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AN OVERVIEW OF OIL AND GAS CONTRACTS IN THE WILLISTON BASIN

Anita Gefreh Himebaugh*

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I. INTRODUCTION

The Williston Basin can be described geologically as a structural basin containing sedimentary rocks of every geologic period from the Cambrian through the Tertiary. It covers 51,600 square miles in central and western North Dakota and extends into eastern Montana, northwestern South Dakota, and southern portions of the Canadian provinces of Saskatchewan and Manitoba. The Williston Basin is a major producer of oil, gas, lignite, and potash. Since 1972 petroleum exploration in the United States portion of the Williston Basin has been a major source of geologic information regarding basin evolution and carbonate

^{1.} Carlson & Anderson, Sedimentary and Tectonic History of North Dakota Part of Williston Basin, 49 Bull. of Am. A. of Petroleum Geologists 1833 (1965).

reservoirs and has been the impetus for the current high level of oil and gas activity in the state.

The largest single segment of the Williston Basin is the North Dakota portion, which includes the deepest part of the basin located southeast of Watford City, where approximately 16,000 feet of sedimentary rocks have been found.² The deepest oil production in the Williston Basin is from the Ordovician Red River Formation at 14,343 feet in the Mesa No. 1-13 Bradvik Well, Dunn County, North Dakota.3 The Williston Basin is now in its third cycle of oil development, and a fifty-six percent increase in exploration in 1981 pushed it into sixth place in the United States ranked by new field wildcat⁴ drilling. In 1981 at least one well was drilled in 28 of North Dakota's 53 counties, and a total of 760 wells were drilled in the state, more than double the total for 1979. The result was the discovery of fifty-two new oil fields and four new gas fields, primarily in McKenzie, Williams, and Billings counties.⁵ The three sales in 1980 of North Dakota state oil and gas leases, totaling 102,536 acres, grossed the state \$19,112,945 in bonuses, an average of \$186.40 an acre.6

Oil and gas activity in North Dakota began in the early 1950s, reaching a peak in the mid 1960s. After a high of 27 million barrels of oil in 1966, production declined to 19.5 million barrels in 1974. During the third and present cycle of development, oil production began to increase in 1975, and in 1980 totaled over forty million barrels.

These impressive statistics represent the dramatic impact of the oil and gas industry on the economy of North Dakota and reflect the corresponding demands placed on private practitioners in the state. A growing number of individual attorneys and law firms in North Dakota are advising mineral owners on offers to lease¹⁰ or providing oil companies, ranging from small

^{2.} Gerhard, Anderson, LeFever & Carlson, Geological Development, Origin, and Energy and Mineral Resources of the Williston Basin, North Dakota, 66 Bull. Of Am. A. of Petroleum Geologists 989, 990 (1982) [hereinafter cited as Gerhard].

^{3.} Id.
4. The term "wildcat" refers to any exploratory well drilled without geological information regarding the underlying rocks or to a horizon from which there is no production in the general area. The term connotes uncertainty about the hydrocarbon potential of the area or strata. 8 H. WILLIAMS & C. MEYERS. OIL AND GAS LAW 834 (1981) [hereinafter cited as WILLIAMS & MEYERS].

[&]amp; C. Meyers, Oil and Gas Law 834 (1981) [hereinafter cited as Williams & Meyers].

5. Petroleum Information, Resume 81, The Complete Yearly Review of U.S. Oil and Gas Activity 54 (1982).

^{6.} Id. at 67.

^{7.} Gerhard, supra note 2, at 990.

^{8.} Gerhard, supra note 2, at 990.

^{9.} Gerhard, supra note 2, at 990.

^{10.} This Article does not cover oil and gas lease contracts. For a comprehensive treatment of oil and gas leases, see H. Williams & C. Meyers, Oil and Gas Law (1981). For a treatment of federal leases, see Rocky Mtn. Min. L. Found., Law of Federal Oil and Gas Leases (1980). See also

independents to major corporations, with title opinions and division order opinions. Increased oil and gas activity in the state has spawned litigation between royalty owners and the oil and gas operators drilling on their lands. 11 Knowledge of oil and gas law has become, and will remain, a prerequisite for many attorneys in the Williston Basin.

The purpose of this Article is to provide the private practitioner in North Dakota, who may be unfamiliar with the oil and gas industry, with an introduction to the contracts used in oil and gas operations in the Williston Basin in the 1980s.

II. TYPES OF OIL AND GAS CONTRACTS—AN ECO-NOMIC ANALYSIS

The oil and gas industry is notorious in the courts for its traditional reliance on letter agreements or, in many instances, just a handshake. The propensity for oral deals closed with a handshake and followed by a short, perfunctory letter agreement led one Canadian court to comment: "These two actions . . . arise out of one of the so-called 'letter agreements' which seem to be so dear to the hearts of the petroleum industry, despite the fact that their vagueness, inexactness, omissions and lack of finality constitute a fertile breeding ground for disputes and litigation."12

Today, however, the highly competitive marketplace, the skyrocketing of lease acquisition costs and drilling rates, the increasing financial complexity of oil and gas deals, constantly changing tax laws, and the high risk nature of wildcat drilling render it impractical as well as imprudent for parties to an oil and gas operation to conduct business without the benefit of formal contracts. This Article will discuss the various contractual arrangements available to both exploration companies and mineral owners and the essential elements of each type of agreement.

A. Exploration Agreements

It is impossible to fully understand the ramifications of any oil and gas contract without some awareness of the economic purpose

Anderson, David v. Goliath: Negotiating the "Lessor's 88" and Representing Lessors and Surface Owners in Oil and Gas Lease Plays, 27B ROCKY MTN. MIN. L. INST. 1029 (1981); Fleck, Selected Leasing Problems—Protection Leases, Life Estate and Remainder Interest, Interest in a Particular Stratum, 15 ROCKY MTN. MIN. L. INST. 217 (1969); Sperling, The More Important Oil and Gas Lease Clauses, 14 ROCKY MTN. MIN. L. INST. 383 (1968).

^{11.} See Gray, A New Appraisal of the Rights of Lessees Under Oil and Gas Leases to Use and Occupy the Surface, 20 ROCKY MTN. MIN. L. INST. 227 (1975).
12. Hudsons Bay Oil & Gas Co. v. Dynamic Petroleums Ltd., 26 W.W.R. 504 (Alta. 1958).

of the arrangement and the motivation of each party to enter into such a contractual definition of its rights and obligations. This understanding requires at least a superficial acquaintance with the oil and gas exploration process.

The primary reason for the existence of the oil and gas industry is the exploration for, discovery of, and production of hydrocarbons, both liquid and gaseous. Geologists geophysicists study the origin and migration of hydrocarbons, the possible trapping mechanisms, and then evaluate the potential of an area of geologic interest for the accumulation of hydrocarbons. Explorationists rely on surface maps, aerial photographs, core samples from wells drilled in the area, and well logs¹³ from existing drill holes, both productive and dry.14 As technological advances continue, explorationists increasingly rely on seismic, gravity, and magnetic data to identify faults and to locate structures that may have trapped migrating hydrocarbons. From this information, explorationists develop prospects, which are theories that structural or stratigraphic traps exist in a specific location having reservoir rocks with the potential porosity to accumulate hydrocarbons in commercial quantities. The only method to prove or disprove the actual presence of hydrocarbons is to drill an exploratory¹⁵ well in the prospect area.

Once a prospect is identified by county, township, range, and section, a landman¹⁶ investigates the mineral ownership in the area and determines whether the minerals are leased or unleased, and if leased, to whom and the expiration date of each lease. If there are unleased mineral interests in the area, the company may decide to

^{13.} The term "logs" refers to drill hole records that measure such formation characteristics as resistivity, spontaneous potential, sound travel time, density, radioactivity, and hydrogen content through the entire borehole. These continuous recordings are then plotted against the depth of the hole. An electrical log is comprised of a spontaneous potential curve and several resistivity curves and is particularly important in locating reservoir type rocks. See Hilchie, Well Logging, in Basic Oil AND GAS TECHNOLOGY FOR LAWYERS AND LANDMEN 3-2 (Rocky Mtn. Min. L. Found. 1979).

and is particularly important in locating reservoir type rocks. See Hilchie, Well Logging, in Basic Oil And Gas Technology for Lawyers and Landmen 3-2 (Rocky Mtn. Min. L. Found. 1979).

14. A "dry" hole is a drilled well in which hydrocarbons were not discovered in sufficient quantities to warrant completion as a producing well. See 8 Williams & Meyers, supra note 4, at 217-18

^{15.} An exploratory well is "[a] well drilled in unproven or semi-proven territory for the purpose of ascertaining the presence underground of a commercial petroleum deposit." 8 WILLIAMS & MEYERS, supra note 4, at 256. In contrast, the term development well "refers to a well drilled with the expectation of producing from a known productive formation, and which is located in accordance with spacing regulations and field development requirements." Id. An exploratory well is a well drilled either in search of a new and as yet undiscovered pool of oil or gas or with the hope of greatly extending the limits of a pool already developed. American Geological Institute, Glossary of Geology 217 (2d ed. 1980).

^{16.} A landman is an employee of an oil company whose primary duties include the management of the company's relations with its landowners. Such duties include securing oil and gas leases, lease amendments, pooling agreements, and title curative instruments. 8 Williams & Meyers, supra note 4, at 386. A landman's duties also include negotiation of land deals with other oil companies and handling the necessary agreements and amendments, such as farmout agreements, operating agreements, and unitization agreements.

allocate money for the acquisition of oil and gas leases in the prospect area either directly from the mineral owner or from the present holder of the leases.

Once an acreage position is acquired in the prospect area, the company must make an economic analysis and decide whether to make the initial investment of drilling an exploratory well. If a decision is made to drill, classic economic formulas for evaluating an investment are used to determine the average annual rate of return on investment, the number of times the expenditure is returned, discounted cash flow, and payout, which is the number of years required to recover the investment measured from the first day of oil or gas production.¹⁷

The company may drill on its own acreage or may jointly explore a prospect area with other companies whose acreage would also be proved¹⁸ by the drilling of the well. The landman must negotiate a deal with other lease holders in the prospect area that will have the most favorable effect on the company's calculations for this particular prospect. The type of contract negotiated by the landman will reflect one of many possible financial arrangements. The standard agreements covering exploration deals contain "boiler plate" contractual definitions of the rights and obligations of the parties and allocate the sharing of costs and risks in a predictable manner, with minor variations and modifications tailored to the specific deal made. These standard arrangements are discussed below.

1. Farmout Arrangements

In a farmout agreement "the owner of a lease not desirous of drilling at the time agrees to assign the lease, or some portion of it . . . to another operator who is desirous of drilling the tract. . . . The primary characteristic of a farmout is the obligation of the assignee to drill one or more wells on the assigned acreage as a prerequisite to the completion of the transfer to him."

^{17.} The term "payout" generally refers to recovery from production of all costs of drilling and equipping a well. 8 WILLIAMS & MEYERS, supra note 4, at 532-33. In Energy Oils v. Montana Power Co., 626 F.2d 731 (9th Cir. 1980), the court noted, "In the parlance of the oil and gas industry, 'payout' refers to the recoupment of costs of production by a driller or developer pursuant to an agreement like the one in issue here." Id. at 736. Payout provisions vary from agreement to agreement. In federal unitization agreements payout is defined by federal regulation as "quantities sufficient to repay the costs of drilling, and producing operations, with a reasonable profit." 30 C.F.R. § 226.12(19) (1977).

^{18.} Proven acreage is an area credited with proven reserves after the presence of a productive formation has been verified by drilling and testing. 8 WILLIAMS & MEYERS, supra note 4, at 594.

19. See Lamb, Farmout Agreements — Problems of Negotiation and Drafting, 8 ROCKY MTN. MIN. L.

Inst. 139, 141 (1963).

^{20.} Mengden v. Peninsula Prod. Co., 544 S.W.2d 643, 645 n.1 (Tex. 1976) (quoting H. Williams & C. Meyers, Oil and Gas Law, Manual of Terms 167 (1971)).

A farmor, the party owning oil and gas leasehold interests in the prospect area, generally enters a farmout arrangement when a favorable leasehold position has been acquired, but drilling funds are unavailable to drill an exploratory well. The money to drill the well may be unavailable due to cash flow problems or the prospect may not appear to meet the company's economic requirements. Also, because of established priorities, the farmor may prefer to allocate its drilling funds to other geologic areas. In a rank wildcat area, where little or no geologic information is available, a farmor may wish to induce another party to drill an exploratory well in a prospect that is too risky in light of the farmor's own economic constraints. Even if the exploratory well is unsuccessful, it provides the farmor with valuable geological information, which the farmor uses to evaluate leasehold interests in the area. Occasionally, in an area of high activity, a party wishing to drill its own well may not be able to obtain a contract on a drilling rig at the desired time. Very often the farmor has one or more leases in the area that are expiring, and a farmout is the only way to drill on a lease and evaluate it before another party's top lease²¹ takes effect. In an area where the farmor has a large number of acres leased, the farmor may wish to have the prospect evaluated before it decides to either pay costly rentals for another year or release the leases.

In a farmin²² situation, the converse of a farmout, a party with a small leasehold position in its prospect area may approach another party owning oil and gas leases and request a farmout. The first party thus has the opportunity to drill a well and earn an interest in the other party's leases. The farmee may be optimistic about the probability of success in that prospect location, while the farmor may not be motivated to drill because the lease is otherwise held by production or has a number of years left in its primary term.²³ In this instance, a farmin agreement results only if the farmee prepares the farmout contract for the farmor. Since farmout agreements traditionally favor farmors, this occurrence is likely only when the farmor has neither the staff nor the time to prepare

^{21.} A top lease is an oil and gas lease that does not take effect until the expiration date of a prior 21. A top lease is an oil and gas lease that does not take effect until the expiration date of a prior lease. See 8 WILLIAMS & MEYERS, supra note 4, at 777 (quoted in Norman Jessen & Assocs. v. Amoco Prod. Co., 305 N.W.2d 648 (N.D. 1981)). See also Ernest, Top Leasing — Legality v. Morality, 26 Rocky Mtn. Min. L. Inst. 957, 957 (1980).

22. The term "farm-in" is used to describe the farmout agreement "from the viewpoint of the farmee rather than from that of the farmor." 8 WILLIAMS & MEYERS, supra note 4, at 262.

23. The primary term of a lease is "[t]he period of time, typically five or ten years, during which a lease may be kept alive by a lessee even though there is no production in paying quantities by virtue of drilling operations on the leased land or the payment of rentals." 8 WILLIAMS & MEYERS, supra

note 4, at 570.

the agreement. In such a case, the farmee may wish to use a simplified type of contract such as the AAPL Form 635.24

a. Lands and Leases

From an economic standpoint, the most important elements of farmout or farmin agreements are the description of the lands and interests owned by the farmor, the interest to be earned by the farmee, and the farmee's obligations to drill an exploratory well and provide the farmor with geological information from the well. Although traditionally the farmout consists of the farmor's leasehold interests, mineral owners can also adopt this type of arrangement. The mineral interest25 can be farmed out as an oil and gas lease. For example, the owner of a one-fourth mineral interest in lands located within the spacing unit for a proposed well may farm out its interest by requiring the farmee to carry its share of the costs of drilling the well. In the event the well is completed as a producer, the farmor grants the farmee an oil and gas lease covering its mineral ownership. The farmor retains both a royalty26 of perhaps one-eighth and an overriding royalty²⁷ convertible at payout to a working interest.²⁸ By this arrangement the mineral owner participates in a productive well to a greater extent than a royalty without expending its share of high risk drilling capital.

The legal description of lands covered by the farmout agreement and the oil and gas leases owned by the farmor may be included in the body of the agreement or may be attached to the

^{24.} The American Association of Petroleum Landmen has published a model farmout agreement known as Form 635.

^{25.} The phrase "mineral interest" refers to the property interest created in oil and gas after a severance by mineral deed or oil and gas lease. 8 WILLIAMS & MEYERS, supra note 4, at 429. The duration may be "in fee simple, in fee simple determinable, for life or for a fixed term of years. The duration may be "in fee simple, in fee simple determinable, for life or for a fixed term of years. The prime characteristic is the right to enter the land to explore, drill, produce and otherwise carry on mining activities." Id. at 429-30. In general, "the owner of a mineral interest has all the rights, powers, privileges and immunities with regard to the minerals as his predecessor in title — the fee simple owner before severance — had before him, except as the serving instrument creates obligations expressly or impliedly." Id. at 430.

26. A royalty is "the landowner's share of production, free of expenses of production." 8 WILIAMS & MEYERS, supra note 4, at 606. The landowner's royalty is frequently one-eighth, but it may be any other fractional share of production.

may be any other fractional share of production. Id.

^{27.} An overriding royalty is an interest in production carved out of the lessee's working interest after payment of the lessor's royalty. See 8 WILLIAMS & MEYERS, supra note 4, at 518. An overriding royalty interest (O.R.R.I.) is expressed as a percentage of 100% of production or as a fraction of 8/8 of production when the royalty is 1/8. For example, an O.R.R.I. of 1/16 of 8/8, in conjunction with a royalty of 1/8, means that for every 100 barrels of oil produced from the well, 12½ barrels are the lessor's, and 6½ barrels belong to the O.R.R.I. owner. The remainder of the lessee's production is the net revenue interest. In the example here, if an additional 1/16 O.R.R.I. had been reserved or conveyed prior to the farmout, the lease burdens are 1/8 plus 1/16 plus 1/16, leaving a net revenue

interest of % or 75 barrels of every 100 barrels of oil produced.

28. A working interest is "the operating interest under an oil and gas lease. The owner of the working interest has the exclusive right to exploit the minerals on the land." 8 WILLIAMS & MEYERS, supra note 4, at 838-39.

agreement as an exhibit. The farmout lands are generally designated in the text as the lease acreage, subject lands, or subject leases, and the defined phrase can then be used consistently throughout the remainder of the agreement to refer to the leases that are being farmed out. The farmor's representation of ownership of farmed out leases is usually without warranty of title, either express or implied.

The lease exhibit describes the farmout leases by lessor, lessee, assignees, date of lease, recording information, and legal description of lands included in the farmout that are covered by each lease. Federal or state leases may be identified by serial number. Additionally, the lease exhibit may show royalty amounts, the existence of overriding royalties or other burdens running with the lease, the term of the lease or expiration date, the gross and net acres covered by the lease, and limitations on strata or depth. It is important to check the accuracy of the exhibit by comparing it with the actual leases and related title material. Any special provisions in the lease, or any environmental or special stipulations in state or federal leases, should be noted.

b. Test Well and Substitute Well Provisions

The well to be drilled by the farmee on farmout acreage is usually referred to as the initial test well, initial well, or test well.²⁹ The test well provisions contain a date by which the well must be commenced, or caused to be commenced, by the farmee. Because of the executory nature of the obligations and the limited duration of oil and gas leases, time is of the essence in test well provisions and should be expressly stated in the agreement.

The caused to be commenced language is used because often the farmee will not operate the well itself, but will instead farm out its rights under the farmout agreement to another farmee. In the oil and gas industry, this is referred to as "selling" the deal. This may be done several times by several parties with various interests in the deal. One party may operate the well with two or more partners ultimately bearing the costs of drilling, testing, and plugging and abandoning or completing the well as a producer. This method of raising capital is particularly common in the case of deep and expensive test wells drilled in rank wildcat areas. One court described this process as slicing the "petrolatum cake" and observed:

^{29.} The phrase "test well" refers to "[a]n exploratory well drilled to determine whether a particular horizon will be productive of minerals." 8 WILLIAMS & MEYERS, supra note 4, at 767.

Not uncommon in these operations where the object is to bring together one who has, or can procure, acreage, (mineral leases) and the one, or many, who will supply the large risk capital required, the transaction is marked by great informality amongst a stratified succession of interested parties, each of whom cuts off a slice (e.g., overriding royalty, etc.) then sells all or a part of the rights to another.30

When several parties are involved, the operator must reconcile conflicting provisions of several agreements to meet simultaneously its contractual obligations to all parties. If complex financial arrangements necessitate a delay in the spudding³¹ of a well and the lease is not expiring, the operator must obtain extensions of the commencement date in writing from each farmor.32

Other requirements that define the drilling obligation are the location of the proposed well and contract depth. Contract depth is the total depth the farmee must drill and is usually described as a specific formation or number of feet, whichever first occurs or as the farmee may elect. Due to faulting³³ or other geological abnormalities, an objective formation may not be encountered at the anticipated number of feet below the surface of the earth, and in that case the operator has fulfilled its contractual obligation by providing geological information to the specified footage. Conversely, the formation may be encountered in a shallower position than expected, and because it has tested the objective formation, the operator need not drill deeper to earn an assignment.

In the standard farmout arrangement in which the farmee carries the farmor for 100% of the costs of the well in consideration for the assignment of lands, the contract will usually state that drilling, testing, plugging and abandonment of the well, or its completion and equipping as a producer of oil or gas or both, will be at the sole cost and risk of the farmee. Alternatively, the farmor may farm out only a portion of its interest and participate in the

^{30.} Petroleum Fin. Corp. v. Cockburn, 241 F.2d 312, 313, 318 (5th Cir. 1957).
31. The term "spudding" refers to "the first boring of the hole in the drilling of an oil well." 8
WILLIAMS & MEYERS, supra note 4, at 718.

^{32.} For a discussion of whether a farmee's drilling operations could extend an expiring lease in the absence of an executed contract, see the holding and dissenting opinion in True Oil Co. v. Gibson, 392 P.2d 795 (Wyo. 1964) (primary term of a lease could be extended only by drilling operations conducted by "the lessee," and in the absence of an executed agreement, True Oil was a

mere volunteer or tresspasser).

33. Faulting refers to the process of fracturing and displacement that produces a fault.

American Geological Institute, Glossary of Geology 224 (2d ed. 1980). The rock fracture may range from a few centimeters to a few kilometers in scale.

cost of the well for the remainder of its interest. An oil company may dilute its interest in a deep and costly well by such a partial farmout and thereby reduce its share of the high risk capital investment.

The parties to a farmout agreement negotiate the inclusion or exclusion of a substitute well provision. A substitute well provision allows the farmee-operator another chance to earn the assignment by drilling a second test well. A second well may be drilled if, before reaching contract depth on the first well, the operator encounters engineering difficulties or or substances,34 which in the operator's opinion, render further drilling impracticable or impossible. Although in some instances a farmee may wish to abandon the project, most farmees will insist that the farmout agreement grant the farmee the right to drill another earning well to contract depth. If there is a payout feature in the contract, a careful draftsman will specify whether the costs incurred for the abandoned hole will be included as part of the costs to be recouped by the farmee.

The farmout agreement usually provides that the drilling of the initial test well, and the substitute well if drilled, be in a "diligent" or "continuous" and "good and workmanlike manner"36 to earn the assignment of the acreage. This language evokes industry standards of performance and good faith in the prosecution of drilling operations. Although some agreements fix a maximum number of days within which the farmee must complete the well, in a wildcat area many companies prefer instead the requirement of diligent or diligent and continuous operations. In cases of an expiring drillsite lease, the lease itself should be reviewed for "commencement" requirements and the effect of drilling over the primary term.

^{34.} An impenetrable substance is "a stratum that cannot be drilled through." 8 WILLIAMS & MEYERS, supra note 4, at 348. See Arkla Exploration Co. v. Boren, 411 F.2d 879, 881 (8th Cir. 1969) (reviewed jury instruction defining the term "practically impenetrable substance" as "any substance that is encountered which is not penetrable with reasonable cost and facilities as long as the driller has performed the drilling with due diligence and without negligence. In other words, a practically impenetrable substance is one in which with available equipment and at a reasonable cost the substance support the penetrated ""

practically impenetrable substance is one in which with available equipment and at a reasonable cost the substance cannot be penetrated.")

35. For a discussion of the distinction between diligent and continuous drilling operations by the farmee and the express or implied covenants of due diligence between the farmor-lessee and the lessor, see Klein & Burke, The Farmout Agreement: Its Form and Substance, 24 Rocky Mtn. Min. L. Inst. 479, 495-97 (1978).

36. In Westbrook v. Watts, 268 S.W.2d 694 (Tex. 1954), the court upheld a jury instruction defining "good and workmanlike manner" as "the manner in which an ordinary prudent person engaged in drilling oil wells would have performed the particular work under the same or similar circumstances." Id. at 696.

37. A commencement provision is a savings clause that operates to keep an oil and gas lease in effect after the expiration of the primary term provided the lessee commences drilling operations and

effect after the expiration of the primary term provided the lessee commences drilling operations and drills to completion with reasonable diligence. Nickel v. Jackson, 380 F. Supp. 1389, 1392 (W.D. Okla. 1974). See 8 WILLIAMS & MEYERS, supra note 4, at 209-10.

c. Default

Most farmout agreements cover default by providing that if the farmee fails to commence, drill, test, and plug and abandon or complete the initial test well as a producer, within the time and manner specified, the farmor at its option may cancel the agreement and all rights of the farmee will therefore terminate. Many agreements also provide that during the period of carried interests the farmee will indemnify the farmor and hold it harmless from any losses, claims, damages, and liabilities arising out of the farmee's operations on the farmor's land.³⁸ A farmor's primary concern is that the farmee keep the drillsite lease free from liens and encumbrances, including mechanics' liens for materials and labor. If indemnification provisions are included in the contract, a point to consider is whether it should cover demands of a lessor for further development of the lease.³⁹

d. Geological Requirements

Concomitant with the farmee's obligation to drill, the farmee must provide the farmor with notice of the exact location, the drilling prognosis and testing program, and the date of actual spudding of the well. From the time of commencement, the farmee must provide the farmor with daily drilling reports, formation samples and cuttings, results of all drillstem tests, 40 electrical sonic and density logs, and results of other tests performed by the operator. The farmor expressly reserves a right of access to the well and derrick floor at all times and requires sufficient notice to allow its representative to be present for testing, coring, running of casing, or any other operations conducted in the course of drilling the well. Geological requirements along with the names, addresses, and telephone numbers of persons designated to receive information and notices are usually detailed on an exhibit to the agreement.

Geological requirements, although technical in nature, should be spelled out as clearly as possible to avoid disagreements between

40. A drillstem test is a test of the productive capacity of a well still full of drilling mud, which is performed by measuring the flow of formation fluid, if any, into the drill pipe. A. Levorsen, Geology of Petroleum 77 (F. Berry rev. ed. 1967).

^{38.} For a discussion of the effect of state anti-indemnification statutes on the indemnification provisions of a farmout, see Klein & Burke, supra note 35, at 504-07.

^{39.} For a decision on whether procuring a farmout satisfies the covenant to reasonably develop the lease, see Shell Oil Co. v. Howell, 258 P.2d 661 (Okla. 1953) (when a lessee is attempting to secure additional drilling operations through a farmout as would an objective, reasonable, and prudent operator, there is no abandonment of the lease and no breach of the covenant).

the geologists of the farmor and farmee concerning the tests or programs needed to thoroughly evaluate the objective formation. These items should be negotiated in advance because the geological testing programs are major expenses in the total cost of the well, and each test increases the cost to the farmee. Neither party will want the operator to pay rig standby costs during negotiations concerning the testing program if those costs can reasonably be avoided.

e. Assignment of Leases

A farmout is an executory contract.⁴¹ Although many farmouts provide for an up front or present assignment for tax reasons, the drilling of the test well, the furnishing of geological information at the farmee's sole risk and expense, and compliance with all other terms and provisions of the contract are conditions precedent to the assignment of leases by the farmor. Some contracts may provide that the farmee make written demand for the assignment within a specified number of days after it is earned. This is done because a farmee may not want a recordable assignment of leases it has "condemned" or proved worthless by the drilling of a dry hole.

The traditional preference of the oil and gas industry is to make an assignment only after the well is earned. A well is earned when it is drilled to contract depth, the data is received, and a determination is made that the farmee or operator has fully complied with the terms of the deal. In addition, many farmouts are limited to the depth actually drilled in the initial test well or 100 feet below such depth. In the present assignment form of farmout, provision must be made for reassignment in case of default or reassignment of any rights not earned to depth. The farmor must rely on the good faith of the assignee in furnishing a reassignment. Increasing use of tax partnerships in the industry eliminates the need for present assignments, and many oil companies are returning to the subsequent assignment format.

Another alternative is to make a present assignment of the agreed upon percentage of interest in all the lands subject to the agreement. If the test well is completed as a well capable of commercial production, the agreement provides that the farmor will assign the remainder of its interest in the drillsite spacing

^{41.} In North Dakota executory contracts are all contracts that are not executed. N.D. Cent. Code § 9-01-03 (1975). See Socony Mobil Oil Co. v. Continental Oil Co., 335 F.2d 438, 439 n.1 (10th Cir. 1964).

unit,⁴² reserving an overriding royalty convertible at payout to a working interest with a reassignment to the assignor at payout.⁴³ This approach is particularly useful when the assignments are made to all depths because no reassignment of rights below the depth drilled is necessary.

Although some courts have applied the landlord-tenant law distinction between an assignment and a sublease,⁴⁴ this analogy has been severely criticized⁴⁵ and largely ignored by the oil and gas industry.⁴⁶ Most farmouts provide that the farmee-assignee accepts assignments of interests subject to all the terms, provisions, conditions, and covenants of the oil and gas leases assigned and of any intermediate assignments, and further agrees to comply with and fully perform all duties, obligations, and covenants, both express and implied, imposed on the lessee.

Many contracts provide that the rights of the farmor in lands subject to the agreement include any extensions or renewals of the acreage acquired by the farmee. Extensions are usually defined as any agreements by the farmee that continue the leases beyond their primary terms. Renewals usually include leases taken by the farmee on lands covered by the agreement within six months from the date of expiration. Extending the farmor's rights to renewal farmee from deliberately avoiding a commencement of a well until the expiration of the farmor's primary term so that its own top lease can take effect, thereby eliminating the farmor entirely from the deal. If an operating agreement is attached as an exhibit to the farmout, the terms of the operating agreement covering extensions and renewals may supersede the extension and renewal provisions of the farmout when the operating agreement becomes effective. Alternatively, extensions and renewals may be governed only by the operating agreement if it becomes effective concurrently with the date of the farmout agreement or commencement of drilling.

^{42.} Drillsite spacing unit, drillsite, spacing unit, drilling unit, and proration unit are used interchangeably in the oil and gas industry to refer to the area prescribed by the state regulatory agency as the minimum density for drilling wells to a specified formation. Proration unit more correctly describes a spacing unit that also has the effect of allocating production to the tracts within the unit. Standup spacing refers to north-south adjacent quarter or quarter-quarter sections, and laydown spacing refers to east-west adjacent quarter or quarter-quarter sections. See 8 WILLIAMS & MEYERS, supra note 4, at 213-14, 592, 722.

^{43.} See Schenkkan, Convertible Oil and Gas Interests After Southland Royalty and Phillips, 24 ROCKY MTN. MIN. L. INST. 547 (1978).

^{44.} See, e.g., Irwin v. Marvel Petroleum Corp., 365 P.2d 221 (Mont. 1961) (reservation of an overriding royalty indicates an instrument is a sublease rather than an assignment, in which case the sublessee's rights and liabilities must be determined from the sublease).

^{45. 2} WILLIAMS & MEYERS, *supra* note 4, § 414 (criticizing the assignment-sublease distinction as inappropriate to the oil and gas lease, which is not really a lease, and contrary to industry practices and understanding).

^{46.} For a discussion of the effect of the assignment-sublease distinction on farmouts, see Klein & Burke, supra note 35, at 486.

Several types of farmout arrangements are common in the Williston Basin area, and the limitations and reservations in the assignment articles of the contract will vary with each deal negotiated by the parties. In a wildcat area, a farmout deal is more likely to be on a drill to earn basis. The assignment of acreage when drilling begins is an inducement to drill even though there exists a good possibility that the result will be a dry hole. Most likely, the deal will also include earning acreage additional to the drillsite lease as an inducement to the farmee to bear all the costs of expensive. high risk exploratory drilling. To allow the farmee-operator to deduct 100% of the intangible drilling costs for tax purposes, an assignment of the lease or leases included in the drillsite spacing unit will normally cover 100% of the farmor's interest, reserving an overriding royalty to the farmor-assignor convertible at payout to a working interest.⁴⁷ Alternatively, the assignment covering the drillsite spacing unit may be for an undivided percentage of the farmor-assignor's interest, with the farmor relinquishing the remainder of its interest contractually and retaining only an overriding royalty until payout.

The increasing use of tax partnerships has altered the assignment provisions of farmouts in the Williston Basin and elsewhere. If a tax partnership is used, a 100% assignment is not necessary to allow the farmee-operator to deduct all its intangible drilling costs. However, when the farmee is carrying the farmor for 100% of the farmor's share of the costs of drilling the well, even an assignment subsequent to the drilling of a producing well commonly covers 100% of the farmor-assignor's interest until payout. The farmor reserves an overriding royalty convertible at payout to the working interest retained by it under the terms of the deal. For example, a 60-40 deal refers to a 60% assignment of acreage outside the drillsite spacing unit and the retention by the farmor of a 40% interest in the additional acreage with a 40% back-in right⁴⁹ on the 100% drillsite assignment.

In a convertible override arrangement payout must be defined in the contract and provision must be made for reassignment if the farmor elects to terminate its overriding royalty and back in for its working interest. Payout is frequently defined as the point when the proceeds or value of the production from the well, after the payment of all ad valorem, production, and windfall profit taxes;

^{47.} F. Burke & R. Bowhay, Income Taxation of Natural Resources ¶ 14.06 (1978).

^{48.} Id. ¶ 10.31, 10.32.

^{49.} In a back-in farmout the farmor is given the right to convert a retained nonoperating interest into a specified working interest at a later date. 8 WILLIAMS & MEYERS, supra note 4, at 47.

royalties; and overriding royalties, including the overriding royalty retained by the farmor, shall equal the total cost of drilling, testing, completing, and equipping the well, plus the cost of operating and maintaining the well during the payout period. 50 An accounting procedure to determine payout should be attached as an exhibit to the farmout, usually in conjunction with an operating agreement, and the farmee should be required to notify the farmor when payout has occurred. A definitive period during which the farmor may exercise its option to terminate its overriding royalty interest and convert to a working interest should be designated.

an overriding royalty has been retained. proportionate reduction clause should be included. A proportionate reduction clause provides that if the interest of the farmor in the drillsite lease is less than 100% prior to assignment, or in the event an additional lease or leases are included in the drillsite spacing unit, the overriding royalty interest retained by the farmor, or the corresponding working interest, is to be reduced by a fraction.⁵¹ The numerator of the fraction is the net acres owned by the farmor in the drillsite spacing unit and the denominator is the total number of acres in the drillsite spacing unit. For example, if the farmor owned 80 acres before the farmout in a 160 acre drillsite spacing unit and farmed out on a 50-50 basis, the farmor would have the right to back into the well at payout for a 25% working interest. This means that at payout, the farmor has the election to assume 25% of the costs of operating the well and receive 25% of the net revenue interest.⁵² An overriding royalty reserved by the farmor is generally required to bear its proportionate part of any gross production taxes, severance taxes, ad valorem taxes, and any applicable windfall profits tax, but is free of transportation charges, storage charges, and other charges, such as expenses, other taxes, or liens.

When the lease to be farmed out is held by production from a shallower horizon⁵³ than the objective formation⁵⁴ or when the farmor does not wish to allow the farmee to earn an assignment if the exploratory well results in a dry hole, the farmout deal may be

^{50.} See 8 WILLIAMS & MEYERS, supra note 4, at 532.1-533.

^{51.} See 8 WILLIAMS & MEYERS, supra note 4, at 589-90.
52. The net revenue interest is total production less royalties and any other lease burdens. See 8 WILLIAMS & MEYERS, supra note 4, at 458.

^{53.} The term "horizon" refers to a particular stratigraphic level in the geologic column or the systematic position of a stratum in the geologic time scale. See American Geological Institute, Glossary of Geology 296 (2d ed. 1980).

54. The term "formation" as used in oil and gas contracts refers to the basic stratigraphic unit in the local classification of rocks, consisting of a body of rock generally characterized by some degree

of internal lithologic homogeneity or distinctive lithologic features. Id. at 274.

on a produce to earn basis. Here the assignment of an agreed upon percentage of the farmor's interest in the leases will be made only if the well is completed as a well capable of commercial production.⁵⁵ An area of potential conflict between the farmor and farmee in this type of arrangement is the determination of commerciability. A well need not necessarily payout to be commercial, but must make a profit beyond the costs of equipping and operating the well.⁵⁶

Assignments may be made to all depths or restricted from the surface of the earth to the stratigraphic equivalent of the total depth drilled. The depth limitation may be expressed as a formation, in feet, or both. Most assignment provisions add the phrase "or the stratigraphic equivalent thereof" because of topographic and stratigraphic variations from surface location to surface location throughout the leased land. In cases of faulting this may or may not prove advantageous to either party; however, the stratigraphic equivalent language or similar qualifications are standard in the industry.

Although reservation by the farmor of an overriding royalty convertible at payout to a working interest is the most common type of arrangement in the Williston Basin, the interest in production retained by the farmor could also be in the form of a net profits interest.⁵⁷ This type of arrangement, common in California oil and gas operations, gives the farmee an immediate assignment of 100% of the farmor's interest in all lands subject to the farmout agreement and requires the farmee to drill the test well at its sole cost and risk. The farmor retains a net profits interest convertible at payout to a working interest. Net profits are defined in the contract, and recoupment by the farmee must be from the net profits remaining after the farmor's net profits interest has been deducted. Payout or recoupment takes much longer for the convertible override, but the farmor participates in the revenue from the well from the day production is obtained and may realize a greater return than if it assumed a working interest after payout. Alternatively, some California type farmout arrangements provide for a present assignment of a specified interest, usually one-half, with the farmor retaining neither an override nor a net profits

^{55.} A commercial deposit refers to a quantity of oil, gas, or other minerals sufficient to repay the cost of drilling, equipping, completing, and operating a well plus a reasonable profit. 8 WILLIAMS & MEYERS, supra note 4, at 111. In Texaco v. Fox, 228 Kan. 589, 618 P.2d 844 (1980), the court held that the term "commercial quantity" was synonymous with the term "paying quantity." Id. at ______, 618 P.2d at 847. See 8 WILLIAMS & MEYERS, supra note 4, at 111-12.

56. See 8 WILLIAMS & MEYERS, supra note 4, at 112-13.

57. A net profits interest is "[a] share of gross production from a property, measured by net profits from operation of the property. It is carved out of the working interest." 8 WILLIAMS & MEYERS subra note 4, at 457

MEYERS, supra note 4, at 457.

interest. After being carried "down the hole" by the farmee, the farmor participates in production and operating costs to the extent of its retained working interest from the first day of production if the well is successful. A tax partnership is used to allow the full deduction of all intangible drilling costs by the farmee. 59

The form of the recordable assignment made in a farmout agreement varies with the type of leases assigned. Fee leases are usually assigned by listing the leases in an exhibit attached to a partial assignment. The assignment is recorded in the county where the lands are located, even if the assignment is limited to a certain depth rather than made to all depths. Since federal regulations do not recognize the horizontal segregation of record title, assignments of federal leases limited by depth must be in the form of working interest and operating rights. A federal form and approval by the Bureau of Land Management is also required. 61

Regulations regarding assignment of state leases vary from state to state, and the language of the lease and the appropriate state agency should be consulted regarding restrictions on the forms of assignments and depth limitations. An assignment of a working interest and operating rights in a lease to a specified depth is generally acceptable for fee and state lease assignments as well as for federal leases.

Most assignments are made without warranty of title, express or implied. Any assignments made pursuant to a farmout agreement should be made expressly subject to the terms and provisions of the farmout and to any prior agreement to which the leases are subject. Assignments under a farmout are usually made subject to their proportionate share of all previous lease burdens that may appear of record. Care should be exercised to ascertain that the form of assignment provided for in the agreement and subsequently received in recordable form conform exactly to the terms of the deal negotiated by the parties. 62 To reduce the possibility of error, many companies attach the form of the recordable assignment to the farmout as an exhibit.

^{58. &}quot;Down the hole" is industry slang for the costs of drilling, testing, completing, and

equipping the well for production or plugging and abandonment.

59. Commerce Clearing House, Miller's Oil and Gas Federal Income Taxation ¶ 26-9

^{60. 43} C.F.R. § 3106.3-2 (1981). The regulation provides that "[a]n assignment of a separate zone or deposit or of a part of a legal subdivision will not be approved unless the necessity therefor is established by clear and convincing evidence." *Id.* 61. *Id.* §§ 3106.2-2(a)(1), 3106.3.

^{62.} For a decision holding that when the farmout agreement and the assignment subsequently made differ in any significant respect the two will be read together, see Phillips Petroleum Co. v. Stack, 231 So. 2d 475 (Miss. 1969).

f. Joint Operations

Once assignment to the farmee is made, any jointly owned leases are generally designated as the jointly owned premises, joint premises, or jointly owned lands. Joint leases usually should be subject to the terms and provisions of an operating agreement governing all operations on the joint lands after completion of the initial test well. The farmout, however, may provide only that the joint leases are held as tenants in common. Also, the parties may merely agree to enter into a mutually acceptable operating agreement, but such an "agreement to agree" is unenforceable and is often unsatisfactory for practical reasons. Whether the test well is plugged and abandoned or completed as a producer, the parties' negotiating positions and their motivation to enter into detailed and protracted contract negotiations lessens considerably once the test well is drilled. The optimal procedure is to negotiate an operating agreement concurrently with the farmout and to attach it to the farmout as an exhibit.63

The issues the farmout agreement should address regarding subsequent joint operations include the effective date of the operating agreement and the lands covered. Several options exist and should be considered in drafting or reviewing a farmout agreement. The operating agreement may become effective on the date of the agreement or the date of commencement of operations. It may apply to all operations except the drilling of the initial test well, or it may become effective upon assignment or at completion of the test well. Many farmouts provide that the operating agreement is operative as to the drillsite spacing unit at payout upon the election of the farmor to convert its overriding royalty to a working interest.

The operating agreement may be incorporated by reference into the farmout and thus legally binding as an exhibit to the farmout, whether signed or unsigned. Alternatively, the parties may agree to enter into an operating agreement in the form attached as an exhibit. The latter procedure allows the operator to provide a separate operating agreement for each drillsite spacing unit and prepare an exhibit to the operating agreement listing the parties and percentages of working interests attributable to them for each well drilled. This may be preferable to incorporation by reference into the farmout because the ownership in each spacing unit will probably vary.

Most farmout agreements provide that the leases covering the jointly owned acreage may not be abandoned or released unless both parties consent. If one party wishes to release or abandon its interest in all or any portion of the acreage, the agreement usually provides that the relinquishing party will assign its interest in the lands, and any wells or equipment thereon, to the party not desiring to surrender it and is thereby relieved of any obligations accruing thereafter. The assignor becomes entitled to the salvage value of any wells or equipment on the relinquished acreage, determined by the accounting procedure attached to the operating agreement.

Most farmouts expressly provide that after an assignment is made each party shall have equal and concurrent right of ingress and egress on the leases as cotenants for the purposes of exploring for or producing the minerals owned by each in their respective depths. Those rights, however, must be exercised in a manner that does not interfere with the rights of the other party.

g. Other Provisions

When the farmor is a large, integrated oil company the farmout may provide that the farmor retains a call on production on its entire interest in the lands that are subject to the agreement prior to any assignment. This provision gives the farmor a preferential right to purchase production in the percentage of its original ownership from the well or wells on the leases farmed out. For example, if the farmor owns 100% of the interest in the leases covering the drillsite spacing unit for the test well and the well is completed as a producer of oil, gas, condensate, or any combination of these, the farmout company has the right to purchase 100% of the production from the well. This is true even though it did not own a working interest in the well until payout. The farmee is entitled to the entire payment for the production. The terms of the call on production usually are detailed in an exhibit to the farmout and specify the notice requirements, the period of time during which the call may be exercised or waived,64

^{64.} For a case illustrating the importance of establishing the duration of an option to purchase production, see Rex Oil & Gas Co. v. Busk, 56 N.W.2d 221 (Mich. 1953). In Rex Oil & Gas Co. Rex Oil farmed out to Busk, reserving the option to purchase oil from designated tracts as well as from any other property then owned or thereafter acquired by Busk. Busk waived assignment after the well proved dry. Eighteen months after completion of the dry hole, Rex Oil demanded the right to purchase oil from other producing properties owned by Busk. Busk refused, and Rex Oil brought suit. The court held that Rex Oil was not entitled to equitable relief because if no time is specified in the option, the term is for a reasonable time. Id. at 223. Here the indefinite term of the option would effectually prevent the marketing and sale of the oil except on a day to day basis, and eighteen months was therefore not a reasonable time within which to exercise the option rights after the other wells owned by Busk were completed as oil producers. Id.

and the price to be paid for the production, such as posted field price for oil. This assures the farmor having a pipeline, gathering system, or refinery in the area access to the production.

To avoid classification of the farmor and farmee as an association or corporation by the Internal Revenue Service, it is advisable for tax purposes to provide that the agreement does not establish a partnership, mining partnership, joint venture, unincorporated association, or any other relationship other than tenants in common of the lands described in the agreement. 65 Most agreements state that the liability of the parties is several and not joint or collective and is limited to the obligations recited in the agreement.

In a farmout arrangement each party has a right to take its share of production in kind, and if it is a gas prospect, some companies attach a gas balancing agreement⁶⁶ as an exhibit. This gas balancing agreement applies when all the parties entitled to take production do not exercise their right, and the nontaking party or parties' share is deemed to remain under the ground. This occurs if a party is unable to market its share of gas or if its purchaser is unable to take its full share of production. The party receives credit for underproduction equal to its share not taken. The agreement provides for a balancing of accounts at depletion of the well and cessation of production. A gas balancing agreement permits a party entitled to production to defer its production from the reservoir and permits the taking parties to pass clear title to all gas marketed by them. All parties remain liable for their own royalty payments.

An important provision in farmouts concerns the payment of delay rentals⁶⁷ during the period of the farmout. This is a negotiated item, but commonly the farmor continues to pay rentals and is reimbursed by the farmee for its proportionate share of rentals accruing from the date of the agreement. Many agreements contain the disclaimer that the responsible party shall not be liable for erroneous payment or inadvertent failure to pay that results from clerical error or oversight. Provision should also be made for responsibility for shut-in gas well payments⁶⁸ or minimum royalties

^{65.} See generally A. Bruen & W. Taylor, Federal Income Taxation of Oil & Gas Investments ¶ 1.06 (1980).

^{66.} A gas balancing agreement is also known as a deferred production agreement. See 8 WILLIAMS & MEYERS, supra note 4, at 173, 300.
67. A delay rental is "[a] sum of money payable to the lessor by the lessee for the privilege of deferring the commencement of drilling operations or the commencement of production during the primary term of the lease." 8 WILLIAMS & MEYERS, supra note 4, at 175.
68. A shut-in payment is made pursuant to a shut-in gas well clause in a lease "when a gas well, capable of producing in paying quantities, is shut-in for lack of a market." 8 WILLIAMS & MEYERS,

supra note 4, at 700.

required under the terms of the leases subject to the agreement.

Most farmout agreements contain insurance provisions either in the body or by exhibit, requiring the farmee to comply with state or federal minimum requirements for workmen's compensation coverage and general public and automobile public liability insurance. If a small company is operating, the farmor may require the submission of evidence of insurance coverage or the purchase of additional amounts or types of insurance, depending on the location and depth of the well and the danger of blow-out.

Most agreements provide that the agreement is subject to all applicable state, federal, and local laws, regulations, and orders and is modified in accordance therewith if inconsistent or contrary in any respect. It is also common to see federal requirements regarding equal employment opportunity, affirmative action, and nondiscrimination in employment and facilities included as an exhibit to the farmout or to the operating agreement. Uncertainty about which situations demand inclusion of these requirements and the broad construction given by the courts to the definition of a government contract⁶⁹ favor inclusion of a clause requiring the farmee to comply with the seven point provision under 41 C.F.R. \$60-1.4.70

The term of the farmout agreement should be stated clearly when there are jointly owned leased premises because some of the clauses will continue to be operative after the drilling of the initial test well. Many agreements provide that the farmout shall remain in force for the life of the jointly owned leases and any extensions or renewals, whether by production or otherwise. The agreement may state that the terms, covenants, and conditions contained therein shall be deemed covenants running with the leasehold estates. The farmout should be expressly binding on successors in interest or subsequent assignees. In a produce to earn arrangement the agreement may provide that if the test well results in a dry hole and no assignments have been made, the agreement will terminate within a specified period of time, such as ninety days after cessation of operations on the lands or plugging and abandonment of the test well.

Many farmout agreements provide for reimbursement by the farmee for ad valorem taxes assessed against the lands subject to the

be included in government contracts.

^{69.} See Crown Central Petroleum Corp. v. Kleppe, 424 F. Supp. 744 (D. Md. 1976) (lessee of government oil and gas leases on the outer continental shelf was a government contractor within the meaning of Executive Order 11246 requiring filing of such reports).

70. 41 C.F.R. § 60-1.4 (1981). The regulation describes the equal opportunity clause that must

agreement. A tax partnership may be included in the body of the agreement or as an exhibit to the farmout for reasons discussed in section III of this Article.

The farmor may require written consent prior to any assignments of the farmout or transfer of any rights or obligations thereunder by the farmee. The farmor also may retain a preferential right to purchase the farmee's interest in the lands subject to the agreement or any wells thereon or production therefrom. If a preferential right to purchase is included, provisions for written notice to the farmor and a definite period for exercise or waiver of the right are necessary.71

h. Negotiating the Farmout Agreement

The farmout agreement, as a contract affecting land, comes within the statute of frauds.72 In the fast-paced oil and gas industry a well may be "down and dry" in a two-week period. Thus it is important that the farmout be drafted sufficiently in advance to allow time for negotiation of its terms. The farmout agreement and the operating agreement that may be attached are extremely susceptible to the battle of the forms. Therefore it is desirable, if not always possible, to avoid commencement of drilling operations until the deal has been reduced to a fully executed, enforceable contract.

It is also important that the written agreement clearly reflects all the terms of the deal negotiated by the parties. The parol evidence rule⁷³ precludes the parties from attempting to correct a poorly drafted contract in court.74 The attorney drafting or reviewing the agreement must understand the aspects of the deal that are of economic importance to the parties and exercise care in clearly and unambiguously addressing these contingencies in the contract. The attorney must be sure that the written instrument properly reflects a meeting of the minds of the

^{71.} For a holding that the equitable doctrine of laches is applicable to deny enforcement of a

preferential right to purchase, see Marken v. Goodall, 478 F.2d 1052 (10th Cir. 1973).

72. See N.D. Cent. Code § 9-06-04(4) (1975). Section 9-06-04(4) provides that "[a]n agreement for the leasing for a longer period than one year, or for the sale, of real property, or of an interest

for the leasing for a longer period than one year, or for the sale, of real property, or of an interest therein" is invalid unless in writing. Id.

73. See N.D. Cent. Code § 9-06-07 (1975). Section 9-06-07 provides, "The execution of a contract in writing . . . supersedes all the oral negotiations or stipulations concerning its matter which preceded or accompanied the execution of the instrument." Id.

74. Compare Phillips v. Inexco Oil Co., 540 S.W.2d 546 (Tex. Civ. App. 1976) (unambiguous agreements must receive a reasonable interpretation, according to the intention of the parties at the time of execution if that intention can be reasonably ascertained from their language, and in the facts received appellants' interpretation of a farmout contract was unreasonable) with Bordelon v. presented, appellants' interpretation of a farmout contract was unreasonable) with Bordelon v. Crutcher, 365 So. 2d 1109 (La. Ct. App. 1978) (use of parol evidence was proper to determine the intent of parties to a farmout agreement when the contract was ambiguous).

parties. Whether the parties intend a particular provision to be a covenant or condition and the consequences of breach or default by either party should be analyzed carefully.

A common mistake in the oil and gas industry is to make the deal fit the contract, rather than altering the contract to fit the economics of each prospect. Every oil company has its favorite contract forms, and the attorney must read each word carefully to determine if the true intent of the parties is reflected and is economically advantageous. Many contractual alternatives are available to the parties to accomplish their separate and mutual objectives. Creatively tailoring the contract may save one or both parties a substantial amount of money, particularly if the agreement gives optimum tax advantages to both the farmor and the farmee.

2. Option Farmouts

In an option farmout arrangement the farmor grants an option that "ties up" the acreage during the option period. In return the farmee furnishes geological information to the farmor from a well drilled at the farmee's sole cost and risk on acreage offsetting the farmor's acreage. The option farmout is a form of support to the drilling party who is about to prove the farmor's acreage. The option assures the drilling party that if the well is productive, the farmor is committed to granting a farmout. If the offset well is dry, the farmee is not obligated to drill additional wells unless it feels some geological justification exists for another exploratory well in the area.

An option farmout agreement may be a letter agreement or a formal document. It obligates the option farmee to commence a test well on certain described lands, drill to contract depth, and provide the farmor with geological information from the well. The option farmee has a specified period of time within which to make written election to commence a test well on the farmor's lands. The agreement outlines the terms of the farmout agreement that will be used if the option farmee elects to take the farmout. It describes the operating agreement, and the terms of the operating agreement may be attached to a letter agreement as an exhibit. In a complex arrangement, the parties may enter into a formal farmout agreement, the terms of which become operative only upon completion of the offset test well and a written election by the farmee to commence a test well on the farmout lands. This type of

document usually provides that in the event the farmee elects not to drill the test well on lands subject to the agreement within the option period, the agreement terminates in its entirety.

When the option farmout is part of a farmout deal, the option well or wells are usually described in a separate article entitled "Subsequent Test Wells" or "Optional Test Wells" that specifies the period during which the farmee must exercise the option. The option farmout may be on a drill to earn or produce to earn basis and may cover additional lands, additional interests in the same lands, or deeper rights to be earned by drilling a test well to a depth greater than contract depth.

3. Seismic Farmouts

A seismic farmout may be either a seismic option letter agreement or part of a farmout agreement. The seismic obligation of the farmee is to shoot a designated number of miles of seismic lines and provide copies of the geophysical data to the farmor. A seismic deal is usually made in rank wildcat areas. The farmor may require geophysical exploration in conjunction with the drilling of an exploratory well to earn an assignment or as consideration for granting an option to take a farmout if the seismic data is encouraging. The advantage to the farmor is "free" geophysical information; the advantage to the farmee or optionee is the opportunity to increase its acreage position if the area appears promising.

When the farmout is an option the farmor should consider inclusion of a confidentiality clause. Thus, the information shared by the parties remains confidential for a specified period of time. The parties can then develop an acreage position in the prospect area without lease costs escalating due to increased activity by speculators. The parties may also include an area of mutual interest provision⁷⁵ to allow joint pursuit of additional interests in the area covered by the seismic lines. This eliminates competition for acreage between the parties having access to the geophysical data.

The seismic option arrangement can be adapted by a mineral owner reluctant to lease extensive acreage to parties who are not serious about drilling a well. The mineral owner may grant a seismic option to a party willing to perform seismic operations and provide the mineral owner with copies of the data. The mineral owner agrees to lease a specified amount of acreage to be selected

^{75.} Area of mutual interest provisions are discussed in section II.A.4. of this Article.

by the performing party within a designated time period after completion of the seismic survey. The bonus and terms of the lease are prearranged. The mineral owner receives a cash payment for the option and may lease the acreage on more favorable terms than if the lessee were unable to first evaluate the area. Although seismic option agreements between oil companies cover only raw seismic data, a mineral owner contemplating this arrangement may require that the optionee furnish computer processed and interpreted geophysical information.

4. Areas of Mutual Interest

An Area of Mutual Interest (A.M.I.) agreement is an arrangement in which two or more parties jointly acquire geophysical information or acreage in a designated prospect area. It may be a formal agreement or may be found in farmout agreements, seismic and option farmouts, or operating agreements. An A.M.I. most commonly is found in conjunction with a farmout deal between two parties actively engaged in an acreage acquisition program in a wildcat area because of common geological interests.

The A.M.I. is established by describing an area corresponding with an outline of the prospect, or it may cover several contiguous prospects. The A.M.I. is identified by a map or plat attached as an exhibit clearly indicating the outline of the area.

An A.M.I. generally includes acreage already owned by each party separately. It may be retroactive to a date preceding the date of the contract, obligating each party to offer the other an opportunity to take a proportionate share in its recently acquired leases. The A.M.I. provisions should include a durational limit, such as two years from the date of the contract or two years from the completion of the initial test well. In conjunction with an option agreement, the term of the A.M.I. may be for two years from its effective date if a test well is drilled or a shorter period, such as one year, from its effective date if the farmee elects not to exercise its option.

The A.M.I. covers all leases in the area acquired by either party after its effective date. Whether it includes extensions and renewals of leases previously owned by the parties, purchased mineral interests, or contractual rights to acquire acreage such as farmins are points of negotiation. The contract may include the joint acquisition of additional geophysical data or acquisition by the farmee at its sole cost.

Area of mutual interest provisions should include written

notification to the other party when new interests are acquired, perhaps within a specified time after acquisition. A response period must be specified during which the other party may make written election to acquire a proportionate share of the leases by reimbursement of its share of acquisition costs. Acquisition costs usually include brokerage fees or commissions, costs of recording, and title curative expenses. The definition should clarify whether title opinions are included in acquisition costs. The electing party pays these costs upon assignment of the lease by the acquiring 'party.' Failure to make written response is usually deemed an election not to participate. Some provision for payment of rentals as well as a provision for reimbursement must be included.

An A.M.I. is usually formed when the parties have jointly incurred expenses and acquired information in an area. It is equitable to give the other party the opportunity to participate in leases acquired on the basis of such jointly acquired information. The disadvantages of A.M.I.'s include the record keeping requirements and the administrative burden of notices to the other party.

5. Support Agreements

All exploration agreements are in essence support agreements. However, this term is generally used to describe a contribution of cash or acreage to a party drilling a well on offsetting acreage. In consideration for the contribution the drilling party furnishes geological information from the test well to the contributing party. Most oil companies avoid drilling an exploratory well that proves any other company's acreage without first obtaining a farmout, option farmout, or cash or acreage contribution. Alternatively, a company anxious to acquire data in a rank wildcat area may offer a drilling party a dry hole or bottom hole contribution in exchange for the information from the test well. A contribution is less expensive than drilling a test well at sole cost.

^{76.} For a decision illustrating the importance of clarifying the depths to be assigned in an Area of Mutual Interest agreement (A.M.I.), see Pasotex Petroleum Co. v. British-American Oil Producing Co., 431 P.2d 373 (Okla. 1967). In Pasotex Petroleum Pasotex and British-American Oil entered into a farmout agreement in 1955 whereby British-American earned a one-half interest in leases owned by Pasotex, limited only to shallow rights. The agreement provided for an area of mutual interest. The agreement did not specify whether British-American's right to acquire an interest in the renewal leases extended to shallow rights only or included all depths. In 1956 the parties entered into an agreement whereby British-American was to drill a deep test well to earn deep rights in the leases owned by Pasotex in the area of mutual interest. British-American failed to drill the deep test well. After deep production was established in the area, British-American asserted its right to receive assignments to all depths in renewal leases taken by Pasotex in the area of mutual interest. The court held that British-American had abandoned its right to acquire deep rights in the area by failing to drill the deep test well provided for in the 1956 agreement, which superseded and replaced the earlier agreement. Id. at 382.

a. Dry Hole Contributions

A dry hole letter is an agreement to pay a drilling party a certain number of dollars per foot for each foot of hole drilled in exchange for the geological information from the well.⁷⁷ Money is paid only if the well is plugged and abandoned as a dry hole. Most dry hole letter agreements specify a maximum amount of money committed by multiplying the contract depth in feet by the dollars per foot pledged. The dry hole letter agreement usually specifies the kinds of geological information to be furnished to the contributing party and allows the contributor access to the drilling rig for coring or testing procedures.

Although the form of the dry hole agreement varies considerably from company to company, conditions precedent to payment include commencement of the test well by a specified date at a specified location; achievement of contract depth, usually defined by penetration of the objective formation or a maximum number of feet below the surface of the ground; furnishing of geological data; and the plugging and abandonment of the well by the operator as a dry hole.

Two major areas of potential conflict exist in the dry hole arrangement. The first concerns the quantity and nature of information furnished. In Balcones Corp. v. Sutherland⁷⁸ the contributor complained that it had not received all the information specified in its dry hole letter. The court held that the drilling party had substantially complied with the contract by drilling to contract depth, allowing the contributor access to the rig, cores, and samples, and furnishing it with a complete electric log. 79

The second area of contention revolves around the definition of dry hole.80 Geologists often disagree about whether further testing is warranted and whether to attempt completion as a producer. Companies may also differ in their definition of a well capable of commercial production. Wells capable of production are sometimes plugged and abandoned because the operator believes they are not capable of commercial production. The problem is whether this constitutes a dry hole for purposes of payment of the cash contribution. In Placid Oil Co. v. Humphrey81 the drilling party reached contract depth with no showing of oil or gas. At the urging

^{77. 8} WILLIAMS & MEYERS, supra note 4, at 218-19.
78. 318 S.W.2d 691 (Tex. Civ. App. 1958).
79. Balcones Corp. v. Sutherland, 318 S.W.2d 691, 694 (Tex. Civ. App. 1958).
80. See 8 WILLIAMS & MEYERS, supra note 4, at 217-18.

^{81. 244} F.2d 184 (5th Cir. 1957).

of the contributing party it drilled deeper and completed the well as a producer. All information down to contract depth was furnished to the contributor. The contributing party contended it did not owe the dry hole contribution because the well was a producer. The court held that the money was owed to the drilling party and stated that the drilling party "had a right to use the dry hole in any manner [it] chose after the contract was terminated."82

It is not feasible to cover every contingency in a dry hole letter agreement, and the parties must take a business risk when entering into a dry hole arrangement. As a practical matter, the contributing party is receiving cheap data, and the decision of the operator to plug and abandon the well usually determines whether payment is made. In a wildcat area the drilling party may require a confidentiality clause in the agreement to keep the data confidential for a specified period of time. A confidentiality provision allows the parties time to evaluate the information before it becomes accessible to the industry.

A bottom hole contribution⁸³ differs from a dry hole contribution only because money is paid whether the well is completed as a dry hole or a producer.84 The contract requires commencement of a test well by a specified time in a specified location, drilling to contract depth, and furnishing geological information to the contributing party. If these conditions are satisfied, the contributing party pays a specified number of dollars per foot drilled, not to exceed a maximum amount, or makes a lump sum payment to the drilling party. This arrangement is more likely to be found in very deep drilling or in rank wildcat areas. The same considerations regarding confidentiality of information apply.

b. Acreage Contributions

An acreage contribution is, in effect, an off lease farmout. The contributing party agrees to make an assignment of a specified percentage of its acreage as consideration for receiving geological information from a test well drilled on offsetting acreage. A farmout that includes lands beyond the drilling and spacing unit for the test well can be considered a combination farmout-acreage contribution because additional, possibly noncontiguous lands are assigned to the drilling party. An acreage contribution is used when the party

^{82.} Placid Oil Co. v. Humphrey, 244 F.2d 184, 189 (5th Cir. 1957). 83. See 8 WILLIAMS & MEYERS, supra note 4, at 69.

^{84. 8} WILLIAMS & MEYERS, supra note 4, at 70.

whose acreage will be proved by the offsetting test well assigns a portion of its acreage rather than supporting the well by a cash contribution.

An acreage contribution agreement resembles a straight farmout contract, one without convertible overriding royalty provisions. The agreement usually includes a description of the lands to be earned; test well requirements, including contract depth; whether the assignment is drill to earn or produce to earn; the percentage of interest assigned; and any depth limitations. Provisions should be included for the payment of delay rentals and, if the assignment is of an undivided interest, for an operating agreement covering joint operations on the assigned lands.

6. Summary

All exploration agreements redistribute the cost and risk elements of exploratory operations. No two deals and contracts are identical, but an understanding of the economic effects of each type of arrangement is important. This ensures that the contractual definition of the rights and obligations of each party conforms to their intent in entering into the deal and best protects their economic concerns.

B. Joint Operations

1. Individual Lease Development

Once oil or gas is discovered and the well is put into production, the development phase begins. The company operating the well plans the location of additional wells to further delineate the hydrocarbon reservoir and develop the field. At this point the leasehold interests are held by production, and the lessee has a duty to pay royalty to the lessor and comply with the express covenants contained in the oil and gas lease. In addition the lessee is bound by the covenants implied from the lessor-lessee relationship created by the lease. These covenants are generally for the benefit of the lessor as the nonoperating party to the lease. 85

The operator of a well is bound by the implied covenant of additional development after production is obtained. The prudent operator test is applied, and the lessee has a duty to develop the

^{85.} Sperling, supra note 10, at 399. See also Ver Schure, Another Look at the Implied Covenants, 26 ROCKY MTN. MIN. L. INST. 887, 888 (1980).

lease as an ordinary prudent operator would under the same or similar circumstances.86 The operator is bound by the implied covenant of diligent and proper operation of wells, under which the lessee must conduct all operations on the property with reasonable diligence and reasonable care.87 Further, the operator owes a duty to the lessor to prevent the drainage of oil or gas underlying the leased lands by operators on adjoining property. This may be an express covenant in the lease or may be an implied covenant of protection against drainage. The obligation is limited to drilling offset wells that will be sufficiently productive to be economically justified.88 It has been suggested that the existence of drainage may also give rise to a duty on the part of the lessee to pool or unitize the leased premises if necessary to protect them from drainage.89

At the development stage the state becomes involved. The North Dakota Legislature has declared that it is "in the public interest to foster, to encourage, and to promote the development, production, and utilization of natural resources of oil and gas in the state in such a manner as will prevent waste."90

The purpose of the state's regulatory function is:

To authorize and to provide for the operation and development of oil and gas properties in such a manner that a greater ultimate recovery of oil and gas be had and that the correlative rights of all owners be fully protected; and to encourage and to authorize cycling, recycling, maintenance, and secondary recovery operations in order that the greatest possible economic recovery of oil and gas be obtained within the state to the end that the landowners, the royalty owners, the producers, and the general public realize and enjoy the greatest possible good from these vital resources.91

The primary oil recovery process, pressure depletion, is inherently inefficient because only ten to thirty percent of the oil

^{86.} Temple v. Continental Oil Co., 182 Kan. 213, 320 P.2d 1039 (1958). See Merrill, The Implied Covenant for Further Exploration, 4 ROCKY MTN. MIN. L. INST. 205, 207 (1958). See also 5 WILLIAMS & MEYERS, supra note 4, \$\$ 806-808.

^{87.} See 5 WILLIAMS & MEYERS, supra note 4, \$ 861.

88. See 5 WILLIAMS & MEYERS, supra note 4, \$ 821-826.

89. Hardy, Drainage of Oil and Gas From Adjoining Tracts — A Further Development, 6 Nat. Resources J. 45, 47 (1966). See Williams v. Humble Oil & Refining Co., 432 F.2d 165 (5th Cir. 1970), cert. denied, 402 U.S. 934 (1971).

^{90.} N.D. CENT. CODE § 38-08-01 (1980).

^{91.} Id.

can be recovered.92 In the early days of the oil and gas industry uncontrolled drainage resulted in early depletion, with recovery of only a small percentage of the actual hydrocarbon content of the Today, production and reservoir engineers and development geologists work together to assure that controlled drilling and production maintains optimal reservoir conditions over the life of the field. Fluid injection for pressure maintenance operations and secondary and tertiary recovery methods, including water or gas injection, are used to increase hydrocarbon recovery.

These concerns are the basis for the regulatory authority vested in the North Dakota State Industrial Commission and the state geologist acting in a supervisory capacity.93 Montana's Board of Oil and Gas Conservation and South Dakota's Board of Natural Resource Development are counterpart agencies. Montana gives its Board similar jurisdiction over the regulation of "drilling, producing, and plugging of wells, the shooting and chemical treatment of wells, the spacing of wells, operations voluntarily entered into to increase ultimate recovery such as cycling of gas, the maintenance of pressure, and the introduction of gas, water, or other substances into producing formations."94

The density of drilling in the Williston Basin is controlled by spacing orders promulgated by the regulatory commission or board. The spacing order prescribes the size and shape of the drilling unit for a particular formation or pool.95 Exceptions to the spacing order may be granted under designated administrative procedures.

2. Pooling Agreements

The spacing orders of the regulatory agencies in the Williston Basin do not have the effect of apportioning production from the drilling unit. In Schank v. North American Royalties96 the North Dakota Supreme Court held that a spacing order without a pooling order does not operate as a de facto pooling of all interests in the spacing unit. 97 When the drilling and spacing unit includes two or

^{92.} Smith, The Engineering Aspects of Pressure Maintenance and Secondary Recovery Operations, 6 ROCKY MTN. MIN. L. INST. 211, 211 (1961).
93. N.D. CENT. CODE § 38-08-04 (Supp. 1981). The statute gives the commission "continuing jurisdiction and authority over all persons and property, public and private, necessary to enforce 94. Mont. Code Ann. \$82-11-124 (1981).
95. The term "pool" used in this context is industry slang for reservoir, which is subsurface

accumulation of crude oil or natural gas under adequate trap conditions. American Geological Institute, Glossary of Geology 531 (2d ed. 1980).
96. 201 N.W.2d 419 (N.D. 1972).
97. Schank v. North Am. Royalties, 201 N.W.2d 419, 430-31 (N.D. 1972).

more separately owned tracts or separately owned interests, the lessee may, however, voluntarily pool interests for the development and operation of the spacing unit, provided the leases grant pooling authority.98

Pooling allocates production from the well to each tract included in the spacing unit. Production is deemed produced from such tract as if a well had been drilled on it. 99 Pooling therefore will hold a lease by production past its primary term, at least on that portion of the lease included in the spacing unit, although no well is drilled on the lease. 100 The purpose of pooling is to prevent the physical and economic waste resulting from the drilling of unnecessary wells. It also serves to protect the correlative rights of landowners over a reservoir. 101 Pooling also permits oil and gas operations to conform to well spacing orders and well permitting regulations.

Initially, pooling was accomplished by voluntary agreement only. With the advancement of geological and reservoir engineering techniques, however, state conservation agencies realized that pooling and unitization were vital to the control of production rates and reservoir pressures for conservation purposes and to the legal feasibility of secondary recovery operations. 102 When conservation or secondary recovery considerations necessitate it, pooling and unitization may be compelled by statute.

a. Designation of Pooled Unit

If a single lessee owns all leases in the spacing unit and has been granted pooling authority in the leases, it may execute a designation of lands covered by the pooled unit and record it or otherwise comply with the lease provisions regarding notice to the lessor. A designation of pooled unit describes the leases and formation pooled. The producing formation may be referred to as the pooled formation, and the hydrocarbon produced may be referred to as pooled substances.

Communitization is a type of pooling authorized on federal lands and is subject to approval by the Secretary of the Interior. 103

^{98.} N.D. Cent. Code § 38-08-08 (1) (1980).
99. N.D. Cent. Code § 38-08-09.8 (1980). The statute provides that "production allocated to each separately owned tract within the unit . . . regardless of the well . . . from which it may be produced . . . shall . . . be regarded . . . as production from such separately owned tract." Id.

^{100.} See 6 WILLIAMS & MEYERS, supra note 4, \$ 953, at 708.1-08.2.

101. 6 WILLIAMS & MEYERS, supra note 4, \$ 953, at 708.1-08.2.

102. Dufford, Summary of Comments Relative to an Introduction to Pooling and Unitization, in Institute on Pooling and Unitization of Oil and Gas Interests 1-12 (Rocky Min. Min. L. Found. 1980).

103. 30 U.S.C. \$ 226(j) (1971). The statute provides in part that "any lease . . . may be pooled

with other lands . . . under a communitization or drilling agreement . . . when determined by the Secretary of the Interior to be in the public interest." Id.

If separate tracts cannot be independently developed and operated in conformity with an established well spacing or development program and communitization is determined by the Minerals Management Service to be in the public interest, communitization will be approved. 104 American Indian lands included in a communitization require the additional approval of the Bureau of Indian Affairs. 105

b. Pooling of Working Interests

The voluntary pooling of leases by several lessees may be accomplished by filing a designation of pooled unit executed by all lessees owning leases included in the spacing unit, or in the case of federal or Indian lands, by the execution of a communitization agreement. In either case the percentages attributable to each working interest owner are set out in the text of the agreement or by exhibit.

Nearly all the state forced pooling statutes have certain elements in common. The elements are as follows: They expressly presuppose the existence of an established drilling or spacing unit; they permit owners of separate tracts in the unit to voluntarily pool their interests; they require notice and public hearing before pooling can be required; and they are based on the theory that each separate owner shall receive its just and equitable share of production. 106 In North Dakota the drilling party under an enforced drilling or spacing unit has a lien upon the share of production from the spacing unit accruing to the interest of each of the other owners for the payment of their share of expenses. 107 Ali courts that have passed upon statutes providing for compulsory pooling have held such laws to be valid and free from constitutional objections. 108

The effect of the pooling agreement or communitization agreement is to apportion costs and production to the various working interests owners in fixed percentages based on net leased acreage. There is no cross-assignment of legal title, but the

^{104.} See Law of Federal Oil and Gas Leases, supra note 10, § 16.2.

^{105.} See 25 C.F.R. § 183.15(a) (1981) (requiring the Superintendent's approval prior to merging leases on Osage land). See also Burley, Indian Lands — An Industry Dilemma, 27B ROCKY MTN. Min. L. Inst. 1605 (1982).

MIN. L. INST. 1605 (1982).

106. See Mont. Code Ann. § 82-11-202 (1981); N.D. Cent. Code § 38-08-08 (1980); Gec, Comparative Study of Compulsory Pooling — Enforcement Against Owners of Divided Interests in the Spaced Tract, 3 Rocky Mtn. Min. L. Inst. 241, 247 (1957).

107. N.D. Cent. Code § 38-08-10 (1980). For a comprehensive discussion of voluntary pooling and unitization and forced pooling laws, see Gray & Schaefer, Conflict Between Voluntary Pooling Agreements and State Spacing and Pooling Orders, 27B Rocky Mtn. Min. L. Inst. 1517 (1982).

108. Gee, supra note 106, at 247.

provisions to jointly bear the costs and apportion production are covenants running with the land committed to the pooling agreement and thus are binding on successors in interest.

The pooling agreement or communitization agreement usually is effective only on the designated producing formation or formations. The formation is usually referenced by a log of the discovery well at the depths that the producing formation was found. The lands covered and the leases committed to the pooling agreement or communitization agreement are either described in the body of the agreement or attached as an exhibit. A pooling agreement should address the questions of perpetuation of parts of the leases lying outside the pooled area, the method of allocating production, and whether operations on the pooled unit satisfy requirements for operations on each lease. 109

If voluntary pooling is not accomplished, the drilling party may petition the regulatory agency for pooling, 110 and the agency may enter an order pooling all interests in the spacing unit for the operation and development of the unit. The procedure includes notice and hearing, and the order provides for reimbursement of the drilling party by the working interest owners in the spacing unit.

c. Commingling Agreements

A tank battery¹¹¹ commingling agreement or tank battery consolidation agreement is not a pooling agreement, but is used when an operator of several producing properties wishes to consolidate the production facilities of various leases and store oil from all the leases in a single tank battery. This agreement allocates to each royalty and overriding royalty owner and each working interest owner a proportionate amount of the production from the common tank battery based on flow tests of all wells affected. The wells are usually retested once a year in order to readjust the allocation of production. The allocation formula is based on a direct ratio of each well's individual production test to the sum of all the wells' individual tests on a per lease basis.

^{109.} N.D. Cent. Code § 38-08-09.4 (1980). The statute provides that "the commission shall define the area of the unit source of supply or portion thereof to be included within the unit area and prescribe with reasonable detail the plan of unitization applicable thereto." Id.

110. See, e.g., Wakefield v. State, 306 P.2d 305 (Okla. 1957) (reasonableness of compulsory pooling to be determined from statute's purpose); Palmer Oil Corp. v. Phillips Petroleum Co., 204 Okla. 543, 231 P.2d 997 (1951) (state unitization act found constitutional).

111. A tank battery is a "group of tanks located at convenient points for storing oil prior to transportation by truck or pipeline to a refinery." 8 WILLIAMS & MEYERS, supra note 4, at 753.

3 Unitization

Unitization refers to the joint operation of a unit covering all or some part of a producing reservoir and is important when there is separate ownership of portions of the rights in a producing pool. 112 Whereas pooling only establishes a drilling and spacing unit, unitization allows the conservation of natural resources under a unified plan. The lessees' and the lessors' interests in the unit area are joined, allowing the various working interest owners to share the risks and benefits of exploration and development. Unitization is usually voluntary, but may also be forced or compulsory. 113

In North Dakota a unit agreement may be approved by the Industrial Commission on a finding that it is protective of correlative rights and reasonably necessary for increased recovery and the prevention of waste.114 A postdiscovery unit agreement may cover the development of a newly discovered field or secondary recovery operations.

The unit area may cover the entire reservoir or only a portion of it if the area is too large to be efficiently operated as a whole. The unitized substance will be designated in the unit agreement and a party designated as operator. Such units commonly are formed to commence an improved recovery method, such as the injection of water or gas, and are usually referred to as secondary recovery units. The secondary recovery unit with a single operator permits the selection of an injection pattern that will maximize overall recovery from the reservoir.115

Compulsory unitization statutes solve many of the legal problems inherent in field wide unitization, and in most cases it is the only way all interests in a field can be unitized. 116 Unitization agreements are binding only on parties who execute them and their heirs or successors in interest.117 The refusal of a royalty owner to

^{112. 8} WILLIAMS & MEYERS, supra note 4, at 800.1.

^{113.} See N.D. Cent. Code § 38-08-09 (1980). Section 38-08-09 allows "cooperative development and operation of a field or pool... if the agreement is approved by the commission." Id. 114. Id. The agreement must also be in the public interest. Id.

^{115.} See Smith, supra note 92, at 212.

^{115.} See Smith, supra note 92, at 212.

116. Myers, Agreements Relative to Secondary Recovery Operations, Their Negotiation and Execution, and the Role of the Landman, 6 Rocky MTn. Min. L. Inst. 245, 258 (1961).

117. Syverson v. North Dakota State Indus. Comm'n, 111 N.W.2d 128, 132 (N.D. 1961). In Syverson royalty owners in the Tioga-Madison field protested the unitization of the field for water injection purposes after a public hearing. Id. The Industrial Commission issued its order approving the unit agreement upon a finding that such unitization was in the best public interest, was protective of corrective sixth and was research to the second control of the second contr of correlative rights, and was reasonably necessary to insure the largest ultimate recovery and to prevent waste. *Id.* at 131. Within six months, approximately 98% of the owners of mineral and royalty interests had signed the unit agreement. The Syversons refused to sign unless they were offered terms more favorable than those made in the offer tendered them. The Industrial

execute a unitization agreement, however, will not prevent the operator from operating the remainder of the unit under the terms of the unit operating agreement.¹¹⁸ The pooling of interests in the unit will not affect an uncommitted royalty owner.¹¹⁹

Unit production allocated to each separately owned tract within the unit is considered production from each tract regardless of the actual location of the wells. 120 Production allocated to a tract is deemed to fulfill the covenants and conditions, express and implied, of each of the leases included in the unit area. Unitization, however, does not effect a cross-conveyance of titles.

Another type of unit, common in the Rocky Mountain area, is the exploratory unit. An exploratory unit is one that is formed prior to drilling an initial test well on a prospect. If the area to be explored contains more than ten percent federal acreage, the federal form of unit agreement is required, and the unit must be approved by the Minerals Management Service (M.M.S.).¹²¹

After the unit has been approved by the M.M.S., the unit area effectively becomes one large lease. All leases covering interests that are committed to the unit are extended for the life of the unit provided production in paying quantities is established under the plan prior to the expiration date of the lease. 122 If a lease is committed to a unit plan and part of the leased land lies outside the unit, the lease is segregated by the Bureau of Land Management into separate leases as of the effective date of unitization. The nonunitized portion of the lease will continue in force for its term, but not less than two years from the date of segregation and so long thereafter as oil or gas is produced in paying quantities.

The federal unit agreement requires commencement of a test well within six months following the effective date of the agreement; diligent continuance of such drilling, once commenced;

Commission authorized the injection of water into the Tioga-Madison reservoir and designated certain wells as injection wells for the unit. The Syversons had no interest in any wells so designated. After the order had been issued, the Syversons applied to the commission for a rehearing. The application was denied and the Syversons appealed to the district court. The district court affirmed the order. Id. at 132. The North Dakota Supreme Court held that the provisions of the unitization agreement were binding only upon those persons having interests in the proposed unit who agreed in writing to such unitization and the rights of those owners refusing to sign were unaffected. Id. at 133. When a lessor refuses to join the unit, the duty of the lessee to operate the leased premises in a reasonable and prudent manner for the lessor's benefit will not prevent the lessee from operating the remainder of the field as unit operator. Id.

^{118.} Id. The court indicated that the operator is "compelled to continue the "in lieu" payments which it has contracted to make." Id.

^{119.} *Id*.

^{120.} N.D. CENT. CODE § 38-08-09.8 (1980).

^{121. 30} C.F.R. § 226.8 (1981). Authorization will be given "upon a determination that such agreement is necessary or advisable in the public interest and is for the purpose of more properly conserving natural resources." *Id.*

^{122. 30} C.F.R. § 226(e) (1981).

and drilling of additional test wells, with not more than six months between wells, until a discovery of unitized substances in paying quantities is made. 123 Once a well capable of producing unitized substances in paying quantities is completed, the unit agreement requires the establishment of a participating area. The participating area represents the area known or reasonably estimated to be productive in paying quantities. A separate participating area is established for each productive zone or deposit of unitized substances. 124

As additional wells outside the boundaries of the initial participating area are completed, the participating area may be expanded to include additional lands reasonably proved productive from the unitized formation or formations. If a portion of the participating area is proved unproductive in paying quantities, the initial participating area may be contracted.¹²⁵

In the participating area scheme only the working interests and committed royalty interests in the participating area are pooled. Costs and production are allocated to the various tracts based on tract participation factors in the participating area. Although the unit operating agreement may provide for volumetric determinations of tract participation factors, the most common tract participation determination is based on surface ownership. Unitized substances are allocated to each tract in a participating area on an acreage basis. In *Phillips Petroleum Co. v. Peterson*¹²⁶ the court held that the effect of federal unitization applies only to the allocation of production and computation of royalties and is not a cross-transfer of interests.¹²⁷

4. Operating Agreements

a. For Drilling and Spacing Units

Prior to 1956 all operating agreements for spacing units or communitized tracts were either hand drawn or printed by individual companies for in-house use. 128 The need for industry-

^{123.} Churchill, Federal Unitization, 21 ROCKY MTN. MIN. L. INST. 223, 237 (1975).

^{124.} For an analysis of the problems arising from the overlapping jurisdiction of state and federal agencies in the formation of participating areas in federal units, see Gray & Schaefer, supra note 107.

^{125.} For a thorough discussion of federal exploratory units, see Churchill, supra note 123.

^{126. 218} F.2d 926 (10th Cir.), cert. denied, 349 U.S. 947 (1954). 127. Phillips Petroleum Co. v. Peterson, 218 F.2d 926, 930 (10th Cir.), cert. denied, 349 U.S. 947 (1954).

^{(1954).} 128. Wigley, AAPL Form 610-1977 Model Form Operating Agreement, 24 Rocky Mtn. Min. L. Inst 693 (1978).

wide standardization of provisions to facilitate negotiations gave rise to the Ross-Martin Form Operating Agreement in 1956, drafted by an industry committee of landmen and attorneys. In 1967 it was adopted with minor revisions by the American Association of Petroleum Landmen (A.A.P.L.) as the A.A.P.L. Form 610-1956 Model Form Operating Agreement.

Changing economic conditions and increasing federal and state regulatory controls as well as the evolution of oil and gas law brought about the need for revisions in the operating agreement. An A.A.P.L. committee drafted the operating agreement most widely used by industry today — the A.A.P.L. Form 610-1977 Model Form Operating Agreement. The latest version, with only minor revisions of the 1977 form, is the A.A.P.L. Form 610-1982 Model Form Operating Agreement.¹²⁹

Most case law on oil and gas operations is derived from decisions prior to the existence of the 1956 Model Form Operating Agreement. The few decisions involving the 1956 form were taken into account in drafting the 1977 form. The 1977 Model Form Operating Agreement, including its 1982 version, is a multifaceted document spanning all phases of oil and gas operations, including substantial treatment of subsequent operations (all operations after the completion of the initial test well).

Article VI.B. of the Model Form Operating Agreement in both the 1977 and 1982 versions sets out the procedure for initiation of proposals by working interest owners for drilling development wells and reworking, deepening, or plugging back nonproducing wells. Article VI.B.2. provides for operations by less than all parties, and allows a party who does not wish to participate in the proposed operation to elect to become a nonconsenting party. If the remaining working interest owners decide to absorb the nonconsenting party's share of the costs of the operation, the nonconsenting party has a right to assume its working interest share of production after the other owners have recouped a specified percentage, such as 300%, of the nonconsenting party's share of the costs of drilling, testing, completing, and equipping the well and 100% of the nonconsenting party's share of the costs of surface equipment and operating costs for the period of recoupment. Article VI.E. provides for the abandonment of wells by the parties.

The Model Form Operating Agreement in both the 1977 and

1982 versions provides for failure of title and designates the responsibilities of the operator. Article VII describes the liability of the parties and incorporates the accounting procedure attached as Exhibit "C" to the operating agreement. The most commonly used accounting procedure is the COPAS-1974 Accounting Procedure for Joint Operations by the Council of Petroleum Accountants Societies of North America. This accounting procedure is based on a philosophy of cost rather than profit recovery to the operator and represents the consensus of the oil and gas industry regarding the allocation of costs of joint operations. 130

Article VII.D.1. provides for a casing point election whereby a party elects whether it wishes to join in the costs of completion at casing point. ¹³¹ If the party elects nonconsent and the completion attempt is successful, the recoupment provisions of Article VI.B.2. apply. Article VII.D.3. provides for limitation of expenditures by the operator and sets an upper limit beyond which the approval of all parties must be obtained. The limitation does not apply to necessary operations for the drilling of a well authorized under other provisions of the agreement through testing and completing or to casing point, as the contract may provide, but applies primarily to production operations.

Exhibit "A" to the Model Form Operating Agreement describes the lands covered by the agreement and sets out the working interest percentages of each party. This exhibit often contains both before payout and after payout interests. All costs and liabilities incurred by the parties in operations covered by the operating agreement are borne and paid in the proportions set out in Exhibit "A." All equipment, materials, and production of oil and gas after the payment of royalties is owned by the parties in the same percentages. Article VI.C. provides that each party shall take in kind or separately dispose of its proportionate share of oil and gas produced from the lands covered by the operating agreement. This is important for tax reasons. The 1982 form provides for an alternate version of VI.C. when a gas balancing agreement is attached as Exhibit "E" to the operating agreement.

All parties maintain access to the wells and all geological

^{130.} See Cunningham, Oil and Gas Accounting Procedure, 13 ROCKY MTN. MIN. L. INST. 397 (1967).

^{131.} Casing point refers "to the time when a well has been drilled to the objective depth..., appropriate tests have been made, and operator notifies drilling parties of his recommendation with respect to the running and setting of a production string of casing and completing the well." 8 WILLIAMS & MEYERS, supra note 4, at 90-91.

^{132.} If the parties to the agreement reserve the right to take production from the property in kind, they do not have the joint profit objective necessary for taxation as a partnership or corporation. F. Burke & R. Bowhay, supra note 47, ¶ 14.08.

information, even if a party elects nonconsent. Article VIII of the 1982 form covers the procedure for acreage or cash contributions to the drilling party. The 1982 form provides the option of attaching a tax partnership agreement as an exhibit. Article XIII provides two options for the term of the agreement, which may be for the life of the leases subject to it or may terminate after cessation of production and abandonment of the well drilled pursuant to it. The latter option is frequently used in the drilling of an exploratory well, while the former is used when the agreement covers jointly owned leases. Article XV allows the parties to include other miscellaneous provisions necessary or appropriate under the circumstances of the particular deal or that reflect preferred company policies.¹³³

b. Unit Operating Agreements for Secondary Recovery and Exploration Units

Operating agreements for secondary recovery units must be drafted from an engineering standpoint to meet the particular problems of each field. The most important element is the participation formula. Costs and production may be allocated on a surface acreage basis or on the basis of hydrocarbons in place or estimated recoverable reserves.¹³⁴

The unit area may cover the entire reservoir or only a portion of it if the area is too large to be efficiently operated as a whole. For compulsory unitization North Dakota requires that the unit operating agreement contain a provision that the owners of a simple majority of the working interests in the unit may vote to change the unit operator. Such operating agreements must also provide for supervision of the operator by the working interest owners and must include reasonable provisions for carrying lessees unable to meet promptly their unit financial obligations. Such operation of the operator by the working interest owners and must include reasonable provisions for carrying lessees unable to meet promptly their unit financial obligations.

^{133.} For a discussion of policy considerations underlying the A.A.P.L. Model Form Operating Agreement Form 610-1977, see Young, Oil and Gas Operations: Who Does What, To Whom, For Whom and Who Pays, How, and When, 27B ROCKY MTN. MIN. L. INST. 1651 (1982).

^{134.} The volumetric method of estimating reserves is as follows:

The average net thickness of the producing sand under a property is multiplied by the acreage of the property to obtain the volume of producing sands (usually expressed in acre feet). If conditions are reasonably uniform an average value of recovery per acrefoot then is determined, considering such properties of the sand as porosity, permeability and conate water saturation, and such properties of the oil as viscosity, amount of dissolved gas and other appropriate factors.

⁸ WILLIAMS & MEYERS, supra note 4, at 813.

^{135.} N.D. CENT. CODE § 38-08-09.4(1) (1980).

^{136.} Id. See generally Myers, supra note 116.

The most common unit operating agreement is the divided type, such as the Rocky Mountain Unit Operating Agreement, Form 2 (1980), which provides for the establishment of a participating area around the discovery well. In an undivided type unit operating agreement all costs are borne and all production is shared by the working interest owners in predetermined percentages that remain fixed for the life of the unit. In the divided type unit operating agreement the working interest owners bear costs and share production as, when, and to the extent their lands become included within a participating area. Participation in both costs and production is revised whenever the participating area is revised. In effect, production from the unit benefits only those parties owning interests in lands within the unit boundaries known or reasonably estimated to be productive in paying quantities.¹³⁷

Problems in federal exploratory units that must be addressed in the unit operating agreement arise because most federal units are formed before discovery of production. Lack of geological and reservoir information in the undeveloped area spawns differing scientific opinions. The location and revision of participating areas and the automatic contraction of the unit often result in an area different from that outlined by the operating agreement.¹³⁸

The Rocky Mountain Unit Operating Agreement, Form 2 provides for an initial test well, subsequent test wells, exploratory wells, and development wells. A development well is defined as a well drilled within a participating area and projected to the pool or zone for which the participating area was established. An exploratory well is defined as a well other than a development well drilled after discovery of unitized substances in paying quantities in the unit area.

An exploratory well may be proposed only by a party owning a committed working interest in the drillsite tract. A drilling block must be designated for the drilling of the well. Although the size of the block is negotiated by the parties, it is required to be one that, on the basis of available geological information, is likely to be proved productive by drilling. This block will usually conform to temporary state spacing orders. Once a drilling block is established, each party within the block must either participate in the cost of the well on an acreage basis or elect to be a nonconsenting party. A nonconsent recoupment provision determines the percentage penalty applied.

^{137.} Churchill, supra note 123, at 244.

^{138.} Ryan, Current Problems in Federal Unitization, with Particular Reference to Unit Operating Agreements, 2 ROCKY MTN. MIN. L. INST. 157, 164 (1956).

Article 13 provides for the adjustment of investment upon the establishment or revision of a participating area. The net effect of the adjustment will be to allocate the costs of the well among the working interest owners in the new or revised participating area on an acreage basis. 139

In article 14 the parties chargeable with the costs of operation have the right to vote regarding any operation conducted by the unit operator in proportion to their respective obligations for operation costs on an acreage basis. Approval of the parties is defined as an approval, authorization, or direction to the unit operator that receives the affirmative vote of the parties entitled to vote. In the drilling of a development well, for example, each party owning a committed working interest in the participating area votes on approving or disapproving the drilling of the proposed well. If the proposed well receives the approval of the parties, each committed working interest owner then votes on whether to participate in the costs or be a nonconsenting party to the well.

III. TAX PROBLEMS IN OIL AND GAS CONTRACTS

The tax treatment of any economic arrangement discussed in this Article can mean the difference between a deal that accomplishes the profit objectives of the parties and one that results in substantial increases in the parties' tax liabilities. The manner in which the parties structure the deal determines the resulting tax treatment.

In 1981 the oil and gas industry paid in excess of \$17 billion in federal income taxes and an additional \$8 billion in windfall profits taxes.140 Obviously any energy company's great concern is the specific tax treatment accorded its exploration and development arrangements. This section briefly discusses some tax planning problems that must be addressed in structuring agreements, particularly farmout arrangements.

The primary objective of each party to an exploration or development arrangement should be maximization of available tax deductions and tax credits. In effect, each dollar of tax deduction results in a fifty-cent reduction in current tax liability, while each dollar of tax credit results in a one dollar reduction in tax liability. Intangible drilling costs, 141 depreciation, 142 depletion, 143

^{139.} Churchill, supra note 123, at 247.

^{140.} Interoffice Memo from Nick Gal, American Petroleum Institute (March 31, 1982).

^{141.} I.R.C. § 163(c) (West 1978).
142. I.R.C. §§ 167, 168 (West 1978 & Supp. 1982). I.R.C. § 167 describes the statutory requirements for a depreciation deduction. I.R.C. § 168 describes the statutory requirements for an accelerated cost recovery system deduction.

^{143.} I.R.C. § 611(a) (West 1967). The statute provides that for "oil and gas wells . . . there

worthless lease write-offs¹⁴⁴ are some of the principal deductions available. The investment tax credit¹⁴⁵ is the predominant credit available.

One tax planning objective is minimization of lease costs, which must be capitalized and may be deducted only as a cost depletion allowance or when the lease is determined worthless. An important consideration is the deductibility of intangible drilling costs (I.D.C.'s) on a well, as opposed to capitalization of those costs. These items relate to the costs of drilling a well and equipping it for production; on the average intangible costs comprise about eighty percent of the total cost of a well. In many cases, the deduction of I.D.C.'s cuts the current after-tax cost of the well by forty percent.

An operator can deduct 100% of its I.D.C.'s only if it owns 100% of the working interest through payout. 146 The reservation by the farmor of overriding royalties or net profits interests does not affect the farmee's right to all of the available deduction, so long as there is no conversion of the nonworking interest to a working interest before payout. The Treasury Department has determined that if there is any possibility at the time the deal is made that the operator will be bearing a disproportionate part of the costs of the well in relation to its working interest, the operator may deduct I.D.C.'s only on the basis of this contingency, whether or not the election to convert to a working interest before payout was actually exercised. 147 The remainder of the I.D.C.'s must be capitalized. 148 This ruling has not been tested in the courts. In a carried arrangement, 149 such as a farmout, the carrying party is entitled to all the deductions and must recognize all the income through the period of relinquished interest by the carried party.

In support agreements, such as dry hole, bottom hole, or acreage contributions, the contributing party does not have a

shall be allowed as a deduction . . . a reasonable allowance for depletion . . . according to the peculiar conditions in each case." *Id.*

^{144.} I.R.C. § 165(a) (West 1978). The statute allows "as a deduction any loss sustained during the taxable year and not compensated for by insurance or otherwise." *Id.*

^{145.} I.R.C. § 38 (West 1967).

^{146.} For certain corporate taxpayers the Tax Equity and Fiscal Responsibility Act of 1982 has changed the amount of the I.D.C.'s that may be expensed. If the corporation is an integrated oil company, the I.D.C. deduction is limited to 85% of the total intangible drilling costs incurred. The remaining 15% is deducted ratably over a three year period. Tax Equity and Fiscal Responsibility Act of 1982, Pub. L. No. 97-248, 1982 U.S. Cong. & Ad. News (96 Stat.) 103.

^{147.} Rev. Rul. 80-109, 1980-1 C.B. 129.

^{148.} *Id*.

^{149.} Ac carried interest arises when one party, who may be referred to as the carrier, owns part of the working interest and agrees to pay drilling, development, operating, and equipment costs applicable to the share of the working interest owned by another, who may be referred to as the carried party. The carrier recoups the carried party's costs only from the carried party's share of oil and gas if, as, and when produced from the premises. Commerce Clearing House, Miller's Oil and Gas Federal Income Taxation ¶ 16-1 (1981).

working interest in the well, and the value of the contribution must be capitalized against its leasehold in that prospect area. The drilling party must include the value of the contribution in its gross income. It is not subject to depletion. In an acreage contribution arrangement the contributing party is deemed to have sold its acreage for fair market value as of the date of contribution and must accordingly recognize gain as a taxable item.

The most advantageous tax position for all parties is a cost sharing arrangement¹⁵⁰ in which each party is responsible for its own share of costs in the development and operation of jointly owned property. In a cost sharing situation each party recognizes as taxable income the proceeds from the sale of its share of production and is entitled to the share of deductions associated with its share of the costs. Of course, the nature of the agreement between the parties will dictate the existence or nonexistence of a cost sharing arrangement. Joint operating agreements, pooling agreements, and unitizations are examples of cost sharing arrangements.

An important concern in any exploration and development arrangement is avoidance of unfavorable tax consequences resulting from classification of the operation by the Internal Revenue Service as an association taxable as a corporation. In addition to language in the contract that the agreement is not intended to create the relationship of a joint profit venture, it is important that each party maintain its right to take and separately dispose of its share of production. The take in kind provisions tend to disprove the joint profit motive characteristic. A joint profit motive is one of the more important tests for determining whether an association is taxable as a corporation. 151 Some commentators conclude that retaining a call on production is not in conflict with the take in kind language because the call is an exercise of the grantor's right and obligation to take and separately dispose of the production attributable to the lands owned by it prior to assignment. 152 If Treasury regulations 153 are carefully followed, the call on production will not place the operation in the association taxable as a corporation classification.

^{150.} Treas. Reg. § 1.761-1 (1972). See generally F. Burke & R. Bowhay, Income Taxation of Natural Resources ch. 9 (1981).
151. I.T. 3930, 1948-2 C.B. 126 (establishes the characteristics of an association taxable as a

^{151.} I.T. 3930, 1948-2 C.B. 126 (establishes the characteristics of an association taxable as a corporation; one of these characteristics is a joint profit motive). See 1 McKee, Nelson & Whitmire, Federal Taxation of Partnerships and Partners ¶3.06[3] (1977).

^{152. 2} WILLIAMS & MEYERS, supra note 4, § 427.

^{153.} I.T. 3948, 1949-1 C.B. 161.

A. Pool of Capital Doctrine

The pool of capital doctrine¹⁵⁴ has been an important tenet of oil and gas taxation since 1941. Under this theory, if a well is drilled on the acreage assigned under a farmout arrangement, the assignment of that acreage is a contribution by the farmor to the pool of capital and is not taxable as a sale. The drilling of the well is considered the farmee's contribution to the pool of capital. A farmout agreement covering only a drillsite spacing unit still is not a taxable event under the pool of capital doctrine. The receipt by assignment of 100% of the drillsite acreage if the well is completed as a producer, regardless of the timing of the assignment, allows the farmee to deduct 100% of its I.D.C.'s even if the farmor reserves the right to back in at payout for its relinquished working interest.

B. Revenue Ruling 77-176

In 1977 Revenue Ruling 77-176¹⁵⁵ held that when a farmor agrees to assign 100% of its interest in the drillsite spacing unit to the farmee and 50% of its interest in the remainder of the leases subject to the farmout, the assignment of the remainder of the leases outside the drillsite spacing unit falls outside the pool of capital and is separate property. This assignment of properties outside the drillsite constitutes a sale and is a taxable event resulting in taxable gain to the farmor and ordinary income to the farmee. If the well drilled proves the property and escalates its value, the impact of this ruling in tax dollars is substantial.

One approach frequently used in the industry to mitigate the tax consequences of a farmout arrangement including excess acreage outside the drillsite is the up front or present assignment. If the assignment is made concurrently with the date of the farmout contract, the leases constitute unproven property and are valued as of the date of the contract. If the assignment is made subsequent to the completion of the well, the value of the acreage escalates, resulting in higher tax costs. However, neither the present assignment nor the subsequent assignment affect the taxability problems created by the Revenue Ruling 77-176 type arrangment; the timing of the assignment merely establishes the dollar cost of tax exposure.

^{154.} G.C.M. 22, 730, 1941-1 C.B. 214. 155. Rev. Rul. 77-176, 1977-1 C.B. 77.

C. Tax Partnerships

Since the 1977 Revenue Ruling, it has become increasingly common in the oil and gas industry to enter into a tax partnership agreement in conjunction with a farmout. Tax partnerships can also be used with unit agreements that contain provisions equalizing preunitization costs, either directly or indirectly through cash settlements or disproportionate spending.

A tax partnership is not a partnership for state law purposes, but is recognized as a partnership for federal and state income tax purposes. ¹⁵⁶ As an entity for income tax purposes the tax partnership must file an income tax return, which is an informational return only. The deductions, income, gains, losses, and credits of the tax partnership flow directly to each partner, who is then taxed on the income and gains and is allowed to take the deductions, credits, and losses. The basic requirement is that all allocations of income, gains, losses, deductions, and credits must have substantial economic effect. ¹⁵⁷

Although there is some disagreement in the oil and gas industry regarding their necessity, capital accounts in the tax partnership can be utilized to monitor and reflect each partner's interest in the tax partnership. The use of capital accounts allows for special allocations to partners bearing the economic burden of the expenditures underlying certain tax deductions. For example, a farmee may be able to deduct 100% of its I.D.C.'s regardless of whether it owns 100% of the working interest until payout. Although specific elections must be made in the tax partnership to take advantage of certain tax benefits, such as the deduction of I.D.C.'s, the use of a tax partnership eliminates the need for a 100% drillsite assignment under a farmout agreement.

The partner responsible for preparing the tax partnership return must be designated in the tax partnership agreement with guidelines established for its preparation. The tax partnership agreement must also include provisions for distribution at termination. If capital accounts are utilized, cash settlements may be required at termination. However, the current tax benefits accruing to the parties usually outweigh the disadvantage of cash settlements and the administrative burden of preparing tax

^{156.} I.R.C. § 761(a) (West 1982). Partnership for federal tax purposes is defined as "a syndicate, group, pool, joint venture, or other unincorporated organization through or by means of which any business, financial operation, or venture is carried on." Id.

^{157.} F. Burke & R. Bowhay, supra note 47, ¶ 10.22.
158. The use of special allocations of intangible drilling costs in a tax partnership agreement was recently upheld in Allison v. United States, 82-1 U.S. Tax Cas. (CCH) § 9163 (1982).

partnership returns. The use of a tax partnership agreement requires an election not to be excluded from Subchapter K, as has been traditionally done in oil and gas contracts.

IV. CONCLUSION

The kinds of contracts commonly used in oil and gas operations in the Williston Basin can be classified as having either an exploration or development objective. The exploration agreements reflect the desire of the parties to redistribute the costs and risks of exploratory drilling. A well-prepared exploration agreement must reflect economic considerations, tax considerations, and factors such as expiring leases, drilling rig availability, the need for retaining a call on production, and the possibility of split stream gas sales.

In a farmout arrangement the farmor is able to evaluate its acreage without cost or risk and, if the well is productive, receives a cost-free interest in production as well as maintaining its leases. The farmee acquires a greater acreage position at a cost that may be lower than otherwise available. The farmee also receives an interest in production from the acreage and protects itself from proving up other parties' acreage in drilling the test well. In addition both parties receive valuable geological information from the test well. The farmee reduces its return on its investment in the first well, but also reduces its investment in acreage. The farmee can drill wells on the earned acreage that may not be possible otherwise.

In support agreements a party with a geological interest in an area contributes something of value to another party to encourage that party to drill a test well on offsetting acreage and shares the geological information. The contribution may be in the form of cash or an assignment of acreage. The contributing party obtains valuable geological data at lowered cost and risk, which it can use to evaluate other acreage in the prospect area. The drilling party minimizes its risk and, with a cash contribution, its costs of drilling thus improving the economics of the prospect.

In option farmout and seismic option farmouts the farmor gains valuable geophysical or geological information with which to evaluate its acreage at no cost or risk and may also get wells drilled on the property if the option is exercised. The farmee gains information from its seismic program or offset test well that facilitates evaluation of the prospect. The information helps predict

favorable locations for drilling on the farmout acreage. The option agreement provides the farmee with an immediate acreage position if the data is favorable.

Operating, pooling, and unitization agreements may be utilized for exploration in wildcat areas or for development of newly discovered producing properties. Operating agreements provide for joint decision making regarding future operations on the properties, allocate costs and risks among working interest owners, and allocate production in the same percentages as costs are shared. An accounting procedure provides a method for determining costs and calculating revenue.

An understanding of the economic effects and tax consequences of typical oil and gas agreements allows the creative structuring of the agreement to reflect the parties' intentions and offers economic benefits. The use of a tax partnership should be considered when separate properties are covered by the agreement or when there is a disproportionate sharing of drilling costs.

