The Coal and Lignite Lease Compared to the Oil and Gas Lease

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Although oil and gas production has long dominated the state's natural resources scene, Arkansas, this land of opportunity, has long yielded other fruits of the earth. Hard minerals, ranging from the mundane, such as sand and gravel, to the exotic, such as diamonds, have been commercially mined here. More importantly, from the energy standpoint, there has been significant coal production in the state since 1870. Lignite, sometimes referred to as brown coal, has reputedly been mined here since the Civil War.

Despite the commercial production of a wide array of hard minerals, including significant coal production, most lawyers by experience and education are oriented to the law of oil and gas. Oil and gas activities overshadowed other mineral transactions in the practice and legal education catered to the marketplace by teaching mineral law almost exclusively by reference to oil and gas. As a consequence, the hard minerals lease was virtually ignored. The result has been, absent exposure to hard minerals transactions, a lack of familiarity with the hard minerals lease.

Due to the increased demand for energy and the continuous depletion of our oil and gas reserves, the need for alternative energy resources has revived the coal industry. Our vast reserves of coal, particularly in the west, indicate that coal will probably be the primary energy resource of the near future. As a result, the buying and selling of coal leases has increased in Arkansas. Of more consequence, however, is the current lease activity in lignite in southern Arkansas. This deposit is part of a broad band of lignite which spans Texas, Louisiana, southern Arkansas and Mississippi and is reported to be of a relatively low BTU value and low sulphur content.
that must be surface mined.\textsuperscript{5}

The increased market activity in coal and lignite and the sheer magnitude of the state's lignite deposit accentuates the need for a working knowledge of the coal and lignite lease. With this in mind, this paper will compare the "classical" coal lease to the "classical" oil and gas lease\textsuperscript{6} with an emphasis on the basic structure of the coal lease: the granting, royalty (including minimum and advance royalty), and habendum clauses. The lessee's right of surface usage, including the right to strip mine, will be discussed.\textsuperscript{7} Additionally, relevant clauses of coal and lignite leases in current use will be highlighted.

The distinct inherent characteristics of oil and gas and coal have resulted in the development of lease forms which are conceptually and functionally different.\textsuperscript{8} Oil and gas are fugacious substances generally found in deep sub-surface reservoirs, making them difficult to find and, once found, it is difficult to determine the amount present. As a result, the modern oil and gas lease is exploration oriented. Coal and lignite, in contrast to oil and gas, are stationary hard minerals. Since the deposit must be of a substantial size for economically feasible mining, the location is generally well known prior to development. Further, the amount of mineable coal in place on the lessor's tract can frequently be ascertained with some certainty. Thus, the lessor and lessee can contract with some specificity as to the rate of production. The coal lease is, therefore, development oriented. In fact, the coal lease, granting the lessee the right to develop the mineral for the payment of royalties on production, resembles a sale of the minerals on an installment basis. One coal producing jurisdiction, Pennsylvania, holds generally that a coal lease results in a sale of the coal in fee simple to the lessee.\textsuperscript{9}
Differences in the respective mining practices and mining industries also result in different lease requirements for coal and oil and gas production. After discovery, oil and gas may be quickly and easily extracted and transported to a readily accessible and continuous market. Coal, however, requires a longer lead time for development since the mining equipment frequently must be specially designed and then assembled on the premises. Finally, as coal is moved by rail, transportation arrangements tend to be difficult and time consuming.10

At present, lignite production is complicated by the fact that there is no presently established market for the extracted substance -- no current commercial use of lignite. Furthermore, the economics of rail transportation and the peculiar physical properties of lignite render it infeasible to transport the substance by rail. Current indications, therefore, point toward "on site" development and use which will require large blocks of committed acreage to render the project operational. As lignite must be strip mined, with up to 150 feet of overburden being removed in some areas, reclamation is required. The uncertainties inherent in the development of lignite are reflected in lignite leases currently in use.

THE GRANTING CLAUSE

The purpose of the granting clause is to effect a presently operative transfer of an estate and to define the nature of the interest created. Since ownership of minerals at common law is an incident to the ownership of land, coal and other hard minerals are owned in place by the landowner.11 However, as oil and gas are fugacious minerals subject to being drained by adjacent landowners, a few jurisdictions hold that these substances are not owned in place
but that the landowner has only an "exclusive right to take" - the exclusive right to capture the underlying oil and gas by operations on his land. Such a right is an incorporeal hereditament, i.e., a non-possessory interest. Arkansas is usually regarded as an ownership in place jurisdiction in which the landowner has a corporeal or possessory interest in the oil and gas underlying his tract. Therefore, in this state, the general principles of conveyancing theoretically allow any interest that can be created in land - corporeal or incorporeal - to be created in the lessee by the appropriate use of technical words of grant in the oil and gas or hard minerals lease.

The Supreme Court of Arkansas, however, has refused to accord the language of the granting clause its traditional effect in oil and gas and hard minerals leases and has consistently held that the lessee of the mineral lease, regardless of the specific mineral involved, has an "interest and easement in the land to explore for and mine" the mineral. This construction was adopted in Osborn v. Arkansas Territorial Oil and Gas Co., in which the court so read an oil and gas lease which "granted, demised and let unto the lessee all of the oil and gas in and under said land." The effect of this construction is to create an incorporeal hereditament, i.e., a non-possessory interest, despite the fact that the granting clause contained in the lease would have conveyed the oil and gas in place, a possessory interest. In Goodson v. Comet Coal Co., the court, refusing to examine the language of the granting clause of a coal lease in determining the extent of the lessee's interest, emphasized the application of this construction by observing that the lease involved was "a lease in the ordinary form and the rule announced by the court relative to the ordinary mineral lease in the case of
present sale or transfer to the title of the coal, but simply a contract to mine under the land..."^{19}

The construction of the granting clause is primarily important in determining the remedy available to protect the interest of the lessee.^{20} Traditionally, if the granting clause vests the lessee with a possessory interest in the minerals, ejectment would lie in the event of eviction. If the lease only created a non-possessory interest, i.e., an exclusive right to take, ejectment would not lie and the lessee would be relegated to an equitable remedy. However, difficulty exists in the application of such traditional theory to mineral leases.^{21} If the lessee has a possessory interest in the minerals but operations have not been commenced on the premises, the availability of ejectment as a remedy is clouded since the surface owner is also entitled to possession and that portion of the surface that the lessee is entitled to occupy to mine the minerals has not yet been delineated. If the lessee has a non-possessory interest in the minerals but has been in prior possession of the premises, i.e., operations having been previously commenced, logic would dictate that ejectment should lie upon eviction as to that portion of the premises previously occupied despite the fact the lessee's interest is "non-possessory."

In Henry v. Gulf Refining Co.,^{22} the Arkansas Supreme Court, consistent with its previous holdings on the effect of the granting clause, held that ejectment would lie even though the lessee's interest under the lease was "an exclusive right to take", a non-possessory interest. The court further intimated that ejectment would be available as a remedy irrespective of whether a prior entry had been made on the premises.^{23}
Therefore, regardless of whether the mineral is oil and gas or lignite and irrespective of the language contained in the granting clause, the court seems predisposed to find that the lease creates in the lessee an exclusive easement to explore for and mine the mineral which despite being a non-possessory interest will support an action in ejectment. The failure to accord the traditional effect to the language of the granting clause, and to follow the traditional consequences as to the effect of that clause on the availability of the remedy, has resulted in a uniformity as to the lessee's interest in the minerals and a simplification as to the nature and effect of the lessor-lessee relationship in a mineral lease in Arkansas.

ROYALTY CLAUSE

The royalty clause in a mineral lease provides for the "benefits to inure to the lessor as a result of the extraction of the desired valuable substances." The relatively standard uniform royalty share that characterizes the oil and gas lease (1/8 of production free and clear of all costs) is not a trait of the coal or hard minerals lease. Different methods of computing the lessor's royalty share exist in the coal industry and it is not unusual to find royalty clauses utilizing different methods of computation in leases within the same field. Furthermore, regardless of the method of computation, the lessor's royalty share is not necessarily uniform since royalty in the coal lease, unlike the oil and gas lease, is more apt to be negotiated.

One method of computation in use in the hard minerals lease provides that the lessor is to receive as royalty a straight monetary sum for each ton or acre foot of coal mined. This method of com-
putation, by fixing the lessor's return for a designated quantity of coal, insulates the lessor from the effects of a decline in the market price but also forcers him from participating in future market increases.\(^{27}\) In an age of habitual inflation, such a royalty clause is obviously not advantageous to the lessor.

An alternative method of computation is that of basing the lessor's royalty share on a specified percentage of the market value of the mined or marketable coal.\(^ {28}\) This method ensures that the lessor will also realize the benefits from future increases in the market price, but it could result in a royalty which may not reflect the long range value of a depletible natural resource should distressed market conditions occur.

The present trend in royalty clauses for hard mineral leases, and the approach which appears to be in predominant use in coal and lignite leases in Arkansas, bases the lessor's royalty share on a combination of the above computations: the lessor receives a specified percentage of the market value of the mined substance, but that sum shall not amount to less than a certain specified sum per quantity removed.\(^{29}\) This basis of computation allows the lessor to realize the benefits of future price increases while placing a minimum price floor on the amount of royalty which may be paid for the mined coal.

**MINIMUM OR ADVANCE ROYALTY**

Minimum or Advance Royalty is a distinctive trait of the coal lease.\(^ {30}\) Advance royalty may simply take the form of a specific sum that the lessee is obligated to pay in advance of securing production.\(^ {31}\) Likewise, minimum royalty may refer to the obligation of the lessee to make a designated payment in the event that a specified
amount of coal is not mined. However, the terms are frequently used interchangeably to refer to one of the following specific contractual obligations which the lessee undertakes: 1) to pay a fixed sum to the lessor designated as royalty regardless of whether or not any coal is mined; or 2) to pay such a sum if the amount mined is insufficient either to meet a specified tonnage requirement or to generate royalty payments equal to a designated sum.

The extent of the obligation of the lessee to pay minimum or advance royalties depends upon the terms of the lease. The lessor will normally have a right to accrued but unpaid minimum or advance royalty payments. However, one lessee who was "to mine...all merchantable...coal that can be profitably stripmine[d]" was relieved by the court from the obligation to make minimum royalty payments upon the exhaustion of all "merchantable coal" even though the provisions governing such payments failed to explicitly provide for this contingency.

Moreover, coal leases uniformly contain a clause which relieves the lessee from advance or minimum payments when the production of coal is precluded by circumstances beyond the lessee's control. Such exclusionary provisions generally encompass a wide variety of causes for non-performance, such as acts of God, strikes, car shortages, fire, etc. Although such clauses are purportedly construed according to the intent of the parties, they are generally strictly construed against the lessee. If such a specific provision is not included in the lease, the lessee's obligations to pay advance or minimum royalties will not be relieved due to circumstances beyond his control which prevent production from the mine.

IMPLIED COVENANT TO DEVELOP AND MINIMUM AND ADVANCE ROYALTY PAYMENTS

The lessee's obligation to make minimum or advance royalty pay-
ments has been said to "provide a rather expensive inducement for a lessee to commence production of ore or to relinquish the freehold." The accuracy of this observation obviously relates to the size of the payment that the lessee is obligated to make. However, there is a relationship, other than this inherent economic inducement, between the minimum or advance royalty payments and the lessee's obligation to develop the property.

In Arkansas, a covenant on behalf of the lessee to explore and develop is implied in a mining lease. The landmark case is Mansfield Gas Co. v. Alexander, in which the Supreme Court was faced with a fifty year fixed term lease, on a royalty share basis, which granted to the lessee the exclusive right to prospect for and mine "lead, zinc, coal, gas, oil and other minerals." The lessee had failed to explore the property for minerals. The court held that the land was subject to an implied covenant to explore. Noting that the consideration that the lessor was to receive was not the recited "$1.00 consideration" but the "royalties on the minerals", the Court stated:

"the law implies a covenant upon the part of the lessee to make exploration and search for the minerals in a proper manner and with reasonable diligence and to work the mine or well when the mineral is discovered, so that the lessor may obtain the compensation which both parties must have had in contemplation when the agreement was entered into."

While Mansfield is generally viewed as a cornerstone of the law of oil and gas, the Arkansas Supreme Court has consistently implied a covenant to develop in hard mineral leases covering a wide range of substances from diamonds to sand, gravel and coal. In Morley v. Berg, a case involving gravel, the court observed that "the duty of complete development is inherent in all mining leases that provide a royalty to the lessor."
The implied covenant to develop requires the lessee to commence exploration or development with "reasonable diligence", a notion which depends on the facts of each case, having regard to various relevant factors including the size and accessibility of the property, the usual method of development in similar situations and the expenses involved. Once development has been commenced, the lessee is obligated to continue production with reasonable diligence. If the implied covenant to develop is breached, the lessor may seek cancellation based on a forfeiture of the lease or damages.

Naturally, in order to permit flexibility in his mining operations, the lessee may desire control over development independent of the obligations implied by law. Lease provisions which require that advance or minimum royalty payments be made to the lessor provide the mechanism by which the lessee may exercise such control. Minimum and advance royalty payments satisfy the lessee's implied covenant to develop and permit the lessee to indefinitely delay or even to forsake development. In essence, the minimum or advance royalty payments clause in the hard minerals lease discharges the lessee's implied obligation to explore and develop just as the delay rental clause in the oil and gas lease discharges the lessee's implied obligation to drill an exploratory well. Therefore, minimum or advance royalty payments should properly be regarded as a substitute for production.

The lessee's satisfaction of the implied covenant to develop by paying minimum or advance royalties has been based on different theories. One such theory is that as such payments constitute consideration to the lessor for the lessee's privilege to defer development, the inclusion of minimum or advance royalty provisions clearly indicate that the parties did not contemplate continuous development;
the lessor, therefore, cannot complain for lack of development. As this theoretical basis obviously emphasizes the intent of the parties, it is tantamount to holding that since the parties have expressly agreed on the matter of development, no room to imply a covenant exists. Other courts, however, have labeled minimum or advance royalty payments as enforceable liquidated damages, a sum agreed upon in advance by the parties as the damages which will accrue to the lessor on breach by the lessee of the implied covenant to develop.

As the purpose of the minimum or advance royalty provision in the hard minerals lease somewhat parallels that of the delay rental clause in the oil and gas lease, it is not surprising to find that that provision satisfies the implied covenant to develop on the same legal basis as the delay rental clause discharges the lessee's implied obligation to drill an exploratory well. The delay rental payment is also viewed as consideration paid to the lessor for the lessee's privilege to defer exploration. Therefore, as the parties have defined the extent of the lessee's obligation as to development, no room for implication exists. Furthermore, a minority view apparently exists which also categorizes delay rental payments as enforceable liquidated damages.

In Arkansas, the cases suggest that the advance and minimum royalty of the hard minerals lease and the delay rental clause of the oil and gas lease operate on the same legal theory to satisfy their respective implied covenants. In Inman v. Milwhite, an Eight Circuit Court of Appeals decision applying Arkansas law, the lessor sought cancellation of a soapstone mining lease, inter alia, for breach of the implied covenant to develop. The lease contained a provision allowing payment of minimum royalties "in lieu of all development operations" for the year in which payment was tendered. The lessee
had not diligently mined the property but had tendered minimum royalty payments as provided by the lease. The court rejected the lessor's claim of a breach of the implied covenant: "where, as here, however, the contracting parties have specifically dealt with the question of development and operations their agreement governs and there can be no room for implication." 59

In certain instances, however, payments labeled as advance or minimum royalties and paid to the lessor may not satisfy the lessee's implied covenant to develop. For example, a lump sum payment made to the lessor at the execution of the lease, even if denominated as a bonus or advance royalty, may not negative the lessee's implied covenant to develop. In Taylor v. Kingman Feldspar, 60 an Arizona case involving a feldspar lease, the lessee initially paid $3800 to the lessor as advance royalty which could also be credited against future royalties. The court held that notwithstanding the payment being labeled as an "advance royalty", the lessee's failure to develop resulted in a forfeiture of the lease as "a lease [in] which [the] ...main consideration moving to the lessor is to be... royalty...imposes upon the lessee the duty to develop. 61

This principle is also applicable to the implied covenant to explore in the oil and gas lease, as recognized in Arkansas in Ezell v. Oil Associates, Inc. 62 There, the lessor brought suit for cancellation for breach of the implied covenant to explore despite the fact that he had received a bonus of 3000 shares in common stock of an operating oil company controlled by the defendant lessee. Nevertheless, the court held that the lease was subject to an implied covenant to explore. As to the effect of the bonus, the court noted that "the principal consideration for the lease was the payment to the lessors of a part of the oil and gas produced on the leased
Both Taylor v. Kingman Feldspar and Ezell v. Oil Associates, Inc. follow traditional theory that the principal consideration moving to the lessor is the royalties accruing from the extraction of the minerals. The bonus or other designated lump sum payment merely represents the consideration for executing the lease. Such a payment, regardless of the size, is not to be considered as a representation by the lessor that exploration or development may be deferred. The argument has been made, however, that advance royalty in the coal and lignite lease should be distinguished from the bonus in the oil and gas lease and treated as "true royalty" due to the obvious intent of the parties.

On the reasoning reflected in Taylor v. Kingman Feldspar, it has been argued that advance or minimum royalty payments credited against future royalties accruing on actual production should not negative the existence of the implied development covenant. If such payments are not credited or are only partially credited, the sum not so credited clearly constitutes consideration paid to the lessor for the privilege to defer mining operations. Such a payment is obviously in the nature of delay rentals. If the sum paid is to be applied against future royalties, arguably no consideration is being paid for that privilege. However, the receipt of payments that represent royalties in advance of production is a benefit to which the lessee is not otherwise entitled and should, therefore, constitute the required consideration for the lessee's privilege to defer production.

Furthermore, some jurisdictions hold that nominal minimum or advance royalty payments in a hard minerals lease do not satisfy the lessee's implied covenant to develop and the lease, absent develop-
ment, is subject to forfeiture. An illustrative case is Dulin v. West, a Colorado decision in which the lessee secured from the lessor a 20 year lease to mine peat moss. The lease provided for both monthly royalty and an annual rental payment of $10.00. The lessee attempted to hold the lease by making annual rental payments but the lessor sought cancellation due to the breach of the implied covenant to develop. The Colorado Supreme Court rejected the defendant's argument that the annual rental payment negated the existence of the implied covenant to develop:

When minimum royalties and annual rentals provided for in a lease are reasonably substantial in relation to the anticipated return from the property, they are in effect an agreed compensation to the lessor for the lessee's failure to achieve reasonable production. The rule is otherwise, however, where the minimum annual rental is miniscule in relation to reasonably contemplated profits from the operation.

The other jurisdictions which follow the Dulin holding are Indiana, Kentucky and Wyoming. To put the Dulin line of cases in their proper perspective, it must be noted that each of these jurisdictions, except possibly Wyoming, follow the old Indiana rule which held that payment of a nominal sum as delay rentals did not satisfy the oil and gas lessee's implied obligation to drill an exploratory well. The basis of the Indiana rule, by implication, is that the lessee should not thereby be permitted to tie-up the property and speculate on its fluctuating values when actual exploration and development of the property is the contemplated result of the lessor-lessee relationship. Arkansas clearly rejected the Indiana rule in Lawrence v. Mahoney and the concept that a nominal sum delay rental payment will satisfy the oil and gas lessee's implied covenant to explore is firmly entrenched here.

If the Dulin line of authority does not merely reflect a minority view as to the efficacy of a nominal sum payment on the implied
covenants to explore or develop in a mineral lease, these cases may have potential significance in Arkansas in that some coal and lignite leases have provided advance or minimum royalty of $1.00 per acre. Arguably, the issue is rendered moot by the inclusion of a clause in such leases that expressly provide that no express or implied covenant to develop is contained in the lease. Following traditional legal theory as to implied covenants, when the parties have specifically contracted as to the subject of development, no room exists to imply such an obligation on behalf of the lessee.

If a distinction exists between the hard mineral and the oil and gas lease that results in a nominal sum payment failing to satisfy the former lessee's implied covenant to develop, even though such a payment will discharge the latter lease's implied covenant to explore, it is that as to the oil and gas lease: the mineral, the subject matter of the lease, is not known to exist on the leased premises. This fact can only be determined by the drilling of an exploratory well: an expensive and, as oil and gas may not be found in paying quantities, risky undertaking. If the exploratory well results in a dry hole, the lessee suffers a total loss of his substantial investment. The risk inherent in discharging the implied covenant to explore by drilling is a basis for the holding that if the parties to the lease so provide, that obligation may be satisfied by the payment of a nominal sum.

Furthermore, augmenting the holding that nominal sum payment should discharge the implied covenant to explore is the fact that the drilling of a well reveals, to a certain extent, the potential of tracts near its proximity to produce oil and gas. Evidence of this phenomena is the common practice of block leasing, i.e., the leasing of several tracts to secure a block of leased acreage to
ensure the right to fully develop any possible producing formation discovered by the planned exploratory well. If an unsuccessful exploratory well is drilled on an adjacent tract, the lessee, if his lease so provides, should be permitted to discharge the implied covenant to explore by payment of a nominal sum. To require the lessee, on pain of forfeiture, to drill what is likely to result in another dry hole, would only encourage economic waste and increase the cost of oil and gas production.

If the risk inherent in oil and gas exploration is the basis for permitting a nominal sum payment to discharge the implied drilling obligation, should not the lessee of the lignite lease be accorded the same privilege as to the implied development covenant? After all, lignite does not as of yet have an established market. Even if such a market develops, it may be limited to on-site utilization which could mean that the availability of sufficient committed acreage near the leased premises to render such a project operational would ultimately determine if the lignite underlying the tract is to be mined. The lignite lease would appear to be as fraught with risk for the lessee as is the oil and gas lease.

Since advance or minimum royalty payments in the hard mineral lease serve a similar purpose and operate via the same legal theory as does the delay rental payment in the oil and gas lease, the clause in the hard minerals lease may be drafted to function the same as the delay rental payment in the drilling clause of the oil and gas lease, i.e., to operate in lieu of development either as a "special limitation" in which the failure to timely pay the designated sum results in the "premature" termination of the lease or as breach of a "covenant" to pay the designated sum for which the lessee incurs liability. Although historically the development oriented hard minerals lease
did not pattern the advance or minimum royalty clause after the unique drilling clause of the exploration oriented oil and gas lease, current coal and lignite lease forms in Arkansas have been drafted to conform to the operation of the drilling clause. This development indicates that some prospective producers of lignite demand the ability to prematurely terminate the lease and thus avoid advance royalty payments.

**HABENDUM CLAUSE**

The basic function of the habendum clause is to define and limit the duration of the lessee's estate. Although the habendum clause serves the same purpose in both oil and gas and hard minerals leases, the two leases have historically utilized different habendum clauses as the result of the basic distinctions between the two leases and the respective industry mining practices. The standard form habendum clause in the oil and gas lease provides for a short primary term of five to ten years with a secondary term of "so long as oil and gas is produced." The oil and gas lease is therefore capable of being of indefinite duration. This type of habendum clause is required since the probable life of the well is virtually unpredictable and the lessee who hazards the risk of exploration wants to realize the full benefit of his investment. In contrast, the habendum clause in the coal lease was usually of fixed duration but in modern times it has provided for an extension for an additional fixed period. Since the probable life of the mineral deposit can frequently be ascertained, the lessee will seek a lease of sufficient duration to permit the opening and full development of the mine with additional time to secure a market and to arrange for necessary trans-
portation. The lessor, however, wants the duration of the lease limited in order to secure a rate of production which will ensure a profitable return from the royalties. The habendum clause in the coal lease is, therefore, more likely to be the result of negotiation between the parties.

The habendum clause of the modern oil and gas lease is a product of evolution — predecessor lease forms contained habendum clauses which provided for straight long primary term and "no term" leases. Although the modern habendum clause of the coal lease is also a product of evolution, the coal lease, unlike the oil and gas lease, has not evolved a relatively standardized uniform habendum clause.

The "No Term" Lease

Although rarely used now, early coal leases sometimes did not specify any term. The habendum clause indicated that the duration of the lease would be "until all workable and merchantable coal shall have been mined." In the early days of the oil and gas industry, "no term" leases were used which also characteristically provided for an indefinite number of extensions by payment of annual delay rentals. The purpose of the "no term" oil and gas lease was to permit the lessee to extend the period of exploration indefinitely for as long as the lessee was willing to speculate with the leasehold. For this reason, the courts treated no term leases harshly and generally held that such leases were either invalid due to lack of consideration, terminable by the will of the lessor, or valid but subject to an implied covenant to drill an exploratory well on pain of forfeiture. However, if the coal lease is truly
a development lease and subject to an implied or express covenant to reasonably and diligently develop, there is no reason to question the validity of the "no term" coal lease. 87

The Definite Term Lease

The habendum clause of the definite term lease merely provides that the lease will exist for a definite specified duration -- most commonly 20 years. 88 Absent abandonment or the exercise of an express surrender clause, duration of the lease is for the specified period. The definite term clause lease is rarely used today due to its failure to protect the interests of the lessee. If the specified term was too short, the lessee ran the risk of premature termination. The lease would end prior to exhaustion of all mineable coal and the lessee either lost the full benefit of his investment or faced the unenviable prospect of having to negotiate an extension of the lease. More obnoxious to the lessee was the fixed long term lease in which the lessee found himself obligated to pay minimum royalty even after the commercial coal had been exhausted. 90 Finally, the lessor found the fixed long term lease providing for low minimum royalties undesirable as the lessee had no obligation to mine and the property was tied up for an extended period of time for a low monetary return.

A modification of the definite term clause is the long fixed term lease that provides for an earlier termination when all "merchantable and mineable coal" has been mined. 91 The problem presented by the use of this type of habendum clause arises upon termination of the lease when all mineable coal has not been mined. That portion of the coal not mined cannot, thereafter, be recoverable since extraction equipment cannot be economically installed to remove only a small amount of coal. The lessor, therefore, could be deprived of
the full development of this natural resource. Merchantable coal has been construed as being coal of a quality that is "salable" on the market. "Mineable coal" has been construed as being coal so situated that it can be mined at a reasonable profit to the lessee. The lessor has been required to shoulder the burden of proof as to the continued existence of "merchantable and mineable" coal.

Definite Term with Renewal or Extension Periods

The most widely used lease form, and the modern trend, provides for a relatively short definite term (analogous to the primary term in the oil and gas lease) with a provision for renewal or extension for an additional fixed period of time. The right to extend the lease at the end of the primary term fully protects the interest of the lessee. Frequently, coal leases require that the lessee give written notice of the decision to renew the lease within a specified period of time prior to the end of the primary term. The notice requirement provisions have been held to operate as a condition precedent to the renewal of the lease and time, therefore, is of the essence. Other leases have provided a self-executing clause that extends the lease "so long as" the mineral is being mined.

Oil and Gas Habendum Clause

In recent years, habendum clauses in hard mineral leases fashioned after the oil and gas lease have appeared in reported decisions. Such leases typically provide for a primary term and the typical oil and gas lease secondary term adapted to hard minerals, "as long as the leased premises are being mined or ore is being produced." In fact, current coal and lignite leases in use in southern Arkansas are characterized by an extended primary term and "as long as coal is produced in paying quantities". In Inman v. Milwhite, the lease contained a habendum clause that provided in part "as long
as paying quantity production of soapstone ... is continued." The lessor argued, inter alia, that the lease should be cancelled as it was not producing in paying quantities. In deciding this question, the court reasoned that, since the solid mineral lease resembled oil and gas leases, the definition of paying quantities relevant to the oil and gas lease would be applicable. The court then applied the Clifton v. Koontz prudent operator standard to determine if production in paying quantities existed. Milwhite clearly indicates that the habendum clause of the oil and gas lease is adaptable to the coal lease and that the courts will give the same effect to the language regardless of the mineral involved.

SURFACE USAGE, SUBJACENT AND LATERAL SUPPORT AND STRIP MINING

Frequently, the mineral estate is described as the dominant estate and the surface estate as the servient estate. More accurate, however, is the statement that the mineral estate and the surface estate are each "mutually" dominant and "mutually" servient. The mineral estate is dominant and the surface estate is servient in the sense that the mineral estate has the right to such use of the surface estate as is reasonably necessary for exploration and the extraction of the mineral. This right is implied from the grant severing the minerals from the surface in order to permit the mineral owner or lessee to enjoy the interest conveyed. However, the surface estate is the dominant estate and the mineral estate is the servient estate in the sense that the servient estate is entitled to subjacent and lateral support from the mineral estate. This right of the surface owner does not rest upon a grant, express or implied, but is a proprietary right, sometimes referred to as a third
estate in the land,\textsuperscript{105} which may be held or conveyed separately and distinctly from either the surface or the minerals.\textsuperscript{106}

The Arkansas Supreme Court in Bodcaw Lumber Co. v. Goode,\textsuperscript{107} in describing the rights of the mineral owner, indicated that reasonably necessary use of the surface for exploration encompasses an easement of ingress and egress to prospect for and remove the substance, the right to erect all necessary appliances for removal, and the right to occupy as much of the surface as is reasonably necessary for mining purposes.\textsuperscript{108} The mineral owner or lessee, as the owner of the dominant estate, must enjoy his right to the use of the surface with due regard to the interests of the owner of the surface estate, i.e., the servient estate. \textsuperscript{109} Excessive or unreasonable use of the surface by the lessee will result in liability.\textsuperscript{110} Negligent operations resulting in surface damages has also been the basis of liability for the mineral owner or the lessee.\textsuperscript{111}

Oil and gas operations in modern times have generally been marked by a lack of substantial interference with the surface of the property.\textsuperscript{112} Recent petroleum exploration and production usually require surface space only for a well site, battery tanks, settling tanks and sub-surface gathering lines. Thus, the oil and gas lessee and the surface owner have been able to co-exist with each enjoying their respective property interests.\textsuperscript{113}

Instead of relying on the right by implication of reasonably necessary surface usage, the typical oil and gas lease provides for various easements in the surface which expressly delineates the operations which the lessee may conduct on the leased premises.\textsuperscript{114} A representative sample of lease included easements are the right to lay pipelines, construct roads and dams, install tanks, erect power stations and to conduct secondary operations.\textsuperscript{115} Some leases also
contain a surface damage clause which obligates the lessee to compensate the surface owner for certain specified injuries to the premises.

Deep or drift mining, which basically involves "underground" mining is the traditional method of mining coal. Deep mining involves the sinking of a vertical shaft into the subsurface and the developing of underground tunnels and passageways from which the coal is withdrawn and removed through the shaft. Deep mining further utilizes portions of the surface for tramways, tipples and other structures necessary to process and transport the mined coal. Deep mining leaves the surface substantially usable by the owner of the surface.

The coal lease has followed the practice of providing express easements which define the extent of the operations that the lessee is entitled to engage in on the leased premises. The provisions for express easements generally grants the lessee the right of ingress and egress upon and through the surface and subsurface with additional easements for construction and maintenance of transportation and development facilities. The coal lease frequently provides that the lessee may deposit debris on the property.

The bane of deep mining coal operations is the subsidence of the surface due to the removal of the underlying strata which results in the liability of the lessee for failure to provide subjacent and lateral support to the surface. Subjacent support is the right of the surface owner to have the land supported by underlying strata. Lateral support is the right to have the surface supported by adjoining land. Subsidence of the surface due to coal mining operations has been a problem in Arkansas.

In Western Coal Mining Co. v. Young, the lessee had operated
a mine 180 feet below the surface and had originally left pillars of coal throughout the mine to support the surface. However, the lessee later mined the pillars which resulted in the surface subsiding and the surface owner's water well being drained. The Arkansas Supreme Court, in affirming a verdict for the surface owner, rejected the defendant lessee's argument that it had the right to remove the coal without regard to the damage that occurred to the surface by reasoning that "if the land is owned by one person and the minerals by another, the owner of the minerals cannot remove them without leaving natural or artificial support to sustain the surface." The court further noted that the surface owner's right to subjacent support is absolute and his cause of action for damages resulting from subsidence is not predicated on establishing negligence on behalf of the lessee. In Paris Purity Coal Co. v. Pendergrass, a subsequent lateral support case, the court pointed out that as to lateral support, the surface owner's right is absolute as to the land in its natural condition; but, as to buildings or other improvements, the lessee will not be liable for damages resulting from failure to provide adequate support in the absence of negligence. This distinguishes lateral support from subjacent support since as to the latter the lessee is absolutely liable not only as to the soil in its natural condition but also as to the buildings or other improvements. The court stated that the right to subjacent and lateral support can be expressly waived by apt language in the grant which severs the minerals from the surface. Also, it is generally recognized that waiver can be accomplished by contract.

A different method of mining coal and lignite is open cut, or strip, mining. This process involves the tearing away of the earth surface and the horizontal extraction of the mineral. As the over-
burden and the mineral deposit is totally removed, the surface is completely destroyed. Strip mining is not a recent technological development since coal has apparently been strip mined in some parts of the U.S. since the turn of the century. However, with the development of power shovels and modern stripping equipment, open cut mining is the most economical method of removing the coal where it is not precluded by the depth of the deposit. More importantly, as to shallow deposits of coal and lignite which are located so close to the surface that insufficient overburden exists to permit deep mining, strip mining is the only method to extract the mineral.

Since strip or open cut mining destroys the surface, a question arises as to whether the mineral owner or lignite owner has the right to mine the coal and lignite? If so, what is the basis for the right of the lessee to destroy the surface by extracting the mineral? Is the right to strip mine derived from the reasonably necessary use of the surface estate implied in the grant to the mineral owner, or is the right implied in law on the ground that the mineral estate is inactuality a truly dominant estate with an incident of its ownership being the right to destroy the surface estate? The obvious argument for the mineral estate to be treated as such a dominant estate is that without this dominant right the mineral estate may be worthless. However, the rule is clearly established that the lessee or mineral owner does not have the right, either implied by law or implied from the grant, to so destroy the surface. The majority view is based on the fact that the right implied by grant to reasonably and necessary use of the surface by the mineral owner does not permit strip mining as the right to "use" does not include the right to "destroy". Furthermore, the concept of a truly dominant
mineral estate which permits the mineral holder to strip mine, which would be a recognized paramount interest in the real property, simply does not exist or has failed to materialize due to the perception of the courts that the right to destroy the surface should be resolved on the intent of the parties at the time of the severance of the minerals from the surface. Apparently, California is the only jurisdiction that has held that the right to destroy the surface by strip mining is an incident of the onwership of the minerals.  

As the right to strip mine is not implied in the grant or by law, the lessee will only have the right to utilize open cut mining if the lease expressly provides for that method of extraction and the coal and lignite has not been previously severed from the surface. However, if the rights to the coal and lignite have previously been severed from the surface rights, the lessee may only acquire the right to strip mine from the lessor if the deed of severance reflects the intent of the parties that the mineral owner could strip mine or extract the mineral by destroying the surface.

The principal case in Arkansas relating to strip mining is Benton v. U.S. Manganese Corp. The owner of the united surface and mineral estate granted by deed to the mineral owner's predecessor in title the "right to mine, excavate, and prospect for minerals and ore." The grant further provided that the owner of the surface estate would hold the owner of the mineral estate harmless "from liability on account of accident or death to stock of any kind, which might be injured by falling into pits, excavations, etc., on said lands made by grantees or its assigns in mining and prospecting on said property, ..." Thereafter, the surface rights were conveyed to the present surface owner. The mineral owner then started to extract the manganese by strip mining as that was the only method by which
the mineral could be mined. Initially, the surface owner was to conduct and manage the strip mining operations for the mineral owner for a certain sum per ton of the extracted manganese. The amount received by the surface owner was deemed sufficient by him to justify the destruction of the surface. However, the mineral owner later dispensed with the surface owner's services and made other arrangements for the strip mining operations. Afterwards, predictably, the surface owner attempted to prevent the mineral owner and his employees from entering upon the premises to strip mine. When the mineral owner sought an injunction to prevent the surface owner from interfering with the mining operations, the surface owner defended the action on the basis that the complete destruction of the estate by strip mining constituted an illegal invasion of the surface estate. The trial court granted the injunction and the surface owner appealed.

In affirming the judgment of the trial court, the supreme court examined the language of the deed which severed the minerals from the surface to determine if the intent of the parties was that the mineral owner should have the right to strip mine. The court, obviously influenced by direct reference to "pits, excavations, etc." held that the "opening of pits was contemplated by the conveyance of the minerals and the owner of the surface estate took with notice of such conveyance."141

The court in Benton followed the general rule of construction in determining if the intent of the parties to the severance deed was that the mineral owner could destroy the surface in extracting the mineral. The court determined the existence of the requisite intent by looking to the language of the instrument. In Benton the severance deed clearly reflected the intent of the parties. If, however, the severance instrument is ambiguous, resort to extrinsic
evidence to determine the intent of the parties is required. In Phipps v. Leftwich, the Virginia court utilized a method of construction which may have potential significance for Arkansas.

There, the court resolved the ambiguity by looking to the "common practices" — the practices and methods of mining that were used in the area at the time of the grant. If strip mining was a known method of recovery used in the area at the time of the execution of the deed, that method of extraction would be permitted unless it were specifically excluded by that grant. The "common practices" approach has also been used by other courts as evidence of the intent of the parties. Other extrinsic evidence which has been considered by courts as part of the circumstances surrounding the execution of the severance instrument and bearing on the intent of the parties includes: whether the price paid for the minerals equaled or exceeded the actual value of the land; the physical character of the land, i.e., whether the land was improved agricultural land or uninhabited mountainous land; the present existence of reclamation statutes which provide for a scheme of restoration for strip mined land; and the waiver either of the right to subjacent support or the right to surface damages by the grantor of the severance deed. Both a constructional preference against the intention to strip mine and the practice of construing the ambiguous deed more strongly against the grantor have been adopted by some courts.

Even if it has been established that the parties to the deed of severance contemplated that the mineral owner can strip mine, there is a question remaining as to whether the surface owner has to be compensated for the destruction of the surface estate. The Kentucky Supreme Court in Buchanan v. Watson held that a mineral owner holding under a "broad form" mineral deed, which provided that the
grantee could use the surface "in any and every manner that may be deemed necessary or convenient for mining" with a complete waiver of surface damages, could strip mine the land and destroy the surface without compensating the surface owner except for "oppressive, arbitrary, wanton or malicious" exercise of that right. The basis for the holding was that the all inclusiveness of the grant with the waiver of surface damages indicated that the parties intended the "estate reserved by the grantor to be subservient to the dominant estate of the grantee." Later, Martin v. Kentucky Oak Mining Co., which affirmed the holding in Buchanan, addressed the argument that the landowner must have contemplated that the surface would retain its value for agricultural or residential use or they would have deeded the whole title to the mineral owners. The court merely noted that the landowner "chose to retain the bare title simply for what little value, if any, it might have."

The Arkansas court in Benton rejected Buchanan and the approach of the Kentucky court and held that if the mineral owner exercises his right to destroy the surface by strip mining, the surface owner must be compensated. After making the following observation in Benton:

...the digging of the pits results in the complete destruction of the surface, and the removal of the surface to washing plants leaves the surface owner with nothing but a "hole in the ground" for agricultural pursuits.

The court then reasoned that "to deprive ... the owners of the surface estate -- of any right for damages for the complete destruction of the surface would be to make the conveyance of the surface as a mere nullity." The court indicated that this holding was compelled by Western Coal & Mining Co. v. Young, which held the lessee liable for failure to provide subjacent support. Although the court
did not specifically indicate why the duty to provide subjacent support necessitates the holding that the mineral holder must compensate the surface owner when the right, acquired by grant, to strip mine is exercised, the West Virginia Supreme Court in *W.Va. Pitts. Coal Co. v. Strong*, 159 indicated the reason:

Certainly, if the owner of the surface has a proprietary right to subjacent support, he has at least an equal right to hold intact the thing to be supported, i.e., the surface.160

Even though the Arkansas Court in *Benton* held that the holder of the mineral estate has to pay for the destruction of the land by strip mining, it remains to be seen whether the court will liberally construe such general language as "all the minerals in under or upon" with right of "egress to remove the same," which is endemic to earlier mineral grants, as granting to the mineral holder the right to strip mine the property. This issue must be resolved to determine if the mineral estate is truly dominant.

CONCLUSION

Although the hard minerals lease is typically unknown to the practitioner and lacks the developed case law that accompanies the oil and gas lease, it should not be viewed as an enigma. Even though differences exist as to the royalty clause and, in older leases, as to the habendum clause, the major difference in the basic structure of the respective leases is the minimum or advance royalty clause which merely serves the same purpose as to development in the hard minerals lease as the drilling clause serves as to exploration in the oil and gas lease. The distinction is further minimized in coal and lignite uses in current use since advance or minimum royalty is
framed as a special limitation or a covenant to function the same as the drilling clause in the oil and gas lease. Functional differences between the respective leases have been further diminished by current coal and lignite leases uniformly adopting the indefinite secondary term of the oil and gas habendum clause. In effect, a standard form "mineral lease" drafted to function like the familiar oil and gas lease and applicable to fugacious as well as non-fugacious minerals, appears to be in evolution. The obvious result will be, to a great extent, an obliteration of the historical differences between the hard minerals lease and the oil and gas lease.

This is not to say, however, that extensive lignite development will occur without impact on Arkansas law. Important legal issues that may require resolution include the further delineation of what constitutes a grant of the right to strip mine in the deed of severance; the protection to be accorded to the owners of other minerals by a lignite lessee contemplating strip mining; the rights if any, of land owners adjoining tracts being strip mined; and the actual implementation of varying standards of reclamation. The natural resources bar now faces the challenge inherent in the commercial development of a "new" energy resource that entails extensive surface disturbance to mine.

Phillip E. Norvell
FOOTNOTES


5. Adkins, supra note 3.

6. Despite the earlier widespread public acceptance of the old "Producers 88" oil and gas lease form, the author, for comparative purposes only, refers to a "classical" oil and gas lease form since variations exist between the relatively stereotyped oil and gas lease forms found in common use. However, far greater liberty must be taken in referring to a "classical" coal or other hard minerals lease since the minerals have not developed a relatively stereotyped lease form.

7. Space limitations preclude a discussion of reclamation.

8. Lampkin, A Texas Comparison of the Coal Lease with the Oil and Gas Lease, 16 S.Tex. L.J. 309 (1975).


10. Lampkin, supra, note 8 at 312.

11. II AMERICAN LAW OF PROPERTY §10.1 (A.J. Casner ed. 1952). As to Arkansas, see also, Goodson v. Comet Coal Co., 182 Ark. 192, 31 S.W.2d 293 (Ark. 1930). That the common law did not readily accept the ideal that undiscovered minerals, i.e., an unopened mine, could be severed from the surface estate by conveyance is noted in Caldwell v. Fulton, 31 Pa. 475, 477 (1858):

"Coal and minerals in place are land. It is no longer to be doubted that they are subject to conveyance as such. Nothing is more common in Pennsylvania that the surface right should be in one man, and the mineral right in another. It is not denied, in such a case, that both are landowners, both holders of an incorporeal hereditament. Our English ancestors, indeed, found difficulty conceiving of a corporeal interest in an unopened mine -- apart from the ownership of the surface -- because livery of seisin
was in their minds inseparable from a conveyance of land, and livery could not be made of an unopened mine. The consequence was, that they were disposed to regard such rights as incorporeal, though they are not rights issuing out of land, but the substance itself. In this state, however, livery of seisin is supplied by the deed and its registration, and there is nothing incongruous in considering a grant of the substratum a grant of land, as much as it is a conveyance of the surface itself.

12. 1 Kuntz, Law of Oil and Gas, §2.4 et seq. (1962), provides an excellent analysis of the legal theory relating to the ownership of oil and gas.

13. Bodcaw Lbr. Co. v. Goode, 160 Ark. 48, 254 S.W. 345 (1923) is generally cited for this proposition. However, in Smith, Creation of Various Classes of Mineral Estates, 2nd Annual Arkansas Oil and Gas Institute (1963), an excellent discussion of the relevant Arkansas cases, the author notes that "Arkansas is usually classified by the textwriters as an ownership-in-place state, but this may be an oversimplification of the actual holdings in the case."

14. In a jurisdiction which has adopted the "exclusive right to take" or non-ownership theory, the holder of the mineral estate, regardless of the language of the granting clause utilized, cannot create a corporeal interest in the grantee since a grantor cannot create an estate greater than his own interest. Kuntz, supra, note 12, Vol. 2 at §23.1.

15. Pasteur v. Niswanger, 226 Ark. 486, 290 S.W.2d 852 (1956); Clark v. Dumis, 172 Ark. 1096, 291 S.W. 807 (1927); Osborn v. Arkansas Terr, Oil and Gas Co., 103 Ark. 175, 146 S.W. 122 (1912); Mansfield Gas Co. v. Alexander, 97 Ark. 167, 133 S.W. 837 (1911).

16. 103 Ark. 175, 146 S.W. 122 (1912).

17. The evolution of the oil and gas lease resulted in the development and use of three distinct types of granting clauses, each of which creates a substantially different common law interest. One such type is the "exclusive right to mine and produce oil and gas" which would create a profit in gross, an incorporeal hereditament. Additionally, a second type, a "grant of the oil and gas in the land together with the exclusive right to enter for the purpose of mining, drilling and operating for oil and gas" by its terms conveyed to the lessee title in place to the oil and gas, i.e., a corporeal interest. Finally, a "grant, demise and lease of the land itself for the sole and only purpose of mining and operating for oil and gas" by its language purports to create a tenancy, i.e. a lease of land. However, since this latter interest cannot be created unless the lessee is given exclusive possession of the land, it should be treated
as having the same effect as the exclusive type of granting clause, i.e., as creating a profit in gross, an exclusive privilege to use the land to extract oil and gas. Nevertheless if the granting clause is construed or by variation expressly purports to be a lease of the oil and gas, it would have the same effect as the "conveyance of title in place" granting clause. See, Kuntz, supra, note 12, Vol. 2 at 23.1. Also, McRae, Granting Clauses in Oil and Gas Leases: Including Mother Hubbard Clauses, 2nd Ann. Inst. on Oil and Gas Law and Tax 43 (1951), contains an excellent examination of the granting clause in the oil and gas lease.

18. 182 Ark. 192, 31 S.W.2d 293 (Ark. 1930). See also, Quality Coal Co. v. Guthrie, 203 Ark. 433, 1157 S.W.2d 756 (1941), in which the lessors created a lease with a granting clause which "... gave, granted, demised and leased for eight years the land described." The lease did not grant the right of haulage and the lessee had used the underground passageways on the leased tract for such purposes. The plaintiff lessors brought an action in account to recover the value of such use. The defendant argued that the lease via the granting clause "granted an estate for years in and to the coal underlying the tract" which included not only the right to use the passageways to remove coal taken from the leased tracts but also to transport coal taken from adjacent tracts. The court held that the right of haulage was not granted to the lessee as the language following the words of grant, "for the purpose of mining, removing and selling the coal..." qualified the interest the lessee was granted. The Court, ignoring the effect of the language of the granting clause, held that the only interest created in the lessee was the right to prospect for, to mine and to remove the coal. The court again cited Osborn v. Arkansas Territorial Oil and Gas Co. as to the nature of the interest created by the mineral lease.

19. 182 Ark. 192, 196, 31 S.W.2d 293, 296 (1930). See also, Dennis v. Clark. 172 Ark. 1096, 281 S.W. 807 (1927), in which the court's complete indifference to the granting clause in the oil and gas lease was emphasized by the court alluding to the lease as "an ordinary oil and gas lease wherein the lessor granted to the lessee an exclusive right to explore..."

20. The nature of the lessee's interest in the leasehold premises, as determined by the granting clause, has also been relevant to the application to the lessee's interest of the general partition statute, Pasteur v. Niswanger, 226 Ark. 486, 290 S.W. 2d 852 (1956), the materialman's lien statute, Roberts v. Tice 198 Ark. 397, 129 S.W.2d 258 (1939), and the ad valorem assessment statute, Attorney General v. Arkansas Fuel Oil Co., 179 Ark. 848, 18 S.W.2d 906 (1929).

21. Kuntz, supra, note 12, Vol.2 at 25.1. et seq., contains an excellent analysis as to the difficulties inherent in the application of the traditional theory of remedies to the oil and gas lease.

22. 176 Ark. 133, 2 S.W.2d 687 (1927).
23. Id. at 135, 2 S.W.2d at 689.


26. "Lessee shall pay lessor as royalty _________ per acre foot of all merchantable coal mined and removed from said premises with a prorated portion of such sum being paid on fractions of acre foot units."...


28. "Lessee shall pay as royalty to lessor _________ percent of the market value at the mine of all merchantable coal mined and removed from the premises.

29. "Lessee shall pay Lessor as royalty (fraction) ( ) of the market value at the mine of each ton of 2,000 pounds of all merchantable coal mined and sold or utilized by lessee from the lease premises, but said royalty shall not be less than (monetary sum) per ton of 2,000 pounds of such merchantable coal mined and sold or utilized by Lessee."

30. Minimum Royalty is occasionally found in oil and gas leases. See, Pan Amer. Pet. v. Robinson, 405 S.W.2d 698 (Tex. 1968).

31. See, Schmidt-Blakely Coal Co. v. Hembree & O'Kane, 134 Ark. 396, 205 S.W. 111 (1918).

32. Rains Coal Corp. v. Southern Coal Co., 202 Ark. 1077, 155 S.W. 2d 348 (1941); Arkhola Bauxite Co. v. Horn, 184 Ark. 1044, 44 S.W.2d 352 (1931).

33. See, Sullivan, supra, note 25 at 261.

34. The Winder Const. Co., Inc. v. Coleman, 158 Pa. Super. 649 139 A.2d 675 (1958); But see, Babcock Coal and Coke Co. v. Brackens Creek Coal Land Co., 128 W.Va. 676, 37 S.W.2d 519 (1946) which involved a lease with a thirty-year term for the mining of "all coal in upper sewell stream" and provided a specific sum per ton royalty and an annual minimum royalty of $3,000 "Whether the lessee shall have mined during such year a sufficient quantity...of coal to pay the sum." Prior to the end of the term, the lessee attempted to cancel the lease on the grounds of the exhaustion of all merchantable coal. The Supreme Court, affirming the judgment of the trial court, refused to rescind the lease and held the lessee liable for the minimum royalty payments to accrue during the balance of the primary term. The Court held the expressed obligation to pay minimum royalties regardless of the amount of minerals mined assumed "the risk of exhaustion" of the minerals and such exhaustion does not discharge the minimum royalty obligation. See 3 Am. L. of Mining, §16.59 (1971).
A typical lessee form currently in force provides as follows:

Any obligation of lessee shall be suspended while lessee is prevented from complying therewith, in whole or in part, by strikes, lockouts, actions of the elements, accidents, rules, orders or actions of any governmental agency or other matters or conditions beyond the reasonable control of lessee, whether or not similar to those specifically enumerated herein, and the period of any delay or interruptions of lessee occasioned thereby shall be disregarded in computing timely performance by lessee hereunder.

The lease in Mansfield provided that "if lessee failed to begin work toward prospecting and developing on these lands or other lands within four miles of these above described lands within a period of one year from date hereof, then these presents and everything contained herein shall forever cease and be null and void." The lessee had complied with this provision by drilling and completing a gas well in lands within four miles of the lessor's tract. The court noted that an express provision as to exploration or production would not be effected and that the rights and liabilities of the parties would not be altered by an implied covenant. However, the express provision here would not negate the existence of the implied covenant since the lessee could only be compensated if his lands were developed.

There is a distinction between the implied covenant to develop...
as applied to oil and gas and hard minerals. In the case of hard minerals, there is a stationary body of ore and if the lessee fails to develop with due diligence, the potential damage to the lessor is the loss of capital represented by future royalties. However, as oil and gas is subject to drainage, there is a potential danger of permanent loss due to the failure of the lessee to drill offset wells. See, Swenson, Development Covenants in Solid Mineral Leases, 1 Nat.Res.J. 271, 272 (1961).


47. Mansfield Gas Co. v. Alexander, 97 Ark. 167, 133 S.W. 837 (1911).

48. Morley v. Berg, 218 Ark. 195, 235 S.W.2d 873 (1951); Winn v. Collins, 207 Ark. 946, 153 S.W.2d 865 (1931); Arkhola Bauxite Co. v. Horn, 184 Ark. 1044, 44 S.W.2d 352 (1931); Millar v. Mauney, 142 Ark. 486, 219 S.W.2d 1028 (1920); Mansfield Oil and Gas Co., v. Alexander, 97 Ark. 167, 133 S.W. 837 (1911). The Arkansas cases continually make reference to "abandonment" instead of forfeiture. Professor Merrill has argued that "forfeiture" is the correct terminology as the lessee does not evidence the requisite "intent" to abandon. Merrill, Covenants Implied in Oil and Gas Leases, §8 (2nd Ed. 1940).

49. As to damages, the question presented is whether the lessor is entitled to all future royalties or merely to the interest on the royalties that would have been received if development had proceeded with reasonable diligence. Since the minerals are still in the ground, damages measured by all future royalties would be over compensating the lessor. See, Swenson, supra note 45 at 272.

50. The provision for minimum royalty has long been an integral part of the coal lease. Such payments at common law were known as "dead rent" or "sleeping rent" and were held to satisfy the lessee's implied obligation to develop as early as 1869 in Wheatley v. Westminster Brymbo Coal Co., L.R. 9 Eq. 538 (1869). The function of minimum royalty may best be illustrated by Wheatley v. Agricultural Chemical Corp. After the lessee secured a lease to mine phosphate for a term of 20 years and covenant to pay annual minimum royalty in the amount of $2500 when mining was not being undertaken, he failed to mine phosphate continuously during the early years of the lease and completely abandoned the mine well before the end of the primary term. The lessee, however, continued to make the annual minimum royalty payments. The lessor sought a declaratory judgment determining that the lessee was not relieved from the obligation to mine the property by paying the minimum annual royalty. In refusing to grant the relief, the court, quoted from Wheatley v. Westminster Brymbo Coal Co:

"so long as the minimum rent was paid the lessee cannot be compelled to work the mines at all, for if the lessors desired to secure the workings of their mines beyond the amount of the sleeping rent, they must so ... [provide]"
    402 F.2d 122 (8th Cir. 1968); Sewell v. Aggregate Supply Co.,
    106 S.E.2nd 16 (Ga. 1956); Ries v. Norton Coal Corp., 346
    S.W.2d 18 (Ky. 1961); Continental Fuel Corp. v. Haden, 206
    S.W.8 (Ky. 1918); Olson v. Pederson, 231 N.W.2d 310 (Neb.
    1970); Muir v. Thompson Coal Co., 229 A.2d 480 (Pa. 1967);
    Tennessee Valley v. Thompson Coal Co., 229 A.2d 488 (Tenn.
    1975); Wheatley v. Agriculture Chemical Corp., 65 S.W.2d
    593 (Tenn. 1933).

52. Swenson, supra note 45 at 280.

53. Id. at 279.

54. Wheatley v. Agricultural Chemical Corp., 65 S.W.2d 593 (Tenn.
    1933).

55. Wheatley v. Agricultural Chemical Corp., 65 S.W.2d 593 (Tenn.
    1933). Anderson v. United Coal and Coke Co., 227 P.2d 700,
    706 (Wyo. 1951).

56. See, Merrill, supra note 48 at 528.

57. Murray v. Barnhart, 117 La. 1033, 42 So. 489 (1906).

    1968).

59. Id. at 794.

60. 41 Ariz. 376, 18 P.2d 649 (1933).

61. Id. at 682.

62. 180 Ark. 802, 22 S.W.2d 1015 (1930).

63. Swenson, supra note 45 at 279. See also, Smith, Arkansas
    Mining and Mineral Law, §92 (1940).

64. Smith, supra note 63 at §92.

65. Lampkin, supra note 8 at 322.

66. Swenson, supra note 45 at 279.

67. 528 P.2d 411 (Col. 1974).

68. Id. at 412.

69. Burnett Coal Mining Co. v. Schrephferman, 133 N.E. 34 (Ind. 1921).

70. Killebrew v. Murray, 151 S.W. 662 (Ky. 1912).

71. Vitro Minerals Corp. v. Shoni Uranium Corp., 386 P.2d 938
    (Wyo. 1963).

72. Consumers Gas Trust Co. v. Littler, 70 N.E. 363 (Ind. 1904).
    See, also Merrill, supra note 48 at §30.
73. 145 Ark. 310, 225 S.W. 340 (1920).


75. Authority for this view is Grooms v. Minton, 155 Ark. 448, 250 S.W. 543 (1923), cited in Inman v. Milwhite, which involved the construction of an oil and gas lease. The lease was for a period of 10 years and contained the following clause:

"if [there is] no prospecting or drilling in the above territory (an area which included the leased premises) within a period of 5 years from this date, --- lease shall be void --- provided that the lease may be kept in force for a period of two years longer by ... payment of ground rent..."

The chancellor held that the lease, notwithstanding this clause, was subject to an implied covenant to reasonable and diligent development which had been breached by the lessee. The Supreme Court reversed the judgment of the Chancellor on the basis that as the parties had expressly provided as to exploration and development, the express provision must control and there was no room to imply a covenant relating to that subject matter.

76. Arguably, the Kentucky legislature has recognized this distinction since the Indiana Rule was abolished by statute only as that rule applied to oil and gas. Ky.St.Ann. 52-301.

77. The Arkansas Supreme Court's holding in Lawrence v. Mahoney is based in part on the following reasoning:

"for neither the land in question nor any of the surrounding county had been explored for oil and gas. The business of drilling or boring wells for oil and gas is risky and uncertain as well as being very expensive." 110 Ark. 310, 313, 225 S.W. 340, 343 (1920).

78. Merrill, supra note 48 at §30.

79. See, Kuntz, supra note 12, vol.3 at, §29-35 for a detailed discussion of the characteristics and functions of the "unless" and "or" type drilling clauses. Although there is a paucity of case authority relating to similar clauses in hard mineral leases, see, Carroll v. Eaton, 541 P.2d 64 (Mont. 1975); Kerr-McGee v. Bokum Corp., 453 F.2d 1007 (1972).

80. An example of such a clause currently in use is as follows:

If Coal Mining Operations are not commenced on the lease premises or on lands with which the lease premises have been unitized as provided in Section ___ hereof on or before one (1) year from the date hereof, this lease shall terminate as to both parties, unless Lessee on or before that date shall pay or tender to Lessor, or to Lessor's
credit in the depository bank set out in Section ___ hereof, the sum of One Dollar ($1.00) for each acre of the lease premises in which Lessor owns the coal. In like manner and upon like annual payments or tenders, the commencement of Coal Mining Operations may further be deferred for successive period of one (1) year each during the Primary Term hereof, or any extensions thereof under the terms of this lease. If, under the provisions of Section ___ above, this lease is continued in force after actual removal of all coal from the lease premises has been completed, there having been no unitization effected, Lessee shall resume said annual rental payment commencing with the anniversary date of this lease next ensuing after the end of the last calendar month in which coal was mined from the lease premises and thereby continue this lease in full force and effect for the remainder of the Primary Term or any extensions thereof.

81. Lampkin, supra note 8 at 318.
82. 3 Williams & Myers, Oil and Gas Law, §§603-604.12 (1975).
83. Id. at §§601-601.5.
86. See, Kuntz, supra note 12, vol.2 at §26.3.
87. Am. Law of Mining, supra note 38, vol.3 at §16.42; However, in Daniel Boone Coal Co., v. Miller, 186 Ky. 561, 217 S.W. 666 (1920) and Berry v. Walton, 366 S.W.2d 173 (Ky. 1963), the Kentucky Supreme Court held that the "no term" coal leases involved in those cases were terminable at will by the lessor for lack of mutuality. The lease in Walton in addition to not specifying a term did not place any express obligation on the lessee other than to account for and pay royalty. In Miller, the lease was terminable by the lessee after giving 30 days written notice.
88. Phillips v. Sipsey Coal Mining Co., 218 Ala. 296, 118 So. 513 (1928); Penn. Mining Co. v. Bailey, 110 Ark. 287, 161 S.W. 200 (1913).
91. Ellis v. Cricket Coak, Co., 166 Iowa 656, 148 N.W. 887 (1914); Big Vein Pocahontas Co., v. Browning, 137 Va. 34, 120 S.E. 247 (1923).

92. Tressler Coal Mining Co. v. Klefeld, 125 W.Va. 3d, 24 S.E.2d 98 (1943).

93. Id.


97. Id.


101. 160 Tex. 82, 325 S.W.2d 684 (1959).


103. Williams & Meyers, supra note 82 at 218.1; See also, Yancey, Rights and Liabilities with Respect to Surface Usage by Mineral Leases, 2nd Annual Arkansas Oil & Gas Institute (1963).

104. Paris Purity Coal Co., v. Pendergrass, 193 Ark. 1031,104 S.W.2d 455 (1937); Western Coal Mining Co., v. Randolph, 191 Ark. 1115, 89 S.W.2d 751 (1936); Western Coal & Mining Co. v. Young, 188 Ark. 141, 65 S.W.2d 1074 (1934); See also, 6A Am. Law of Property, §28.36.


106. Id.

107. 160 Ark. 48, 254 S.W. 345 (1923).

108. Id. at 60, 254 S.W. at 356.

109. Williams & Meyers, supra note 82 at §218.1.

110. Id.

112. Yancey, supra note 103.

113. Id. at 2.

114. Id.

115. Id.

116. Id.


118. Id. at 895.


121. Id.

122. Id.

123. See, American Law of Property, supra note 11, vol. 3 at §24.36

124. Id.

125. 188 Ark. 191, 65 S.W.2d 1074 (1934).

126. Id. at 193, 194.

127. Id. at 194.

128. 193 Ark. 1031, 104 S.W.2d 455 (1937).


132. For example, in Dept. of Forests & Parks v. Georges' Creek & Land Co., 212 A.2d 165, 168 (MD. 1968) evidence indicated that strip mining had occurred in the area in 1917. In Stewart v. Chernicky, 226 A.2d 259, 263 n.7 (Pa. 1970) evidence indicated that strip mining was not unknown in Pennsylvania in 1902.


136. Ferguson, supra, note 134 at 418.


139. Trklja v. Keys. 121 P.2d 54 (Cal. 1942); MacDonnell v. Capital Co., 130 F.2d 311 (9th Cir. 1942).

140. 229 Ark. 181, 313 S.W.2d 839 (1958).

141. Id. at 183, 313 S.W.2d at 841.


143. Arkansas uses a similar approach, the Strohacker Doctrine, to determine if a substance is included within a grant of minerals. Missouri Pac. R.R. Co. v. Strohacker, 202 Ark. 645, 152 S.W.2d 557 (1941).


145. Buchanan v. Watson, 290 S.W.2d 40 (1956); Martin v. Kentucky Oak Mining Co., 429 S.W.2d 395 (Ky. 1968).


150. Buchanan v. Watson, 290 S.W.2d 40 (Ky. 1965).

151. Id.

152. Id. at 42.
153. Id.

154. 429 S.W.2d 395 (Ky. 1968).

155. Id. at 398.


157. Id. at 842.

158. 188 Ark. 191, 65 S.W.2d 1074 (1934).

159. 129 W.Va. 832, 42 S.E.2d 46 (1947).

160. Id. at 836, 42 S.W.2d at 50.