West (2003).

Williams and Meyer, Manual of Oil and Gas Terms, Matthew Bender (1976).

North Dakota Oil and Gas Lease Considerations, North Dakota State University (2006).

Rocky Mountain Mineral Law Foundation, Landman's Legal Handbook (4th Ed.) (1982).

W. L. Summers, The Law of Oil and Gas, Thomson West (2004).