

## **SECTION I: OVERVIEW**

---

### Contents:

Chapter 1:	An Overview of the Oil and Gas Industry	Joan Wilson & Linda Barry
Chapter 2:	Elements of the Lease	Judith Eubanks
Chapter 3:	An Overview of the Division Order Process	Sara K. Tays
Chapter 4:	Contracts Affecting the Division Order Analyst	Jon F. Love

## **CHAPTER 1: AN OVERVIEW OF THE OIL AND GAS INDUSTRY**

---

**Joan Wilson  
Linda Barry**

## Introduction

Before a well is drilled, a [prospect](#) is first identified. A prospect is an area that the exploration department of a production company believes would be productive to drill. In order to drill for oil or gas, a geologist locates a geologically attractive area to explore. Formerly dynamite charges were used to sound out the prospective area. Today, however, more modern methods are used, such as seismic surveys. Contracts to run seismic surveys are made with the surface owners so that crews can gather seismic data. Also, in many parts of the oil- and gas-producing states, seismic information can be purchased from another company. The next step is the interpretation of the seismic data, done by geophysicists with expertise in petroleum geologic structure. This interpretation, along with modern technology, reduces the risk taken when a company makes a decision to explore a new area for oil and gas.

## Drilling Location

Deciding where to drill a well is an educated guessing game. The economic potential of a prospect must be stringently evaluated. Since seven out of eight [wildcats](#) (a well drilled outside a known producing area) are dry, management and potential investors must feel that there will be a reasonable rate of recovery. The geologist and engineers must convince the company management that there is a sufficient reserve to warrant the expenditures to drill the well.

## Mineral Ownership

Once the company has determined that there is a potential for production in paying quantities, the landman authorizes a mineral ownership check. The landman reviews a current lease map, and then checks the ownership of the unleased minerals at the county courthouse or hires a broker to check the unleased mineral ownership. Using the information gotten from this ownership check, the

production company can determine if there are sufficient unleased minerals to give the company a solid position in the drilling prospect. Also, the ownership check will show whether other exploration companies hold mineral leases in the prospect. If the mineral ownership check shows the opportunity to lease the outstanding minerals, the landman authorizes the leasing of the prospect.

## Prospect Lease

Once the ownership check has revealed the open mineral acreage, either the landman or broker will contact the mineral owners and negotiate leases. The company tries to negotiate smaller bonuses and royalties to better the odds that the company (the [working interest owner](#)) will recover its costs and earn a profit. But this desire to pay less for the lease must be balanced against goodwill of the owners. Once a company has decided on an area of interest, secrecy prevails. Bonus payments and royalty percentages increase in areas where competition exists. Once a lease is negotiated, it must be maintained, or it will expire and the prospect cannot be drilled.

## Lease Maintenance

Leases are maintained by making a payment. There are four types of payment which maintain the lease:

**[Bonus.](#)** Given to the mineral owner in return for execution of the lease.

**[Delay Rental.](#)** Delays the drilling of a well; it is usually made annually.

**[Shut-in.](#)** Made after a well is drilled and is capable of producing though is not actually producing. (Example: A gas well is drilled, but there is not pipeline to carry the gas to market, so a payment is made until a pipeline can be connected to the well and production begins.

**Royalty.** Is a share of the monthly production; the fraction for this share is found on the face of the lease.

Leases are maintained and recorded in the Lease Records Department of the production company. The most important functions of a Lease Records Department are to see that all leases and assignments are recorded, that the leases are maintained, and that all contractual agreements correctly state the intent of the parties.

If all of the leases have not been drilled, or **farmed out** (drilled by another company) or had dry holes at the end of the primary term, the land and exploration departments must determine if drilling should be started before the leases expire or if the leases should be dropped with no additional expenditures.

### Operating Agreement

If a company does not hold all of the leases in a prospective area, the company holding the largest leasehold will usually pursue the other leaseholders and ask them to join in the drilling of the prospect or to farm out their interest. The Landman negotiates the best **Joint Operating Agreement** (JOA) for his company while ensuring the prospect will be drilled. The JOA dictates the procedures for all operations of the well from the time of full execution. The JOA contains such information as well location and number of wells to be drilled, gas sales procedures, procedures when large amounts of money will be required, **overhead rates**, and accounting and audit procedures. Note: Overhead rate is the monthly charge to be billed to all working interest partners and credited to the operator to cover the costs associated with the operations. Prior to the negotiation of the JOA, the lessee is responsible for all costs. After the JOA, all partners share in the costs of the drilling, completing and operating in accordance with their interest in the well as set out in the JOA. In most cases the net

mineral acres owned by each participant divided by the total mineral acres in the anticipated property will equal each owner's share of all further costs. (Example: Company A contributes 320 acres, Company B contributes 160 acres, and Company C contributes 160 acres. The unit is 640 acres. Under the usual JOA, each company's share will be: A=50%, B=25%, C=25% of the costs.)

Each partner signs an Authorization for Expenditures (AFE) which commits his or her company to the payment of the estimated expenses for drilling and completing a well which are set out in the AFE. If more expenses are incurred, the operator must get a Supplement to the AFE.

### Drillsite Title

Before a well can be drilled, the landman orders a drillsite **title opinion**. This opinion is obtained from a title attorney licensed to practice in the state where the property is located and who is experienced with the title in the area where the proposed well is located. He or she will determine the ownership in the drillsite tract. There are three major types of ownership:

**Royalty Ownership.** The mineral owner has a royalty share in the production. His or her interest is based on the royalty fraction on the lease.

**Non-Participating Royalty Owner.** An owner does not have executive rights, thus he or she cannot sign an oil and gas lease. However, he or she owns a share of any royalty the property generates.

**Overriding Royalty Owner.** This owner has a **beneficial interest** in the value of the production, which has been assigned to him or her by a lessee or reserved in an assignment to another party.

**Working Interest Owner.** This owner is a lessee who shares in all of the costs of drilling the well and is burdened by all royalties and other leasehold costs associated to his or her interest.

To create a title opinion, the courthouse records are reviewed or abstracts are obtained in order to determine the ownership in the drillsite tract. The drillsite title opinion will reflect correctly the ownership of the surface and the minerals as of the date of the opinion. It will indicate if all prior leases are invalid, and it should determine the ownership of the operating rights for the minerals to be certain the well is being drilled on a valid lease. If a well is drilled in the wrong place (unleased or owned by a different company) or to an unleased zone (zone not covered by the lease), the well becomes the property of the owner of record and the monies expended are generally not recovered. Traditionally a drillsite title opinion covered the drillsite tract of land only. However, more and more companies are obtaining title opinions for all of the lands in the unit. Thus they have to pay for one opinion only, and if the well produces, they can update the runsheets and use this opinion for division order purposes.

### Location Preparation

The cost of preparing the location includes clearing the drillsite, making the roads suitable for the heavy equipment to be delivered, surveying and staking the well bore location, digging the reserve pit, digging the cellar, and driving the conductor pipe to establish the hole location.

**Reserve pit.** The pit where debris and fluids from the hole are pumped when cleaning the well bore.

**Cellar.** A hole (6 x 8 foot wide) around conductor pipe for placing wellheads below ground level. (After stacking three wellheads when the well is completed, the final

wellhead, the **Christmas tree**, will be flush with the ground.)

### Drilling Contract

The operator contracts with a drilling company to actually drill the well. This will be the largest expenditure.

The drilling personnel consist of one (1) toolpusher and generally three (3) drilling crews working eight (8) hours each. Each drilling crew consists of a driller, a derrickman, a motorman and two floormen or roughnecks.

The drilling crews are responsible for putting the rig in place, along with other equipment which has been delivered to the location. The rig itself must be assembled and then raised.

Each of the crewmen has a specific job. The driller, besides being responsible for the actions of the entire crew, manages the draw works (the power pulley system) and the control console for all of the drilling equipment, and monitors hole depth and pipe footage.

The derrickman conditions the mud, maintains the pumps and, from the monkey board approximately 85' above the derrick floor, handles the pipe being put into or taken out of the hole.

The motorman maintains all of the many motors, the light plant (power plant) and all diesel and water lines.

The floormen keep pipe to be used pulled off the racks and stacked on the floor, make connections with collars between joints of pipe going into the hole, and maintain the rig floor.

The hole is bored with drill pipe reaming the hole. A string of casing is run into the hole at predetermined intervals, then requiring a smaller outer diameter hole to be drilled below each string of casing set. Prior to setting each string, logs are run to determine what permeable, and

possibly productive, sands have been drilled to that point.

Also, a wireline survey is run at approximately each 500' of hole to verify that the hole is straight. If there has been any deviation, the crew must come out of the hole and straighten it to a true vertical direction. If a well is to be directionally drilled, ( not a true vertical hole), the wireline surveys become even more important as directional drilling is stringently regulated by the oil- and gas-producing states.

When the well is at the total projected (or planned) depth, the most important log is run. It will determine if the well is productive. If it is not productive, the hole is cemented from the bottom with cement plugs at every porous zone and every quarter stage up the hole. The final cement plug is from approximately a 50' depth to the surface.

If a producing zone was found, the production string (pipe) is put down, the drillpipe is pulled out of the hole, and the well head is set. The logging crew then perforates the production string in the producing zone, the rig is taken down and moved off, and the completion crew moves in.

### Well Completion

The completion rig is smaller than the drilling rig; once set up, the crew places a “packer” below the producing zone to plug the hole below. They then run production tubing inside the casing, setting another packer above the producing zone. During the drilling stage of the well, drilling mud was used to prevent oil and/or gas from escaping the hole. Now water is pumped down the hole to force out the mud.

After the hole is cleaned up, the crew opens the top packer to allow the oil or gas to flow up the production tubing. The well is further cleaned and the well pressure is tested for at least twenty-four hours. If the well is a gas well, the Christmas tree, the final well head,

which controls pressure and the flow of gas from the well, is set. Now the completion rig is moved out.

### Production Equipment

Next the location crew moves in. Their responsibility is to clean up the area around the well and set the oil storage tanks and separator in place, run the lines from the wellhead to the equipment, and run the gas sales line to the connection point with the gas purchaser's pipeline. If they don't do a good job, the surface owner, who may not be a mineral owner, will be beating down the door of the operator.

**Oil storage tank.** Tanks capable of holding from 250 to 500 barrels of oil or condensate (Note: a barrel holds 42 gallons). Trucks from the oil purchasing company empty the tanks when the pumper advises they have sufficient quantity.

**Separator.** Equipment that allows the lighter weight gaseous vapors to escape into the gas lines from the top while flowing the heavier oil or condensate into lines at the bottom to the storage tanks.

Finally the pumper, who is usually a regular company employee, turns the well on.

### Sale of Oil and Gas

Definitions of products from a well:

**Oil** are the liquids produced from an oil formation.

**Condensate** is the liquid produced with natural gas from a gas formation.

**Gas** is the vaporous natural gas produced from a gas formation.

Casinghead gas is gas produced from an oil well or oil formation, containing some amount of butane, propane, ethane, etc.

The operator of the well will negotiate an oil and/or gas contract. Most of the time the royalty owners will sell their production with the operator. Working interest owners may also sell with the operator. However, most JOAs allow the working interest owners to take their product “in kind” and sell it under their own agreements.

Long term oil contracts are no longer used; most state governments require that oil and gas contracts can be terminated after 30 days with proper notification. The basis for oil pricing may include the cost of trucking and the price variable of each point of gravity as well as the base price. Gas is sold under a short term gas contracts or on a Spot Market (a given number of MCF sold during one given month for a price for that sale only.)

Gas from individual wells is measured through meters and then gathered, compressed, and treated if necessary. It is then moved to a gas processing plant where it is processed and transferred to the end user. A gas sale may occur at several points: the well head, the field meter, the gathering meter, the plant entrance or plant exit.

Each working interest owner often negotiates his or her own contract for the best price. When this happens sometimes one owner sells more gas than the others, so the other partner has to sell more gas at a later date or a gas imbalance will occur. If a well is out of balance at the time it can no longer produce (depletion) then the owners will have to “cash balance”.

Under the JOA, the operator is responsible for all operations of the well including administrative and accounting functions.

## Division Orders

One of the functions of an operator is to prepare the divisions of interest (DOI) and division orders. A division of interest is a list of all the owners in the well along with their decimal ownership and interest type and pay status. A division order is the document which contains the list of owners, their decimal interest and interest type along with the well name, description and certain clauses regarding ownership. The division order is mailed to the owners in the well for verification of their interest, address and social security number or tax identification number. Note: Many companies no longer send the entire division order to each owner; they send a division order which reflects only the interest of the one owner to whom the division order is addressed.

When a well is completed, a division order title opinion is ordered, usually from the same title attorney who prepared the drilling opinion. The drilling title opinion is concerned with drillsite ownership, operating rights, and correct location, while the division order title opinion details each owner under each tract and his or her exact interest in the production. All clouds or questions about the title are set out. Requirements to be satisfied to correct fractions of production credited to the owner and ensure the proper payment also are set out on the division order title opinion.

**Note:** Many companies are now only ordering one title opinion at the time of the drilling of the well. If that is what is done, the title information would be updated and the division order analyst would review all of the new title documents to determine any changes of ownership since the time of the original title opinion.

A division order analyst reviews this division order title opinion and cures the requirements or waives those that are considered a reasonable business risk. When the division

order is mailed out, the division order analyst sends a division of interest to Revenue Accounting and to Joint Interest Billing. Each owner's interest is either released for payment or the payment is suspended waiting on satisfaction of title requirements.

## Accounting

When the joint interest billing department receives the DOI, it updates the billing decks and bills the working interest partners in accordance with their correct decimal interest in the well.

Under the terms of the gas purchase contract or the oil purchase contract, the purchaser begins paying the operator each month for the production from the well. The revenue accountant must verify that payment is received and that the values are correct according to the contracts. Then the revenue must be posted on a DOI showing all owners who share the proceeds. The revenues are released to the owners and monthly checks are mailed for production to each owner.

When the division order analyst is notified of a change of ownership caused by the transfer of an interest or the death of an owner, he or she updates the DOI and sends out a Supplemental Division Order or a Transfer Order to the new owner.

## Other Operator Accounting Functions

There are many other accounting functions that must be handled by the operator's accounting department. Some of these are:

**Payouts.** Farm-ins, non-consents by partners, and unleased mineral interests are a few of the situations that require payout statements to be completed monthly until payout occurs and the interests of the parties have been changed in accordance with the particular agreements.

**Gas Balancing.** If all partners are not simultaneously selling their gas at any time, balancing statements must be completed monthly until sales are in balance in accordance with the gas balancing agreement.

**Property Taxes.** The operator is responsible for property tax renditions, payment on behalf of all working interest owners and proportionate billing to the partners.

**State and Federal Audits.** When taxes and/or royalties paid to the state and federal governments are audited, the operator's accounting department must provide both information and support, respond to the audit, refute invalid claims, and pay valid exceptions.

## Production Department and Accounting

The Production Department is responsible for all phases of maintaining the well in producing condition. As in each of the operator's primary functions, this department's responsibilities are multi-faceted.

This department files all required state (or federal) forms regarding well location, depth, well tests, and monthly production and sales reports.

They contract services for well capability analysis, chromatographic analysis, and meter calibrations. These tests are conducted to satisfy both state requirements and other contractual obligations.

Well gas meter and stock tank volumes are read and reported daily by a department employee. Any problems with the well are reported and analyzed, and solutions are determined.

Major expenditures to correct a well problem require an Authorization for Expenditure (AFE). The AFE is prepared and mailed to the

working interest partners by the production department. A limited amount of time is given the partners to make their election prior to proceeding with the remedial work.

If any partner declines participation in the additional cost of the well, the working interest ownership in the well changes temporarily and this affects division orders, joint interest accounting and revenue accounting as well as gas balancing.

### Plugging or Secondary Recovery

At the end of the life of an oil well, secondary recovery may be possible. The management team must decide if the potential production will be greater than the cost of creating a secondary recovery. A secondary recovery unit will require a unit agreement executed by most of the owners. A secondary recovery unit can extend the life of the field for 10-20 years. If a secondary recovery is not possible, the well is plugged.

Plugging is necessary to protect the environment and the formations. Proper plugging notices and forms must be filed with the state.

### Conclusion

The life of an oil or gas well is complex and the methods used to locate and produce oil and gas are ever changing. Each phase in the life of a well is necessary to produce the hydrocarbons. Anyone working in the oil and gas industry performs a much needed service for the world community.

**Judith Eubanks**  
Copyright © by Petroleum Extension Service (PETEX),  
The University of Texas at Austin,  
and reprinted with permission from *Land and Leasing*.

## Lease forms

In the course of negotiations, the landowner will be offered a lease which the landman for the leasing company has approved. It will have clauses which are favorable to the company. An experienced lessor will supply his or her own form or one which has been written by his or her attorney. The days of short, simple, handwritten leases are more than 100 years in the past. Such early oil leases were modeled on instruments that permitted exploration and drilling for salt water; simple as they were, they contained several basic elements still found in oil and gas leases. These include a description of the land, a conveyance of specified rights, an obligation to drill and to pay a percentage of the production to the landowner, and a forfeiture clause. The development of the petroleum industry has brought with it more and more complicated lease clauses. The courts have often construed (interpreted) leases when the parties disagreed over terms or compensation. Much history and considerable litigation have produced lease forms that any prudent landowner will wish to have examined by his or her attorney; the sheer complexity of such instruments often requires this step. Many attorneys who specialize in oil and gas work do not attempt to decide for their clients what prices should be asked or settled for. They have enough to do in explaining and amending lease clauses so that landowners thoroughly understand the terms they are confronted with.

## State and federal forms

The forms used by state and federal governments for the lease of their lands are clearly standardized in the sense of being printed up in uniform batches for the various agencies. While such forms may vary with the *kinds* of property to be leased, a prospective lessee has only to query the proper office to get samples and instructions on how to proceed. In contrast, the lease forms used by

private companies vary far more widely. There are literally hundreds of different forms in use, and more are being drawn up all the time.

## Forms printed by private companies

**The *Producers 88*.** Many of the lease forms used by the industry are titled *Producers 88* or *Standard Form 88, Producer's Special*. The *88* title is often joined with a term like *Revised* or *Pooling* or some other designation. When an operator, landman, or royalty owner refers to a standard lease, it is usually some form of the *Producers 88* that he or she has in mind. Oddly enough, the standard title now runs across the top of hundreds of very different forms, all of them considerably changed from the original *Producer's Special*. That original form was run off by an Oklahoma printing company, which simply indicated the number of the form it was currently printing at the top of the document. Historically, the number *88* has, so far as anyone can tell, no more significance than that. The oil and gas lease being printed up was called a *producer's* form because the printer wanted to create a form acceptable to a number of oil producers in his own state of Oklahoma and nearby states. Since the printing company had the reputation of not changing its forms without changing titles as well, Oklahoma landowners felt that they could rely on the *Producer's 88*. The form quickly became so popular that many landowners refused to sign leases that did not bear the familiar title.

**Revised versions of the *88*.** The original *88* form was, of course, drawn up to meet the needs of those who would be obtaining leases. Today many oil and gas companies have their own *88* forms, and careful attention is given to drafting the clauses in these updated versions of the *Producer's Special*. A number of printing companies also produce *88* forms and revise them regularly to keep them consistent with court decisions on leasing. Indications of such revisions generally appear

on the form, often in the upper left-hand corner. For example, a form might be titled *Producers 88 (12, 82) Revised*. With the universal use of computer generated leases, companies can easily create their own lease forms but they often type “Producers 88” in the header of the document so that it appears to be a standard form. It is truly only the “standard” form used by the leasing company.

The so-called standard form, then, appears in so many variations that it is not standard at all. The courts have long recognized this fact, though some landowners and even some attorneys have not. In *Fagg v. Texas Co.*, 57 S. W. 2d 87 (Tex. Civ. App. 1933), an option to lease that called for the use of an *88 form lease* was held by the court to be invalid. The description of the form was judged too vague to be useful, given the number of different 88 forms on the market. "As we see it, the reference to an 88 Form lease is as incapable of definite application as if the term 'oil and gas lease form' had been used instead." In areas with intensive drilling and exploration, 88 forms can usually be bought in local office supply stores, drug stores, and variety stores and are generated by the leasing companies to suit the special situations encountered in the leasing area.

### Forms prepared for individuals and associations

**Landowners forms.** A number of local and regional associations, formed to advance the interests of surface and mineral owners, print lease forms which they recommend that their members use. These forms vary a great deal, and a lease suitable for one region may be regarded with horror by landmen and oil companies in another area. In general, forms printed for landowners or even specifically requested by them will be very carefully scrutinized by potential lessees. In some cases, a landowner will have no great objection to using the oil company's form but will have additions and alterations in mind. When these

are extensive — or when the landowner asks for a typed rather than a printed lease — the landman will often suggest that the drafting be done by attorneys.

**Attorneys' forms.** Many oil and gas attorneys who regularly represent landowners not only draft leases but also have their own printed lease forms. And quite a number of these printed forms are titled *Producer's Special 88* — out of deference to convention, since the forms are not likely to favor the producer. They are often modeled on state lease forms that, quite naturally, favor the lessor. In Texas, for example, the forms that can be obtained from the General Land Office for the leasing of minerally classified lands are sometimes used as examples by attorneys drawing up their own forms for the lessor. The urge to produce a neatly printed form seems almost universal in the industry. The proliferation of paper owes something, no doubt, to the tendency most people have to accept printed information more readily than that conveyed by less official means. Typed emendations to leases may be objected to, while the same provisions, in a printed lease form, arouse no objections. Best of all, from the clerical and administrative points of view, are standard, familiar forms that present none of the unusual features of a hand-drawn or special lease. Even when brokers or landmen create their own forms in word processing software they print it so that it appears to be a “standard” printed form lease.

The landowner, of course, may take a different view of the matter, reading the fine print with care and holding out for his or her cherished emendations. A lease negotiation is rather commonly a battle of wits, with the lease form serving as the field of the contest. Capable attorneys on both sides, however, know the value of lease clauses that are fair to all the parties. Unfair or unreasonable terms, even if accepted, can lead to dissatisfaction and to litigation later on. A good oil and gas attorney will do his or her best to look after

his or her client's interest and draft an instrument that all the parties can live with. If he does his job well, his client should not need — or want — to contest the lease once the wells begin to flow.

### Lease provisions

The most common lease provisions include title; date; parties; consideration; granting clause; description; Mother Hubbard clause; habendum clause; royalty clause; shut-in royalty clause; drilling and delay rental clause; dry hole, cessation of production, and continuous drilling clauses; pooling and unitization clause; surrender clause; damage clause; assignment clause; warranty and proportionate reduction clauses; force majeure clause; and legal effect clause and lessor's signature. Some of these clauses, though commonplace, apply only to gas wells. Virtually all the clauses are negotiable, as more and more landowners are discovering. Certainly all of the clauses need care and thought in the drafting. While it might not seem that matters as apparently simple as the title of the lease or the names of the parties could give rise to dispute, even these elements should be as clear and unambiguous as possible. Otherwise, a judge may someday be forced to consider and rule on the intended meaning of a doubtful sentence, phrase, or bit of punctuation.

**Title.** The many leases used in the oil and gas industry are titled "Oil, Gas and Mineral Lease." Like some other forms it includes the word *mineral* in its title and refers to other minerals in the body of the lease. Since some older leases have been used to justify the mining of coal, iron, uranium, clays, and other substances (though the lessor intended only the removal of oil or natural gas), the courts have tended to rule very carefully on what can be called a mineral. Lessor and lessee should avoid ambiguities by naming the specific substances which the lease is to cover.

In addition to limiting the lease title to *Oil and Gas*, some attorneys add a provision which specifies that the oil and gas in question are those *derived from petroleum substances only* or *derived from petroleum or associated hydrocarbons*. If by-products like sulfur or helium are expected in any quantity, such products are usually named in the lease; separate royalties may be arranged for one or more of them. In any case, unintended substances like lignite or uranium should not slip into a lease via a vague catchall phrase like *other minerals*.

**Date.** An undated lease is not void but generally takes effect when it is executed and delivered. (Note: When a lease is undated, it has been the practice at many companies to use the date of the acknowledgment by the lessor as the controlling date.) Any lease *should* be dated, however, and its dating may prove important if there should be any dispute later about which of two documents is the earlier. The controlling date, for any lease, is the one written in the instrument — not the date on which it was executed (signed), notarized, or recorded.

**Parties.** A lease must name all the parties involved in the agreement. The *grantor*, who grants the lease, is referred to in the body of the lease as the *lessor* even if more than one person executes the instrument as a lessor. The *grantee*, or person receiving the right to search for and produce oil or gas, is subsequently referred to as the *lessee*. In most states, lessors' addresses, as well as their names, must appear on the lease. Some states (Louisiana, for example) also require indication of the parties' marital status.

Where possible, cotenants (co-owners) are usually named as lessors in one lease. The awkward alternative is to have each owner execute a separate lease that covers only his or her undivided interest. Lessees also try to

provide for the possible failure of one or more of the named lessors to execute the lease. In such a case, the lease is generally enforceable between the lessee and any lessors who do sign.

**Consideration.** Consideration is the benefit required to make a contract valid. Even in states that do not view oil and gas leases as contracts but as, for example, conveyances of interests in land, consideration is still required. The benefit to the lessor can be broken down into payments in cash and payments in kind. Royalties are usually described as payments in kind, that is, as the landowner's share of the oil or gas actually produced. Delay rentals and lease bonuses are paid in cash. All three payments appear in the oil and gas lease; royalties and rentals have their own separate clauses, and the lease bonus is mentioned in the granting clause. Commonly, on a government lease the full amount of the bonus is written on the face of the lease. In private leases, the bonus consideration is often set out as a nominal amount — \$10.00 or so — while the real bonus is paid by draft or check. In Louisiana, a *serious consideration* is necessary to complete the transfer; elsewhere, nominal amounts will generally suffice to support all the terms and provisions spelled out in a lease.

**Granting Clause.** The important granting clause specifies the rights and interests granted by the lessor to the lessee. The words used to establish a leasehold are words like grant, devise, *lease*, and *let*. In return for consideration (the bonus), a lessee usually obtains the *exclusive* rights to search and drill for, then to produce oil and gas. While such rights could, in theory, be nonexclusive, it is doubtful that several lessees would consent to a competitive cotenant arrangement.

The kinds of operations that can be carried out in the course of exploration, drilling, and production should be clearly described. Many leases, however, use rather broad terms for

listing these operations. As a result of such vagueness, the courts have defined a number of activities as *implied* by an oil and gas lease, whether these are spelled out in the granting clause or not. In Texas, for example, these implied rights include permission to enter and exit front the property, to set up equipment, to drill, to use improved recovery techniques and saltwater injection. Use of the land's surface, though, has given rise to so much disagreement and litigation that both lessor and lessee will be prudent not to rely on implication. The extent of surface use — for roads, pipelines, tanks, power stations, employee housing, and so on — should be specified.

The granting clause is also the place for being very clear about which minerals are covered by the lease. In addition to oil and natural gas, other related substances found in the oil and gas stream (distillate, condensate, casinghead gas, helium, sulfur, etc.) need to be mentioned. If the lessor is concerned about having his or her land restored after production has ceased, he or she may add a stipulation requiring the lessee to leave the property as he or she found it, or as nearly so as possible. Finally, the granting clause is usually the section of the lease that describes the land.

**Description.** A legal description is a necessary element in an oil and gas lease. If the lessor owns the entire undivided interest in the land being leased, a description should be perfectly straightforward. If the lessor owns only a part interest in the mineral estate, certain points need to be considered. If, for example, the description makes use of an earlier instrument, like a deed, it may include the fractional interest conveyed in that earlier instrument. But the landowner may now own or intend to lease a different fractional interest. Reliance on instruments like deeds should be discriminating. The purely descriptive parts of earlier documents should be used, and the question of whether to

specify the fractional interest owned by the lessor should be decided separately.

Since many leases are taken as quickly as possible after a check of the county records, a lessee is often in the position of not knowing whether a lessor does in fact own all or only a portion of his or her mineral rights. This uncertainty (left unclarified until the title examination) has led to the use of *lesser interest* or *proportionate reduction* clauses that allow lessees to reduce rents and royalties proportionately if it turns out that the owner owns less than all of the minerals. From the lessee's point of view, it is desirable that no confusion arise to limit this right to reduce rents and royalties. When a lease does contain a lesser interest clause, the landman will usually urge that the land description omit any reference to a fractional undivided interest. Leases that contain *both* a lesser interest clause and a description specifying a partial interest have led to litigation and in some cases to decisions in favor of the lessor. From the landowner's point of view, a lesser interest clause (though fair in and of itself) seems inconsistent with another commonly included clause that warrants title. Attorneys who represent landowners will very frequently argue for the removal of warranty clauses. This done, there is little to object to in a lesser interest clause that allows an oil company to pay in proportion to actual ownership. Finally, landowners may wish to follow the land description with a *depth limitation*, thereby leasing their minerals to specified depths from the drill pad. Strata below these depths are not covered by the terms of the lease. It is generally desirable to measure depth limits in feet, yards, or meters rather than by reference to named producing strata, though either method can have unusual or unwanted results when drilling reveals more about the geology underlying the land. Measurement in standard units is, in some cases, so difficult that the safer, less ambiguous reference would be to the base of a known formation.

**Mother Hubbard Clause.** The Mother Hubbard clause, also referred to as a coverall clause, sometimes follows the land description. Its intention is to perfect that description by including in the lease any small or oddly shaped bits of land owned by the lessor and *contiguous with, adjoining, or adjacent to* the described tract. Such bits and pieces, it is reasoned, can be left out of surveys and boundary descriptions. A Mother Hubbard clause scoops up *lands adjoining the herein described land up to the boundaries of the abutting landowners* and includes them in the lease. The difficulty arises when such a clause seems to make the lease apply to lands that the landowner himself did not intend to lease. A broadly worded clause could be broadly interpreted by the courts, and in fact litigation has put various Mother Hubbard clauses to the test. To avoid such problems, many attorneys suggest omitting the clause or at least carefully limiting its applicability —for example, to 5 or 10 percent of the amount of land in the legal description.

**Habendum Clause.** The habendum clause is sometimes called the *term* clause and fixes the duration of the lessee's interest, just as the granting clause fixes the nature of that interest. The primary term — generally used as an exploration period — is given in days or years; during this term, the lessee is obliged to begin or complete a well (as specified in the lease) or pay delay rentals that usually begin on the next anniversary date of the instrument. The secondary term is conditional and depends upon the production of oil or gas (or other minerals). Even when it is not so stated in the lease, courts have generally held that production in *paying quantities* or in *commercial quantities* is required to hold the lease in effect during this secondary term. The courts have variously interpreted *paying* production to mean *profitable* or such as would encourage a reasonable and prudent operator to continue even in the absence of cash profit. In view of these interpretations, lessors may want to establish a standard for paying

production and list the operational costs to be considered, how temporary low production is to be viewed, and so on.

**Royalty Clause.** Royalty is the percentage of production paid to the landowner. Oil royalties may be paid in kind; the lessor may, if he or she chooses, receive his or her oil from the lessee and market it himself or herself. In fact, most lessors prefer to receive the posted market price of the oil in money.

Gas royalties are normally paid in money. Establishing the value of the gas, however, has led to much confusion, disagreement, and litigation. Landowners who want the *market value at the mouth of the well* have been urging their interpretation of this phrase on some producers hard-pressed by the rapid rise in gas prices. Such producers may be caught by contracts with pipeline companies; yet, according to this interpretation, they might be required to pay royalties calculated on current market values while receiving payment from gas purchasers at older, and much lower, prices.

One possible way out of this dilemma, for the producer or the landowner, is for the landowner to take gas royalties in kind and arrange to market the gas himself or herself. Some Louisiana owners, for example, do their own marketing if the producer is unable or unwilling to. If the owner prefers not to market his or her gas, he or she may specify in the royalty clause that he or she will join the lessee in any marketing contract undertaken as an *arm's length* transaction. (Such a transaction assumes willing, uncompelled sellers and buyers.) A variation on this kind of agreement would include the possibility that the lessee purchase the lessor's gas at arm's length prices. In any case, the landowner should not receive a royalty based on a lower price than that received by the lessee. (Such is the intended meaning of *market value at the mouth of the well* in producers' leases that use the phrase.)

The royalty clause is the place to specify any separate royalties for substances produced as by-products of the oil and gas stream—sulfur, for instance. It is also the place to mention *free use of gas* by the landowner. Many landowners wish to include this money-saving provision, but they should certainly consider the risks involved and be willing to stipulate that their use of gas from the producer's wells is at their own risk and expense.

Today more and more mineral owners are creating more complicated royalty paragraphs. Some owners are asking for sliding scale royalties. These are royalty rates that increase or decrease as production from a well or wells on the property increases or decreases. For an example see the Addendum Example 6.

Finally, landowners concerned about prompt receipt of royalties sometimes place a royalty due date in the lease. Failure to make timely payment may involve the addition of interest charges and/or the termination of the lease after a month's written notice.

**Shut-In Royalty Clause.** Shut-in payments (substitutes for production on gas wells shut in by the producer) must be paid to royalty owners, including the lessor *if* he or she owns a royalty interest. The purpose of this provision is to allow a lessee to hold the lease on a nonproducing well until he or she can find a market or until a transmitting pipeline becomes available. (Producing wells are sometimes shut in for workover or because of a cutback in production by the pipeline company.) Today, landowners are likely to limit shut-in privileges to definite terms of two, three, or five years and to negotiate for higher shut-in royalties. They believe that higher royalties will spur producers to find markets or give up their leases. Shut-in royalties, of whatever size, are intended to apply to wells that can produce in commercial amounts; the lease should probably mention this condition.

**Drilling and Delay Rental Clause.** Also known as the *unless* clause, the drilling and delay rental provision has replaced the old drill-or-pay notion. Drill or pay was a means of forestalling conflict over the question of how quickly leased land should be developed. In the early days of the industry, landowners' only consideration came from royalties; they wanted their property made productive as rapidly as possible. On the other hand, oil companies had begun to acquire leases in order to have petroleum reserves and had their own timetables for development of these reserves. Eventually, this source of conflict was partially settled by lease provisions that gave the lessee three choices: he or she could drill or pay rental to defer drilling or terminate the lease. Today, a lease usually expires one year from the date on the instrument *unless* the operator begins operations for drilling or makes timely payment of delay rental. To defer drilling past the primary term of the lease generally voids the instrument

A number of states, Texas among them, are severe about nonpayment or untimely payment of delay rentals. A check or draft posted in good time but lost in the mail may be viewed with leniency, but other excuses may do nothing to save the lease. Lessors sometimes wonder, when they do not receive a rental check, just what constitutes the commencement of drilling. To avoid dispute about this issue, the required operations are frequently specified in the lease. Finally, one kind of lease, called a *paid-up lease*, settles the whole matter of future rentals by providing for their payment along with the cash bonus. No further action is required during the primary term.

**Dry Hole, Cessation of Production, and Continuous Drilling Clauses.** The *dry hole* clause allows an operator to keep his or her lease in the event that he or she drills a dry hole. He or she has a specified period of time — which can range from 60 days to a year — within which to begin drilling a second well *or*

resume payment of delay rentals.

Similarly, if production stops for some reason, the *cessation of production* clause allows the lessee a specified length of time during which to begin new operations. These might include workover on a sluggish well to make it produce in paying quantities. Usually the clause calls for restored production, commencement of a new well, or a return to delay rentals.

A *continuous development* clause aims to keep drilling operations going steadily after the primary term has expired. Designated intervals (of 180 days, for example) between completion and new drilling require the operator to develop leased land up to its allowable density. Some landowners leave the rate of development up to the lessee. Others are particular about the designated time limits; failure to comply with these intervals commonly releases the undeveloped portions of the leased land.

**Pooling and Unitization Clause.** The terms *pooling* and *unitization* are often used interchangeably, but they refer to different undertakings. When a lessee pools leased land, he or she is usually combining small or irregular tracts into a unit big enough to meet state spacing regulations for drilling. The unit size required will vary from one state to another and sometimes from one field to another. As an example, a lessee may need units of 40 acres to drill oil wells and units of 640 acres to drill deep gas wells. A clause in the lease that permits him or her, at his or her discretion, to merge separately acquired tracts and treat them as a single unit is advantageous in several ways. He or she can develop the tracts more efficiently and more economically, since he or she need not worry about drilling offset wells. Nor need the lessee pay as many delay rentals; a producing well anywhere on the pooled acreage will mean the beginning of royalty payments to all the landowners and the end of rentals to all. Unless the

landowners have specified otherwise, a well anywhere on the unit will also hold the leases on each pooled tract through the primary and secondary terms. Royalty is almost invariably shared on the basis of percentage of surface acres in the pool.

Unitization involves combining tracts, too, but generally on a larger scale. Whole reservoirs, or large sections of them, are often unitized to make secondary and tertiary recovery operations possible. The principle is the same, and the advantages to the operator very similar. Landowners may also benefit from these arrangements. They will want to negotiate the relevant clauses with care, though, because the legal effects are quite complex. For example, royalty owners must share production with other parties in the unit. This sharing is often calculated on the percentage of reservoir each owner has contributed to the unit. If engineering and geological studies show the reservoir to be unequally distributed underneath the tracts of land, one owner may have a lower or higher percentage of royalty than others with tracts of the same size. (A unitization requires ratification by a substantial majority of the owners involved precisely because sharing may not be proportionate to the acreage contributed. Pooling, however, generally requires no consent from the landowners but does require the consent of the nonparticipating royalty owners.)

A pool or unitization can also affect the habendum clause in each owner's lease. To keep a well anywhere on the unit from holding all the leased land, owners sometimes require the insertion of a Pugh clause. Such a clause provides for the release of nonproducing acreage and strata at a specified date or in the absence of specified development.

**Surrender Clause.** A surrender clause spells out the procedure for the lessee's voluntary surrender of all or part of his leased interests.

He can also terminate the lease by failing to comply with its conditions, but such failure is presumably involuntary. It is always prudent to require from the lessee a written notice of surrender; this notice can be recorded and will provide the landowner with a clear title if he or she wishes to lease his property again.

**Damage Clause.** Many operators pay for damage to the surface voluntarily. However, most leases do include a clause which specifies that the lessee will be liable to the surface owner for damage to all growing crops and other items listed. Some damage clauses omit the reference to growing crops. Some add improvements to the site, along with any special considerations like timber or pasture that need protection. The damage clause should be particularly tailored to the requirements of the individual landowner.

**Assignment Clause.** Leases can be freely assigned by lessor or lessee. Ordinarily, neither must have the other's permission to sell, trade, gamble away, or otherwise transfer a lease to someone else. From the lessee's point of view especially, this assignable character of a lease can be quite an asset; leases frequently change hands a number of times before and sometimes after production begins. It is a good idea, therefore, to require that both parties give notice of such transfers. The landowner will need to know the names and addresses of all the assignees that the original lessee has dealt with, if only to be sure about who has a right to be on the property. Should delay rental payments ever stop (suggesting that the lessee has simply dropped the lease) the landowner will also want to know whom to contact to get a release. Lessees who assign only a part of their interest are, of course, obliged to arrange for the timely payment of delay rentals (dividing these, perhaps, between themselves and their assignees) to keep the lease in force.

On the other hand, the lessee should be

promptly informed of any assignments by the landowner so that rentals and royalties will be paid to the proper persons. The lessee must also change the lease records to reflect changes in ownership. An assignment clause usually specifies that such changes are not binding on a lessee *until* he or she has received some formal notice. In general, assignments that change and/or divide leased interests must not increase the obligations or decrease the rights of the lessee.

**Warranty and Proportionate Reduction Clauses.** As the discussion of land description pointed out, many landowners and their attorneys believe that the warranty and the proportionate reduction clauses contradict each other. The first seems to guarantee clear title, while the second provides for the possibility that an owner owns less than his or her land description claims. Although few owners dispute the justice of a proportionate reduction in rentals and royalties if their interests turn out to be smaller than at first thought, a number of owners refuse to provide title guarantees at all and insist that warranty clauses be removed. Whether or not a lessee will strike the warranty clause — or agree to something less than a general warranty of title — will depend in part on how badly he or she wants the property. Other portions of this clause are less likely to arouse objections. These generally include the lessee's rights in the event that the lessor defaults on obligations like taxes and mortgages.

**Force Majeure Clause.** The force majeure clause usually contains a reminder that the lease is subject to state and federal laws. It also excuses the lessee from the timely performance of his or her obligations if certain kinds of events (beyond the lessee's power to control) occur. Such events tend to be catastrophic or at least highly unpleasant. Examples are acts of war or rebellion, fire, flood, and other disasters known as *acts of God*. Forms of government interference that

cannot be blamed on the lessee may also be taken into consideration.

**Legal Effect Clause and Lessor's Signature.** The legal effect clause binds the parties and declares the lease effective for the lessor when he or she signs the instrument. Lessors' signatures are dated and, depending upon the state in which the lease is executed, must follow certain conventions. Here it can be pointed out that a lessor needs to sign in the same form he or she used in acquiring the land. If maiden names, nicknames, initials, and so forth appear on earlier instruments like deeds, then these forms should be duplicated — with any additions or alternatives — on the lease. Representatives of other persons should clearly specify the legal capacity in which they are signing, along with their own names and the names of those they represent.

## **CHAPTER 3: AN OVERVIEW OF THE DIVISION ORDER PROCESS**

---

**Sara K. Tays**

**Jeffersonian Description added by Linda Barry**

## The division order analyst personality

Division order work is not an exact science. Most of the decisions you make as a division order analyst will be based on legal principles and common sense applied to individual problems. The ability to think, reason, communicate and make decisions will be called into play every day. Patience and courtesy should always control your actions and responses, because division order analysts have the opportunity to be the greatest public relations people in the oil industry. The analyst may be the only contact that thousands of people in this country have with the oil business. The patience and care shown in handling the concerns and questions of interest owners will be reflected in the goodwill your company earns. There is no one who deserves more careful and courteous treatment than the lessor of your lease.

The following chapter is an overview of the basic knowledge every Analyst should have mastered in his or her career as a Division Order Analyst. The purpose of the materials is to give a basic understanding of the division order function and the legal concepts which act as groundwork for division order work. Please note that these materials are not intended as legal advice.

## The basic responsibilities of a division order analyst

To the uninitiated, a division order analyst appears to be someone working with mounds of paper, receiving numerous telephone calls and adding up numbers to send to accounting from a title list furnished by an attorney. A division order analyst may do all of these things, requiring that the division order analyst be well versed in many areas.

Some of the responsibilities of the analyst include reviewing the events in a chain of title, if necessary, back to the inception of the title, understanding the legal implications of the events, and being able to detect problems in the title. The analyst then may review the marketing

arrangements and ultimately translates all these events into some format for accounting, such as a division of interest, so that the revenue may be applied and current owners paid their correct share of production or proceeds. The division order analyst must be part detective, translator, legal specialist, customer service representative and decision maker in order to accomplish all of these things.

The goal of the division order analyst is not only to make sure all parties for which the analyst's company is responsible for paying are paid, but also that the analyst's company is paid for its producing properties. Also, when changes of ownership occur, the analyst is responsible for reviewing the documents effecting the change and again, making sure the current owner of a producing property is being paid correctly.

Achieving these goals means the analyst must be able to locate producing properties, review the title and communicate the ownership to the accounting function so the owner can be paid.

The following topics are discussed in this chapter:

- Definition and history of a division order
- Attributes of a division order
- Basic concepts of oil and gas law as they relate to division order work
- How to review ownership information to set up a division order.

## Division order definition

Definitions of a [division order](#) are widely varied, some by the function of a division order and some by the laws of the state in which the property covered by the division order is located. The first thing to remember about oil and gas law, division order work, and the surrounding land functions is that some of the principles may be abstract. The concepts are legal in nature and many are constantly being tested in court cases. The actual nature of the division order itself is one of the concepts continually on trial.

However, one of the best definitions found is by John S. Lowe, Professor of Law at The University of Tulsa, Tulsa, Oklahoma: a **division order** is an authorization to one who has a fund for distribution from persons entitled to the fund as to how it is to be distributed.

In the oil and gas industry, division orders are entered into by royalty owners to sell oil and to give instructions for payment of delay rentals, royalties and other payments under a lease. Working interest owners also commonly sign division orders to give instructions to the purchaser of production for payment of the proceeds of the sale.

As noted in Dr. Lowe's definition, the division order can be used for several types of payments including delay rentals, shut-in royalties, and royalties from production. In this chapter, however, only division orders used for the payment of royalties will be discussed.

### History of the division order

The history of the division order begins early in the history of the oil industry. At that time oil leases generally contained prices for the royalty oil. However, changes and uncertainties in market prices soon made this an unprofitable or at least a risky agreement for the lessee. The lease did not serve well as a purchase contract and it began to evolve into an agreement without specific pricing and with an option for the royalty owner to take his fractional part of the oil in kind for sale at the best price obtainable.

The first division orders were orders of division posted on storage tanks prior to the purchase of oil from the tanks. They set out the ownership of the oil similar to the division of interest division order analysts currently send to their revenue accounting departments. The division order eventually became an agreement with conditions of sale and terms as well as ownership and price. The more easily canceled

division order serves better as a purchase agreement than the lease, which is designed as a long term agreement. By the beginning of the Twentieth century, the oil and gas division orders, much as exist today, were in use.

The types of division orders commonly used to make royalty and working interest disbursements include:

- oil
- gas
- oil and gas
- condensate
- sulfur

The next section is a comparison of oil and gas division orders.

### Oil versus gas division orders

Division orders may function differently for oil and gas, even if both are included on the same document. An oil division order may be defined as an agreement of sale between a working interest owner or royalty owner, as the owner and seller of oil, and the purchaser of the oil.

A gas division order may be considered a distribution of proceeds agreement between the royalty owner, as the owner of a percent of the gas value, and the operator, as the owner and the seller of the gas.

Definition and function of oil and gas division orders vary due to the lease provisions. Generally, a lease grants a royalty in oil as a share of that saved and produced, preserving title to the royalty oil in the royalty owner; and, the gas royalty is usually a share of the money from the sale of production, not reserving title in the gas for the lessor. This is an important consideration when dealing with oil and gas division orders.

### Parts of the division order

Division orders may vary from form to form and with each company; however, there are certain

basic parts and clauses to the division order. Some of the parts are unique to each property or owner covered in the division order. These parts would be the operator's name, well or property name, effective date and division of interest.

These unique portions of the division order are the ones the division order analyst must be able to complete when initiating a division order and to verify when reviewing a division order from another company. The other clauses, although not covered in this paper, are also significant and the analyst should have a working knowledge of these clauses and how the analyst's company, as well as the laws of the state, treat variations in these clauses.

Each company will have its own division order form(s) and methods for completing this form. All companies, however, include certain information in all division orders. These are the items which are researched, calculated and input by the division order analyst. They are, in general:

- Name of the property
- Name of the operator
- Effective date of the division order
- Legal description
- Division of interest
- Products covered by the division order
- Special clauses as necessary (such as Life Estate, Mortgage, Indemnity)

The division order analyst will locate this information through various sources, some unique to his or her company. Some of the documents which may provide this information are runsheets and copies of documents from the county records, title opinions, unit designations, gas contracts, completion reports, joint operating agreements and intracompany

reports. Look primarily to those people who initiate such information for answers. Another good source of information is the operator.

**Note:** Some states have legislated what constitutes a division order and some are reviewing such proposed legislation. Be sure to review the state laws for the state where the property is located when issuing a division order. Many companies have adopted the NADOA Model Division Order form as it conforms to the laws regarding division orders in the major oil and gas states.

### The mineral estate

Mineral ownership is based on the fact that the minerals lying below the surface such as oil, gas, sulfur, etc., known as the mineral estate, is considered to be *real property*. The mineral estate can either be tied to the surface estate or severed from it. This means that whoever owns the surface may or may not own the minerals that are below that surface. Also, this means that the mineral estate, like the surface estate, can be owned by one or more persons, sold or conveyed, leased, inherited, etc. The real estate principles of the surface generally hold true for the mineral estate.

There are several basic and unique rights to the mineral estate. Outlined below are the six rights which encompass the mineral estate:

1. Right to Execute
2. Right to Explore for Minerals
3. Right to Produce Minerals
4. Right to Receive Delay Rentals
5. Right to Receive Bonus
6. Right to Receive Royalty

One person may own all the above rights or different individuals may own each of the rights or, since each right is divisible, several entities may own various combinations of the rights. An example of the division of these rights is:

Landowner A owns all the rights and the leasehold estate. Using their *right to*

*execute*, Landowner A leases the executive right, the right to explore, and the right to produce minerals. In return Landowner A reserves a  $\frac{1}{8}$  right to receive royalty (monies from production), the right to receive a bonus the right to receive delay rentals.

Different combinations of these rights illustrate the various ownerships which occur in the mineral estate. Someone who owns only the right to receive a royalty without the rights to lease or execute may be known as a non-participating royalty owner.

### Events in a chain of title

The act of leasing is only one of the events that occurs in a chain of title. Although the analyst usually is not required to research the complete chain of title, one must have an understanding of the events and the implications of such events.

When the chain of title is examined for a particular property, it is usually done by an attorney licensed in the state where the property is located and the resulting report is called a title opinion. Generally, a title opinion will cover the ownership from inception of title. Inception is also referred to as sovereignty of the soil. If a title opinion does not cover from inception of title, then it will usually refer to another opinion that does. Inception of title or sovereignty of the soil is when private ownership first occurred, such as when certain lands were granted to people in Texas.

An illustration of events which may occur are outlined as follows:

1. Land is granted to A. Smith.
2. A. Smith sells undivided interests to J. Jones, S. Doe and C. Dow in equal shares.
3. J. Jones dies leaving a will (*testate*).
4. Per the terms of the will, J. Jones' wife, Sue, inherits one half of the interest in the land. (J. Jones purchased the property prior to marriage, making it his separate property.) Also, J. Jones' sons, Bill and Mark inherit the other half equally, subject to a

Life Estate held by their mother, Sue.

5. Sue Jones dies without a will (*intestate*); her half passes, per the state probate code, to her two sons, Bill and Mark, in equal shares. Bill and Mark automatically inherit, as remaindermen, the other half, which was their mother's Life Estate.
6. Bill Jones deeds his property to George, Sam, and Carl equally.
7. Carl leases his portion.

As this simple illustration shows, the chain of events can become quite complicated. When the example cites "undivided interest", it means that the owners take an undivided interest in the whole formerly owned by A. Smith. A good example is that a home and the land it is located on are usually owned by a couple as "undivided"; but, if they were owned "divided" one spouse might own the living room and front yard and the other the kitchen and garden spa.

Many of the events which can occur are not as clear as those described. They may include unrecorded or unclear assignments, adverse possession, illegitimate heirs, lost persons, partitioning, etc.

The calculation of Carl's interest in the original A. Smith property according to this imaginary chain of title would be:

Carl's  $\frac{1}{3}$  of Bill's  $\frac{1}{2}$  of J. Jones'  $\frac{1}{3}$  of A. Smith's or  $\frac{1}{3} \times \frac{1}{2} \times \frac{1}{3} = \frac{1}{18}$

This fractional interest would be multiplied by whatever royalty that Carl has reserved in his lease.

It is important for a division order analyst to understand legal descriptions in order to review the chain of title in context. Minerals are described by the surface connected to them even though the surface and mineral ownership may be different. The description given for a title opinion will identify the limitations of that opinion. Descriptions in pooling and unitization will describe how much of a lease is included in a unit and therefore, what participation to credit an owner

in that lease. They are also very important in deeds, wills, trust agreements, and as a part of the division order. The next section outlines the basic principles of legal descriptions.

## Legal descriptions

**Note:** The legal description portion is excerpted and condensed from *The Appraisal of Farm Real Estate* by Robert C. Suter, Ph.D., Retus, Inc. copyright 1980 [pages 103-114]. Reprinted with permission.

An adequate legal description is an essential part of many legal instruments such as deeds, land contracts, mortgages, wills and leases. Unfortunately, legal descriptions may vary, both in form and completeness. An adequate description is one which enables a surveyor to locate the tract of land without question. However, for the transferring of oil and gas interests, the requirements for an adequate description can vary from state to state. A valid description for conveyance may be as loosely described as "all my interest in the State of Texas."

There are two separate and distinct systems of land surveys in the United States. One is a [metes and bounds system](#) which describes the boundaries of a parcel of land. The other is the rectangular survey system, which describes land parcels using equal-sized townships, sections and fractions thereof.

**Metes and Bounds.** The metes and bounds system was originally used in surveying land in the thirteen colonies, Kentucky, Tennessee, parts of Ohio and Texas. Each parcel of land in these states is described independently and varies in size. The metes and bounds system describes land according to its measurement and boundaries. The following terms are integral to this system:

### *The Starting Point.*

- Any and all metes and bounds type legal descriptions have a point of reference or a starting point.
- The description then continues specified distances along given lines called **courses** until the tract has been circumscribed and the point of the beginning is reached.
- The recitals of distance and course are known as the **calls**. The calls in a legal description should describe an enclosed tract ending at the starting point. If they do, the description is said to **close**; however, this is not always the case.
- Natural monuments such as trees, rivers, lakes or stones are sometimes used as reference points. Man-made monuments, such as fences, roads, and iron posts, may also be used as reference points. However, these monuments can be moved or destroyed with time.

### *Courses and Distances.*

Courses are lines identified by direction; distances are linear measurements along these lines. A course is generally described in terms of its angular relationship to the point of reference or to a meridian. Such a course is also called the **bearing of the line**. An example might read in part, "Starting at the big oak tree, the point of beginning, thence 6. north, 13 degrees 53 minutes east, a distance of 387 feet, then, . . ."

Some of the more common measurements used for distance and their equivalents are:

- 1 mile: 8 furlongs; 80 chains; 320 rods; 5280 feet
- 1 furlong:  $\frac{1}{8}$  mile; 10 chains; 40 rods; 660 feet
- 1 chain: 4 rods; 66 feet; 100 links
- 1 rod: 25 links;  $16\frac{1}{2}$  feet
- 1 link:  $\frac{1}{100}$  chain; 7.92 inches
- 1 vara: 32"-43"

*Irregular Boundaries.* Not all tracts of land will have regular boundaries. To account for the occurrence of lakes, rivers and other irregular boundaries, legal descriptions may have the following language: "... to river, thence along such river to monument".

*Exception and Quantities.* Legal descriptions will frequently describe a larger tract of land and use "exceptions" to exclude portions of the tract not to be included. These exceptions describe the smaller tract of land using acreage, metes and bounds or other references.

*Deed Reference.* Frequently, a tract of land will be adequately described in a chronologically earlier document in the chain of title for a tract of land. Instead of describing that portion again in a subsequent instrument, the deed or other document will reference the earlier document. This is known as a deed reference and an example is as follows: "... containing 54 acres of land more fully described in that certain Mineral Deed from to dated xx/xx/xx and recorded in Volume X, Book X, page XXX of the Deed Records of County, State."

*Conflicts.* Where a conflict exists, the courts have held that natural boundaries or monuments are more reliable than artificial ones. Also, that monuments are more reliable than courses or distances and bounds take precedence over metes. And that the least reliable are quantities and acreages

*Texas Land Grant.* In Texas, legal descriptions often refer to Land Grants or Surveys and Abstracts. These references are to the portions of land granted to settlers, railroads and other groups when Texas was first settled. References such as the "Hugh Means Survey, Abstract A-78" are used as descriptions of the larger area in which the parcel of land being described by the metes and bounds is located. These references are treated as the starting points for the metes and bounds descriptions.

An example entitled "How to Read Land Descriptions Which Locate Tracts of Land Using the Metes and Bounds Method" from *The Appraisal of Farm Real Estate* by Robert C. Suter, Ph.D. describes this.

*Flow to Read Land Descriptions which Locate Tracts of Land Using the Metes and Bounds Method.* A metes and bounds description is one starting at a given point, running in a certain direction so many feet, then in another direction so many feet, etc., etc., back to the point of the beginning. To locate a tract of land, one needs to start from the point of the beginning and follow it step by step.

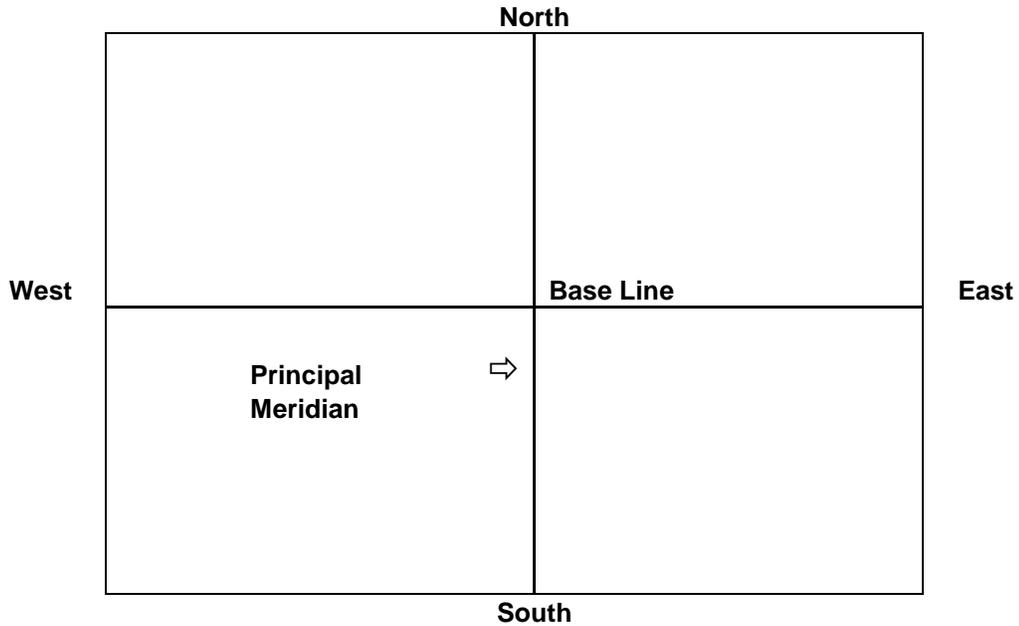
In a metes and bounds description, the descriptions generally read from the north or south; however, sometimes they read from the east or west. For example, northwest is half-way between north and west; in terms of direction, northwest would read, "North 45 degrees West"

The following description describes a small tract. "All land located in the County Tippecanoe, State of Indiana. Beginning at a point on the section line between Sections 23 and 24 in Township 23; thence North on said section line 223.8 feet; thence North 50° 58' West 150.6 feet; thence, North and parallel to the section line above mentioned a distance of 680.1 feet; then North 73°36' West 239.7 feet; thence, South 8°24' West 686.7 feet; then South 15°36' East 56 feet; thence South 52°02' East 78.8 feet; thence South 7° West 280.1 feet; thence East 342.5 feet to the place of beginning, containing 7.03 acres more or less." Book 276, page 210, Book of Deeds Tippecanoe County Recorder's Office, State of Indiana.

**Rectangular survey (Also called the Jeffersonian Survey).** This American invention was started in 1784. Its goal was to standardize the methods of describing lands. In this type of survey method, lands are described according to their distance from two fixed lines at right angles to each other. One line, running **north** and **south** (top to bottom of a piece of

paper), is called a **principal meridian**.  
One line, running **east** and **west** (from left to

right on a piece of paper, like the lines on ruled paper), is called a **base line**.



On a piece of ruled paper, the lines run across the page, but they measure from top to bottom. For example, the lines on a page are numbered from the top line to bottom line.

The same is true with base lines: they run east to west but they measure from top to bottom or north to south.

So starting at a base line, the next line toward the top of the page would be Township 1 North (T-1N). The next one would be T-2N, etc., thus, measuring the number of townships from north of the base line.

The same principal hold true when starting below the base line .One line below the base line would be Township 1 South (T-1S). The next one would be T-2S, etc., thus measuring the number of townships south of the base line. (See next page)

		<b>North</b>			
		T 8 N			
		T 7 N			
		T 6 N			
		T 5 N			
		T 4 N			
		T 3 N			
		T 2 N			
		T 1 N			
<b>West</b>		T 1-S	<b>Base Line</b>	<b>East</b>	
			T 2-S		
			T 3-S		
			T 4-S		
			T 5-S		
			T 6-S		
			T 7-S		
			T 8-S		
		<b>South</b>			

A similar principal applies to ranges. The principal meridian runs north and South, but measures across the page, or east and west of the principal meridian. So the first measure east of the meridian would be Range 1 East (R1-E) and (R 1-E) and the next Range would be 2 East of the meridian, etc. And it follows that the first range west of the meridian would be R 1-W etc.

						<b>North</b>	
<b>West</b>	R 3-W	R 2-W	R 1-W	R 1-E	R 2-E	R 3-E	<b>East</b>
		<b>Principal Meridian</b>	⇒				
						<b>South</b>	

Putting these concepts together produces a grid that measures the lands:

			<b>North</b>			
			T 8-N R 1-E	T 8-N R 2-E		
			T 7-N R 1-E	T 7-N R 2-E		
			T 6-N R 1-E	T 6-N R 2-E		
			T 5-N R 1-E	T 5-N R 2-E		
			T 4-N R 1-E	T 4-N R 1-E		
			T 3-N R 1-E	T 3-N R 2-E		
			T 2-N R 1-E	T 2-N R 2-E		
			T 1-N R 1-E	T 1-N R 2-E		
<b>West</b>						<b>East</b>
	T 1-S 2-W	R	T 1-S R 1-W			
	T 2-S 2-W	R	T 2-S R 1-W			
	T 3-S 2-W	R	T 3-S R 1-W			
	T 4-S 2-W	R	T 4-S R 1-W			
	T 5-S 2-W	R	T 5-S R 1-W			
	T 6-S 2-W	R	T 6-S R 1-W			
	T 7-S 2-W	R	T 7-S R 1-W			
	T 8-S 2-W	R	T 8-S R 1-W			
			<b>South</b>			

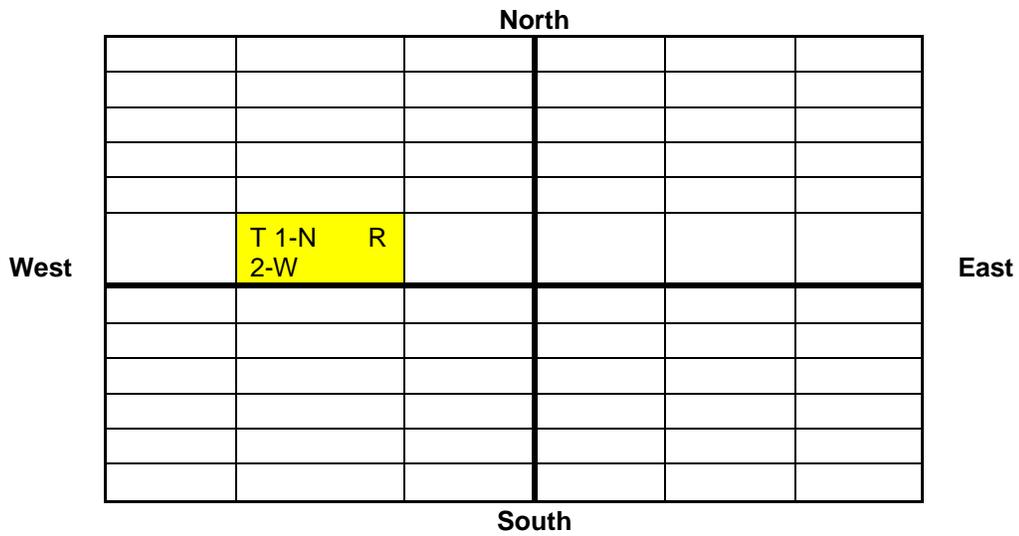
Each one of the units formed by a township line and a range line is called a [township](#). Six miles square, each township contains 36 one-mile squares called sections. They are numbered beginning on the *right* and going across the page, and then dropping down and going back to the right (see next page).

6	5	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

Then each of these sections is further divided into quarter sections. And each quarter can be further quartered.

Northwest Quarter NW/4	Northeast Quarter NE/4
Southwest Quarter SW/4	Southeast Quarter SE/4

So, T-1N - R 2 W Sec 3: NW/4 would located as follows:



(Continued  
on next  
page)

6	5	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

Northwest Quarter NW/4	

The basic elements of the Rectangular Survey System of descriptions are:

*Meridians.* Principal meridians were established to meet the surveying needs in a given area by government surveyors who often determined them with reference to natural objects. They are not located on geographic longitude.

*Base Lines.* The base lines are latitudinal lines which are also formed on an arbitrary basis by government surveyors. There is at least one base line for each meridian.

*Correction Lines.* Due to the curvature of the earth's surface, government surveyors established correction lines at various distances from the principal meridians and base lines, in order to keep their measurements accurate. Correction lines for the principal meridians are called **guide meridians**; those for the base lines are called **standard parallels**. Sections located on opposite sides of a correction line do not always have corresponding corners as evidenced by the jog in some country roads.

*Townships.* Townships are units of land six miles square and containing 36 square miles. These ideal units of land are called *land office* or *congressional townships*.

*Rectangular Survey Lines.* Rectangular survey lines are established every six miles from each meridian and from each base line. The east-west lines (township lines) form the north and south boundaries. The north-south lines (range lines) form the east and west boundaries for individual townships. An example is that a township located between the base line and first township line north of the base line is said to be in Township 1 North (T-1N). A township located between the third and fourth range lines west of the principal meridian is said to be in Range 4 West (R-4W).

*Sections.* Each township is divided into 36 sections of land with each section containing one square mile. Federal law established a one through 36 numbering system in which the sections are numbered consecutively, beginning with Section 1 in the Northeast corner of the township and proceeding west to Section 6. Section 7 is located immediately below (south) Section 6. Then the numbering goes back to the left and again to the right until it reaches Section 36 in the southeast corner of the township.

Theoretically, a section of land contains 640 acres. However, due to the convergence of lines and due to surveying errors, not all sections contain this exact amount. To avoid having small errors in all sections, all shortages or surpluses have been assigned to the north and west sections in each township.

*Subsections.* Sections are divided into regular quarter sections of 160 acres each. Each quarter section thus established is described according to its geographical position as the Northeast, Southeast, Southwest, or Northwest Quarter. Smaller tracts are described according to their fractional part and according to their location within the quarter section. For example, the square 40 acre tract in the southeast corner of the southwest quarter of Section 23 would be described as *Southeast quarter of the southwest quarter of Section 23*, or in abbreviated form, the SE/4 of the SW/4 of Section 23 or SE4 SW4, Section 23.

*Exceptions.* The United States Military Tract, located in Central Ohio, is subdivided into five mile square townships instead of six. The Jackson Purchase in Western Kentucky was subdivided into townships by a special State survey.

### Various measurements and equivalents

#### **English measurements.**

1link	7.92inches
1 rod (pole)	16.5 feet
100 links	1chain
1 chain	4 rods or 66 feet
1 mile	80 chains or 320 rods or 5,280 feet
1acre	43,560sq. ft or 160 sq. rods
1 Section	640 acres

#### **Spanish measurements with English equivalents.**

1 vara	33 1/3 inches (To convert varas to feet, divide the varas by 0.36)
--------	--

3 varas	100 inches
1900 varas	1mile
1 league	5,000 varas
5,645 square varas	1 acre
1labur	1,000,000 sq. varas or 177.15 acres
1 square league	25,000,000 sq varas or 4,428.4 acres

#### **French measurements with English equivalents.**

1 arpent	192feet (more or less)
1 square arpent	36,864 sq. ft or 0.846 acres (more or less)

#### **Metric measurements with English equivalents.**

1 meter	3.28 feet (more or less)
1 hectare	107,639 sq. ft. or 2.47 acres (more or less)

### Oil and gas transactions

Affecting the final division of interest between owners in an oil or gas property are transactions which occur relating directly to the production of oil or gas. Some of these transactions, besides leasing which was previously discussed, include:

- Pooling of tracts to comply with state regulations
- Joint Operating Agreements to cover operating guidelines and expenses
- Assignments of interest
- Farmins/farmouts
- State rules/laws and guidelines for drilling and producing
- Marketing contracts such as supply agreements or gas contracts.

These transactions all must be taken into account when reviewing the ownership for the division of interest. Usually, the contracts are reviewed as to the date of their enactment within the framework of the law.

The timing of the transactions has a great bearing on their effect. An example is that a lease would take first priority and a sub-sequent assignment would be subject to and bound by that lease.

Pooling and unitization are important to the division order analyst when calculating what share of production an owner will have in a unitized property.

### Pooling and unitization: an introduction

In the early oilfields, one well was drilled almost on top of the next. The purpose of these back-to-back wells was to get oil out of the ground quickly, get the investment in the well back, and move on to new fields. Naturally, unwarranted waste occurred and also a glut of oil which caused prices to drop.

Resulting from this incessant waste was the concept of pooling and unitization. The time period for the transition to pooling was the 1930s, and with it came proration. Proration is the limitation of how much each well could produce monthly. The concept of unitization has evolved over the years with the need for more efficient and economic development of producing areas.

Unitization may be generally considered the pooling or combining of two or more tracts into a single unit in order to operate the tracts as a single lease, although there is a distinction between pooling and unitization. *Pooling* usually refers to the consolidation of several tracts to comply with spacing regulations (pooling the royalty interests), whereas *unitization* implies the joining of tracts to more effectively develop a reservoir. For the purposes of this discussion, pooling and unitization are used interchangeably.

The primary justification for pooling or unitization is the conservation of oil and gas. The regulatory body which governs oil and gas production in each state determines the amount of oil and gas that may reasonably be

expected to be produced from a given area or field. Then the number of acres per well is decided that should most efficiently drain the producing reservoir, and the spacing guidelines are issued accordingly. The individual lessees in the field must meet these spacing requirements, which often result in the pooling of tracts from various means in order to form the predetermined number of acres from which a well may produce. If a lessee does not have sufficient contiguous leased acreage, he or she will likely contact lessees of adjoining tracts and pool working as well as royalty interests.

Units must be formed by contractual agreements of consenting parties or by order of the State Conservation Commissioner and in some jurisdictions, by court order. Usually, contractual units are referred to as *voluntary units* and units formed by commission orders as *forced unit*.

## Exercise one: Completing a division order for a lease well

---

The Aggie #1 was drilled by TAMU Oil Company. The well was completed and began producing oil only on August 25, 2008. The legal description for the property is as follows:

700 acres of land in the C. A. Tucker Survey, Abstract A-3, Brazos County, Texas. More fully described in a deed from T. O. Ark to M. E. Aggie dated September 4, 1980 and recorded in Book 300, Volume 54 of the Deed Records of Brazos County, Texas.

TAMU Oil Company is to sell all the oil to Reveille, Inc. Reveille, Inc. will distribute all the proceeds. The ownership portion of the title opinion reads as follows:

*Mineral/Royalty Owners (Subject to  $\frac{1}{8}$  royalty)*

Joe Williams	$\frac{3}{4}$
Harry Williams	$\frac{1}{4}$
Jack Sherrill	5% of 8/8

*Working Interest*

TAMU Oil Company 100%

*Requirements*

1. Henry Williams interest is subject to a 1/2 life estate vested in Mary Lou Williams. She is entitled to receive royalty payments for life
2. Affidavits of use and possession should be furnished for this property. (You are advised by the landman or attorney that this requirement has been satisfied.)

**Complete the following exercise using the above information.**

1. Name of the property
  
  
  
  
  
  
  
  
  
  
2. Name of the operator
  
  
  
  
  
  
  
  
  
  
3. Name of purchaser

4. Effective date of division order
  
5. Legal description
  
6. Division of interest (Do not calculate; show equations only)
  
7. Products covered by the division order
  
8. Special clauses, if necessary

**Answers.**

1. **Name of the property:** Aggie #1
2. **Name of the operator:**  
TAMU Oil Company
3. **Name of purchaser:**  
Reveille, Inc.
4. **Effective date of division order:**  
August 25, 2008

**Note:** Some division orders will read *date of first sales* or *date of first production*. It avoids confusion if a real date is stated instead of one of these terms.

5. **Legal description:**  
700 acres of land in the C. A. Tucker Survey, Abstract A-3, Brazos County, Texas. More fully described in a deed from T. O. Ark to M. E. Aggie dated September 4, 1980 and recorded in Book 300, Volume 54 of the Deed Records of Brazos County, Texas.

6. **Division of interest** (Do not calculate, show equations only):

*Royalty Interest*

Joe Williams	$\frac{3}{4} \times \frac{1}{8}$
Henry Williams	$\frac{1}{2} \times \frac{1}{4} \times \frac{1}{8}$
Mary Lou Williams Life Estate	$\frac{1}{2} \times \frac{1}{4} \times \frac{1}{8}$

*Overriding Royalty Interest*

Jack Sherrill 5%

*Working Interest*

TAMU Oil Company  $\frac{7}{8}$  less 5%

7. **Products covered by the division order:**  
Oil only
8. **Special clauses, if necessary**

A life estate clause may be deemed necessary for the interests of Henry Williams, as remainderman, and Mary Lou Williams, as life estate tenant.

An example of a life estate clause is as follows:

This interest is a life estate and will remain in effect during the lifetime of Mary Lou Williams. Thereafter, the interest is to be credited to Henry Williams. By executing this division order, Henry Williams agrees to notify Reveille, Inc. in writing upon the termination of this life estate. In the absence of such written notice, Reveille, Inc. shall not be held liable for any payments made in this manner.

## Exercise two: Calculating interests

---

Please read and answer the following sets of facts and questions:

1. Gene Dow is the fee owner of a 40 acre tract of land which he leases to General Oil reserving a  $\frac{3}{16}$  royalty. Only 10 acres of his tract are included in General Oil's Jones Unit #1. The Jones Unit #1 encompasses 80 acres in total. What is the fractional equation for Mr. Dow's royalty interest?
2. Sam Smith owns an undivided  $\frac{1}{2}$  interest in 70 acres. Subsequently, Mr. Smith deeds an undivided  $\frac{1}{4}$  of his interest to Mr. Allen. Then Mr. Smith leases his remaining interest in the 70 acres to Sell Oil Company reserving a  $\frac{1}{8}$ <sup>th</sup> royalty interest. Of Mr. Smith's acreage, only 22 acres is included in the Spencer Unit #1. This unit is comprised of 320 acres. Show the fractional equation for Mr. Smith's interest after his conveyance to Mr. Allen and the subsequent leasing to Sell.
3. Sterling Oil Company owns a .875000 net working interest in the Shining #1. Subsequently, it conveyed a 2% of  $\frac{8}{8}$ ths overriding royalty to Sally Store. What is their net working interest after such conveyance?
4. Brooks Oil Company owns a 25% overriding royalty inclusive of its burdens. The burdens refer to the  $\frac{1}{8}$  royalty lease it contributed to the unit. Its lease contributes 10 acres to a 40 acre unit. What is the equation for its net overriding royalty in this 40 acre unit?

5. Seminole Gas Company is purchasing and distributing 50% of the gas for the Cherokee #1. It furnishes you *a* division order crediting your company with a .14000000 royalty interest. Your records show they should only be paying you a .07000000 royalty interest. What happened?

**The following answers and discussion are provided for Exercise Two:**

1. Gene Dow is the fee owner of a 40 acre tract of land which he leases to General Oil reserving a 3/16 royalty. Only 10 acres of his tract are included in General Oil's Jones Unit #1. The Jones Unit #1 encompasses 80 acres in total. What is the fractional equation for Mr. Dow's royalty interest?

$$10/80 \times 3/16$$

2. Sam Smith owns an undivided 1/2 interest in 70 acres. Subsequently, Mr. Smith deeds an undivided 1/4 of his interest to Mr. Allen. Then Mr. Smith leases his remaining interest in the 70 acres to Sell Oil Company reserving a 1/8th royalty interest. Of Mr. Smith's acreage, only 22 acres is included in the Spencer Unit #1. This unit is comprised of 320 acres. Show the fractional equation for Mr. Smith's interest after his conveyance to Mr. Allen and the subsequent leasing to Sell.

$$3/4 \times 1/2 \times 1/8 \times 22/320$$

NOTE: It is important to review in any conveyance the portion conveyed of 'what' interest. Various assignments may read "of my interest" or "of the total interest", etc. Also, when someone conveys an interest, they can never convey more than they have. For example, Mr. Smith could not convey 3/4 of the 8/8ths interest.

3. Sterling Oil Company owns a .875000 net working interest in the Shining #1. Subsequently, it conveyed a 2% of 8/8ths overriding royalty to Sally Store. What is their net working interest after such conveyance?

$$.855 \text{ net working interest}$$

NOTE: Overrides are generally in two categories a fixed interest in the property, such as this one, or a percentage of the assignor's interest.

4. Brooks Oil Company owns a 25% overriding royalty inclusive of its burdens. The burdens refer to the 1/8 royalty lease it contributed to the unit. Its lease contributes 10 acres to a 40 acre unit. What is the equation for its net overriding royalty in this 40 acre unit?

$$(25\% \text{ less } 1/8) \times 10/40$$

**Note:** This is a common method of reserving an override when farming out a working interest. In a typical situation Brooks would own 25% in a property, but has made a business decision not to develop the property. In order to achieve maximum return without investing in a well, they choose to farmout the interest, retain an override and probably an election to convert to a working interest owner or to have a larger override after payout.

5. Seminole Gas Company is purchasing and distributing 50% of the gas for the Cherokee #1. It furnishes you a division order crediting your company with a .14000000 royalty interest. Your records show they should only be paying you a .07000000 royalty interest. What happened?

Besides being an error, there are two most probable answers. The first is that the purchaser inflated the decimal and the second is that the title opinion and pooling arrangements left you with twice the interest you

thought that you had. The usual case is that the purchaser has inflated the decimal to show you which portion of the portion it is buying that it accounts for to you. The equation for this would be the interest .07000000 divided by 50% to obtain .14000000.

### Exercise three: Reviewing the title opinion

---

The purpose of this exercise is to introduce reviewing title opinions for property setup. Attached are some mock title opinions, including a division order title opinion, to review. The division order analyst should review all parts of these opinions and not just rely on the cumulative opinion. The analyst, however, is not always furnished a copy of the drilling opinions as provided in this exercise. The title attorney provides information critical to the correct payment of royalties in the text of the opinion. A very general list of the steps in reviewing the title opinion follows:

1. Review the ownership fractions and decimals both tract and cumulative to ensure that they total 100% or whatever portion of the interest for which you are to account. At this point, you should already be aware of the marketing arrangements and your company's responsibilities for payment.
2. Match the legal descriptions to the pooling agreement; joint operating agreement, and leases for which the property is being set up.
3. Read the materials examined. This is especially important if you are reviewing a title opinion not prepared for your company. This step involves understanding what your company accepts as a title opinion for royalty payment purposes. This standard may vary from company to company. Two examples of items to watch for are title opinions preceding the date of first production and title review in the courthouse done by someone other than an attorney.
4. Review the title attorney's general comments for a statement which would relieve them of accuracy to someone other than the company for which the opinion is written and take this into your business decision to use this title opinion. Also, know the purpose of the title opinion, whether it is for the purpose of paying royalties or just to drill a well.
5. Review the mineral leases for accuracy in dates, lessor addresses, special royalty payment provisions, and obligations.
6. Determine if the title opinion takes into account the pooling, joint operating or any special arrangements for the well. If not, you should review these in conjunction with the title opinion in order to determine correct payment.
7. Review any mortgages or liens which the title attorney advises you of in order to include them in your payment, should they require you to do so.
8. Review the requirements and determine which owners may be placed in a pay status. Also, determine what action, if any, you should take in order to clear the requirement. The guidelines for proper title for payment may differ from state to state. Know the laws of the state in which you are working. Also, different companies handle the curative of requirements differently. The term *waive* is used when a title requirement will not be satisfied and the company will accept the business risk of not satisfying such requirement. Again, know your company policy regarding the waiver of requirements.

Please review the following title opinions and write any comments which you might have regarding your review of the opinion. Note that the title opinions have various errors; you should attempt to locate them.

**MATTINGLY, KEMKER, & TAYS**  
ATTORNEYS AND COUNSEIORS AT LAW  
**2532 VILLAGE CIRCLE**  
**KARLY, TEXAS 77449**  
**(713) 391- 0077 Sara M. K Toys \*Bogus Firm**  
*\*\* created for training & instruction \*\**

September 6, 2008

TAMU Exploration & Production  
Company # 2 Cotton Row  
Station College, Texas 75833

Attention: Mr. John A. Doe  
Division Attorney

RE: TAMU Lease #123456  
M. N. Bones et al  
Doituit Survey, A-77 and Gotitdone Survey,  
A-11 Mission Field  
Impossible County, Texas

### **DRILLING TITLE OPINION**

Gentlemen:

Attached is the title opinion you requested covering the drillsite for your proposed unit. This opinion covers the following:

### **DESCRIPTION**

The M. N. Bones et al lease described as being the North twenty and three-tenths (20.3) acres, calculated as 20 acres, of land out of Block No. Seven (7) of the Jane Smith Subdivision of the Doituit Survey, A-77 and Gotitdone Survey, A-11. Being more fully set out and described in deed from L. M. York to A. R. Jones, said deed dated January 3, 1899, and of record in Volume Z on Page 1 of the Deed Records of said County and State to which reference is

hereby made.

### TITLE MATERIALS EXAMINED

In accordance with your instructions, we have examined the following materials in preparing this Opinion:

- (1) Run sheet (not certified) prepared by Jane Doe, apparently covering instruments filed for record in Impossible County, Texas relating to the captioned property for the period from the sovereignty of the soil to January 15, 2007.
- (2) Records of the County Clerk of Impossible County, Texas of the instruments listed on said run sheet.
- (3) Letter dated August 27, 2007, from Marge LaBarge addressed to the writer of this opinion to the effect that the above listed run sheet covers all the instruments filed for record in Impossible County, Texas relating to the captioned property (and other lands) for the period from the sovereignty of the soil to August 4, 1987 at 5:00 pm.
- (4) Oil, Gas and Mineral lease dated December 19, 2007, from M. N. Bones to Earl Pearl, recorded in Volume 777, page 777 of the Deed Records of Impossible County, Texas.
- (5) Rental Receipts relating to the payment of the annual delay rentals for the subsequent lease years under the terms and provisions of said lease.
- (6) Assignment from Earl Pearl to Ummble Refusing & Oil Too, Inc. dated December 16, 1983 of aforementioned lease from M. N. Bones.
- (7) Certificate of Merger from Secretary of State for Ummble Refining & Oil Too, Inc. and TAMU Exploration & Production Company.

Based upon an examination of the foregoing, subject to the comments and requirements hereinafter set forth, we find the title to the captioned property to be vested as of August 4, 2008 at 5:00 p.m. as follows:

TITLE TO THE

LAND: Surface

Reveille Coal Company            All

Mineral and 1/5 Royalty

M. N. Bones Estate 1/2

E. Z. Chair 1/2

OIL, GAS AND MINERAL

LEASE: TAMU Lease No.: 123456

Form: 12-34567X Producers 88 Rev. Texas (1-70) with 40/640  
Acres  
Pooling Provision

Date: December 18, 2006

Filed: January 11, 2007

Recorded: Volume 777, Page 77 of the Deed Records of Impossible  
County, Texas

Lessor: N. Bones

Lessee: Ummble Refilling and Oil Too, Inc. All.

Interest Covered: The full interest in the captioned property. Four years

Land Covered: from the date of the lease.

Primary Term:

Royalties and Shut-In (quoted from the Lease): The royalties to be paid by Lessee are: (a) on oil, 1/5th of that produced and saved from said land, the same to be delivered at the wells or to the credit of Lessors into the pipeline to which the wells may be connected; Lessee may from time to time purchase. any royalty oil in its possession, paying the market price therefor prevailing for the field where produced on the date of purchase, and Lessee may sell any royalty oil in its possession and pay Lessor the price received by Lessee for such oil computed at the well; (b) on gas, including casinghead gas or other gaseous substance, produced from said land and sold or used off the premises or for the extraction of gasoline or other product therefrom, the market value at the well of 1/5th of the gas so sold or used, provided that on gas sold by I "see the market value shall not exceed the amount received by Lessee for such gas computed at the mouth of the well, and on gas sold at the well the royalty shall be 1/5th of the amount realized by Lessee from such sale; and (c) on fissionable materials and all other minerals mined and marketed, one-tenth either in kind or.....

Other provisions which may be covered are Delay Rentals and Pooling and Warranty or Addendums containing special provisions

COMMENTS:I.

Except as may be otherwise specifically stated herein, this opinion does not cover such matters *as* discrepancies in area, taxes, conflicts in boundary lines or survey lines, rights of parties, if any, in possession, rules, regulations, restrictions, orders or ordinances of governmental agencies having or asserting jurisdiction (or compliance or noncompliance therewith), matters which could be determined only by an investigation upon the ground, unpaid bills for labor or materials that could ripen into mechanic's and materialman's liens, genuineness of signatures, or any other matters not revealed by the materials examined in connection with this opinion.

2.

This Opinion covers only the surface of the captioned property and the oil and gas mineral produced therefrom. Specifically excluded are the ownership of coal, lignite, uranium or other hard minerals.

3.

This opinion is based solely upon our examination of the records of the County Clerk of Impossible County, Texas of the instruments identified on the run sheet and copies of the other instruments listed above. Our examination covered the period from the sovereignty of the soil to August 4, 2008 at 5:00 p.m. with respect to the entirety of the captioned property. We believe our opinion to be accurate based upon such examination; however, for a complete title examination and an opinion for which we can accept full responsibility, we should be furnished for examination abstracts of title certified to cover the captioned property for the period from the sovereignty of the soil to a current date and containing complete copies of all of the instruments included therein.

4.

It is our understanding that you do not intend to have the captioned property surveyed but will only have surveyed so much thereof as is necessary in connection with staking well locations in connection with your operations (if any) in search of oil and gas thereof.

REQUIREMENTS:

1.

You should secure documentation from the estate proceedings of M. N. Bones.

2.

You should secure a pooling ratification, if unitization occurs, from the heirs of M. N. Bones.

3.

You should present documentation that the property taxes of the royalty owners are current. A cursory review revealed that E. Z. Chair had outstanding taxes for 1957 of \$10.31.

4.

We should be furnished affidavits of two or more credible, disinterested persons stating in detail the nature and character of the use, occupancy and possession of the lands for as long a period as is practicable, and for at least the last 25 years.

Very truly yours,

Sara M. K. Tays

**MATTINGLY, KEMKER, & TAYS**  
**ATTORNEYS AND COUNSELORS AT LAW\***  
**2532 VillagE CiRcIE**  
**Ktuy, TEXAS 77449**  
**(713) 391.0077**

*Sara M. K Tays*

*Bogus Firm \**

*\*\* created for training & instruction \*\**

September 7, 2008

TAMU Exploration & Production  
Company # 2 Cotton Row  
Station College, Texas 75833

Attention: Mr. John A. Doe  
Division Attorney

RE: M. N. Bones Oil Unit #1, Tract 3  
Doituit Survey, A-77 and Gotitdone Survey, A-11  
Mission Field  
Impossible County, Texas

**ORIGINAL TITLE OPINION**

Gentlemen:

Attached is the original title opinion you requested covering the referenced unit as follows:

**DESCRIPTION**

Tract 3 of the M. N. Bones Oil Unit #1, described in that certain Designation and Oil Pooling Agreement recorded in Volume 4200 at page 7456 of the Deed Records of Impossible County, Texas.

**ADDITIONAL MATERIALS EXAMINED**

In accordance with your instructions, we have examined the following additional materials in preparing this Opinion:

- (1) Drilling Title Opinion dated September 6, 2008, addressed to TAMU Exploration & Production Company, by Mattingly, Kemker & Tays covering the drillsite tract from sovereignty of the soil to September 6, 2008.
- (2) Original Division Order Title Opinion dated June 12, 1997 addressed to Wako Drilling Company by Bear, Bear & Bear covering the N. 0. Bones Gas Unit #1 from sovereignty of the soil (surface to all depths) to June 12, 1947. Unit subsequently dissolved in 2003.
- (3) Abstracts of Impossible County from June 1947 to August 2008 and duly certified to date shown.
- (4) Estate proceedings from the estate of M. N. Bones, including the Order Admitting the Will to Probate and the Will.
- (5) Affidavit from Olin O. Olsin certifying the use and possession of property described herein.
- (6) Copy of a letter dated December 21, 2007, from B. B. King to TAMU Exploration & Production Company regarding the Estate of Sexton Bones.
- (7) Copy of the Designation and Pooling Agreement for the M. N. Bones Oil Unit #1, Impossible County, Texas, with attached exhibits, executed by TAMU Exploration and Production Company.
- (8) Letter dated September 5, 2007 from Marge LaBarge concerning curative.

TITLE TO THE LAND:

Surface

Reveille Coal Company	All $\frac{1}{3}$ X $\frac{1}{2}$ *
Mineral and $\frac{1}{5}$ Royalty	$\frac{1}{3}$ X $\frac{1}{2}$ *
Zeursalina Bones Jones	$\frac{1}{3}$ X $\frac{1}{2}$ *
Zeus Bones	

Sexton Bones Estate

\*Subject to a  $\frac{1}{3}$  life estate in Mrs. M. N. Bones. This should not be paid until Requirement #2 is satisfied.

Earl Pearl

1/8

\*until \$20,000 (net after taxes) at which time payout of this payment occurs and this interest reverts to assignee.

Working Interest

TAMU Exploration &

4

/5

Production Company

TRACT AND UNIT SUMMARY FOR MINERALS

Royalty	Tract (20 ac)	Unit (40 ac)
Zeursalina Bones Jones	.03333334	.016666667
Zeus Jones	.03333334	.016677777
Sexton Bones Estate	.03333334	.016666666
E. Z. Chair	.05000000	.025000000
Overriding Royalty and Production Payment		
Earl Pearl	.12500000	.12500000
Working Interest		
TAMU Exploration & Production Company	.67500000	.33750000
TOTAL	1.00000000	.50000000

**ADDITIONAL COMMENTS AND**

**REQUIREMENTS** Same as Drilling Opinion

**REQUIREMENTS**

Requirements 1 and 4 met

2.

Restated. You should secure a pooling ratification from the heirs of M. N. Bones or insert a pooling ratification clause in your division order and release interest upon execution of such.

3.

Restated.

5.

Additional. You should secure documentation from the estate proceedings of Sexton Bones.

Very truly yours,

Sara M. K. Tays

**MATTINGLY, KEMKER, & TAYS**  
ATTORNEYS And COUNSELORS AT LAW  
2 5 3 2 V i l l a g E C I R C L E  
K a t y , T X 7 7 4 4 9  
(713) 391.0077

*Sara M. K. Tays*

*Bogus Firm \**

*\*\* created for training & instruction \*\**

September 14, 1994

TAMU Exploration & Production  
Company # 2 Cotton Row  
Station College, Texas 75833

Attention: Mr. John A.  
Doe Division  
Attorney

RE: M. N. Bones Oil Unit #1, Tract 3  
Doituit Survey, A-77 and Gotitdone Survey, A-11  
Mission Field  
Impossible County, Texas

**FIRST SUPPLEMENTAL DIVISION ORDER TITLE OPINION**

Gentlemen:

Attached is the supplemental- division order title opinion you requested covering the referenced unit as follows:

**DESCRIPTION**

Tract 3 of the M. N. Bones Oil Unit #1, described in that certain Designation and Oil Pooling Agreement recorded in Volume 4200 at page 7456 of the Deed Records of Impossible County, Texas.

**ADDITIONAL MATERIALS EXAMINED**

In accordance with your instructions, we have examined the following additional materials in

preparing this Opinion:

- (1) Division Order Title Opinion dated September 6, 1987, addressed to TAMU Exploration & Production Company, by Mattingly, Kemker & Tays covering the referenced unit.
- (2) Letter from Marge LaBarge dated September 9, 1987 advising that requirement #3 has been waived.
- (3) Affidavit of Heirship by F. E. Bones dated September 6, 1987 for the Estate of Stixton Bones. The interest of Stixton Bones should be transferred to A. L. Bones and S. A. Bones in equal shares.

### **COMMENTS AND REQUIREMENTS**

All requirements cleared subject to execution of division orders as set out herein.

Very truly yours,

Sara M. K. Tays

**Some comments regarding the review of the title opinions might be as follows:**

1. The division of interest does not equal 100%.
2. The title opinions were rendered from run sheets prepared by a landman from court house records, but the landman was not willing to certify his work. Also, there is a restriction placed upon the ability to rely on this opinion by the title attorney.
3. It is unclear whether or not the life estate is to receive royalty proceeds. A stipulation of interest or payment direction clause in the division order may be necessary to clarify who to pay this interest to.
4. It is unclear whether the interests of the Bones family is pooled into the unit or not. The recommendation to have division orders ratifying the pooling should be reviewed carefully. Division Orders are revocable and in some states may not alter the lease. Usually the most reliable way to secure the pooling of these interests would be to have the owners execute a pooling ratification separate from the division order.

5. You would probably wish to confer with your Land and Legal groups or the Operator/Producer, if you are the purchaser of production from this property advising them that you hesitate to rely upon this opinion and wish to have further title review done.

## CHAPTER 4: CONTRACTS AFFECTING THE DIVISION ORDER ANALYST

---

Jon F. Love

## Contracts affecting the division order analyst

A *contract* is an agreement between or among two or more parties which is enforceable in a court of law. In order for such an agreement to be enforceable in a court of law, it must have present in it the element of *consideration* (a mutual ex-change between or among the parties to the agreement, of something of value) often a promise of performance for a similar promise from the reciprocating party (e.g. "You promise to sell us your oil or gas and we promise to pay you \$XX per barrel of oil or thousand cubic feet of gas). What, then, are the contracts that affect the division order analyst in the day-to-day execution of his or her job responsibilities?

### The Lease

The lease is a usufructuary agreement between the mineral owners (who are often residents of the surface of the land where an oil and gas well is to be drilled) and the operator who drills the well. An apology for that jaw-breaking term, usufructuary – it's a Latin-based word combining the roots *use* and *fruit* to make a legal term meaning "you use it or you lose it." Since this agreement between two otherwise adverse parties is supported by an exchange of mutual promises (e.g. "If you promise to let us drill a well on your land, we promise to deliver to you one-fifth of all the oil and gas produced from that well"), it is said to contain the most essential element of a contract - consideration.

As a written contract, the lease has considerable impact on the division order analyst when it is recorded in the county or parish courthouse where the well is located, thus becoming a conveyance. And so recorded, it creates a leasehold estate - a permanent public record of the temporal ownership in an oil or gas well.

As a recorded instrument, the lease, and the assignments recorded after it, also create the so-called *chain of title* - which is vital to the division order analyst's central task of verifying each owner's fractional interest in the lease and calculating the net revenue decimal for each owner from that fractional interest.

An unfortunately less-recognized function of the lease and related assignments as recorded contracts is that they often provide the best (and sometimes only) listing of the last known addresses of the parties to the instruments, either in the instrument itself or in the return address required and placed in the margin of the instrument by the recording officer of that county or parish. Here, the division order analyst is often at the mercy of the attorney writing the division order title opinion (who many times leaves out these addresses mistakenly, or vainly believes that he or she must certify them as an element of title or that there is a higher and better use of attorney time). Older leases may also contain the social security number or tax identification number of the lessor.

Another contractual relationship stems from the lease and most often arises by default on the part of the mineral owner. Since most oil and gas leases provide for the delivery in kind (that is, physical delivery) of a substantial fraction of the oil or gas produced to the mineral owners "at the wellhead," they must buy and set tanks for oil or lay and connect their own pipeline for gas, or they have no means to store oil or transport gas for ultimate sale to a buyer. Most leases provide or imply from their wording that, if the mineral owner does not provide these facilities for taking oil or gas in kind, then the mineral owner will be deemed to have defaulted to the operator of the well to sell that mineral owner's fraction of the production. This contractual relationship is probably most aptly described as "agency by default" in which the default of the mineral owner results in the operator being appointed the agent of all the owners in the well to market and sell their production to a

purchaser of oil or gas.<sup>1</sup> The introduction of a purchaser into the transactions between lessors and lessees gives rise to another form of agreement called the *purchase and sale contract* which will be addressed as a separate topic below. Trying to follow a chronological sequence of the contracts affecting division order analysts, however, leads us to consider yet another instrument which, like the oil and gas lease, begins as a contract, but by being recorded as part of the leasehold title, becomes a conveyance as well - the oil and gas lease assignment.

### The Assignment

The assignment of interests in an oil and gas lease probably affects the division order analyst as much if not more than any other contract we will examine - especially if he or she must try to determine what the [grantor](#) (assignor) or his or her attorney had in mind when he or she drafted it and (hopefully) recorded it to become a part of the real property title, thus creating a myriad of difficult questions: If the grantor is a mineral owner, did he or she intend to convey a portion of his mineral rights, or only a right to royalty under the lease? What fractional interest did the grantor intend to convey? This recurring question is generally the result of inept drafting of the assignment, and the basis of the *Duhig Rule*, adopted by many oil and gas producing states, which generally construes an ambiguous conveyance in an oil and gas assignment most strictly *against* the grantor.<sup>2</sup>

What type and amount of reservations have been made by the grantor of the assignment -

---

<sup>1</sup> This concept is more fully and articulately set forth in an article by Professor David E. Pierce entitled "Resolving Division Order Disputes: A Conceptual Approach" appearing in the *Proceedings of the 35th Annual Rocky Mountain Mineral Law Institute*, beginning at page 16-1. Published by Matthew Bender & Company, 1990.

<sup>2</sup> (See *Duhig vs. Peavey-Moore Lumber Company*, 135 Tex. 503, 144 S.W. 2nd 878 [1940]).

such as overrides, back-ins, production payments, etc. - and how is the division order analyst to learn of them reaching fruition, and what, if anything, is he or she to do about them in regard to changing any of the decimal interests on the Division of Interest?

The assignment appears to be one of the greatest sources of headaches for the division order analyst. Here again, the writing of Professor David E. Pierce,<sup>3</sup> provides a useful and practical guide for division order analysts attempting to answer very tough questions such as the ones posed above.

The assignments and the leases to which they are attached in the chain of title are examples of contracts that become conveyances by virtue of being recorded in the real estate recordings of the county or parish in which the producing oil or gas well is located. We now turn our attention to some of those contracts which are generally *not* recorded.

### The Force Pooling Order

When viewed as a *forced lease*, the force pooling order constitutes a *forced* contract, in that it compels unfound mineral owners to either appear at the administrative hearing adjudicating their rights, or accept a royalty interest or money or both in exchange for the right to drill on their acreage. The Force Pooling Order affects the division order analyst when attempting to determine the decimal interests of unfound mineral owners. Most pooling orders provide for the mineral owners from whom leases could not be obtained to either pay their proportionate share of drilling and completion costs and participate in the completion and operation of the well, or to accept one of several combinations of more money (*bonus*) and a lesser fraction of royalty - with the end of this progression resulting in the non-appearing, non-contesting mineral owner being given no *bonus* money and only the minimal statutory

---

<sup>3</sup> "Evaluating and Drafting Oil and Gas Lease Assignments," beginning at page 385 of the *Proceedings of the National Association of Division Order Analysts' 19th Annual Institute*, Volume IV, September 1992.

royalty. Without knowing the results of the force pooling hearing or the election - even if by default -of these unfound mineral owners, it is impossible to determine their net revenue decimals and thus balance the division of interest to a parity of 1.0000000. Here again, the division order analyst is at the mercy of the writer of the title opinion. If the author did not include a tabulation of this information from the pooling order in the opinion, and the analyst has reason to believe the well was forced pooled, then it is incumbent upon the analyst to get a copy of the order to enable the correct calculation of the net revenue decimals for these unfound or unleased owners.

### The Farmout Agreement

When an oil and gas company engaged in exploratory drilling finds itself with an overabundance of leases such that it will never be able to drill all or even a majority of the potential locations for wells - and perhaps not even be able to shoot seismic lines across the acreage leased - before the expiration of the primary lease term, then a standard industry practice is to [farm out](#) the leasehold acreage to another company for exploratory drilling by means of a farmout. Although the farmout agreement is rarely recorded, this written contract may have several significant effects on the chain of title and, consequently, the division order analyst.

The company farming-out will usually retain an overriding royalty in any producing well drilled on the acreage. The earning of lease assignments under the terms of the farmout agreement is sometimes on a *drill to earn* basis, but most often *produce to earn* (that is, a requirement to complete a commercially producing oil or gas well in order to earn an assignment of the farmed-out acreage). This means that the recording of these assignments may lag far behind the effective date (sometimes called the *date of first run* on which commercial quantities of hydrocarbons are first taken from the well by the purchaser) at which time the division order analyst may be called upon to make the necessary transfers of ownership to split out and adjust the decimal

interests for the overriding royalties and working interests. Also, note that the company farming-out will usually retain a *call on production*, which will determine, for the division order analyst, who has the legal right to sell the oil and gas produced. This call is also being retained by oil and gas companies when selling producing properties who are then selling it to third parties - giving [due diligence](#) a new spin meaning.

The retention of an [overriding royalty](#) as described above may be further complicated by the retention, in the farmout agreement, of a *back-in after payout* in the hands of the company farming-out - which means that, when the newly drilled well pays out the cost of its drilling and completion, the company farming-out has an option which it can exercise to convert its retained overriding royalty back into a substantial portion of the working interest and thus considerably increase its net revenue decimal interest - albeit with the increased exposure of being subject to its proportionate share of joint interest billings for leasehold operating expenses. With knowledge of such a *back-in* from either the division order title opinion or being furnished a copy of the farmout agreement, the division order analyst needs to establish the means by which he or she will be notified when the well has "paid out" and whether or not the company or party farming out is exercising the option to "back into" a position of being one of the working interest owners again, in order to properly recalculate the resulting net revenue decimal interests.

### The Purchase and Sale Contract

Unless the operator of the well owns the transportation facilities necessary to get the oil or gas to a market or wishes to put the oil or gas to use in its own refining or end-user marketing system, that operator must contract with a purchaser to provide a market for the oil or gas that will turn this production into money in the hands of the owners, as

described above. With the sale and purchase of oil, this is most often a verbal agreement by the operator to sell the production from the well at purchaser's posted price, struck on short notice as soon as the well begins to produce in commercial quantities; in the case of gas, this sale and purchase of production must often take the form of written contracts between the operator or other non-operating working interest owners and the purchaser(s) or end-user(s).

These *purchase and sale contracts* most often impact the division order analyst in several ways. Hopefully, the terms of the purchase and sale contract will contain an effective date - that is, the date on which oil or gas was first sold - thus establishing the point in time down through which the chain of title must be searched and analyzed in order to establish the correct division of interest at the time the well starts to produce in commercial quantities.

The price to be paid for the oil and gas being oil - especially the way in which the price is to be established for gas, are important terms of the purchase and sale contract that the division order analyst be aware of.

Perhaps the most significant effects of the purchase and sale contract, however, come from those provisions concerning which of the two parties, the seller (generally the operator) or the purchaser, will make a distribution of production proceeds. The contract also determines whether the purchaser is to pay the seller less or including taxes. Whoever takes on the distribution of production proceeds also takes on the responsibility and the overhead associated with identifying, finding, and paying the individual owners in an oil and gas well. Generally this includes providing something similar to womb-to-tomb services for the owners, such as division-of-interest history recordkeeping and [escheat](#). The party designated to deduct and pay taxes will be expected to report and pay these taxes by the applicable state taxing authority and, in

generally accepted industry parlance, will be called the *first purchaser*.

Since the purchase and sale contract designates the party responsible for the distribution of production proceeds, we next examine a contract which, like the purchase and sale contract, is not usually recorded such as leases and assignments are, but has perhaps the greatest importance to the division order analyst - *the division order*.

### The Division Order Title Opinion

Although not often thought of as a contract, the division order title opinion has some contractual aspects and consequences that directly affect the division order analyst, the purchaser, the operator, and the author of the opinion as well.

Many purchasers who are making a distribution of production proceeds based on such an opinion wisely require that it be addressed to them as a party-in-interest, as well as the operator, who usually orders the opinion, in order to establish *a privity of contract* with the author (ideally an attorney). Thus, in the event the author of the opinion miscalculates or omits a portion of ownership, causing a mispayment or underpayment, and the operator or purchaser making the distribution of production proceeds suffers an adverse claim and loss at the hands of one of the underpaid owners, then the operator or purchaser may seek recourse against the authoring attorney's *Errors and Omission Insurance Policy* as a party-in-interest.<sup>4</sup>

Perhaps a more obvious contract than the division order title opinion, however, is the *Joint Operating Agreement*.

---

<sup>4</sup> (see, e.g., *Gavenda vs. Strata Energy, inc.*, 705 S.W. 2d 690 [Tex. 1986]; on remand, *Strata Energy, inc. vs. Gavenda*, 753 S.W. 2d 789 [Tex. CivApp. 1988])

## The Joint Operating Agreement

Although not the exclusive source of the [Joint Operating Agreement](#) (JOA), the American Association of Petroleum Landmen has formulated several editions of the JOA (the latest being *AAPL Form 610*, last revised in 1989) in an attempt to bring coherence and uniformity to the drilling, completion, and day-to-day operation of oil and gas wells. The AAPL Form 610 or other similar agreements among and between the operator and non-operating working interest owners in a well have several effects on the division order analyst.

The statement of percentage interests listed in the *Exhibit A* generally attached to the Form 610 JOA is an important consideration for the division order analyst in calculating the fractional interests of the working interest owners.

The division order analyst must also be aware of the effect that the *non-consent penalty provision* in the JOA will have on the motility of the net revenue decimal interests listed for each of the working interest owners. Operators will often look to the purchaser's division order analyst to keep track of which working interest owners elected to go *non-consent* at key points in the life of the well, such as casing-point, rework, or side-tracking, and to make the necessary diversions of production proceeds to the operator and other consenting working interest owners.

Another important contractual feature of the JOA is the so-called *operator's lien provision*. This lien consists primarily of the right of the operator to instruct the purchaser to suspend and pay over to the operator the production proceeds attributable to a non-operator who is delinquent in paying *joint interest billing* (JIBS) to defray leasehold operating expenses necessary to keep the well producing. When this contractual lien is exerted by the operator,

the effects on the division order analyst may be several.

Depending on the applicable state law of the jurisdiction in which the well is located, this lien may be enforced by the courts, refused by them as non-statutory, or supplanted by judicially suggested substitutes<sup>5</sup>. in which the Oklahoma Supreme Court suggests that the operator's lien under the JOA is only contractual or consensual in nature and that the operator should have filed a claim under the Oil and Gas Lien provisions of the state Mechanics Lien statute in order to protect a valid lien against a non-operating working interest owner.

Because of the wide variance in state law interpretations, the division order analyst should approach with caution the suspense and payment over to the operator of production proceeds ostensibly belonging to a non-operator. Notice that production proceeds are derived from severed minerals, hence they are [personal property](#). Since most mechanics and materialmen's liens are intended to attach only to real property or the labor and materials used to improve it, the invocation of the operator's lien is fraught with the danger that the division order analyst is exposing his or her employer to a claim of *conversion* when these monies are suspended and paid over to the operator, even if the operator has made a colorable compliance with state mechanics and materialmen's law.<sup>6</sup>

---

<sup>5</sup> See, e.g., *Amarex vs. El Paso Natural Gas Company*, 772 Pac. 2d 905 [1987]

<sup>6</sup> (For an excellent exposition on the subject of suspending payment of production proceeds, and the dangers attendant thereon, see Phillip Lear's "First Purchaser Suspense Accounts", 33 *Rocky Mountain Mineral Law Institute*, 17-[1988]. Also, compare: Oklahoma's 41 O.S. §144 with Colorado's C.R.S. 38-24-101.)

## Summary and Conclusion

Certainly, this article is not intended as an exhaustive look at all the contracts that may affect the division order analyst. It is hoped, however, that some fresh insights are afforded division order analysts into contracts that all of us may, from time to time, take for granted.

Finally, one other type of "contract" bears mentioning - and this is the social contract

that we all enter into when handling the responsibility for other people's money. In spite of seemingly indifferent management, and occasional infantile attitudes on the part of some owners, this fiduciary responsibility of seeing to it that each and every owner of an interest in an oil and gas well is paid as rapidly and accurately as possible is handled with knowledge and grace by those we know as division order analysts.