Introduction

Pooling, unitization, and even communitization mean the combining or merging of leases or other interests to erase boundary lines between these leases. The preceding is, of course, general in scope and requires further definition to be descriptive of a particular project involving pooling and unitization. More specifically, pooling commonly refers to combining royalty interests in a proration unit (spacing set by governmental authority for allowable and conservation purposes). Unitization describes larger operations and may involve combining working and royalty interests for the entire area. Communitization generally describes pooling of federal, state or Indian leases into proration units.

Reasons for pooling

There are four basic reasons for pooling or combining bases:

1. **Diversity of ownership.** Pooling brings together small tracts which otherwise would not be sufficient for drilling a well under applicable spacing rules. Proration units normally require forty (40) acres for an oil well and six-hundred and forty (640) acres for a gas well.

2. **Conservation.** Indiscriminate drilling of wells and uncontrolled production of oil and gas is wasteful. Pooling prevents unnecessary and uneconomic drilling. For this reason, regulatory agencies have been empowered to regulate the spacing of wells, set allowable days, and promote conservation of these resources.

3. **Economic considerations.** Combining small tracts or interests and drilling fewer wells lowers the exploratory, development, and production costs. This also permits the working interest and royalty owner to participate more equitably in the production from the reservoir.

4. **Secondary recovery and pressure maintenance operations.** Unitization makes it economically feasible to engage in cycling, pressure maintenance, or secondary recovery operations. These operations can add vast quantities to the producible reserves of a field that would not be recoverable without unitization.

Considering these four factors, the purposes of pooling or unitization are twofold: (1) to develop and operate a given reservoir to remove the greatest amount of hydrocarbons consistent with reasonable economic practice, and (2) to achieve equity among the various interest owners by permitting each to recover his or her fair share of the oil and/or gas, or the proceeds from it.

Pooled units

A pooled unit is generally an area which conforms to the authorized spacing requirements and in which diverse royalty and/or working interests are combined. This type of pooled unit can be created two ways: by voluntary pooling in which any parties agree to pool, and involuntary pooling, or forced pooling, in which control is given by the state statute.

It is important to note that the principles and concepts developed in this chapter will be equally applicable to gas or oil units and will serve as a basis for further examination of larger units. Although procedures differ in the various states, the principles are generally the same.

Voluntary pooling

The three most common ways to effect voluntary pooling are through pooling provisions in leases, pooling amendments, and royalty pooling agreements. This discussion of voluntary pooling will be limited to pooling leases and royalty interest within a proration unit.
All mineral and/or royalty interests, except royalty interests sold by the mined owner subsequent to the date of the lease, must agree to voluntary pooling. If the lease contains pooling provisions, the lessor’s interest is effectively pooled. The owner of a royalty interest conveyed prior to the lease must ratify the lease and agree to similar terms. This is usually accomplished by securing a pooling amendment.

**Pooling provisions and amendments.** Many leases contain pooling powers, called *pooling provisions*. The exercise of these powers determines if pooling will take place, along with the type and extent of the pooling. This type of *pooling authority* generally provides one or more of the following powers:

1. The lessee is given the option to pool all or any part of the lease with other lands or leases in the immediate vicinity. Normally the size of the units are 40 acres for oil and 640 for gas, with a 10% tolerance for either. Larger units may be permitted or prescribed by governmental authority with the proper jurisdiction.

2. Operations on or production from any portion of the pooled unit is deemed to be operation on or production from each lease committed to the unit. This is the very heart of this type of pooling. Each lease is maintained for the life of the production from the pooled unit after the primary term. (An exception occurs when a lease contains a provision commonly known as a *Pugh clause* or *Freestone Ryder*. This provision is used in many forms, but generally it provides that only that portion of the lease included within the pooled unit will be maintained by unit production.)

3. Production from the pooled unit is usually allocated to and shared by the various pooled interests on a surface acre basis. Royalty is paid on the production so allocated without regard to location of the unit well.

4. Units may be pooled as to any one or more strata; the units need not conform in size or shape with other units.

5. Units do not have to be formed at any particular time. The lessee may exercise the power at any time and from time to time — before, during, or after the drilling of a well. *This power may also be exercised after the expiration of the primary term if the lease has been otherwise maintained.*

Pooling amendments are used when the lease does not contain pooling authority. In this case, the lessor is requested to join in the execution of such an instrument.

**Exercise of pooling authority.** The lessee(s) is usually required to execute an instrument called a *Designation of Pooled Unit*. This describes the unit area and the leases being committed to the unit, identifies the unitized formation or depth, states an effective date, and designates the unitized substances. This instrument is then filed on record in the county where the unit is located.

**Limitations of pooling authority.** The pooling authority granted in leases or in pooling amendments gives the lessee considerable discretion as to arrangement of units and amount of acreage from each lease to be included in the unit. Bearing this in mind, the courts have held that a lessee must exercise this power in good faith. For example, the lessee’s judgment, as a reasonably prudent operator, must dictate that pooling is necessary or advisable in order to explore or to properly develop and operate the premises in compliance with the spacing rules of the appropriate regulatory body or to promote conservation.

The shape of the units must be reasonable under the circumstances and must be designed in such fashion that conservation motives take
precedence over lease maintenance motives, should there be a conflict between the two.

Royalty pooling agreements. Another type of voluntary pooling commonly used is the royalty pooling agreement. These are formal agreements specifically drawn and designed for one proration unit. These instruments vary considerably depending on the circumstances existing in the unit being formed. Generally they will describe the unit area, the specific formations covered, the unitized substance, the leases and/or interests being committed to the unit, and state the effective date and condition for termination. Although they are called royalty pooling agreements, they are signed by all interest owners, including working interest, royalty, production payment, and overriding royalty owners. Two reasons for using this type of agreement are (1) not all leases contain pooling provisions, and (2) some owners of mineral and/or royalty interest will not grant the broad pooling authority as normally contained in leases, but will agree to the pooling of a specific unit for a specific purpose.

Involuntary Pooling

Approximately 32 of the 50 states have some type of forced pooling statute. Under these statutes, small tracts or uncommitted royalty and/or working interests can be included in a proration unit of the size authorized by the regulatory agency of the particular state. There is relatively little uniformity of provisions among the applicable statutes of the various states. Some of the most common provisions applicable in most cases are:

1. A statement as to what party or parties may invoke the provisions of the act.

2. Provisions for application to regulatory agency for hearing and information to be submitted in support of such application, and setting of hearing date.

3. Notice to all parties of application and hearing.

4. Required testimony to be presented at the hearing. This presentation will normally consist of technical testimony by either a geologist or engineer, or both, and testimony by a landman as to the ownership of interests, response voluntary efforts to pool, etc.

5. Enumeration of matters to be set forth in the order by the regulatory agency approving the unit.

Some cities, or towns have ordinances relating to units that may be formed and drilling operations that may be conducted within their corporate limits. If any portion of the proposed unit is within the limits of a town, these matters must be investigated and complied with.

Texas Involuntary Pooling. In Texas involuntary or force pooling is accomplished under the provisions of the Texas Mineral Pooling Act, which became effective August 30, 1965. This act covers only proration size units and does not provide for pooling on a fieldwide basis. Without going into detail, it can be stated that the Texas statute contains the same general provisions as described in the preceding discussion. A discussion of some of the specific provisions and application follows.

1. The act is administered by the Railroad Commission of Texas.

2. The provisions of the act do not apply to any reservoir discovered and produced prior to March 8, 1961.

3. The provisions of the act cannot be invoked until after the Railroad Commission has established field rules for the reservoir.

4. The act applies only in situations where uncommitted interests exist in a separately owned tract within the proposed proration unit. It does not apply to any reservoir discovered and produced prior to March 8, 1961.

1 Art. 6008c of the Revised Civil Statutes
apply to an uncommitted interest that is uniformly owned.

5. The party requesting pooling under the provisions of the act must show that it has made a fair and reasonable offer to all other parties to voluntarily pool, and that this offer has not been accepted by all parties.

6. The Railroad Commission has taken the position that the offer to pool and their order authorizing such pooling must be limited to productive formations.

7. The Commission may assess a penalty of up to 200% of the share of cost attributed to a forced pooled working interest. If the well results in a dry hole, the drilling parties pay all costs. The penalty can only be recovered out of production from the well drilled under the order.

8. State of Texas lands, or lands in which the state owns an interest, cannot be forced pooled without the State's consent.

Oklahoma Involuntary Pooling. The Oklahoma Force Pooling Law, as was first enacted in 1947, and has remained virtually unchanged since that date. Although this Act is couched in very general terms, its basic concepts follow the terms set forth at the beginning of this section. The administration of the Act is delegated to the Oklahoma Corporation Commission. The act states that where there are separately owned tracts, or undivided interests, or both, within an established spacing unit, the Commission may "require such owners to pool and develop their lands in the spacing unit as a unit." It goes on to say that the pooling order "shall be upon such terms and conditions as are just and reasonable and will afford to the owner of such tract in the unit the opportunity to recover or receive without unnecessary expense his just and fair share of the oil and gas." The Oklahoma law and its implementation by the Corporation Commission results in procedures and practices quite different from the Texas procedures and practices. The principal features of the Oklahoma law are discussed below.

Poolig Royalty Interests. Prior to commencing the drilling of a well in an area that has not been spaced, the operator will usually request the Corporation Commission to issue a spacing order for the depths and formations expected to be productive. The issuance of this order effectively pools the one-eighth royalty within the spacing unit, and no further pooling efforts are necessary. Acreage contained in a spacing unit will vary according to a depth and hydrocarbon being unitized as follows:

- **Oil Spacing** — 40 acres for oil-producing formation lying less than 4,000 feet below the surface, 80-acre maximum at depths between 4,000 and 9,990 feet with 1150 acres being standard.

- **Gas Spacing** — Where oil spacing is 40 acres, gas is spaced on 160 acres with 320- or 640-acre spacing is imposed as the depth increases.

Poolig Working Interests. The Commission requires that an area be spaced prior to issuing an order to force pool the working interest. In practice, an operator can file an application for spacing and for force pooling at the same time. After notice to the parties and the presentation of evidence at the formal Commission hearing, an order will usually be issued, giving the non-joining parties the following options:

- The owner of an unleased mined interest can either put up its share of the estimated drilling costs, and participate in the drilling of the well, or lease its interest to the drilling party for

---

2 520.S1971 Sec. 87.1(e)
cash bonus and royalty as prescribed by the Commission in its order.

- The owner of a leasehold interest has the option to put up its share of the estimated drilling costs and participate in the drilling of the well, or sell its leasehold interest to the drilling party on terms fixed by the Commission, or farm out its interest to the drilling party on terms fixed by the Commission.

**Lands owned by the State of Oklahoma are subject to the provisions of the act.**

**Pooling of working interests**

Drilling a well on a proration or spacing unit in which the working interest is owned by more than one party makes it necessary that the owners reach an agreement about the portion of cost each will bear and how the resulting production will be shared. This agreement is usually accomplished by negotiating an operating agreement. If the parties cannot reach an agreement, the working interest can be forced pooled as described above. If the area to be covered is greater than one proration unit, the force pooling statutes will not apply and the agreement must be made on a voluntary basis.

**Agreements covering single proration units are often referred to as drilling units.** Agreements covering multiple sections or proration units are often formed to provide for the equitable sharing of exploratory costs in a wildcat situation. These are referred to as exploratory units. This is an agreement between the working interest owners and does not affect the royalty owner. In this type of unit, the royalty will be pooled on a proration unit basis and leases must be maintained and offsets met as in competitive field operations.

An operating agreement is an agreement between the owners of operating rights in oil and gas properties, either leasehold or unleased minerals, providing for the concurrent operation of the properties for the drilling and production of oil and gas. A typical operating agreement consists of the agreement itself and several exhibits which, when attached, become part of the agreement.

**Federal units**

Federal and/or Indian lands may be included in any one of the three types of federal units, depending on the circumstances involved. Before examining the three types of federal units in detail, there are some common features to all three which should be pointed out.

1. All unit agreements and communitization agreements must be on forms prescribed by The Bureau of Land Management (BLM) or other federal governmental agency. Only minor changes can be made to the form if necessitated by circumstances.

2. After each agreement is executed by the parties, it must be approved by the BLM before it can become effective.

3. The various federal procedures and requirements must be observed when dealing with Indian lands.

4. The spacing of wells in federal units is governed by the rules of the applicable state regulatory agency.

5. Units become effective on the date of BLM approval.

6. State and privately owned lands are often included in federal units. These parties are required to agree to the inclusion of their lands and interests by ratifying the unit agreement.

**Communitization.** The pooling of federal or Indian lands into proration size units is usually accomplished by means of a communitization agreement. This pooling is authorized in instances where separate tracts under lease cannot be independently developed in accordance with the established spacing pattern. If a lease contains sufficient acreage to
comply with the spacing pattern, the BLM generally will not approve the communitization of a portion of that lease with other lands. Each communitization agreement is limited to the productive formation only and must comply with the state spacing order.

**Federal exploratory unit.** An exploratory unit is one that is formed prior to the drilling of the first well on the prospect. The size of the unit area is determined by the geologic features but is limited to approximately 25,000 acres from one well commitment. If the prospect covers more than the 25,000 acres, an additional well will be required for each additional 10,000 to 15,000 acres included in the unit. If the unit area contains less than 10% federal acreage, it is not necessary to use the prescribed federal unit agreement form.

Under a federal exploratory unit, the obligation well must be commenced within six months after the unit is approved. If drilling is commenced before the unit is approved, the approval must be obtained before the objective formation is penetrated in order for that well to satisfy the drilling requirement of the unit agreement. If the initial well results in a dry hole, additional wells must be drilled with not more than six months between wells until a discovery is made. Failure to meet this drilling requirement will result in termination of the unit.

When a well capable of producing in commercial quantities is completed, the operator must submit a proposed participating area to the BLM for approval. The participating area is composed of lands that can reasonably be expected to be drained by the producing well. Royalty will be paid to the owners of royalty interests within the participating area. Royalty owners outside this area do not receive payment.

After commercial production has been established, the unit operator is required to file a Plan of Development with BLM for the further development of the Unit Area. These plans are usually filed annually and must be approved by the BLM. The unit operator propose drilling one or more wells, or reworking or recompleting existing wells. If conditions warrant, the BLM will occasionally approve a plan of no development.

Working interest owners may participate in one of two ways in a federal exploratory unit, depending on the type of operating agreement negotiated.

**Undivided type units.** All operators participate in all operations and production from the entire unit area, similar to the provisions described above.

**Divided type units.** The operators owning interests within the participating area pay all costs and receive the working interest share of production. Owners of working interest outside the participating area pay no costs and do not participate in the income.

Five years from the date the first participating area becomes effective, all lands included in the area will automatically be eliminated from the unit. An exception would be if a continuous drilling program was maintained on lands outside the participating area. This continued drilling can maintain the original unit for a total of 10 years, at which time the automatic elimination will occur. In extremely rare circumstances, the area may be continued for an additional two years.

**Secondary Recovery Units.** This type of unit is formed after a field is fully developed in order to increase the ultimate recovery by the institution of an enhanced recovery method. The general observations above also apply to this unit. The purpose and function of the secondary recovery unit will be discussed below in more detail.

Fieldwide unitization or secondary recovery units. Fieldwide or secondary units may be formed either by voluntary agreement or under the
terms of an applicable state statute, if the state where the property is located has such a statute. The main purpose of this type of unit is to increase the ultimate quantity of hydrocarbons produced from the reservoir. This may be accomplished by the injection of various substances into the formation to move additional oil to the well bore, or by other procedures designed to maintain adequate pressure in the reservoir to extend the life of the production.

The general characteristics and features of the secondary recovery units are:

1. Unitization applies only to the unitized formation.
2. Both royalty and working interests are required to consent to the unitization.
3. The unit operator is usually the owner of the largest working interest within the unit area.
4. Owners of both royalty and working interest in each individual tract within the unit area must agree to exchange their interest in a specific tract for a functional interest in total production from the entire unit. Each month unit production is allocated to each tract within the unit area based on a participation formula negotiated and approved by the working interests owners without regard to the actual production from any specific tract during the month.
5. Unitization is usually proposed after the reservoir is essentially fully developed and after a pressure and/or production decline has been observed. The working interest owners are required to devise and adopt a plan of operation designed to increase the ultimate recovery from the unitized formation.
6. The plan of unitization must be approved by the applicable state regulatory agency before it can be made effective.
7. If a mutually satisfactory plan of unitization cannot be negotiated on a voluntary basis, one or more of the parties owning an interest in it may invoke the provisions of compulsory or forced pooling statues in states where these laws exist.

Compulsory Unitization Statutes. At least 22 states have statutes providing for force pooling both working and royalty interests in secondary recovery units. Although the laws in the various states differ greatly, the majority do have some provisions which are similar. The following reflect some of these common provisions.

1. Any interested party can apply for the formation of a unit. The application must describe the proposed unit area, designate the productive formation, describe contemplated operations, state proposed basis of participation, and be accompanied by a proposed plan of Unitization (Unit Agreement) and Plan of Operation (Unit Operating Agreement).
2. After notice and hearing, the regulatory body must find that the proposed plan is reasonably necessary to prevent waste, protect the correlative rights of the parties, and that ultimate recovery will be substantially increased. It must also be found that the value of the estimated additional recovery will exceed the cost of such operations.
3. All statutes require voluntary agreement from 63% to 80% of both working interest and royalty owners before an order to pool the remainder of the interests will be issued.

Fieldwide or Secondary Recovery Units in Texas. All pooled units in Texas are voluntarily formed under the provisions of
Article 6008b of the Revised Civil Statutes of Texas entitled "Agreement for Pooled Units and Cooperative Facilities in Secondary Recovery Operations." This act became effective October 5, 1949. The purpose of the act, as it was originally introduced, was to protect parties desiring to form units from prosecution under anti-trust laws. Numerous amendments were attached, and the version that became law was considerably wider in scope than the original bill.

In its present form, the Texas statute has provisions similar to the common provisions discussed above. The one very important exception is that the Railroad Commission of Texas is only authorized to approve proposed units; there are no provisions providing for compulsory unitization. The procedures for notice, hearing, testimony presented, and other matters are generally the same.

**Fieldwide or Secondary Recovery Units in Oklahoma.** Oklahoma passed the first comprehensive unitization statute in the nation in 1945. This statute provided for compulsory unitization of oil or gas from a common source of supply. It was amended in 1951 to satisfy certain objections that had been raised and has operated successfully since that time. The statute generally follows the common provisions set forth above. Administration of the act is delegated to the Corporation Commission. The Commission cannot force pool a unit until after 63% of the working interests and the one-eighth royalty interests have approved the unit in writing.

**Conclusion**

This chapter has briefly examined some of the more common types of units. The purpose here has been to create awareness of the situations which make pooling desirable or necessary and to impart information about the purpose and function of the different type units. It must be noted that one chapter cannot provide all of the information needed in this area. Rather, it should serve as a basis for further study and education in pooling and unitization.