Drilling for Black Gold Under the Model Form Drilling Contracts(1)

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Synopsis

§ 9.01. Introduction.


§ 9.03. Formal Requirements Concerning Execution.

§ 9.04. Selecting the Type of Drilling Contract.


[a] — Daywork Contracts.

[b] — Footage Contracts.

[c] — Turnkey Contracts.

§ 9.05. Content of the Drilling Contract.


[a] — Well Location.

[b] — Well Hole Specifications.

[c] — Time for Performance.

[d] — Permits Required for Drilling.

[e] — Access to the Drilling Location.


[g] — Description of and Responsibility for Furnishing Equipment.

§ 9.06. Third-Party Services.

§ 9.07. Consideration to Be Paid.


This article discusses drilling contract provisions and case law construing those provisions. Specifically, this article focuses on three model form drilling contracts that were drafted under the sponsorship of the International Association of Drilling Contractors (IADC), a contractor-oriented organization, and one model form promulgated by the American Petroleum Institute (API), an operator-oriented organization. Notwithstanding the respective orientations of these two organizations, these forms have much in common. While these model forms are often used without amendments, experienced parties modify these forms to address specific problems encountered in prior drilling activity, or to reflect relative bargaining power. Although major oil companies and large independent oil companies often use their own operator-oriented forms, and large drilling contractors often use their own contractor-oriented forms, such forms typically contain many provisions that are similar, if

After an oil and gas lease has been acquired and geophysical work has been conducted, the operator (the party who has the legal right to produce oil and gas from a given tract) may elect to drill a well. The operator may be the original lessee of the tract to be drilled, an assignee-lessee, a farmee, a designated operator under a joint operating agreement, or, occasionally, a fee mineral owner. While an operator may drill a well with its own crew and equipment, a well is most often drilled by a drilling contractor: a person or entity engaged in the business of drilling oil and gas wells.

Generally, the operator will invite several drilling contractors to bid for the job of drilling a well at a specified location and to a specified depth in accordance with detailed technical specifications that are outlined in the bid invitation. Using this scheme, the operator is seeking offers to drill. Some negotiation of contract terms may be necessary before the operator accepts one of the bids, thereby entering into a drilling contract. In addition, depending on the specific provisions of the drilling contract, either the operator or the drilling contractor, or both, will contract with various service companies and supply companies for special services, supplies, and equipment that are needed to complete the drilling project. These services may include surveying and staking the location, preparing access roads, providing water for the drilling operation, setting surface casing, providing drilling mud services, providing testing services, surveying for drilling deviation, acquiring directional (whipstock) or horizontal drilling equipment, and setting production casing.

Large operators will employ a drilling manager or drilling engineer, whose primary job is soliciting and negotiating the drilling contract. Large drilling contractors will also have a marketing or sales person whose primary job is responding to solicitations and negotiating final drilling contract terms. Whether these agents have authority to execute the contract on behalf of their respective companies depends on individual company policy. The principal officers of smaller operators and drilling contractors often negotiate terms, and they usually have authority to execute the drilling contract.

Negotiators should have expertise in the technical aspects of well drilling and should be able to estimate anticipated costs accurately. The financial success of drilling contractors, and to some extent of operators,(4) may depend on their respective negotiators' bargaining skills and ability to identify, negotiate, and clarify accurately and completely the many risks and technical details inherent in a drilling venture.(5)

Even though most drilling contracts are executed on model forms, these forms are generally modified by the parties and contain many blanks for specifically addressing detailed technical aspects of drilling that need to be fully and properly completed by knowledgeable personnel.

Often the operator will be a farmee, a party to a letter agreement, or a designated operator under a joint operating agreement. In other words, other working interest owners may have an interest in the proposed well and may be expected to pay a portion of the drilling and completion costs. Accordingly, in negotiating a drilling contract, the operator must consider any contractual or other legal obligations owed to other working interest owners. The operator must be especially mindful of any contractually expressed deadlines or specifications for the commencement or completion of wells and of any limits on the maximum contributions that can be obtained from other working interest owners.(6)

The operator may also be required to obtain the consent of other working interest owners prior to executing a drilling contract. While these matters are of primary concern to the operator, the negotiator for the drilling contractor may wish to inquire as to the existence of any such obligations or limitations in order to avoid a potential problem after execution of the drilling contract; for example, no drilling contractor would wish to assume the risk that
each working interest owner is creditworthy. A prudent drilling contractor will contract with one working interest party as the "operator" from which the contractor will take orders and receive payment.(7)

In the event both parties are concerned about the other party's ability to perform (or pay), escrow provisions may be attached to the contract.(8)

Even when the operator is clearly identified in the contract, a dispute can arise over the party who is ultimately liable for payment of the contract price. In *Carter Baron Drilling v. Badger Oil Corp.*, Badger was clearly identified as the "operator" in an IADC daywork form, in a contract that specified that the "[o]perator shall pay contractor."(10)

Badger had been retained by Knee Hill Energy, Inc., the working interest owner, to operate the well on its behalf. When Knee Hill failed to pay for the drilling expenses, Badger resigned as operator. Ultimately, Carter Baron sued Badger for payment. Badger argued that it was acting merely as an agent for Knee Hill. Based upon conflicting testimony on custom and usage in the drilling trade and the conduct of Carter Baron in attempting to collect from Knee Hill, the trial judge refused Carter Baron's motion for summary judgment, thereby giving Badger the opportunity to prove that it was under no obligation to pay Carter Baron without first being paid by Knee Hill.(11)

The facts indicated that Carter Baron initially attempted to collect from Knee Hill before suing Badger.(12)

Had Carter Baron sought payment from Badger only, the custom and usage evidence alone might not have been sufficient to vary the terms of an unambiguous contract, and Carter Baron's motion for summary judgment would likely have been granted.

§ 9.03. Formal Requirements Concerning Execution.

A pure drilling contract (one calling for the drilling of a well in return for a money payment) does not relate to an interest in real property. Thus, such a contract is outside the real property statute of frauds.(13)

However, if a well is to be drilled in return for an interest in real property (such as a farm-out agreement), then the parties must comply with the real property statute of frauds in the absence of an applicable exception.(14)

Since most wells are completed within one year, a contract to drill a single well is generally not within the contract statute of frauds.(15)

However, because drilling a well is a costly and risky venture, the parties to a drilling contract should have a written contract signed by both parties. Moreover, because of the detailed nature of a drilling contract, a written contract is essential as a practical matter.(16)

In negotiating a drilling contract, the parties are free to specify that all terms of the contract must be in writing and that both parties must execute the contract in order to bind the parties. In fact, under the contemplated use of the model forms, the operator can use the forms to solicit offers from drilling contractors by asking them to complete and execute the contract and exhibit. The operator then has the option of accepting the offer by executing the contract.(17)

Most commonly, however, further negotiations occur.

During negotiations and preparation of a detailed drilling contract, the parties often add addenda to the contract. Where the addenda are not fully incorporated by reference into the
executed contract, the party who sought these additions may not be able to prove that both parties agreed to their incorporation. For example, in *C.E. Jacobs Co. v. Lamar H. Moore Drilling Co.* (18) the drilling contractor contended that a special addendum allocating risk in the event of loss of circulation or well control shifted the risk of loss of the in-hole equipment and of the well onto the operator. (19)

However, because the executed contract made no reference to the addendum, the court ruled that the addendum was not a part of the contract, (20) even though the addendum had been included in the package of documentation that the drilling contractor had sent the operator for execution, and even though the operator had returned the addendum to the contractor along with the executed contract. (21)

Consequently, the drilling contractor lost in-hole equipment and received no compensation (in contract or quantum meruit) for work performed because the well had not been drilled to the footage contract depth. (22)

Had the contract clearly incorporated the addendum by reference, the result would have been different.

Once the contract has been fully and properly prepared, agents having authority to execute a contract on behalf of the operator and drilling contractor should execute the contract and the accompanying exhibits. (23)

If there is any doubt about the authority of the executing agent of a corporation, a certified copy of a resolution of the corporate board of directors conferring such authority should be secured from the corporate secretary. A drilling contractor should be especially careful when it is dealing with a person who is acting as an apparent partner that it is actually dealing with the partnership as the operator and not with the individual. (24)

As with any written contract, the parties to a drilling contract must beware of representations or other conduct that could result in an oral modification of the contract's terms. While the statute of frauds technically requires (and prudent practice dictates) that a written contract be amended in writing, courts will search for a means to uphold oral modifications. For example, in *Green v. Kinley,* (25) the drilling contractor had agreed in writing to drill on a footage basis "to a depth of 1,920 feet unless oil was found at a lesser depth." (26)

Oil was found at 1,845 feet, but the operator wished to go deeper. The parties orally agreed that further drilling would continue on a daywork basis. (27)

In upholding the oral agreement, the court concluded that the written agreement had been completed and that the parties had entered into a new and separate oral agreement. (28)

In *E.B. Duncan Drilling & Well Servicing Co. v. Robinson Research, Inc.* (29) the footage contract specified drilling to a maximum depth of 3,000 feet to test the Paluxy formation. (30)

When well control problems occurred at a depth of 1,068 feet, the operator ordered the well completed at that depth, and the contractor obliged. (31)

Although the court determined that the loss of well control was due to the negligence of the contractor, the court concluded that the operator could not recover for breach of contract because of the parties' agreement to complete the well at the shallower depth. (32)

However, the court also ruled that because the contractor had agreed to complete the well at a shallower depth, the contractor could collect footage rates only for the depth drilled and not for the specified contract minimum or maximum depth. (33)

In *Lemm v. Sparks,* (34) the drilling contractor agreed to drill two wells to a specified depth,
each for a fixed price. The drilling contractor contended that the parties had orally agreed that completion expenses were to be provided at an additional cost, (35) and that the operators had already paid the drilling contractor more than had been required by the terms of the written contract. (36) The court found that a separate oral agreement had been negotiated concerning completion of the well. (37) But in Grayhill Drilling Co. v. Superior Oil Co. (38) the parties had entered into a written footage contract calling for a stated price per foot of hole drilled to the Gibson sand, which was estimated to be at a depth of approximately 6,500 feet. (39) When the well reached approximately 4,000 feet, a steep dip in the geological formation was encountered, which made continued vertical drilling more difficult and expensive. The parties then orally agreed that drilling should continue on a cost-plus basis, thereby shifting much of the risk from the drilling contractor to the operator. (40) When the well reached a depth of 7,254 feet, it was abandoned as a dry hole. The parties then disagreed as to the amount of compensation due the drilling contractor. The operator ultimately sent a check to the drilling contractor "in full and final settlement." (41) The drilling contractor cashed the check and then brought suit for further compensation. The court held for the operator on the ground that the check constituted an accord and satisfaction. (42) In reaching this decision, however, the court expressed doubt that the oral modification in this particular case would have been enforceable by the drilling contractor, since the contractor had essentially threatened to breach the contract if modifications respecting completion costs were not made. (43) Thus, Grayhill provides several fundamental, but important, lessons: (1) parties to a drilling contract should cover all aspects of a drilling contract (including any modifications) in writing; (2) in seeking to modify a contract, parties must be careful not to threaten to breach the contract if the modifications are not accepted; and (3) at least in some jurisdictions, parties must be wary of accepting partial settlements that could be construed as an accord and satisfaction.

§ 9.04. Selecting the Type of Drilling Contract.


There are three types of onshore drilling contracts in common use: (44) daywork, footage, and turnkey. All types are usually executed on preprinted forms. However, the turnkey contracts often may be tailor-made to a particular drilling program. The American Petroleum Institute (API) has promulgated what formerly was the most commonly used model form. (45) This form contains a disclaimer stating that it is only a suggested guide. Nonetheless, the API form, which is now dated, is often used without modification and submitted for execution, with the only additions to be filled in on the blanks provided on the form. This form may be used for both single and multiple well arrangements and may be completed as either a daywork or a footage contract.

The International Association of Drilling Contractors (IADC) has promulgated daywork, footage, turnkey, offshore, and international model forms. (46) The domestic onshore daywork and footage contract forms are substantially similar to the API model form. However, the IADC forms are slightly more detailed. Like the API form, the
IADC forms generally contain two disclaimers: (1) the forms are only suggested guides, and (2) the forms may not contain all of the necessary provisions in particular situations. The IADC forms are also easier to understand than the API form because there are separate forms for footage and daywork contracts.

Most major oil companies and large independent companies have their own operator-oriented contract forms. While company forms may include provisions substantially similar to provisions found in the model forms, they typically contain key provisions that significantly depart from related provisions found in the model forms. Some of these variations arose because major companies historically had superior bargaining power over drilling contractors. Other variations arose in response to problems previously encountered by a company in drilling other wells. A few large drilling contractors have their own standard contract forms that are more contractor-oriented than the model forms. The respective bargaining powers of the operator and drilling contractor at the time of contract negotiations influences the choice of a particular form and any modifications.


Of the three major types of drilling contracts, the daywork contract historically has been the most commonly used form. In certain areas or at certain times the footage or turnkey contract may be more prevalent.

[a] Daywork Contracts.

A "day-rate" or "daywork" contract provides that the drilling contractor will be paid a stipulated price (rate) for work performed at the direction of the operator over a twenty-four-hour period with the contractor assuming only specified risks. The amount of the stipulated daywork rate depends on a number of factors, including the type of rig; the size of the crew; and the party responsible for furnishing the crew, drill pipe, other equipment, and special well services. The daywork rate may change at various stages of contract performance. In addition, a daywork contract may provide lump-sum payments for specialized work, such as mobilization and demobilization.

Proportionate sums may be paid for fractions of days, and proportionate reductions in the daywork rate may be made when the rig is on "standby time": the time when the rig is on location but, for a variety of reasons, is not "making hole." When the rig is on standby time, the contractor's employees are still on location, and their salaries, along with other expenses of the contractor, are continuing. Some of the contractor's operating expenses, such as the use of drill pipe and fuel for operating the rig, are not continuing. Accordingly, the "standby rate" may be lower than the daywork rate.

Historically, the daywork contract has been regarded as more favorable to the drilling contractor than the footage or turnkey contract since the drilling contractor assumes less risk and is paid for each day of operation as directed by the operator. Today, some drilling contractors find footage and turnkey contracts to be more profitable, even though they are riskier. Thus, the type of a contract used is really a function of bargaining and of market conditions.

Under the daywork contract, the drilling contractor is responsible for specified risks, while the operator assumes liability for the general risk of delay and risk of liabilities not assumed by the contractor.

Modern forms, however, tend to separate the risks into categories, and some operator-oriented company forms attempt to shift much of the risk to the drilling contractor. Under the traditional daywork contract, the operator is in charge of directing the drilling operation. In other words, a daywork contract is similar to the contractor's lease to the operator of a rig,
related equipment, and crew. The contractor, however, is still obliged to provide trained personnel and equipment capable of performing the contract. Modern forms tend to alter this traditional contractor/operator relationship by providing that the drilling contractor is in charge of day-to-day operations and functions as an independent contractor.\(^{(53)}\) 

Some operator-oriented forms provide that while the operator must approve the contract work, the operator "is only interested in results obtained."\(^{(54)}\) 

The effort by operators to shift more responsibilities to drilling contractors under the daywork contract has resulted in model form provisions that strike can be misleading. For example, the IADC daywork form states that the "Operator engages Contractor as an Independent Contractor . . . on a daywork basis."\(^{(55)}\)

But immediately thereafter, the form defines "daywork basis" to mean that the "Contractor shall furnish equipment, labor, and perform services as herein provided, for a specified sum per day under the direction, supervision and control of Operator," that the "Contractor . . . assumes only the obligations and liabilities stated herein," and that otherwise "Operator shall be solely responsible and assumes liability for all consequences of operations by both parties . . . including results and all other risks or liabilities incurred in or incident to such operations."\(^{(56)}\)

The API daywork contracts contain similar provisions\(^{(57)}\) but go to greater lengths in defining the contractor's role as that of an "independent contractor."\(^{(58)}\)

This language should clarify the drilling contractor's status as an independent contractor in the event of a dispute over compensation due to the contractor's employees or subcontractors. However, with regard to other risks and obligations, particularly those arising in tort, the courts must look to more specific language found elsewhere in these contracts.\(^{(59)}\)

While footage and turnkey contracts are perhaps older forms of drilling contracts, the more common daywork contracts are used whenever the demand for drilling is high relative to the supply and availability of rigs. In times of peak demand, the drilling contractor may insist on a "term daywork" contract. Under this type of contract, the contractor is entitled to receive a fixed daywork rate over the term of the contract whether the rig is drilling, on standby, or rigged down and standing idle.\(^{(60)}\)

[b] — Footage Contracts.

A "footage" contract provides that the drilling contractor will be paid a stipulated price per foot of hole drilled from the surface through the total depth or for some other specified objective.\(^{(61)}\)

The IADC footage contract specifies that the operator is an independent contractor\(^{(62)}\) and that the "contractor shall direct, supervise and control drilling operations and assumes certain liabilities to the extent specifically provided for herein."\(^{(63)}\)

Accordingly, at the outset, the contractor more clearly assumes the general risks associated with drilling under a footage contract rather than with drilling under a daywork contract.

A footage contract also contains provisions calling for daywork compensation. For example, under a typical "standby" or "shutdown time" provision, daywork compensation is due when specified circumstances result in the cessation of drilling operations or when these circumstances necessitate special drilling operations. When a contractor drills under a footage contract, the specific circumstances requiring daywork payments vary but would commonly include drilling below the specified contract depth, waiting for cementing operations or well testing, waiting for orders from the operator, or suspending operations on orders of the operator.\(^{(64)}\)
Daywork rates also typically apply whenever the contractor encounters impenetrable formations or abnormal pressures, whenever well circulation is lost, or whenever other problems result in delays beyond the control of the drilling contractor. (65)

When a footage contract calls for daywork rates, the risks associated with drilling are also allocated as if the contract were a daywork contract. In other words, when a contractor drills under the daywork provisions of a footage contract, the operator assumes the general risks of drilling, and the contractor is liable only for the risks that would be specifically assumed while it is drilling under a daywork contract. (66)

Accordingly, a well-drafted footage contract will specifically define the circumstances under which daywork rates apply. Poor drafting or later conduct inconsistent with the contract terms can lead to disputes over which rates apply, or over which party had the risk of loss when a particular mishap occurred.

Because the drilling contractor is paid only for footage drilled and for specified daywork and because the contractor assumes more risk, the footage contract has been regarded as more advantageous to the operator than the daywork contract. Use of the footage contract increases in a slow oil-patch economy. When demand for rigs is high, or when the risks associated with drilling are particularly great, the daywork contract is more commonly used. However, as previously mentioned, the contract used is really a function of market conditions, and the drilling contractor may find a footage contract more profitable.

[c] — Turnkey Contracts.

A "turnkey" contract provides for the drilling contractor to be paid a stipulated price for drilling a well to a specified depth or to a targeted formation. (67)

Under a "pure" turnkey contract, in the event a commercial quantity of oil or gas is discovered, the contractor completes the well so that the operator may simply "turn the key" to commence production. (68)

In practice, however, the drilling contractor does not guarantee production, and, under most modern turnkey contracts, the operator is responsible for completing and equipping the well because these operations can be often accomplished with less powerful and less expensive equipment than the rig used in drilling to the target formation. And if the drilling contract does provide for completion, the price will commonly be separately stated so that the operator will not have to pay for completion even though the hole is dry.

In general, a drilling contractor assumes more risk under the turnkey contract than under the other types of contracts because the contractor has general control of all drilling operations. Turnkey contracts, however, are often tailor-made to particular drilling conditions that may be encountered. Thus, a turnkey contract generally places specified risks on the operator and provides for additional compensation to the drilling contractor (usually at a daywork rate) for certain operations. (69)

Such operations may include drilling below the specified turnkey depth, additional operations necessitated by the operator's negligence, or by failure of equipment or materials that were furnished at the operator's request that were not specified in the contract. The operator may assume the risk of loss attributable to the operator's negligence, the risk of loss of the operator's equipment, the risk of loss to the contractor's equipment at times when operations are conducted on a daywork basis, and the risk of damage to the oil and gas property.

In Par-Co Drilling, Inc. v. Franks Petroleum Inc., (70) the turnkey contract specified that the contractor was to drill a well to a depth of 7,900 feet. After the well was logged and cored, the operator would have 24 hours of free rig time to decide whether to complete or plug the well. (71)
The well was drilled to a depth of 7,916 feet and was then logged and cored. The operator elected to complete the well, so the contractor re-entered the hole to condition it for the setting of production casing. (72)

During this operation, the drill pipe became stuck. (73)

The contractor sought daywork payments for the time spent retrieving the drill pipe and for completion operations. The operator argued that the turnkey contract required the contractor to complete the well at its own expense, except for the cost of production casing. (74)

Based primarily on testimony concerning custom and practice in the industry, the court held that after the well was logged and cored, the operator assumed all risk and after the lapse of twenty-four hours of free rig time, that the operator was obligated to pay daywork rates. (75)

This case illustrates that the risk of loss may shift to the operator before the obligation to pay daywork rates arises. Usually the type of contract is clear from language on the face of the contract. For example, IADC model form contracts are titled "footage," "daywork," or "turnkey." Occasionally, however, the type of drilling contract may be at issue. For example, in (76) the drilling contractor agreed to deepen an existing well by 700 feet. (77)

During the course of drilling, equipment was dropped down the hole and the well was lost. (78)

The operator sued for damages, and the drilling contractor counterclaimed for payment of the contract price. (79)

The operator argued that the drilling contractor had agreed to a turnkey contract, but the drilling contractor argued that the contract was of the daywork type. (80)

Because the stated consideration was for a specified rate per day, the drilling contractor properly characterized the contract as daywork. However, when the court remanded the case, it noted that a question of fact still existed as to whether the drilling contractor was entitled to compensation under the circumstances. (81)

§ 9.05. Content of the Drilling Contract.


The parties to a drilling contract are generally referred to as the "operator" and "drilling contractor" (or simply "contractor"). The operator has the legal right to drill a well on the particular tract of land to be developed. The operator may be an oil and gas lessee, an assignee of the lessee, a farmee, a designated operator under a joint operating agreement, or an unleased mineral interest owner. The operator could be a major oil corporation, a large or small independent oil corporation, a partnership, a limited partnership, a joint venture, or an individual person.

The drilling contractor is generally a person or entity engaged in the business of drilling oil and gas wells. A drilling contractor could be anything from a large company operating many drilling rigs in a number of states, in foreign countries, or offshore, to a small company operating one or two rigs in one oil basin. Note that a drilling contractor may be a subsidiary of a major oil company that drills wells only for the parent company or other subsidiaries of the parent.

Generally, the operator will solicit bids from several drilling contractors. If the operator uses the API form, the operator would partially complete the contract forms (including Exhibit A) and submit them to several drilling contractors, inviting them to bid on the proposed well(s).
Drilling contractors may submit bids by completing the forms and executing them, and the operator may then accept one bid by executing the forms and by notifying the successful bidder. Often, however, additional negotiations occur before a final contract is completed.

The successful bidder is not necessarily the low bidder. Some specification provisions are frequently left blank when the bid solicitation is made. Since the drilling contractor is invited to complete the form and to submit a bid in accordance with certain minimum specifications, there are often more variables in a bid than just the contract price. Moreover, operators may elect to accept a bid from a drilling contractor who has worked for the operator in the past, who has a reputation for completing drilling projects in a timely and workmanlike manner, or who has prior experience in the target area. Finally, the operator generally retains "the right to reject any and all bids."(82)

After the operator has selected a drilling contractor, both parties should be certain that the other is fully and properly identified. For example, corporations and partnerships should be identified by their full official names. Each party should also be certain that the person executing the contract on behalf of the other party has the legal authority to do so.

In addition to specifying the parties to the contract, a well-drafted drilling contract provides for the designation of representatives to be contacted during the drilling operation.(83)

These representatives should be knowledgeable about drilling operations and understand the precise circumstances under which a footage or turnkey contract reverts to daywork operations. They should also have the discretionary authority to make routine decisions concerning drilling operations and to respond immediately to any emergency situation.(84)

[2] — **Respective Obligations of the Parties.**

[a] — **Well Location.**

Because the operator probably has better access to relevant topographical, geological, and geophysical information, the operator should always designate the well location when it solicits a bid for the drilling of a specified well. The drilling contractor must know the well location because the cost of moving the rig to the well site and setting up (rigging up) the rig, the cost of transporting the crew to and from the well site, and the potential cost of housing the crew at the well site depend upon distances and topography. In addition, environmental, zoning, or road load-limit regulations may increase drilling costs at particular locations.

Generally, the bid sheet/drilling order form contains provisions that identify the proposed well by name and number, that identify the name of the oil and gas field or prospect, (including the legal description of the tract on which the proposed well is to be drilled) and that identifies the location of the well.(85)

The model forms specify that the well location noted in the contract is for "contract identification only and Contractor assumes no liability whatsoever for a proper survey or location stake on Operator's lease."(86)

The operator ordinarily provides a survey of the appropriate tract drilled and stakes the well location. The operator should also be certain that the location complies with applicable well-spacing regulations. If the well is to be drilled as a directional well, both the surface and bottom-hole locations should be identified. The contractor's job then is to drill the well at the designated location in accordance with the contract specifications.

In *Callon Petroleum Co. v. Big Chief Drilling Co.*, (87) the drilling contract specified that the operator was to stake the well location. The location, staked by a third party hired by the operator, was not the location specified in the contract.(88)

The contractor had requested the third party to relocate the stake about 60 feet to the
northeast of the contract site. (89)

Ostensibly, the operator had agreed to this change; however, the actual staked location was about 122 feet northeast of the contract site. (90)

The drilling contractor commenced the well at the staked location and had drilled 9,000 feet when the operator protested. (91)

Litigation ensued over who was responsible for the increased cost of directionally drilling the well. (92)

The trial court directed a verdict in favor of the operator and the third-party contractor. (93)

On appeal, the Fifth Circuit reversed and remanded for a new trial. While the court viewed the operator's preparation of a drill site as a condition precedent to the obligation of the drilling contractor to drill a well, (94) here, the contractor had a role in the changed location. The court concluded that where the contractor wrongfully induces the third party to move the location without advising the operator, the operator's condition precedent to prepare the location could be attributed to the contractor. (95)

The court noted that a drilling contractor could not "negligently disregard what it knew or reasonably should know and drill a well contrary to the express terms of its drilling contract." (96)

[b] Well Hole Specifications.

When soliciting bids, the operator should specify the anticipated depth of the well. (97)

While a well-drafted drilling contract allows for the possibility of deeper drilling, the contract should specify a maximum depth (98) to allow the contractor to determine whether its rig is capable of drilling to that depth and whether it is capable of furnishing a sufficient amount of drill pipe to drill the well to the specified depth.

Because the depth of the hole will necessarily affect drilling costs, (99) the operator must be careful not to underestimate the depth of the targeted formation. On the other hand, if the operator overestimates the depth of the targeted formation, the bid price may needlessly increase, especially if drilling occurs pursuant to a turnkey contract.

In Ryan v. Fitzpatrick Drilling Co., (100) the operator underestimated the depth of the targeted formation by about 700 feet. (101)

The basic compensation to be paid the contractor was $20,000, plus a one-fourth interest in the completed well. (102) The contract provided that the well was to be drilled "to a depth sufficient to test the Curtis sand or to a total depth of 4300 feet." (103)

The contract further provided that "after the Schlumberger electric log has been run the contractor's obligations have been fulfilled, (sic) and any work performed after that will be borne 25% by the Contractor, and 75% by the Operator . . . ." (104)

The appellate court affirmed the trial court holding (which was based in part on testimony concerning custom and usage), (105) that the contractor was entitled to be paid in full for the costs of drilling below 4,300 feet on a quantum meruit basis. (106)

In reaching its decision, the court quoted from Parkford v. Union Drilling & Petroleum Co.: (107)

The extension of the oil well . . . below the original anticipated depth which was specified in the written agreement is in the nature of extra services which were performed by the
contractors. These services, having been performed with the knowledge and acquiescence of the owners of the property, created an obligation which entitles the defendants to reasonable compensation therefor. Where the terms of the original agreement are entirely fulfilled, and additional work is performed pursuant to a subsequent oral agreement or merely with the knowledge and acquiescence of the owner, the contractor is entitled to reasonable compensation therefore. (108)

Notwithstanding the depth specifications, the operator will reserve the right to order that drilling cease at any time. (109)

In contrast, the drilling contractor's right to stop drilling is more limited. In general, a contractor may cease drilling operations if there is concern over the operator's solvency, if the operator has failed to compensate the contractor in a timely manner in accordance with the contract terms, (110) or if unanticipated problems arise that are beyond the contractor's control. (111)

In addition to specifying depth, the contract bid sheet/drilling order should specify the minimum diameter of the hole at specified depths. (112)

The diameter of the hole is relevant in estimating drill time and in determining the required diameter of the drill bits and casing. All of these specifications affect drilling costs. Commonly in a daywork contract, the drilling contractor furnishes the drill pipe, while the operator furnishes the drill bits and casing. Commonly, in a footage contract, the drilling contractor furnishes the drill pipe and bits, while the operator often furnishes the casing. In a turnkey contract, the drilling contractor often furnishes the pipe, bits, and casing. These expensive materials are a major cost variable in drilling contracts.

With the exception of directional wells that are drilled with whipstock equipment, drilling contracts call for a straight hole drilled perpendicular to the horizon. Since no well can be drilled at true vertical, a well-drafted contract will allow for a specified range of deviation, not exceeding the range allowed by conservation commission regulations. To ensure that the hole is drilled within the deviation range, the contract may call for deviation surveys at specified depth intervals during the course of drilling. (113)

In a footage contract, the drilling contractor generally assumes the risk that the hole will be straight, and it must perform, at the contractor's own expense, all deviation surveys specified in the contract. However, additional surveys ordered by the operator are performed at the operator's expense. (114)

In a daywork contract, the drilling contractor may agree to exercise due diligence and care to maintain a straight hole; however, the risk and expense of maintaining a straight hole is on the operator. (115)

An operator who has reason to believe that a hole may deviate from the accepted range should immediately order surveys so that the drilling contractor may not contend that the operator has waived the right to a straight hole. (116)

[c] — Time for Performance.

In the bid sheet/drilling order, the operator will specify a commencement date. (117)

This date may be vital to the operator who has an oil and gas lease that is about to expire or that is approaching a delay-rental anniversary date. The continuing validity of the lease may well depend upon having "commenced" a well on the lease premises by a certain date.

The commencement date may also be vital to the drilling contractor, since the contractor must anticipate whether a rig will be available to commence drilling operations by the date specified in the bid sheet/drilling order. This date can pose a dilemma for a drilling
contractor. To be profitable, a drilling contractor must keep rigs and crews busy; however, drilling time cannot be precisely estimated. Thus, there is a substantial risk that unanticipated delays may occur that prevent the rig from being "released." This problem is less likely to occur when the demand for drilling rigs is low.

The API bid sheet/drilling order form provides that a "[c]ontractor agrees to use best efforts to commence operations for the drilling of the well(s)" by the specified commencement date.\(^{(118)}\)

The term \textit{best efforts} (commonly used in a variety of contracts) has been judicially defined in a relatively small number of cases.\(^{(119)}\)

One case has defined best efforts as a duty of performance more demanding than mere due diligence or good faith, even if there was a financial loss to that party.\(^{(120)}\)

Thus, the immediate risk of failing to commence a well on time is on the drilling contractor. However, under the API bid sheet/drilling order form, the contractor's liability for failure to commence a well on time is limited to specified liquidated damages.\(^{(121)}\)

The contractor's acceptance of the terms of the bid sheet/drilling order is "[s]ubject to rig availability."\(^{(122)}\)

When the "best efforts" standard is combined with the "subject to rig availability" clause, there appears to be an ambiguity that may invite litigation. Is the drilling contractor's duty to commence a well by the commencement date subject to the "best efforts" standard only when a rig is available? Or must the contractor also use best efforts to ensure rig availability? Given the more specific nature of the best efforts clause, a court might adopt the latter interpretation, even though the parties, especially the drilling contractor, may have intended a less stringent, objective, good faith standard N that the drilling contractor would act reasonably and prudently in view of the mutual interests of the operator and contractor to commence a well by the date specified in the contract.\(^{(123)}\)

In any event, the parties must have intended "best efforts" to mean more than a mere subjective good faith effort to secure a rig and commence a well.

Failure to comply with the commencement deadline is more serious if drilling never begins.\(^{(124)}\)

When an operator acquiesces to the late commencement of a well, the operator may be estopped from asserting the breach. This consequence may be true even in a contract where time was expressed to be "of the essence."\(^{(125)}\)

The drilling contract usually contains a provision concerning the duration of the contract. In the unusual circumstance where an operator needs to complete a well within a specified time,\(^{(126)}\) the contract may require that a well be completed to a specified depth by a stated date. However, a prudent drilling contractor would most certainly hesitate to sign such a contract. More often, the contract will state a general duration. For example, the API bid sheet/drilling order form provides that the contract "shall remain in full force and effect until operations are completed on the well or wells. . . or for a term of ."\(^{(127)}\)

As between these alternative durations, this clause does not specify "whichever is sooner" or "later." Thus, the parties should specify one of these alternatives and delete the other, even though the form does not suggest that this be done. The latter provision should be used when the form is issued as a master contract that contemplates the drilling of multiple wells. An ambiguity results if the well completion clause is not deleted, and a time period is inserted. Perhaps the contract would be valid for the time reasonably needed to complete the specified drilling operations but not exceeding the specified period. Perhaps the contract would be valid for the specified period with the drilling contractor being available for additional
drilling operations that may be accomplished within that period. Or perhaps the contract is valid for whatever time is needed to complete the well, notwithstanding the specified period.

In Toce Oil Co. v. Great Southern Oil & Gas Co., the drilling contract specified that the well was to be completed by the end of calendar year 1985 so that all drilling expenses could be allocated to that year for tax purposes. Great Southern, the drilling contractor, proposed a turnkey drilling contract with commencement "predicated by rig availability."

The operator executed the contract and attached a cover letter stating that its "acceptance is predicated on Great Southern timely providing a rig to drill the subject well during the early part of December so that drilling operations are completed before the end of the year."

At the bottom of the one-page letter was the statement: "ACCEPTED AND AGREED TO THIS 18th DAY OF NOVEMBER, 1985. GREAT SOUTHERN OIL & GAS CO., INC." Below this statement was a signature line for the contractor's agent. Great Southern's agent executed this letter and returned it to the operator.

After the operator had prepared the drill site, Great Southern refused to drill the well, prompting the operator to enter into a new contract with a second contractor on December 20 for $22,000 more than Great Southern was to have been paid. Because the calendar/tax year was about to close, the operator prepaid the drilling price. Nonetheless, the drilling of the well was never completed, and the second contractor filed for bankruptcy in early 1986.

In a suit by the operator for the difference between the drilling prices in the two contracts and for other damages, the court affirmed the trial judge's conclusion that Great Southern had contractually bound itself to complete the well by the end of the calendar year 1985. Great Southern had argued that the letter agreement did not bind it to drill a well, but was merely a "resolutory condition" allowing the operator to escape from the contract in the event that a drilling rig was not furnished in time to complete the well by the end of the calendar year. If the letter is construed against the operator (the party who drafted it), the language suggests that the contractor's interpretation may have been correct, although the operator must have intended the result reached by the court. However, the operator successfully argued that if the contractor's interpretation was correct, Great Southern had breached the contract before the "resolutory condition" arose. The operator was allowed to introduce parol evidence to show that Great Southern had a rig available to drill the well but that it moved the rig onto other property in violation of the contractor's stated practice of servicing contracts in the order that they were executed.

The lesson for a drilling contractor is clear: if a contractor does not want to be bound to commence or complete a well within a certain time, the contract should contain no language that could be construed otherwise, and a contractor should either service its contracts in the order that they were executed or specifically agree to a different schedule.

From the operator's perspective, clarification of contract duration is particularly important in a specially drafted term daywork contract, which may call for payment of daywork rates for idle or standby time through the stated term. Further, a contractor that drills on a daywork basis may wish to be paid for a minimum number of days when drilling is completed earlier than anticipated. From the drilling contractor's perspective, clarification of the meaning of a stated time period may be important in a footage or turnkey contract, as compensation is earned per foot of hole drilled in the former and for a well drilled to total depth in the latter.
Occasionally, a dispute occurs over commencement of a term, which in turn can lead to a dispute over the compensation due under the contract. In *Wagner & Brown v. E. W. Moran Drilling Co.*, (138) the parties executed a drilling contract on an IADC daywork form. (139)

The contract called for a well to be drilled to a depth of 25,000 feet — a depth that, due to heavy rig demand, could only be reached by new rigs coming out of construction. (140)

All daywork rates, including rig mobilization time (which the parties specifically defined as "[a]ll time from arrival on location to the time of spud"), (141) demobilization time (which the parties specifically agreed included "tear down after rig release and setting off location"), (142) repair time, standby time (which the parties specifically agreed included standby with or "without crews"), (143) and *force majeure* time, were set at $11,000 per day. (144)

The contract provided that the drilling contractor "agrees to use best efforts to commence operations for the drilling of well by *approximately September 30 to October . . . 1981* or as soon as Rig 30 is completely rigged up and ready to move to first location." (145)

In addition, the printed form contained the following typed rider:

> 21.1 In that the full initial term of this contract is for a period of eighteen (18) months (550 days), the standby rate without crew will apply for each day the rig is not on an operating status for the Operator. Should the Operator terminate this contract before the eighteen month term is fulfilled, the Operator shall be obligated to the Contractor to pay the daily standby rate without the crew . . . until this eighteen month term contract is concluded; however, the Operator will not be charged the standby rate without crew for the periods of time that this Contract is assigned to a third party operator at the same rates as outlined in . . . this Contract.

> 21.2 It is agreed . . . that the actual number of days required to move and rig up . . . Rig 30 from MORAN's Wichita Falls yard to Wagner and Brown's first location will be billed at the moving and mobilization rates as outlined in . . . the Contract plus actual costs of trucking and crane service. . . . (146)

In the event that the contract was terminated by the operator prior to commencement of operations, the operator agreed to pay for 550 days of rig time as liquidated damages. (147)

By mid-November, the rig had not yet been completely fabricated. However, the operator instructed the drilling contractor to move the rig to the drilling site and complete construction there. (148)

The drilling contractor complied by completing construction at the drilling site and by spudding the well on December 12, 1981. After 430 days of continuous drilling, the well reached a depth of 22,000 feet, and the operator ordered that all drilling operations cease. The drilling contractor removed the rig and awaited instructions "for further operations pursuant to the contract." (149)

The operator made no further use of the rig, but the drilling contractor billed the operator for an additional 120 days of daywork pursuant to the 550-day contract term. (150)

When the operator failed to pay, the drilling contractor brought suit for payment.

In defense, the operator conceded that the contract was for a term of 550 days but argued that the contract term commenced with the date of execution (March 12, 1981), rather than with the date of spudding (December 12, 1981) and further argued that no payment was due under the contract prior to the commencement of the well. (151)
Under the operator's interpretation of the contract, the 550-day term had already expired, and the drilling contractor had been compensated for each day of actual drilling and for transportation, mobilization, and demobilization. Both parties relied on a "laundry list" of canons of construction.(152)

Based on a construction of the contract and given the heavy demand for rigs at the time of execution, the trial court agreed with the drilling contractor. However, the jury found that the 550-day term commenced on November 27, 1981, the date that the drilling contractor began to move the rig to the well site.(153)

The jury further found that demobilization took 4 days. Because the jury found that the operator had paid for these days of service, the jury awarded the drilling contractor day-rate damages for 101 days.(154)

In affirming the trial court, the appellate court called the contract a "term day-work contract," a contract which "provides for a specific amount of time during which the contractor receives payment for services."(155) even where such services are not performed due to instructions from the operator.(156)

Drilling contracts typically give the operator the unfettered discretion to order the cessation of drilling operations at any time prior to completion of the well.(157)

The contract generally will also allow the contractor a limited right to cease drilling operations due to the operator's insolvency, due to the operator's failure to pay the contractor in a timely manner in accordance with the contract provisions,(158) or due to unanticipated problems that are beyond the control of the contractor.(159)

A well-drafted contract will clarify termination.(160)

[d] — Permits Required for Drilling.

The operator has the obligation to secure the drilling permit as well as any required bond from the state agency regulating drilling operations, most frequently the oil and gas conservation commission. While the drilling contract should specify this obligation, state oil and gas conservation regulations generally require the operator to secure the drilling permit and bond.(161)

In addition to the drilling permit and bond, a number of other permits may be necessary.(162)

Special permits and bonds may be needed to transport the rig and other equipment over public roads or federal property or to drill a water well to provide a water supply for the drilling operation. The need for special permits should be assessed, and the responsibility for securing any such permits should be specified.(163)

[e] — Access to the Drilling Location.

Generally, the operator is responsible for securing the legal right of access to the well site, which includes an access road to the well location and any necessary rights-of-way for power, fuel, or water lines.(164)

In addition, the operator is usually responsible for construction and maintenance of the access road right-of-way.(165)

The responsibility for installation of power, fuel, and water lines should be specified in the contract.(166)

In some states, the operator must compensate the owner of the surface estate for the use of the
surface in the course of drilling and production operations.\(^{(167)}\)

The contract should specify that the operator is responsible for this payment as part of its duty to secure legal access to the well site.

The contractor is generally responsible for the actual transport of the drilling rig to the well site; however, in a daywork contract, the operator normally pays a mobilization fee to the drilling contractor.\(^{(168)}\)

In footage and turnkey contracts, the cost of transportation is ordinarily absorbed by the drilling contractor and amortized over the depth of the well.\(^{(169)}\)

With regard to other equipment such as casing, the party responsible for furnishing the equipment would ordinarily be responsible for actually transporting that equipment to the well site.\(^{(170)}\)

Note that the responsibility for actually transporting the drilling rig and other equipment to the well site and the responsibility for paying the cost of transportation may be divided.\(^{(171)}\)

**[f] — Modification of Contract Terms in the Course of Performance.**

While the well location, well-hole specifications, and performance time should be specifically expressed in the drilling contract, the parties will sometimes modify the contract during the course of performance. If the contract, as modified, fails to address all of the ramifications of the drilling project, litigation can result, especially over the drilling contractor's right to receive compensation. The following case briefly illustrates this problem.\(^{(172)}\)

In *Bankoff v. Wycoff*,\(^{(173)}\)

the drilling contract required the contractor to drill a well to a specified depth at a footage rate payable upon completion of the hole. Just short of the specified depth, the contractor encountered drilling problems. After twenty-two days of unsuccessfully attempting to overcome these problems, drilling operations were terminated by mutual agreement of the parties. The court held that the drilling contractor was entitled to compensation at the specified footage rate because the agreement to terminate drilling operations meant the parties had agreed that the drilling contractor had fully performed the contract, which, as modified, was to drill a well to the depth actually reached at the time of termination.\(^{(174)}\)

In *Thomas & Duffield Drilling Co. v. Cobb*,\(^{(175)}\)

the drilling contractor agreed to drill a well to a specified maximum depth or to a depth sufficient to test a specified formation. The well bore had entered part way into the specified formation when the operator ordered that casing be run based upon the recommendation of the operator's geologist. After learning that the hole was actually dry, the operator refused to pay the drilling contractor, contending that the well had not been drilled to a depth sufficient to allow for adequate testing of the formation. On appeal, the court held that the operator's decision to run casing modified the drilling contract and that the contractor had fully performed the contract as modified.

In *Augusta Oil Co. v. Watson*,\(^{(176)}\) the drilling contract called for deviation surveys at intervals of 500 feet and at such other intervals as the operator may request. The drilling contractor drilled two wells for the operator without performing any deviation tests, and the operator made partial payment on both wells. However, when the operator discovered that no deviation tests had been made, it refused to make further payments. The contractor sued, and the court held that the operator had accepted the drilling contractor's performance. Since the operator's representative was present at the well site during the course of drilling as required
by the contract, the operator was found to have waived any right to object to the lack of deviation surveys.

**Description of, and Responsibility for Furnishing Equipment.**

A drilling contract should contain a detailed description of all equipment to be used, beginning with the type of rig and powersource. Most drilling contracts contain detailed drilling rig specifications.(177)

Of course, the contractor furnishes the rig and crew of sufficient size and experience to allow for proper drilling operations. Generally, the operator will furnish the storage tanks, drilling mud, separator, coring equipment, testing and completion services, and equipment.(178)

The API bid sheet/drilling order form contains detailed checklists, which allow the parties easily to designate which party is to be responsible for furnishing and paying for specified equipment and services. Note that the obligation to secure certain equipment or services may be on one party, but the obligation to pay for such equipment and services may be on the other party.(179)

In addition, the API contract contains detailed specifications for casing, drilling fluids, coring, and testing.(180)

**§ 9.06. Third-Party Services.**

While the drilling contractor and operator are the key parties in a drilling operation, various third parties supply services and materials needed to drill and complete a well. For example, one or more construction contractors generally prepare well sites and construct and maintain access roads, power, water, and fuel line rights-of-way. Various oil field equipment and supply companies generally supply drilling bits, casing, tubing, reserve pit liners, and other supplies and equipment needed for drilling. A mud company generally furnishes drilling fluid (drilling mud) and the expertise to formulate the mud at the well site. Third-party specialists typically furnish logging and testing services, and independent contractors generally furnish supplies, equipment, and expertise needed to complete or plug a well. Third-party contractors even furnish specialized drilling services, such as the technology for directional or horizontal drilling; these services are generally furnished on a daywork basis. Each of these third-party services should be governed by a written contract.(181)

Drilling contracts should address several issues concerning third-party services: (1) What third-party services are or may be required? (2) Who selects the third party? (3) Who has control of and responsibility for the performance of third-party services? (4) Who is responsible for compensating the third party? (5) Who is liable for damages to equipment belonging to the third party or for personal injuries to the third party’s employees? (6) What insurance coverage is to be secured for third-party services, and who is responsible for securing it? Note that the latter five questions should be separately addressed as to each third-party supplier.

As previously stated, under the API bid sheet/drilling order form, the operator is responsible for selecting, controlling, and paying for any third-party services that are needed to prepare the well site and to provide access roads.(182)

The same is true for all drilling fluid (mud) services, and coring, cementing, logging, testing, and completion services.(183)

The operator generally retains the services of a "mud engineer" to control pressure, pump speeds, and related operations. Hence, the mud engineer is most frequently under the direct control of the operator. As between the operator and the drilling contractor, most drilling contracts provide that the operator is to be in charge of formulating the drilling fluid mud,(184) but the contractor is often responsible for controlling circulation in the hole and
for making recommendations concerning the formulation.

In J.C. Trahan Drilling Contractor, Inc. v. Cockrell,(185) drill pipe became lodged in the hole, allegedly as a result of an improper mud formulation. The contractor sued the operator for damages incurred in dislodging the pipe. The court ruled for the operator on the grounds that the contractor had implicitly consented to the formulation by not objecting to its use, and that under the terms of the contract the contractor was "obliged to advise [the] Owner and make recommendations to him in writing when, in [the] Contractor's opinion, the mud program should be revised."(186)

A number of other services, such as the installation of fuel and water lines, casing, and tubing, and the supplying of drill bits, fishing tools, and transportation services are left for negotiation.(187)

The API bid sheet/drilling order form contains a checklist that allows the parties separately to designate the responsibility to provide and to pay for each of these third-party services.(188)

§ 9.07. Consideration to Be Paid.


Key differences among the various types of drilling contracts affect the basis for payment of compensation to the contractor and the allocation of risk in drilling the well.(189)

In a footage contract, except for specified operations that are conducted on a daywork basis, the contractor is paid a stipulated price per foot of hole that is drilled from the surface through the total depth of the well or some other specified objective. Risk is allocated largely on the basis of whether a specific operation is being conducted on a footage or daywork basis.(190)

The contractor's compensation is earned when the drilling has been completed in accordance with the contract terms.(191)

A footage contract also contains a "standby" or "shut-down" time provision, which provides for day-rate (daywork) compensation when specified circumstances result in the cessation of drilling operations.(192)

For example, the API form requires "daywork" compensation for the (1) drilling and setting of casing below the contract footage depth,(193)

(2) efforts to restore a hole that has been lost or damaged as a result of failure of the operator's casing or equipment or from failure of any cement job,(194)

(3) work performed at the operator's request beyond the scope of the work to be performed on a footage basis,(195)

(4) efforts (typically in excess of a specified number of hours) to restore lost circulation, (5) work performed to overcome abnormal pressures or other specified drilling problems,(196) and (6) delays resulting from force majeure.(197)

In addition, if rock formations are encountered that make drilling operations more difficult and time-consuming, the bid sheet/drilling order form provides for adjusted compensation on a daywork basis.(198)

A day-rate or daywork contract provides that the drilling contractor is to be paid a stipulated price for work that is performed under the direction of the operator over a twenty-four-hour period, and the drilling contractor generally assumes only the specific risks that are
enumerated in the contract. The daywork rate may vary with the particular operation being performed. (199)

For example, the API bid sheet/drilling order form allows for the day rate to be separately specified for transporting the rig to and from the well site, rigging up, rigging down, operating time, standby time, repair time, and force majeure time. (200)

Daywork rates may be reduced during periods when the drilling contractor does not maintain the specified "full crew" at the well site (201) and may be proportionately reduced for fractions of days. (202)

Daywork compensation is usually payable on a specified periodic basis. (203)

A turnkey contract provides that the drilling contractor is to be paid a stipulated price for the drilling of a well to a specified depth or to a targeted formation, (204) and except as limited by the terms of the contract, the contractor assumes all risks of drilling. If a commercial quantity of oil or gas is discovered, a turnkey contract may leave completion to the operator or may require the drilling contractor to complete the well. If the contractor is to complete the well, the contract often provides for additional compensation. (205)

Payment is due upon completion of all work specified in the contract. (206)

A turnkey contract generally provides for payment of a day rate in specified situations. (207)

Typically, these situations are similar to those commonly found in a footage contract, (208) and the rate may vary for operating time, standby time, repair time, and other specified situations. (209)

In addition to the rate of compensation and the method of calculation (footage, daywork, or turnkey), operators must be mindful of other contractual provisions that may affect total costs. For example, the contract should specify the party who is responsible for furnishing drilling bits, casing, cement, drill pipe, and other special tools and equipment. (210)

The contract should also specify the party who is responsible for paying subcontractors. (211)

Modern contracts generally contain cost-adjustment provisions to allow for the raising or lowering of contract rates in the event that costs of drilling materially change. (212)

In a depressed oil and gas economy, cost-adjustment provisions are difficult for the drilling contractor to negotiate; therefore, these provisions, are usually deleted from the model forms. However, the need for cost-adjustment provisions is less important in a depressed economy, since the large number of available rigs tends to encourage short-term (one-well) contracts. Nonetheless, from the drilling contractor's perspective, protection against increased costs due to changes in governmental laws, rules, and regulations is especially important. (213)


A well-drafted drilling contract allows the operator to order the contractor to stop work at any time. (214)

If the operator exercises this right, the drilling contract should specifically provide for the drilling contractor's compensation. (215)

The rate of compensation usually depends upon the timing of the operator's order. (216)

If the operator terminates the drilling contract before the contractor commences operations, most contracts call for the payment of a flat sum of money, often characterized as liquidated damages. This payment applies to footage, daywork, and turnkey contracts. (217)
The parties prescribe liquidated damages because actual damages are hard to ascertain and because special or consequential damages, such as lost job opportunities, are specifically prohibited by the contract.\(^{(218)}\)

If the operator terminates the drilling contract after drilling operations have commenced (but prior to actual spudding of the well), most contracts provide for the operator to compensate the drilling contractor for actual expenses incurred in performance of the contract, expenses resulting from the early termination (excluding crew costs and supervision), and a specified percentage of such expenses. In addition, some contracts provide for an additional day-rate charge (often equal to the standby rate) from the date of commencement through rigging down (dismantling operations). This charge applies, with slight variation, to footage, daywork, and turnkey contracts, although turnkey contracts may only address pre-commencement and post-commencement operations.\(^{(219)}\)

If the operator terminates a footage or daywork drilling contract after the well has been spudded, these contracts usually provide for the drilling contractor to be compensated in accordance with the general contract terms for the work actually performed up to the date of termination. In other words, under a footage contract the drilling contractor is entitled to compensation on a footage basis based upon the number of feet drilled and for any daywork done under such contract, plus expenses resulting from early termination, and, perhaps, specified liquidated damages.\(^{(220)}\)

Under a daywork contract, the drilling contractor is entitled to compensation for the total number of days of compensable drilling operations at the applicable rates. In addition, the daywork contract may provide for a minimum and a maximum payment.\(^{(221)}\)

\[3\] — Stoppage of Work by Contractor.

The drilling contractor has only a limited right to terminate the drilling contract prior to completion of the well; for example, because of the operator's insolvency, because of the operator's failure to make timely payments,\(^{(222)}\) or because of drilling problems that are beyond the contractor's control.\(^{(223)}\)

If the drilling contractor lawfully terminates the contract, the contractor is generally entitled to whatever compensation would be payable in the event the operator had terminated the drilling contract.\(^{(224)}\)

In addition, most drilling contracts provide for a specified rate of interest in the event the operator fails to make timely payments and for the recovery of reasonable attorney's fees incurred in collecting any payment due under the contract.\(^{(225)}\)

If the drilling contractor unlawfully terminates the drilling contract, the operator would have a cause of action for breach of contract; however, some drilling contracts specify liquidated damages for such a breach.\(^{(226)}\)

\[4\] — Lien Rights of Drilling Contractor.

If the operator fails to pay the drilling contractor for work performed in accordance with the drilling contract, the laws of many states provide the contractor with a statutory lien on the operator's interest in the well, the property on which the well is drilled, or both. In addition, the lien will generally cover all wellhead equipment and any production that belongs to the working interest owners. This statutory lien protection may be a general mechanic's or supplier's lien act\(^{(227)}\) or it may be a special well drilling lien act aimed specifically at protecting drilling contractors and subcontractors.\(^{(228)}\)

The theory behind these liens is that the contractor should have a lien against the developed property to secure payment for well drilling services that may have materially increased the value of the property.
When these liens arise, the manner of perfection and their priority relative to other liens and encumbrances varies from state to state. In order to gain the protection of these liens, however, the drilling contractor must comply with all of the statutory requirements governing their creation and perfection.\(^{(229)}\)

Although a detailed discussion of these matters is beyond the scope of this article,\(^{(230)}\) liens may be of little value if the well is plugged and abandoned as a dry hole.\(^{(231)}\)

The best protection for a drilling contractor is a creditworthy operator. If a drilling contractor is concerned about the operator's creditworthiness, a prudent contractor should require prepayment, have payment placed in escrow, or have payment guaranteed by a third party, such as through the use of a standby letter of credit.

In addition to the drilling contractor, third parties may have a statutory lien for labor, services, or materials furnished.\(^{(232)}\)

Some of these third parties may be fulfilling obligations that the drilling contractor had assumed under the contract. The model forms require the contractor to drill a lien-free well. In other words, the contractor agrees to pay all claims made by others in the performance of obligations assumed by the contractor.\(^{(233)}\)

Breach of this provision by the contractor, however, is not by itself material so as to excuse the operator's performance.

In *Houy v. Davis Oil Co.*,\(^{(234)}\) the drilling contractor drilled two wells in accordance with the drilling contract. Prior to completion, however, the contractor encountered financial difficulties and failed to pay a third-party supplier, who then filed liens on the operator's property. The operator and drilling contractor thereafter entered into a supplemental agreement, whereby the operator agreed to pay off the lienors and to make a partial payment to the contractor. Upon completion of the wells, the operator then refused to pay the balance of the contract, citing the contractor's breach of the covenant to drill a lien-free well.\(^{(235)}\)

The trustee in bankruptcy brought suit on behalf of the drilling contractor, and the operator counterclaimed for damages. The case was dismissed.\(^{(236)}\)

On appeal, the court held that the contract had been substantially performed and that the operator was liable for the balance due under the contract since the wells were completed in a good and workmanlike manner.\(^{(237)}\)

Of course, the operator was allowed to credit the lien pay-off against the contract price.

§ 9.08. Drilling Contractor's Default.

If a drilling contractor fails to drill the well in accordance with the terms and specifications of the drilling contract, the operator has a cause of action for breach of contract. Under general contract law, the operator is entitled to compensation for any damages suffered as a result of the breach. The measure of damages varies from state to state and from case to case. This section will briefly review the various methods of measuring damages and will summarize how typical contracts provide for alternative or substitute remedies.\(^{(238)}\)

A traditional measure of damages for breach of the promise to drill a well is the reasonable cost of drilling the well or, if drilling has commenced, the reasonable cost of completing the well in accordance with the contract.\(^{(239)}\)

When the evidence suggests that the well would have been a dry hole, this measure of damages has been criticized as too generous.\(^{(240)}\)
Yet the rule has been applied in several jurisdictions, including Colorado, Kansas, Louisiana, Montana, and Oklahoma; it has been rejected in California, Texas and Alberta, Canada.(241)

Another measure of damages is lost profits to the operator.(242)

In the absence of actual production, this remedy may be difficult to prove. Further, if the evidence indicates that the well would have been a dry hole, the contractor may be liable only for nominal damages. Nevertheless, this remedy enjoys some support among oil and gas law scholars, at least as a supplemental remedy to the loss-of-value measure of damages discussed in the following paragraph.(243)

The loss-of-value measure of damages has been characterized as "the difference in the market value of the [operator's] interests when the promised well was not drilled and the value if the promised well had been drilled."(244)

While many courts appear willing to accept this measure of damages, operators may have difficulty proving these values and may even have to prove loss of specific bargain—that they would have sold their interest in the property had the well been drilled.(245)

However, not all courts are so strict.(246)

Still other courts have awarded damages based upon the value of the information that would have been secured had the well been drilled.(247)

In general, the value of the information often is determined by ascertaining what additional costs the operator would have incurred in order to obtain the information.(248)

In addition to the above damages, some courts have been willing to compensate the operator for consequential damages, such as the value of a leasehold lost by reason of the drilling contractor's breach.(249)

Other courts, however, have denied the recovery of consequential damages where proof was regarded as too speculative.(250)

Modern forms specifically prohibit liability for consequential damages.(251)

If the drilling contractor has committed a material breach of contract, the operator may be able to rescind the drilling contract and recover moneys already paid to the contractor.(252)

Where the well has been partially drilled and the operator wishes to complete the well, the operator may elect to petition a court in equity for the appointment of a receiver to complete the well with the use of the contractor's equipment.(253)

However, the remedy of specific performance (requiring the contractor to complete the well) is not generally available.(254)

Because of the various remedies and methods of measuring damages (and the resulting variance in exposure to the risk of having to pay or absorb such damages), one might expect to find detailed provisions in model drilling contract forms that address available remedies and measures of damages for breach of a contract to drill a well. Some early contracts simply included a liquidated damages provision providing for a certain remedy. The major disadvantage with such a provision lies in the reluctance of some courts to enforce the provision when the specified damages bear no reasonable relation to the actual damages suffered.(255)

Although the modern trend is toward the enforcement of such provisions.(256) the typical drilling contract limits the operator to a recovery of liquidated damages only when the drilling contractor "fails to commence operations . . . and terminated [the] Agreement."(257)
Other than situations where the drilling contractor fails to commence operations, no general measure of damages is expressed in the contract for other defaults by the contractor. Damages, however, are limited because the model drilling contract forms provides that "[n]either party shall be liable to the other for special, indirect, or consequential damages resulting from or out of this agreement, including without limitation, loss of profit or business interruptions, . . . except as set forth in . . . the Drilling Order."(258)

In addition, the API drilling contract form gives the operator the option, "[i]n the event of unreasonably slow progress, carelessness, inattention, or incompetency on the part of the Contractor," to take possession of the well and the drilling contractor's equipment and to either drill the well to completion or abandon the well.(259)

This option can be elected only if the operator gives the drilling contractor prior notice and a reasonable opportunity to remedy the unsatisfactory performance. However, if there is an imminent threat of a blowout or other hazard, the operator may immediately take over the well without notice to the contractor. If the operator takes over the well, the API contract form provides for partial compensation to the drilling contractor for use of the contractor's rig and equipment. The operator must use its own employees or those of a third party.(260)

Since this self-help option is not written in exclusive terms, the operator should have the right to seek any remedies provided by general contract law, subject to an express provision that prohibits the recovery of special or consequential damages.(261)

In interviews with representatives of operators and drilling contractors, the author failed to turn up a situation where this self-help option had been exercised. A prudent operator should hesitate to exercise the option to elect to take over a well. First, the threshold test for the exercise of the right is "[i]n the event of unreasonably slow progress, carelessness, inattention, or incompetency on the part of Contractor in performance of the work."(262)

In a given situation, reasonable minds could differ on whether this test is met. Thus an operator should consider this election only in circumstances where this test is clearly met and after the operator has given the contractor written notice of the inadequate performance and a reasonable opportunity to correct the problem. Second, many operators would not have the experience or the trained employees to take over drilling operations; consequently, this election is unlikely to be a practical remedy. Third, in the event the operator exercises this right, the operator should be certain that all insurance policies remain in full force and effect. If insurance policies would terminate, the operator would need to obtain its own coverage. This could be costly, time consuming, and coverage could even be impossible to secure.(263)

Finally, in the event of imminent blowout or other hazards, a prudent operator should be especially reluctant to take over a well unless the contractor is clearly incompetent or fails to respond reasonably to the urgency of the problem. Note, however, that such a circumstance may place the operator in a "catch 22" position. Conceivably, parties who are injured as a result of the problem could assert that the operator was negligent or reckless in failing to take over a well where the drilling contractor was obviously incompetent and where a reasonably prudent operator would have elected to exercise the right. Thus, this option potentially presents more problems than solutions for the operator, especially under a footage or turnkey contract where the operator assumes less risk. In the case of a daywork contract under which the operator is truly directing and supervising the day-to-day drilling operations, the reservation of such an option may have some merit.

A comprehensive discussion of remedies is beyond the scope of the paper; however, many states have consumer protection statutes(264) that may be used by an operator who is the victim of a deceptive trade practice. For example, in Pool Co. v. Salt Grass Exploration, Inc.(265) the drilling contractor represented that its "power swivel" drilling rig could drill the specified well, when in fact the rig did not have that capability and was ordinarily suited for use as a workover rig.(266)
The court affirmed the trial court's decision that such a representation violated the Texas Deceptive Trade Practices — Consumer Protection Act.\(^{(267)}\)

Because violation of such acts can be costly, drilling and related service contractors must be careful not to misrepresent their equipment, services, and abilities. If litigation ensues, the party found to have violated such an act can be liable for actual damages, statutory treble damages, costs, and attorney's fees.\(^{(268)}\)

§ 9.09. Description of Casing and Cementing Programs.

Casing, tubing, and related cementing services are customarily provided by the operator in both footage and daywork contracts.\(^{(269)}\)

Such items customarily are furnished by the drilling contractor in a classic turnkey contract. The model contracts however, allow the parties to designate this responsibility.

In addition to identifying the party who is responsible for providing casing, tubing, and cement, a well-drafted drilling contract must include detailed technical specifications for the casing and cementing programs. These specifications may include the outside diameter of each casing string, the minimum hole diameter needed to accommodate each casing string, the proposed depth of each casing string, the estimated quantity of cement, the hours of setting time for the cement, the maximum outside diameter of the drill collar, and the maximum speed of the rotary table while the casing shoe is drilled out. The drilling contract may specify that the casing and cementing are to be performed on a different contract basis. For example, footage and turnkey contracts commonly provide that the setting of any casing below contract depth is to be performed on a daywork basis.\(^{(270)}\)

During the course of drilling, the operator is generally allowed to modify the above specifications.\(^{(271)}\)

However, if the modification materially increases the drilling contractor's cost of performance, the operator must pay additional compensation.\(^{(272)}\)


Because the drilling of an oil and gas well is an expensive and hazardous endeavor requiring great expertise, a drilling contract should address the standard of performance expected of the drilling contractor. For example, the API drilling contract form requires the contractor to perform "with due diligence and care, in a good workmanlike manner, and in accordance with good drilling practices."\(^{(273)}\)

In addition, the drilling contractor must represent that it "is engaged in the business of drilling and completing such wells and . . . that it has adequate equipment meeting specifications stated [therein] in good working order and [that it has] trained personnel capable of efficiently operating such equipment."\(^{(274)}\)

The IADC footage and daywork forms do not include a general standard of performance;\(^{(275)}\) however, a court might infer such a warranty.

In *E.B. Duncan Drilling & Well Servicing Co. v. Robinson Research, Inc.*,\(^{(276)}\) the contractor agreed to drill a well with "due diligence and care and in a good and workmanlike manner" and specifically agreed to "maintain well control equipment in good condition at all times" and to "use all reasonable means to control and prevent fires and blowouts and to protect the hole."\(^{(277)}\)

While drilling at a depth of 1,068 feet, circulation was lost.\(^{(278)}\)
The drilling contractor then left the site to procure more mud and well control materials. (279)

While the drilling contractor was away from the site, a blowout occurred and the well caught fire. (280)

The well was brought under control with a "home-made" blowout preventer. (281)

In a suit by the drilling contractor for payment, the court held that the contractor had not conducted drilling operations in a good and workmanlike manner. (282)

The contractor unsuccessfully argued that it did not have to furnish any well control equipment or blowout preventers at the site because the drilling order did not specify any such equipment beyond a drilling rig. (283)

The court, however, noted that "this position is untenable since it is clear that the description of the rig was intended to include all necessary appurtenances thereto," including blowout preventers and well control equipment. (284)

In W.E. Myers Drilling Corp. v. Elliott, (285) the drilling contractor had agreed, under the terms of a daywork contract, to drill a well "with due diligence and care and in a good workmanlike manner" on a daywork basis to 3,200 feet at a daywork rate of $5,250. (286)

The operator paid the estimated drilling cost ($65,500), in accordance with the contract; however, the contract provided for additional payment or a refund to reflect the actual daywork price upon completion of the well. (287)

Drilling took longer than estimated, and the drilling contractor sued the operator for additional daywork compensation. (288)

The operator conceded that the well had been drilled in a "good and workmanlike manner" but contended that the contractor had not drilled with "due diligence" as required by the contract. (289)

The jury found for the operator, concluding that a diligent contractor would have completed the well in 10 days (the contractor had taken 12 1/2 days). (290)

Relying on precedent, (291) the appellate court noted that the contractor carries the burden of proving due diligence in a daywork contract. (292)

In affirming the trial court, the appellate court noted:

Although the work was fully performed, the contract was not substantially performed when the jury failed to find that the contractor complied with the due diligence clause . . . . But since the work was completed, the contractor was entitled to recover for the number of days reasonable and necessary to complete the well . . . . (293)

The court cautioned that a "'due diligence' clause may not make time of the essence," thereby allowing the operator to rescind; however, the clause does excuse the operator from paying for "excessive delays." (294)

The Elliott court, in conclusion, noted that a daywork contract cannot be substantially performed without complying with the due diligence clause. (295)

In reaching this result, the court rejected what it perceived to be the reasoning of Matador Drilling Co. v. Post. (296)

In Matador, drill pipe lodged in the hole, and in an effort to free the pipe, the derrick was
Repairs to the derrick caused substantial delays in drilling, but the court concluded that the drilling contractor had substantially performed the contract.

In dicta, the *Elliott* court distinguished the "due diligence" clause from the "good and workmanlike manner" clause:

In the *Matador Drilling Company* case, had the well been completed within the anticipated thirty days but with such a directional deviation that casing could not be run, certainly the court would not have found 'substantial performance.' When the parties contracted for both 'due diligence' and 'good and workmanlike manner' they must have expected both standards would be met in order for there to be substantial performance under the contract. Each clause is of equal dignity and each relates to a particular way the work was to be performed. Each clause is an essential part of the contract and each clause provides a defense to a claim of substantial performance.

. . . [T]o protect against an excessive claim where the work was fully performed, the operator had required not only work in a good and workmanlike manner, which went to how the contract was completed, but also 'due diligence,' which went to when the contract was completed. Otherwise, an operator would have no protection under a daywork contract where no diligence was exercised and the contractor chose to let the work go on and on and on.

In *Matador*, drilling was delayed 25 days while the derrick was being repaired.

Fishing operations were conducted for an additional 13 days in an attempt to retrieve the stuck drill pipe.

During the fishing operations, a survey revealed a substantial (21 ¡) vertical deviation.

This deviation resulted in a 3-day shutdown while the parties discussed the proper course of action.

Matador, the drilling contractor, sued Post, the operator, seeking daywork compensation at operating rates, *force majeure* rates, and standby rates for specified periods during the delay, as well as for periods following the delay and for equipment lost in the hole.

The jury, concluding that the drilling contractor had substantially performed the contract, made no reduction in the contractor's damage award to reflect the operator's counterclaim for delay resulting from the deviation.

On appeal, the court concluded that the drilling contractor had met its burden of proving substantial performance by introducing into evidence the contract, testimony about the work performed, and final invoices that had been submitted to the operator.

In holding that the motion was properly denied by the trial judge, the court stated that the test for meeting the burden of proof was whether the evidence submitted was sufficient to withstand a motion for a directed verdict.

However, the court did deny the contractor *force majeure* daywork rates for the period during which the derrick was being repaired.

*Matador* appears to be a case where the jury and court were satisfied that the contractor had conducted operations in a good and workmanlike manner and that the delays were beyond the contractor's control. In other words, considering the problems that caused the delays, the contractor did act diligently. Thus, *Matador* and *Elliott* are distinguishable. The *Elliott* court perhaps erroneously characterized the holding in *Matador* as finding substantial performance...
without regard to compliance with the due diligence clause.(311)

A questionable aspect of Matador is the court's reluctance to require more specific evidence as to the parties' failure to discover a 21¡ deviation in 5,200 feet of hole. While geologic conditions might explain the deviation, such conditions do not explain why the operator's initial deviation tests did not reveal such a substantial deviation. In other words, were the deviation surveys conducted in a "good and workmanlike manner"? And in any event, which party bears the risk of a deviation? Note that the API form specifically provides: "While operations are being performed on a daywork basis, Contractor agrees to exercise due diligence and care to maintain the straight hole specifications, . . . but all risk and expense of maintaining such specifications or restoring the hole . . . shall be assumed by Operator."(312)

The Matador opinion does not state whether the contract was executed on a model form. Perhaps the court thought it was achieving "rough justice" by denying force majeure rates for the derrick repair period;(313) however, note that daywork drilling is conducted under the operator's direction and control.(314)

Why did the derrick need repair Ñ because of the operator's negligence, or because the derrick was faulty from the outset?

In Houy v. Davis Oil Co.,(315) the court held that a contractor had completed two wells in a good and workmanlike manner. This holding was reached even though the contractor had caused third party liens to be filed against the operator's property(316) and even though the contract specified that the contractor had promised to drill a lien-free well.(317)

Query whether other courts would agree.

The "good and workmanlike manner" clause has also lead to litigation over whether the clause indemnifies an operator against the claims of an injured third party.(318)

In Exxon Corp. v. Roberts,(319) the court held that it did not, but the court's rationale was based in part on public policy that the clause failed to expressly indemnify the operator against its own negligence.

Some drilling contractor-oriented forms may specifically negate a "good and workmanlike manner" warranty and limit the contract to specific warranties expressed in the contract.(320)

While a specific disclaimer may diminish the standard in some circumstances, it would not allow the drilling contractor to act in bad faith. For example, when a drilling contractor is found to have engaged in misleading or fraudulent conduct, a court may allow the operator to rescind the contract without payment of any portion of the price, whether or not the contract required drilling in a good and workmanlike manner.(321)

Under the model forms, the drilling contractor must "maintain well control equipment in good operating condition . . . and . . . use all reasonable means to control and prevent fires and blowouts, protect the hole, and protect Operator's equipment."(322)

While the current onshore model forms do not do so, a drilling contractor would be wise to make its liability under this provision specifically subject to the liability limits expressed in the contract.(323)

Otherwise, a contractor's negligent failure to maintain bottom hole pressure may subject the contractor to well control and pollution expenses for which the contractor may not be insured.

Generally, state oil and gas conservation regulations specify the equipment and drilling practices that are required for safety and for the prevention of blowouts, fires, and pollution. Because of these regulations, the determination of whether a drilling contractor has been
"reasonable" in providing and maintaining the equipment that is necessary to ensure safety and to control and prevent blowouts and fires may be relatively easy. However, the determination of whether a contractor has acted reasonably in controlling a fire or in controlling a "kick" that could result in a blowout is difficult. For example, if abnormal pressures are encountered, the contractor may walk a fine line in deciding whether to try immediately to control the well or to abandon the well to protect the lives of the crew.

While a footage or daywork contract customarily requires the operator to specify the drilling mud program,(324) the drilling contractor is obligated to maintain the program in accordance with the operator's specifications.(325)

Moreover, in the event abnormal pressures are encountered, the drilling contractor must "without undue delay, exert every reasonable effort to overcome such difficulty."(326)

Except under the IADC Daywork Form, the drilling contractor agrees to drill a straight hole, (unless a directional well is specified, and also agrees to make all deviation surveys that are specified) in the contract.(327)

Under a footage contract, the drilling contractor generally bears the risk of excessive deviation. However, under a typical daywork contract, the risk of a deviated hole is generally borne by the operator because the operator has more control over drilling operations.(328)

§ 9.11. Drilling and Accident Reports.

Most drilling contracts require the contractor to furnish the operator with daily (or more frequent) drilling reports summarizing the current status of the well, including the current depth of the hole and the formations penetrated.(329)

Often the drilling contract requires telephone reports to the operator when certain depths or geological horizons are encountered. These reports are most commonly made on the API-IADC Daily Drilling Report Form, a form jointly drafted under the sponsorship of the American Petroleum Institute and the International Association of Drilling Contractors. The report is prepared by the driller(330) or tool pusher(331) and is submitted daily to the operator.(332)

In the event that a controversial decision must be made, the drilling contractor may seek the concurrence of the operator's representative at the well site. Such concurrence can be indicated by having the representative sign the drilling report form.

In Matador Drilling Co. v. Post,(333) the court permitted the admission of such reports into evidence, over the objection of the operator (who asserted that they were self-serving), to determine whether the contractor had acted with due diligence and had performed work in a good and workmanlike manner.(334)

In addition, the drilling contractor is generally responsible for monitoring the deliveries of equipment and supplies to the well site by the operator or a vendor of the operator. The drilling contractor is to verify the quantities, description, and condition of such supplies and equipment and to submit delivery tickets for such items along with the daily drilling report.(335)

Many operator-oriented contracts make the drilling contractor responsible for loss or damage resulting from a failure to detect defects in the operator's equipment. Because of the proliferation of tort claims and rising insurance rates, drilling accidents are a major concern to both the operator and the drilling contractor.(336)

In the event an accident occurs involving personal injury or equipment damage, the drilling contractor must report such accidents to the operator as soon as practicable — often by telephone, with a follow-up written report. Such reports must include the nature of the
accident, injuries, and damages and generally must include copies of any reports that are filed with insurers, government officials, or other parties. (337)

The language of the model forms is broad and may arguably include reports to counsel and corporate officials that the drilling contractor may not wish to share. Accordingly, drilling contractors may wish to negotiate a more specific provision requiring only that copies of insurance or workers' compensation claim forms be submitted to the operator.


By its very nature, the oil and gas well drilling business exposes operators and drilling contractors alike to innumerable risks as unexpected problems arise when new formations are tested in unexplored regions. A drilling contract contains extensive provisions covering liabilities, indemnification, and insurance to guard against potentially enormous costs and losses. These clauses attempt to allocate responsibility and liability for accidents that may cause property damage or loss, personal injury, or death. Nevertheless, a major source of drilling contract litigation concerns disputes over which party assumed the responsibility for certain risks under the terms of a drilling contract. (338)

When risks are allocated in a drilling contract, the parties should attempt to clarify exactly "who" is responsible for "what," to avoid future litigation and to minimize legal and insurance expenses. Indeed, risk allocation is the most crucial issue in drilling contract negotiations.

Although drilling contractors maintain insurance coverage for their own operations, the majority of drilling contracts require the drilling contractor to procure and maintain adequate insurance covering the contractor's operations for the duration of the drilling contract. (339)

The API drilling contract form specifies minimum limits of coverage for each type of insurance required of the drilling contractor and provides blanks for the insertion of additional or alternate coverage. (340)

The parties must also ensure that these minimum amounts are in compliance with all applicable state and federal laws and regulations. While insurance is generally carried at the drilling contractor's expense, the cost of the coverage may be reflected in the compensation paid to the contractor for the drilling of the well.

A drilling contract generally requires the drilling contractor to carry three or more categories of insurance coverage. (341)

The first category of insurance covers the contractor's employees and includes workers' compensation coverage, which the drilling contractor must ordinarily obtain "in full compliance with all applicable state and federal laws and regulations." (342)

Most drilling contracts, including the API form, also require the drilling contractor to provide employers' liability insurance covering events that may be outside the scope of the applicable workers' compensation statute. (343)

If mandated by statute, the contractor is also required to provide unemployment compensation insurance for its employees. (344)

The second category of insurance coverage is automobile liability insurance covering liability for bodily injury or destruction of property arising from all "owned, non-owned, and hired automobile equipment" used in connection with the work performed under the contract. (345)

While minimum policy limits are normally provided under the drilling contract, insurance coverage must comply with applicable state law. (346)
The third general category of required insurance coverage is comprehensive general liability insurance. This coverage is probably the most important since it covers the greatest potential exposure to liability.\(^{(347)}\)

Comprehensive general liability insurance coverage protects the drilling contractor from claims made by employees of the operator,\(^{(348)}\) by employees of third-party contractors, by trespassers, and by invitees.\(^{(349)}\)

In addition to insuring against personal injury, this policy also insures against property damage.\(^{(350)}\)

A well-drafted drilling contract, including the API form,\(^{(351)}\) requires the drilling contractor to obtain comprehensive liability insurance "covering all operations" of the contractor, including any contractual liability assumed by the contractor. Most drilling contracts specify the minimum limits that must be provided "per occurrence."\(^{(352)}\)

A fourth category of insurance coverage, which may be required, is property insurance.\(^{(353)}\)

This coverage extends to physical damage to the drilling contractor's or the operator's property, including the drilling rig, housing, offices, storage facilities, and other related equipment that is used in the performance of the drilling contract. While prudent drilling contractors would carry property damage coverage on their rigs, many operators require proof of such coverage, because in certain instances (such as the operator's failure to prepare a sound location, the operator is liable for damage to the contractor's property to the extent that contractor's insurance is inadequate to pay the loss.

To ensure compliance with insurance provisions, the drilling contractor is often required to furnish the operator with certifications that all insurance policies are in full force and effect.\(^{(354)}\)

The operator may reserve final approval over which company may underwrite the drilling contractor's insurance coverage.\(^{(355)}\)

A well-drafted drilling contract provides that the insurance may not be canceled or materially changed without prior written notice to the operator.\(^{(356)}\)

Strict adherence to these provisions is critical to ensure that the necessary insurance coverage is in force at all times during the performance of the drilling contract.

In contrast, drilling contracts seldom require the operator to have insurance coverage, yet the operator assumes substantial risks and generally may agree to indemnify the contractor for stated risks. The model forms, however, do provide that the operator must have its insurer waive subrogation rights against the contractor for risks that the operator assumes.\(^{(357)}\)

In addition to ascertaining that the drilling contractor has the required categories of insurance coverage, the operator should examine all policies to determine whether each policy is an "occurrence" policy or a "claims made" policy. The "occurrence" policy is a type of liability policy that traditionally has been marketed by the majority of insurance companies. Under an "occurrence" policy, coverage is extended for any property damage or bodily injury that "occurs" during the period the policy is in force, even if a claim is filed years after expiration of the policy. In other words, the time of the occurrence of the damage or injury determines whether there is coverage. This type of policy is purchased by most service industries, including drilling contractors.

Under a "claims made" policy, the occurrence of the property damage or bodily injury does not determine or trigger the coverage; rather, the time of the filing of the claim against the insured determines whether there is coverage. Thus, a "claims made" policy differs from an
"occurrence" policy in that, under a "claims made" policy, property damage or bodily injury claims must be brought and reported to the insurer within the term of coverage specified in the policy. (358)

The "claims made" policy has not been well received by service industries. Accordingly, an "occurrence" policy is the standard form used in the well drilling industry. (359)

By requiring the drilling contractor to obtain an "occurrence" policy, the operator will be insured against covered mishaps occurring within the duration of the contract. (360)

Note that while the model forms specify liability coverage "per occurrence," (361) this language is intended to refer to the amount of coverage that is required for each accident, and not to an "occurrence" policy. Failure to secure adequate insurance coverage could expose the operator (and contractor) to a high risk of liability for damages, particularly in the case of a drilling contractor (or operator) that is judgment proof.

In addition to the form of the policy, both operators and drilling contractors must be careful to secure coverage that meets their expectations. An illustrative case is Natol Petroleum Corp. v. Aetna Insurance Co. (362)

By the terms of a drilling contract, the operator assumed the risk of loss for the contractor's in-hole equipment while on a daywork basis — a common provision in most drilling contracts. While the contractor was drilling on a daywork basis, well control was lost and efforts to restore control were unsuccessful. (363)

Consequently, the well had to be plugged, and the contractor's drill pipe and other equipment were cemented in the hole. (364)

The operator filed a claim with its liability insurer, Aetna, for the value of the lost equipment. (366)

Aetna denied the claim, contending that the policy did not include coverage for liability assumed by contract, but only covered liability "imposed by law." (367)

The parties stipulated that the loss of the contractor's drilling equipment was not caused by the negligence or other tortious conduct of the operator and that the operator's liability was assumed under the contract. (368)

In construing the insurance contract, the trial court granted the operator's motion for summary judgment and Aetna appealed. (369)

The Tenth Circuit reversed, holding that the insurance contract did not cover liability assumed by contract. (370)

In other words, liability assumed under the terms of a contract and enforceable according to contract law is different from liability "imposed by law," such as tort law, in the absence of a contract. Thus, both operators and contractors must make certain that their liability policies are as comprehensive as their needs require, as they will self-insure for any risks not covered risks. (371)

Model drilling contract forms provide that both the operator and the contractor must secure special endorsements from their insurance underwriters, which waive subrogation rights for the respective liabilities assumed. (372)

Operator-oriented forms, however, generally provide for such a waiver by only the drilling contractor.

Except where specifically prohibited by statute, a waiver of subrogation rights is
commonly inserted in commercial contracts that allocate risk, and such a waiver will not ordinarily be set aside by a court as contrary to public policy.\(^{(375)}\)

When parties enter into a drilling contract, they should agree who will bear what risks, with each party either self-insuring or procuring insurance that is adequate to cover its respective risks. Logic dictates that the parties agree to waive subrogation so that both parties will get what was bargained for: the allocation of certain risks and the elimination of the need to secure duplicate insurance coverage. If an insurer is allowed, by way of subrogation or otherwise, to ignore the risk allocation the parties have made, the parties lose the benefit of the bargain and will be forced to secure duplicate insurance coverage.

In addition to requiring the drilling contractor to waive all rights of subrogation, the operator may require that the contractor's insurance policies name the operator as an additional insured.\(^{(376)}\)

By doing so, the operator is afforded coverage under the drilling contractor's policies for covered liabilities resulting from the operator's activities undertaken in the performance of the drilling contract.\(^{(377)}\)

While this provision is not included in model drilling contract forms, such a provision could be inserted in the contract.\(^{(378)}\)

This provision is not viewed as exculpatory in nature and will not ordinarily be invalidated by a court as against public policy.\(^{(379)}\) except where prohibited by statute.\(^{(380)}\)

Hence, many major operators seek such a provision.\(^{(381)}\) Of course, in theory such an endorsement may increase the cost of insurance coverage.\(^{(382)}\)

However, the added cost could be reflected in the compensation paid to the drilling contractor under the terms of the drilling contract, and this device may avoid some litigation. There are, however, practical problems. Because most drilling contractors maintain blanket policies, the insurer may be unwilling to include a number of operators, with different claims experience, as named insureds. In situations where the insurer did agree, the cost of additional premiums could make such a practice prohibitive. If accomplished, however, the drilling contractor should be careful to limit such an endorsement to the liabilities assumed under the contract.

Due in large part to the rising cost of obtaining conventional insurance coverage through carriers, many large drilling contractors choose to self-insure their operators by setting aside a fund sufficient to meet potential losses.\(^{(383)}\)

Large drilling contractors often self-insure up to a specified amount and then cover any excess with insurance. In the event of a loss, the drilling contractor must pay any claims up to the self-insured limits, with the insurance company paying the balance. The API drilling contract allows the contractor to act as a self-insurer as to any one or more of the risks for which insurance coverage is required, subject to the written approval of the operator.\(^{(384)}\)

\section*{§ 9.13. Risk Allocation and Indemnification.}

Generally, an employee of a drilling contractor is limited to workers' compensation recovery from the contractor for injuries that are sustained on the job. However, this does not limit a cause of action by a contractor's employee against the operator in tort. The operator may defend such an action by arguing that it had no control over the mishap and, accordingly, is not liable for injuries to an employee of an independent contractor. This argument will not succeed, however, if the operator exercises control over the operations or fails to warn of a known hazard.\(^{(385)}\)

The model forms provide that the drilling contractor is acting as an independent contractor.\(^{(386)}\)
In a tort action, however, these provisions offer no protection to the operator if the facts indicate that the operator was actually in control.

The operator is most vulnerable to a claim of control when the contractor is drilling on a daywork basis. But here the operator may not have the requisite control over routine drilling operations. In Cockburn v. Terra Resources, Inc.,(387) an operator was found not liable for injuries to a contractor's employee when pipe slipped from a storage rack while operations were being conducted on a daywork basis. The court held that the operator was not responsible for the slippage of the drill pipe, which was under the direct control of the contractor's tool pusher, and reasoned that "the 'footage' and 'daywork' clauses of the contract demonstrate nothing more than a mechanism from which the compensation due [the contractor] . . . was to be determined, and they do not manifest any intention to assign control over the details of the work to [the operator]. . . ."

In light of the more detailed insurance and indemnity provisions in the contract, the court refused to construe this provision as making the operator responsible for injuries to the contractor's employees. The court noted that "[w]hen the plain language . . . of the contract is applied, this agreement demonstrates the intent and understanding of the parties . . . [the contractor] was to be an independent contractor for all work performed without regard to whether it was performed on a 'daywork' or a 'footage' basis."(389)

In so holding, the court affirmed a summary judgment ruling by the trial court. While this case protects operators against personal injury claims by employees of a drilling contractor,(390) other courts may not agree with the Wyoming court's assessment of the daywork contract.

For example, in Redinger v. Living, Inc.,(391) the Texas Supreme Court in holding that an operator owes a duty to keep the well site in a safe condition, adopted the view set forth in the Second Restatement of Torts § 414:

One who entrusts work to an independent contractor, but who retains the control of any part of the work is subject to liability for physical harm to others for whose safety the employer owes a duty to exercise reasonable care, which is caused by his failure to exercise his control with reasonable care.

Several courts have applied this action of the Second Restatement of Torts in oil patch cases.(392)

In light of the uncertainty of the independent contractor defense, the operator and drilling contractor will continue to allocate various risks of losses and damages between themselves through indemnity provisions.(393)

Commonly referred to as "hold harmless" clauses, indemnity provisions are normally inserted in drilling contracts.(394)

Historically, many courts held indemnity agreements void as against public policy on the ground that such provisions encouraged negligence on the part of the indemnitee. Today, however, many courts will enforce such agreements where the agreement to indemnify against negligence is clearly expressed.(395)

However, several oil and gas producing states have enacted statutes prohibiting certain types of indemnity provisions in drilling contracts. These anti-indemnity statutes generally hold indemnity provisions void if they purport to indemnify the indemnitee against bodily injury, death, or property damage arising from the negligence of the indemnitee.(396)

Operators, drilling contractors, and third-party contractors must be keenly aware of the specific applicable law concerning indemnities because their contractual indemnities, no
matter how clear and unequivocal, will not be enforced to the extent that they violate the
governing jurisdiction's public policy. In addition, parties face uncertain precedent in some
jurisdictions as well as the possibility that existing precedent will be overturned. Consequently
prudent parties, should insure against such fortuities, notwithstanding their contractual
indemnification arrangements. While insurers may collect multiple premiums as a result of
this uncertainty, insurance underwriters also have difficulties in assessing assumed risks.

Apart from statutory restrictions, the modern view is that indemnity provisions that
clearly and unequivocally assign the risks to be borne by each party should be
enforced.

However, in the proper case, the court may strike down an exculpatory provision where the
party in whose favor the clause operates enjoyed superior bargaining power.

In addition, there have been many cases concerning the proper interpretation of an indemnity
provision. The most pertinent issue is whether a party's act or omission or the damage or
expense involved was intended to be within the scope of the provision, especially in situations
where the indemnitee's negligence has contributed to the problem.

In Wyoming Johnson, Inc. v. Stag Industries, Inc. Wyoming Johnson, the general
contractor, and Stag, the subcontractor, agreed that Stag would indemnify Wyoming Johnson
"against . . . all claims, suits or liability . . . on account of any act or omission of
Subcontractor. . . ."

The agreement also stated that Stag would "be bound . . . by the same terms, as the
Contractor's [master] contract with the Owner and assume toward the Contractor all
obligations and responsibilities which the Contractor by contract, assumes toward the Owner.
. . ."

When Doyle, an employee of the subcontractor, was injured, Wyoming Johnson's insurer paid
a personal injury settlement to Doyle. Wyoming Johnson and its insurer then brought
an indemnity action against Stag.

The Wyoming Supreme Court held that the specific indemnity by Stag did not apply because
the injury in question was not caused by an act or omission of Stag.

The court then focused on a clause in the master contract that provided that the "Contractor . . .
shall indemnify and hold harmless the Owner . . . from and against all claims, damages,
losses and expenses . . . ."

The court further held that the attempted incorporation by reference of this "much broader"
indemnity provision was not a "clear and unequivocal" undertaking by Stag to indemnify
Wyoming Johnson for its negligence.

The court stated that where the indemnitee intends to transfer the risk of loss to the
indemnitor for any shared fault, such intent must be expressed beyond any doubt, the test
being "whether the contract language specifically focuses attention on the fact that by the
agreement the indemnitor was assuming liability for [the] indemnitee's own negligence."

Finally, the court held that when specific indemnity provisions are contained within a contract,
no additional indemnifications will be implied.

In Aymond v. Texaco, Inc. the plaintiff, an employee of the drilling contractor, was
injured as a result of the negligence of both his employer and Texaco. The drilling contract
contained indemnification language, which provided that the drilling contractor would
indemnify Texaco "from all claims, demands, and causes of action in favor of Contractor's
employees on account of personal injuries or death or on account of property damage, no
matter how such claims arise."
The court denied indemnification, holding that the language "no matter how such claims arise" was not broad enough to cover claims arising from the negligence of the indemnified party. (413)

In light of such decisions, (414) a contract should include explicit language setting forth an unequivocal intent by one party to indemnify the other for specific claims in order to ensure that a court will enforce the provisions as the parties intended. Therefore, when including indemnity provisions in the drilling contract, the parties should be certain that their intended expectations regarding indemnification responsibilities are expressly stated. For example, if the contractor is to indemnify the operator against the operator's own negligence, the contract should specifically state that the indemnity is absolute, without regard to the negligence of either party or of any third party. (415)

Such indemnities should also be limited "to the extent authorized by law" since an unlawful indemnity against the indemnitee's negligence may serve to invalidate the entire indemnity provision.

Ordinarily, a court will distinguish an allocation of direct risks of loss from an indemnity. Such a distinction was drawn in In re Incident Aboard D/B Ocean King. (416)

In that case, the operator sued the drilling contractor to recover costs incurred in controlling a blowout and extinguishing a fire and for lost profits as a result of the mishap. The jury found that both the operator and drilling contractor were negligent. (417)

The drilling contractor denied liability, however, because the drilling contract provided that the risk of a blowout "from any cause" was to be borne by the operator. (418)

The operator responded that under Louisiana law, (419) the phrase "from any cause" was insufficient to relieve the drilling contractor from his own negligence. (420)

The court held that no express reference to negligence is required where the parties are allocating the risk of their own direct loss, as distinguished from allocating liability for injury to third parties. (421)

The indemnity provisions in most drilling contracts, including the API form, (422) the IADC forms, (423) and the contract forms used by many major oil companies, are similar in language and effect, whether the contract is of the footage, daywork, or turnkey type. Essentially, these provisions attempt to lessen the likelihood of litigation and to make the operator and drilling contractor individually responsible for any claims made by their respective employees, subcontractors, or subcontractors' employees without regard to cause, fault, or negligence of any party. (424)

The most common case involving an indemnity clause arises when an employee of the indemnitee is injured on the job. Even where the employer/indemnitor is negligent, the employee's claim against the employer is ordinarily limited to the recovery permitted under the applicable workers' compensation act. The employee, however, may sue the third-party indemnitee on a theory of negligence and recover damages in tort far in excess of the available recovery under a workers' compensation act. If found liable, the indemnitee may claim indemnity from the employer/indemnitor to the extent permitted by law. In the absence of a lawful indemnity, workers' compensation law would shield the employer from tort liability, including contributio. (425)

However, the employer/indemnitor may be contractually liable to the indemnitee by reason of the indemnity provision in the contract. (426)

The following three subsections briefly summarize the indemnity provisions incorporated into model drilling contracts. Note, however, that company forms, such as those used by
major oil companies, may have indemnity provisions that are more one-sided.


Under the API form, the operator "agrees to protect, defend, indemnify, and save Contractor" from claims by the operator's employees or the operator's other contractors or their employees "other than the parties identified in" the contractor's indemnification of the operator on account of bodily injury, death, or damage to property.(427)

This indemnity runs against all such claims without limit and without regard to the cause or the negligence of any party.(428)

If the limits of assumed indemnity exceed those permitted by any applicable law, the indemnity is automatically amended to conform with such law.(429)

The "other than" clause is not found in the drilling contractor's indemnification of the operator.(430)

In Maxus Exploration Co. v. Moran Bros., Inc.(431) the Texas Supreme Court construed the "other than" phrase. An employee of one of the operator's contractors had been injured by the negligence of the drilling contractor, and the operator and contractor disputed the validity and application of the operator's indemnification. The operator argued that the "other than" phrase took the personal injury claim in question outside of the indemnity because the injured party was also an invitee of the contractor. The operator further argued that because the contractor had agreed to indemnify the operator against claims by invitees of the contractor, any invitees of the contractor (including an employee of the operator's contractor) was a party "identified in [contractor's indemnity]." The Texas Supreme Court found the argument untenable.(432)

In struggling to construe the "other than" phrase, the court noted that it made sense to limit the operator's indemnification to its invitees 'other than' Moran's [drilling contractor] employees, Moran's contractors, and their employees. Without such an exclusion, Diamond Shamrock [operator] might well be assuming the obligation to satisfy the claims of all persons at the well site. The apparent purpose of the cross-indemnification provisions is to make Diamond Shamrock and Moran each responsible for the claims of the people it has itself brought to the well site. Thus, as we construe . . . [Diamond Shamrock's indemnity, the injured party] is not excluded from the group for whose claims Diamond Shamrock is responsible. We acknowledge that this construction does not solve all the problems with the 'other than' language. It does not, for example, answer the question of whether Diamond Shamrock or Moran is responsible for an injury to an invitee of both. The provisions do not admit of a certain and completely consistent construction. Ours here is sufficient to resolve the issue raised.(433)

Moran illustrates the need to clarify the operation of both the operator's and drilling contractor's indemnity with respect to invitees, as well as employees (or employees of subcontractors) who may work for both the operator and drilling contractor simultaneously.

With the exception of certain enumerated responsibilities that are assumed by the drilling contractor,(434) the operator also assumes responsibility for pollution or contamination resulting from "well fire, blowout, cratering, seepage, or any other uncontrolled flow of oil, gas, water, or other substance" without regard to the negligence of any party, including control and removal expenses.(435)

The API form differs from the IADC forms by limiting the operator's liability to the extent that such liability may be covered by the drilling contractor's insurance.(436)

Under the IADC model turnkey contract, the drilling contractor, while drilling on a turnkey basis, promises to indemnify the operator for liability for pollution, contamination, and
blowouts up to a predetermined monetary limit, above which the operator agrees to assume full responsibility and to indemnify the drilling contractor. (437)

However, while the contractor drills under the daywork provisions of the turnkey contract, the operator makes an indemnity similar to that made under a model daywork or footage contract. (438)

Due to the potentially high cost of liability for pollution and contamination, the party with the greater bargaining power can be expected to negotiate provisions limiting its exposure.

Finally, model forms provide that the operator will indemnify the drilling contractor against claims resulting from operations that cause loss or impairment of any property right in oil, gas, other mineral substance, or water if the substance has not been reduced to physical possession above the surface of the earth. (439)

The operator is also responsible for any claims of damage to any formation, strata, or reservoir beneath the surface of the earth. (440)

This indemnity is necessary because drilling contractors cannot ordinarily secure insurance against the risk of underground damage; however, operators can and often do obtain such coverage.


The drilling contractor usually "agrees to protect, defend, indemnify, and save Operator" from claims by the drilling contractor's employees or the contractor's subcontractors or their employees on account of bodily injury, death, or damage to property. (441)

This indemnity runs against all such claims without limit and without regard to the cause or the negligence of any party. (442)

If the limits of assumed indemnity exceed those permitted an applicable law, the indemnity is automatically amended to conform with that law. (443)

The drilling contractor normally assumes all liability for surface pollution or contamination resulting from drilling operations. (444)

For example, under the API form, the drilling contractor agrees to indemnify the operator for pollution and contamination "originating on or above the surface" and caused by substances "in possession and control of" the drilling contractor, without regard to the negligence of any party. (445)

Essentially, the drilling contractor assumes liability for surface spills of any substance in its possession and control that are directly associated with the contractor's equipment and operations. Generally, the contractor is not responsible for the discharge of any pollutant from below the surface resulting from blowouts or uncontrolled flows. (446)

Under the IADC model turnkey contract, the contractor, while drilling on a turnkey basis, indemnifies the operator against all pollution and contamination up to an agreed upon monetary amount, provided that such pollution and contamination is not caused by the operator or operator's agents, employees, and representatives. However, while the contractor is drilling under the daywork provisions of the turnkey contract, the contractor's indemnity is similar to the more limited indemnity made under the IADC model forms. (447)


The API and IADC forms provide that all indemnity obligations and liabilities assumed by the parties under the terms of the agreement "shall have no application to claims or causes of
action asserted against Operator or Contractor by reason of any agreement of indemnity with a person or entity not a party hereto,"(448) which would include any third-party contractors engaged by either party.(449)

Essentially, this provision is inserted to ensure that neither the operator nor the drilling contractor can attempt to enter into third-party contracts that may impair or defeat the indemnity agreements or enlarge the indemnity exposure contained within the drilling contract.

As an illustration, consider *Tyler v. Dowell, Inc.*, (450) where the drilling contract specified that the drilling contractor would indemnify the operator against all accidents and damages resulting from drilling operations.(451)

Subsequently, the operator entered into a well-service contract with a third party, which provided that the operator would indemnify the third-party contractor against loss or damage. The drilling contractor's equipment was damaged due to the alleged negligence of the third-party contractor's frac(452) operation.(453)

The drilling contractor sued the third-party contractor who joined the operator as a third-party defendant based on the indemnity clause in the well-service contract. The operator then counterclaimed against the drilling contractor based on the indemnity clause in the drilling contract.(454)

On appeal, the court held that although the indemnity clause in the drilling contract was enforceable as between the operator and the drilling contractor, the parties did not intend for the drilling contractor to indemnify third parties under the clause.(455)

The court further held that the indemnity clauses in the two separate contracts would not be "construed together to effect a circuitry of rights and liabilities" so as to exempt the third-party contractor from liability for its own negligence.(456)

The court reasoned that since the well-service contract was entered into by the operator with the third-party contractor subsequent to the drilling contract, the two contracts "were in no wise connected with respect to rights and duties to be imposed" and that "[e]ach stands upon its own footing independently of the other."(457)

The model drilling contracts attempt to achieve the same result by using express language.(458)

In light of the above discussion, the operator and drilling contractor may allocate risks between them by the terms of the drilling contract. In the case of third parties, such as between the drilling contractor and sub-contractor (or operator and other contractor), the terms of their respective contracts govern risk allocation.(459)

However, such contract may not and should not modify the rights and liabilities of the operator and drilling contractor under the drilling contract. Therefore, the net result is that insofar as the operator and drilling contractor are concerned, the responsibilities and liabilities for loss arising from the work of a third-party contractor will be resolved as if the party (the operator or drilling contractor) who contracted for the third-party services had done the work itself, subject to the provisions set forth in the drilling contract.


[1] — Blowouts (Pollution and Contamination).

The sudden, violent expulsion of oil, gas, drilling mud, and debris that may occur during a blowout may potentially result in tremendous exposure to liability for any resulting pollution, contamination, or other damages. The API(460) and IADC(461) forms place the
responsibility for pollution or contamination caused by blowouts on the operator, regardless
of the negligence of any party.\(^{(462)}\)

In many cases, however, in addition to pollution and contamination damages, a blowout may
cause loss of or damage to the equipment of the operator, contractor, and third parties, or
may result in loss or damage to the hole. The responsibility for these latter types of losses is
governed by other provisions of the drilling contract.\(^{(463)}\)

Drilling contracts vary with respect to the limits of the operator's liability for pollution and
contamination damages. For example, the API form shifts the responsibility for damages to
the operator only to the extent that such damages are not covered by the drilling contractor's
insurance.\(^{(464)}\)

No such limitation appears in the IADC forms. The IADC model turnkey form provides that
when operations are being conducted on a daywork basis, the operator assumes full
responsibility for pollution and contamination resulting from a blowout.\(^{(465)}\)

However, when operations under the contract are being conducted on a turnkey basis, the
drilling contractor is responsible for such damages up to a pre-determined monetary
amount;\(^{(466)}\) the operator is responsible for pollution and contamination damages exceeding
that amount.\(^{(467)}\)

In light of these variations and the tremendous exposure to liability that may arise from a
blowout, both the operator and the drilling contractor should specifically allocate the
responsibility for such damages so that each party may obtain appropriate insurance
coverage. Most drilling contractors cannot buy high-limit pollution or contamination
insurance at a reasonable cost without large deductibles; however, prudent operators do secure
such coverage. Nevertheless because of its high cost, the operator may elect not to buy this
coverage when it drills in an area where the likelihood of a blowout is extremely remote. Note
that the model form contracts do not require the operator to maintain such insurance, and
contractors should satisfy themselves as to an operator's financial ability to respond to this or
any other liability assumed by the operator.

Disputes can arise over the meaning of the term blowout, even when the term has been
Co.*\(^{(468)}\) the drilling contractor's insurer denied coverage where the drilling crew was able to
cement in the well, although well control was lost and drilling fluid was expelled.\(^{(469)}\)

The insurer argued that the mishap did not constitute a blowout within the meaning of the
policy because the policy required that the well must be completely out of control.\(^{(470)}\)

In ruling for the drilling contractor, the court held that a well is completely out of control
when there is "adverse pressure and flow of gas or liquid from the well which cannot be
corrected by injection of drilling mud or otherwise to allow the operator to continue normal
drilling operations."\(^{(471)}\)

In so ruling, the court relied on expert testimony as to the meaning of the term *blowout* as
used within the oil and gas industry.\(^{(472)}\)

\[2\] — Well Control and Lost Circulation.

Classic examples of well control are shutting in a major blowout and extinguishing a raging
well fire (often involving the drilling of relief wells). However, well control also includes the
cementing of the well when the pressures of escaping gas or liquid from the hole have proven
to be otherwise uncontrollable. While the costs associated with the latter are likely small in
comparison to the former, in either case the parties to the drilling contract should fully
evaluate potential liability for damages and costs resulting from loss and restoration of well
control.\(^{(473)}\)
Under the various API and IADC model form drilling contracts, liability for well control largely depends on the type of contract. Under the daywork contract, the operator is generally in charge of directing the drilling operations; hence, the operator assumes liability for any needed well control and attendant costs.

Note that footage and most turnkey contracts contain provisions requiring that certain operations be conducted on a daywork basis. Consequently, when operations are conducted under the daywork provisions of the API or IADC forms, the operator is expressly made responsible for the costs involved in controlling a "wild" well. Thus, if the drilling contract calls for daywork operations, the operator should obtain adequate insurance for protection against well control costs.

The allocation of responsibility for controlling a wild well is not as clearly defined under the footage provisions of the API form: there is no express allocation of responsibility for well control between the drilling contractor and the operator. Under footage contracts, the drilling contractor normally assumes general responsibility for conducting drilling operations.

However, most footage contracts, including the API and IADC forms, include provisions whereby the basis of compensation reverts to daywork whenever the contractor encounters abnormal pressures, lost circulation, or circumstances beyond the control of the drilling contractor.

Accordingly, when control of a well is lost in these situations, responsibility for well control and associated costs would be assumed by the operator under the daywork provisions of the footage contract. However, if well control is lost from causes attributable to the drilling contractor's operations and while the contractor is drilling on a footage basis, the contractor assumes the responsibility for regaining control of the well and for any associated costs because the contract provides that "should a fire or blowout occur or should the hole for any cause attributable to Contractor's operations be lost or damaged, . . . all such loss or damage shall be borne by Contractor."

Accordingly, under a footage contract, the parties should carefully define the circumstances when drilling switches from a footage to a daywork basis.

The API and IADC footage forms provide that the contractor is responsible for restoring lost circulation for a specified period, after which efforts to restore circulation are to be performed on a daywork basis. In Blackstock Drilling Co. v. R. Olsen Oil Co., the contractor expressly assumed the risk of restoring lost circulation for a period of twenty-four hours. However, "should circulation of mud or fluid be lost for more than 24 hours in any one instance, [the operator] shall pay the contractor on a daywork basis for work performed."

Since the twenty-four-hour period commenced when circulation was first lost, the definition of "lost circulation" was central to the shifting of the contract rate from footage to daywork. The court defined lost circulation as

[A]ny interruption of the return of the mud forced into the hole which would prevent its flowing out of the hole in substantially the same quantity that was forced into the hole. There might be a partial interruption of circulation, or there might be complete interference with the circulation, so that no mud would return to the surface. However, any interference with the circulation which would prevent the elimination of the cuttings at the bottom of the hole and the proper conditioning of the structure into which the drill was cutting, could be termed lost circulation.

After defining lost circulation, the court held that the contractor was entitled to daywork compensation for the entire period of lost circulation if such period exceeded twenty-four
hours, including the initial twenty-four-hour period.\(^{(490)}\)

In contrast, the model forms currently provide that should lost circulation persist, "then after a period of hours consumed in such efforts, further operations shall be conducted on a daywork basis . . . until normal drilling operations can be resumed."\(^{(491)}\)

In *Startex Drilling Co. v. Sohio Petroleum Co.*,\(^{(492)}\) the court described circulation and lost circulation as follows:

[C]irculation in its most general meaning refers to that feature of drilling an oil well, whereby some type of drilling fluid or mud is pumped down the drill pipe. This is done to lubricate the drill bit, and to remove the earthen cuttings from the holes as the fluid recirculates to the surface. It also provides weight to the drilling column thus decreasing the danger of a gas pressure "blowout". Another term used by the parties to describe circulation is "returns," i.e., the return of the drilling fluid to the surface.

Occasionally, because of gaps or porosity in the formation, some or all of the drilling fluid will escape from the drilling column rather than returning to the surface. The parties agree that the term "loss of circulation" certainly applies in describing a situation where none of the drilling fluid returns to the surface. On the other hand, they also agree that the definition of the term "normal circulation" encompasses the situation where 100% of the regular, scheduled drilling fluid comes back. Their dispute arises in applying the terms loss of circulation and normal circulation, when the contractor is experiencing partial returns (as, for example, when only 80% of the drilling fluid returns) and is forced to use a special mud program not contemplated by the drilling order . . . \(^{(493)}\)

The contract in question was an API form footage contract. The contract provided that the contractor should bear the expense of restoring circulation, including the expense of "any fishing job or sticking of drill pipe, or other difficulty," for the first eight hours and that thereafter such expense should be borne by the operator on a daywork basis.\(^{(494)}\)

Beginning on July 25, circulation was completely lost. This problem continued for a period of eight hours, so the operator's representative took over control of the drilling operations. In the opinion of the operator's representative, normal circulation was restored four or five hours later, so he left the rig.\(^{(495)}\)

Thereafter, returns were as high as 80%. Four days later, drill pipe got stuck in the hole. The ensuing fishing operation took nearly a month and cost $142,630, which sum was paid by the drilling contractor to a third party. Drilling resumed, but shortly thereafter circulation was lost, and the operator took over the well through completion on September 12. The drilling contractor billed the operator for daywork for all time after the eight-hour period following the initial loss of circulation on July 25 and billed the operator for the cost of the fishing operation.\(^{(496)}\)

The operator disputed the daywork charges following the time when its representative left the rig on the morning of July 26, contending that at that time normal circulation had been restored. Further, he disputed his liability for the fishing costs, contending that the drill pipe got stuck during normal circulation.\(^{(497)}\)

The question of proper interpretation of the contract was submitted to the jury, which found for the drilling contractor on both matters. On appeal, the court agreed with the trial judge, finding that the contract was ambiguous and that the matter was properly submitted to the jury.\(^{(498)}\)

The appellate court affirmed the jury's findings in favor of the drilling contractor.\(^{(499)}\)

However, the court stated that both the drilling contractor and the operator presented plausible arguments.\(^{(500)}\)
This case suggests that had the jury found for the operator, that verdict would also have been affirmed. Accordingly, because the appellate court agreed that the contract was ambiguous, and because the appellate court suggested that it would have affirmed a jury verdict in favor of either party, operators and contractors should specifically define loss of circulation in the contract.

In *Inland Drilling Co. v. Davis Oil Co.* circulation problems were encountered from the outset. At a depth of 69 feet, the rotary rig was removed and a spudder was brought in. The spudder drilled to a depth of 142 feet, where circulation was regained and rotary drilling resumed. Although some circulation problems occurred thereafter, the contractor drilled to a depth of 2,407 feet.

The footage contract provided that daywork rates would apply following twenty-four hours of lost circulation. The court held that the contractor was entitled to daywork rates for the entire period of lost circulation, including the time the spudder was drilling. Furthermore, the operator was responsible for the costs of the spudder, and the contractor was entitled to footage rates for all footage drilled, except for the 73 feet drilled by the spudder.

A variation on the allocation of the risk associated with regaining control of a wild well is found in the IADC Model Turnkey contract. When drilling operations are being conducted on a turnkey basis, the drilling contractor is liable for well control up to a predetermined cost, at which point the operator assumes any liability costs exceeding the predetermined amount.

Thus, when using the turnkey drilling contract form, both the operator and the contractor should carry insurance that is adequate to cover their respective shares of any potential liability for well control.

Because of the high cost of this insurance coverage, the operator and drilling contractor may decide not to procure this coverage when they are drilling in an area where well control problems are unlikely to occur. Note, however, that failure to insure adequately against such problems can lead to bankruptcy in the event of a major catastrophe. Accordingly, prudent operators carry blowout insurance, and conservation commissions will require operators to post bonds that, in part, may underwrite well control mishaps.


In the course of drilling operations, there is substantial risk of damage to or loss of the hole. Damage may be so minor that the hole can be cleaned out and redrilled, or so extensive that a replacement well must be drilled. The damage might result from a deviation from straight-hole specifications, loss of equipment in the hole, fire, cratering, blowout, or other events. Regardless of the cause or extent of the damage, responsibility should be clearly allocated between the operator and the drilling contractor.

Under the various API and IADC forms, liability for damage to the hole depends largely on whether the contract is a daywork or footage agreement.

Because the operator is generally in charge of directing the drilling operations under a daywork contract, the operator assumes liability for any damage to the hole. When operations are conducted under the daywork provisions of the model footage...
the operator is expressly responsible for any damage to or loss of the hole, including any casing in the hole.

Under footage and turnkey contracts, the drilling contractor normally assumes responsibility for conducting the drilling operations.

Accordingly, under the footage provisions of the API, IADC footage, and IADC turnkey forms, the contractor is responsible for a fire, blowout, or other loss or damage to the hole caused by the contractor's operations. While the drilling contractor's liability under this provision would seem to include even consequential damages (such as lost profits), the model forms provide that neither party is liable for "special, indirect, or consequential damages."

If the hole is damaged to the extent that it cannot be drilled to the contract depth, the drilling contractor, upon the request of the operator, is obligated to commence a new hole.

Whether or not a new hole is commenced, the drilling contractor receives no compensation for the abandoned hole, except for any accrued daywork operations conducted under the daywork provisions of the footage or turnkey contract.

The API form and the IADC footage and turnkey forms, however, do provide for compensation to the drilling contractor where the damage to or loss of the hole is attributable to the operator.

The API form provides that when operations are being conducted on a footage basis, the operator must pay the contractor for work performed in drilling the lost hole if the loss is due to failure of the operator's casing or equipment (either during the running or cementing of such casing) or due to the subsequent failure of the cementing job resulting in parted casing.

In such a case, the operator must also reimburse the drilling contractor for all costs incurred in attempting to restore the hole and, if a substitute well is drilled, for the costs of rigging down, moving the rig to a new location, and rigging up.

The work of drilling the replacement well is then performed under the terms and conditions of the original contract.

Both the operator and the drilling contractor may obtain insurance covering the risk of redrilling the well should problems arise. However, because of its high cost, many operators and contractors do not procure this coverage.


The operator will normally have equipment present at the well site, including such items as casing, tubing, and wellhead equipment.

Most drilling contracts, including the API and IADC forms, provide that the operator assumes liability at all times for damage to or destruction of the operator's equipment, and that the drilling contractor shall be under no liability to reimburse the operator for any such loss or damage.

Under both the API and IADC forms, the drilling contractor agrees "to inspect visually" all materials furnished by the operator and to notify the operator of any "apparent defects."

These forms also provide that the contractor "shall not be liable for any loss or damage resulting from the use of material furnished by Operator or failure to notify Operator of defects."
While this waiver of liability is unequivocally stated and consistent with the operator's affirmative assumption of risk discussed in the previous paragraph, a court would likely hold a contractor responsible for losses incurred by reason of defective materials, where the contractor failed to inspect, and thereby discover, obvious visible defects or failed to warn the operator of such defects.

In *Warren-Bradshaw Exploration Co. v. Tripplehorn*,(532) the operator, in accordance with the drilling contract, delivered casing to the well site. The drilling contractor examined the casing and notified the operator's representative that the casing was defective. The representative directed the contractor to use the furnished casing. The casing broke in the hole, and efforts to retrieve it proved unsuccessful. In accordance with the terms of the contract, the court held that the contractor had fulfilled its duty to inspect and notify, that the contractor was not negligent in continuing drilling operations at the direction of the operator's representative, and that the operator was estopped from attempting to place liability on the drilling contractor.(533)


The risk of destruction or damage to the drilling contractor's surface equipment is normally borne by the contractor. As a result, the model form drilling contracts(534) provide that the contractor shall assume liability at all times for damage to or destruction of the contractor's equipment while it is on the surface, regardless of whether drilling operations are being conducted on a daywork, footage, or turnkey basis. This assumption of liability extends to equipment such as drilling tools, machinery, and appliances for use above the surface, and remains the responsibility of the drilling contractor regardless of when or how such damage or destruction occurs.(535)

The model forms contain two important limitations on the assumption of risk of damage to the contractor's surface equipment. First, the operator is responsible for damage to surface equipment when the damage results from the operator's failure to prepare a sound surface location, including damage resulting from subsurface conditions, such as mines, caverns, sink holes, streams, pipelines, power lines, and telephone lines.(536)

In the event that such damage occurs, the operator must reimburse the drilling contractor to the extent such damage is not covered by the contractor's insurance.(537)

In addition, the operator must compensate the drilling contractor at applicable daywork rates during any resulting periods of work stoppage or related repair.(538)

This reimbursement provision is included because the operator selects the location, and the drilling contractor has no knowledge of the operator's preparation of the well site and no knowledge of subsurface conditions that could cause cratering or loss of the rig.

Second, except when drilling on a turnkey basis,(539) the operator must reimburse the drilling contractor when the contractor's surface or in-hole equipment is damaged or lost due to exposure to a highly corrosive or otherwise destructive environment, such as hydrogen sulfide emissions from the well.(540)

The IADC forms expressly provide that such corrosive elements include those that may be introduced into the drilling fluid and cause damage either to surface or in-hole equipment.(541)

The API form's counterpart provision also includes corrosive substances introduced into the drilling fluid but applies only to damage to the contractor's in-hole equipment.(542)

Under the API form, in the event that such damage occurs, the operator must reimburse the drilling contractor to the extent that such damage is not covered by the contractor's
insurance. The IADC forms do not contain this limitation.

In addition, the operator must compensate the drilling contractor during any resulting periods of work stoppage or related repair at applicable daywork rates.

Apart from liability for damage caused by corrosive substances, liability for damage to or destruction of the drilling contractor's in-hole equipment depends largely on whether the contract is of the daywork, footage, or turnkey type.

Under a daywork contract, the operator is generally in charge of directing drilling operations.

Thus, the operator is liable for any damage to or destruction of the drilling contractor's in-hole equipment (such as drill pipe, drill collars, and tool joints). Under the daywork provisions of the API and IADC footage and turnkey forms, the operator must reimburse the drilling contractor for the current repair cost or a percentage of the current new replacement cost of any such lost or damaged equipment.

Under the API form, reimbursement is limited to the extent that the damage is not covered by the contractor's insurance. Typically, a contractor's property insurance excludes coverage for the drill string while it is in the hole. The IADC forms do not contain this insurance limitation. The daywork provisions of the API form limit the operator's liability to "tools and equipment lost or damaged in the hole."
The daywork provisions of the IADC forms provide that the operator assumes liability "at all times for damage to or destruction of Contractor's in-hole equipment."

Accordingly, under the API forms, the operator is liable for damage to tools and equipment actually in the hole. Under the IADC forms, the operator is arguably liable for equipment used in the hole, whether or not the equipment is actually in the hole at the time of damage.

While drilling on a footage or turnkey basis, the drilling contractor normally assumes responsibility for conducting the drilling operations. Accordingly, the drilling contractor ordinarily assumes the risk of damage to or destruction of the contractor's in-hole equipment.

However, as noted above, whenever operations shift to a daywork basis, liability shifts to the operator. Most footage contracts, including the API and IADC forms, shift operations to a daywork basis whenever: drilling occurs below contract depth; abnormal pressures are encountered; the well loses circulation; or formations are encountered that make drilling difficult or hazardous.

Under a turnkey contract, in addition to the footage contract provisions, any services performed by the contractor beyond those specified are conducted on a daywork basis.

In short, the operator ordinarily assumes the risk of damage to or loss of the contractor's in-hole equipment and to all equipment damaged by corrosive substances while daywork operations are being conducted.


The API form provides that all of the liabilities assumed by the parties under the terms of the
agreement "shall have no application to claims or causes of action asserted against Operator or Contractor by reason of any agreement of indemnity with a person or entity not a party hereto," which would include any third-party contractors engaged by either party. (563)

The drilling contract allocates the risk of damage to or loss of equipment only as between the operator and the drilling contractor. In the case of third parties, the allocation of risk between the operator (contractor) and the third party will be governed by the terms of the third-party contract, but that contract will not modify liabilities of the operator and contractor under the drilling contract.

In *Zephyr Oil Co. v. Cockburn*, (564) the parties apparently entered into a turnkey contract whereby the contractor agreed to drill the well for a specified sum of money, plus an interest in certain oil properties. (565)

The contractor agreed to "at his own expense take such cores and make such drill stem tests as in his judgment are deemed advisable, and is to stand by, at his own expense, while the Schlumberger is being run. . . . All Schlumberger expense is to be paid by the [operator]. . . . ". (566)

The contract further provided that the contractor "shall drill said well as an independent contractor, and as such, except as herein provided shall save and hold [operator] harmless from all expenses and liability incurred in the performance of this contract." (567)

The Schlumberger electric logging device was furnished and run by the Schlumberger Well Surveying Corporation, a third-party contractor. A gun (part of the logging device) used to collect sidewall samples became lodged in the hole and was then lost. Ultimately, the gun was fished out and drilling resumed after the hole was reconditioned. (568)

The contractor had apparently objected to the use of the gun for taking sidewall samples because of the likelihood that the gun would get stuck. (569)

The court affirmed a jury finding that custom and usage in the industry did not require the operator to reimburse the contractor for the cost of the fishing operations. (570)

Although the reasoning of the trial and appellate courts is unclear, the courts apparently construed the contract as requiring the contractor to "stand by" at its own expense while the Schlumberger operations were being run, including the time spent on fishing operations, and that the operator's promise to pay "[a]ll Schlumberger expense" was limited to the third party's fee for the logging service.

**§ 9.15. Force Majeure.**

A well-drafted drilling contract contains a *force majeure* clause, which excuses performance by both the operator and the drilling contractor in the event certain unforeseen or unavoidable circumstances arise that prevent full or timely performance. (571)

The clause provides that neither the operator nor the drilling contractor will be liable to the other for any delays or damages that might arise as a result of "causes beyond the control of the parties affected hereby," except for payment of any applicable *force majeure* rate. (572)

The IADC daywork and footage forms provide that a party claiming *force majeure* must give detailed notice of the *force majeure* to the other party. (573)

As might be expected, the *force majeure* clause, especially the phrase "causes beyond the control of the parties affected hereby," is subject to a wide variety of interpretations and is thus ripe for litigation. In general, however, *force majeure* clauses are strictly construed since courts are hesitant to relieve a party of its obligations under a contract. For example, in *Logan v. Blaxton*, (574) excessive rains made well-site roads impassable. (575)
The court refused to apply the *force majeure* clause although the contract defined *force majeure* as "lack of labor or means of transportation of labor or material; Acts of God; insurrection; flood; strike."(576)

In holding that the *force majeure* clause had not operated to save the lease, the court stated:

We are not impressed, from the evidence, that the rains complained of constituted a flood or floods, or that they constituted a Force Majeure or Act of God as would have prevented defendant from transporting . . . to market the oil from these leased premises. . . so as to relieve the defendant of his obligation under the . . . contract.(577)

Accordingly, the parties to a drilling contract should not depend on making liberal use of the *force majeure* clause to avoid their respective contractual obligations.

Similarly, in *Matador Drilling Co. v. Post*,(578) the drilling contractor was denied *force majeure* rates because it failed to notify the operator that it was claiming *force majeure* as required by the contract.(579)

In addition, the court concluded that no *force majeure* actually existed when, in an effort to recover stuck pipe, the derrick was damaged, necessitating a twenty-four-day delay for repairs.(580)

In reaching this decision, the court noted that the parties had specifically addressed the issue of repairs elsewhere in the contract.(581)


Operators spend large sums of money on the formation of prospects for exploration and possible development. In an industry where the stakes are so high, operators try to guard drilling information. Thus, most drilling contracts contain a provision concerning confidentiality.(582)

Under the API form, upon the written request of the operator, the drilling contractor may not divulge drilling information to third parties.(583)

Under this provision, the contractor also promises that its employees will not divulge any drilling information to third parties.(584)

As a practical matter, however, there is little a drilling contractor can do to stop the loose conversation that may occur after working hours in establishments regularly patronized by rig hands.


While the API form does not include a choice of law provision, the IADC provisions do contain a statement of governing law.(585)

None of the model forms specify a choice of forum that would require any disputes to be resolved by the courts of a particular jurisdiction.

While a thorough discussion of conflict of laws is beyond the scope of this article, a statement of fundamental principles is appropriate. First, when the parties fail to designate the governing law and a contract dispute arises, the courts must first decide which state's substantive contract law governs the contract. "In a diversity case a federal court must apply the conflict-of-law rules of the state in which the court sits."(586)

In general, most states apply the "most significant relationship" test set forth in the Second
Restatement of Conflict of Laws.(587)

Specifically with regard to service contracts, such as a drilling contract,(588) both the validity of the contract and the rights created by the contract are governed by the law of the state where the service is performed.(589) In other words, by the law of the state where the well is drilled.

Second, the parties to a drilling contract may specifically agree that the contract is to be governed by the law of a certain state. Such a designation, in the absence of a contrary intent, means that the local law of a designated state should govern the contract, except for such state's conflict of laws principles.(590)

As between the parties, this designation will ordinarily be binding so as to fulfill the reasonable expectations of the parties.(591)

However, the parties (a) may not be allowed to choose a state that has "no substantial relationship to the parties or the transaction," or (b) may not be permitted to choose governing law that is "contrary to a fundamental policy of a state which has a materially greater interest than the chosen state in the determination of the particular issue and which... would be the state of the applicable law in the absence of an effective choice of law by the parties."(592)

Problems respecting exception (a) above are rare. The choice of law will be effective if the parties choose the state of the operator's or drilling contractor's principal place of business, the state where the drilling will occur, or the state where the contract is executed, provided such location was not merely fortuitous.(593)

Problems more commonly arise under exception (b). Where, but for the express choice of law (State Y) by the parties, the law of State X would govern the dispute, and where State X has a fundamental policy that overrides the contract of the parties, the law of State X will be applied, provided State X has a materially greater interest in the outcome of the dispute than State Y.(594)

Obviously, there can be disputes over what constitutes "fundamental policy," but one area where such a dispute commonly arises concerns the indemnifications the parties make in a contract. For example, the parties may agree that the law of State Y is to govern a drilling contract, which provides for the drilling of a well in State X. Absent this choice of law by the parties, the law of State X would most likely govern.(595)

If the operator had agreed to indemnify the drilling contractor against the contractor's own negligence (an agreement enforceable in State Y but not in State X), a court may nonetheless apply the law of State X on the grounds of "fundamental policy." Accordingly, the parties to a drilling contract should not assume that their expressed choice of law will be honored.(596)

Parties making a choice of law must also be careful not to confuse disputes arising in contract with disputes arising in tort. In the latter, the choice of law selected by the parties may not be controlling; this is especially true where third-party plaintiffs are concerned. In other words, parties who agree that a drilling contract is to be governed by the law of State Y, even though the well is to be drilled in State X, may nonetheless have their tortious conduct in State X governed by the law of State X. For example, a tort action for personal injury or property damage is generally governed by the law of the state where the injury or damage occurred, unless another state has a more significant relationship to the dispute.(597)

Special problems arise when an injury occurs that is covered by more than one state's workers' compensation act, or for which immunity is provided to the defendant by one state's act, but not provided by another state's act.(598)

The parties to a contract may not be able to avoid such problems with a choice of law or other
contractual provision.

In general, a state may provide for extra-territorial application of its workers' compensation act, either by explicit statutory provision or, more commonly, by administrative or judicial decision.\(^{(599)}\)

Depending on the specific state law, extra-territorial application of an act may lead to awards in more than one state. However, the amount paid on a prior award is credited against the subsequent award.\(^{(600)}\)

A state may constitutionally provide a cause of action in tort even though the defendant is immune from suit under the provisions of an applicable workers' compensation act of another state under which the plaintiff could obtain an award against the defendant or a third person.\(^{(601)}\)

However, in general, the *Second Restatement of Conflict of Laws* provides that a suit in tort should be barred if the defendant is immune under the other state's workers' compensation law and is required to provide insurance, which could have (or has afforded) the plaintiff relief.\(^{(602)}\)

Notwithstanding such immunity, however, such a defendant may be liable for contribution or indemnification to a third person against whom a judgment has been rendered.\(^{(603)}\)

Only this latter issue of contribution or indemnification can be effectively controlled by contractual provisions, and in some states, even this matter may be governed by rules of law that override the parties' contractual intent.

Special choice of law considerations exist in the context of offshore wells and indemnity provisions. The threshold question on the enforceability of the indemnity provisions is whether the contract is governed by admiralty law or state law. If the contract is governed by admiralty law, then the indemnity provisions are generally enforceable.\(^{(604)}\)

On the other hand, if the contract is governed by state law, then the enforceability of the indemnity provisions depends on whether the law of the governing state permits an indemnity against negligence. If state law does not, then the indemnity is invalid or limited by the state's indemnity statute.

In 1985, in *Herb's Welding, Inc. v. Gray*,\(^{(605)}\) the United States Supreme Court curtailed the Fifth Circuit Court of Appeals' expansive view of admiralty jurisdiction. Nevertheless, contracts to furnish offshore drilling barges, jack-up rigs, semi-submersible drilling vessels and movable platforms are still maritime in nature.\(^{(606)}\)

However, contracts to furnish fixed platforms are not maritime in nature.\(^{(607)}\)

Well service contracts are more difficult to characterize as maritime or non-maritime. In light of the Supreme Court's curtailment of maritime jurisdiction in *Herb's Welding*, the Fifth Circuit in *Davis & Sons, Inc. v. Gulf Oil Corp.*\(^{(608)}\) considered six factors in determining whether a contract is maritime in nature:

1) what does the specific work order in effect at the time of injury provide? 2) what work did the crew assigned under the work order actually do? 3) was the crew assigned to work aboard a vessel in navigable waters? 4) to what extent did the work being done relate to the mission of the vessel? 5) what was the principal work of the injured worker? and 6) what work was the injured worker actually doing at the time of injury?\(^{(609)}\)

In *Domingue v. Ocean Drilling & Exploration Co.*,\(^{(610)}\) the Fifth Circuit noted that the latter two factors are not relevant in characterizing the contract as maritime or non-maritime if the injured party is an employee of another contractor or an invitee.
In *Davis & Sons, Inc. v. Gulf Oil Corp.* (611) the relevant contract required the service contractor to indemnify the operator from all claims by its employees. Under the terms of the contract, as supplemented by specific work orders, the service contractor was to perform maintenance on wells in Black Bay Field, a field located primarily in open water. The well maintenance was done with work barges and the service contractor furnished crews to operate the barges as part of the contract. At the time of the mishap (the drowning of one of the service contractor's employees) the work barge was spudded down adjacent to a fixed platform. The crew performed most of its work (a variety of maintenance activities) on and from the barge. The court concluded that the use of the mobile barge (vessel) for transportation was more than merely incidental to its primary purpose as a work platform. The court likened the work of the crew to that of a surgeon on a floating hospital, and concluded that the drowned employee, a supervisor, was "in effect, a Jones Act seaman. . . ." (612)

Therefore, maritime law governed the contract.

The court in *Davis*, distinguished an earlier decision, *Thurmond v. Delta Well Surveyors* (613) in which the service contractor furnished wireline services pursuant to a blanket contract that the court said was distinctly non-maritime in character. Moreover, the performance of this obligation was regarded as non-maritime, even though the particular performance at issue had been offshore and even though the service contractor had furnished the work barge for the crew. (614)

*Thurmond* is, in turn, distinguished in *Lewis v. Glendel Drilling Co.* (615)

In *Lewis*, maritime law was applied where the injured party was an employee of a well-logging contractor (arguably non-maritime), but an invitee of the indemnifying drilling contractor (maritime).

**§ 9.18. Conclusion.**

The choice of form (daywork, footage, or turnkey), the risk allocation/indemnification provisions, and the technical specifications are the most important matters concerning drilling contracts. Of these, the risk allocation/indemnification provisions are critical (616) because the most significant variations in contracts will be encountered in, and the most costly litigation is likely to arise from, these provisions.

**Addendum**

After this paper was initially presented in April 1994 at the Annual Institute of the Eastern Mineral Law Foundation, the International Association of Drilling Contractors issued revised model daywork, footage, and turnkey contracts (617)

These newly revised forms are substantially similar to the prior forms. Key changes were made to the indemnity and risk of loss provisions of each of the forms in light of 1991 amendments to what is commonly called the Texas Oilfield Anti-Indemnity Act (618) and to respond to the requirements of *Dresser Industries, Inc. v. Page Petroleum, Inc.* (619) which held that release provisions in contracts must meet the same express negligence requirements necessary for a valid indemnity clause under Texas law.

1 Copyright © 1994 by Owen L. Anderson. Preparation of an earlier version of this article, focusing more heavily on Texas and the Southwest, was facilitated by a research grant from the Oil, Gas & Mineral Law Section of the State Bar of Texas. See Owen L. Anderson, "The Anatomy of an Oil and Gas Drilling Contract," 25 *Tulsa L. J.* 359 (1990).

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for their assistance in the preparation of this article.

3 Obviously, drilling contracts will be governed by the general contract law of the relevant jurisdiction. This article does not focus on general contract statutory or case law. Rather, the article focuses almost exclusively on cases that have construed drilling or well-service contracts.

4 Of course, the ultimate financial success of an operator most often depends on finding reserves of oil and gas.

5 From the drilling contractor's perspective, the negotiation of contract terms is especially critical in footage and turnkey contracts, because the drilling contractor assumes greater risk and furnishes more services than under a daywork contract. The major differences in these types of contracts will be highlighted throughout this article.

6 As an illustration of the problems that may arise, see Anderson v. Bell, 251 P.2d 572 (Wyo. 1952).

7 In this regard, a contractor's remedy for breach of contract does not extend to non-operator investors who are not parties to the drilling contract. Smith v. L.D. Burns Drilling Co., 852 S.W.2d 40, 41-42 (Tex. Ct. App.ÐWaco 1993). Likewise, a drilling contractor is not required to give notice to non-operating working interest owners prior to filing a lien on the subject property for nonpayment. Bandera Drilling Co. v. Lavino, 824 S.W.2d 782 (Tex. Ct. App.ÐEastland 1992).

8 Cf. Drilcon, Inc. v. Roi Energy Corp., 749 P.2d 1058 (Mont. 1988) (awarding contractor in excess of $1.5 million for operator's fraud and breach of contract for failing to establish escrow account as required under drilling contract).

10 Id. at 593.
11 Id. at 599-600.
12 Id. at 594.

13 See, e.g., Blackstock v. Culbertson, 127 F. Supp. 828 (D. Minn. 1955), wherein the court upheld an oral contract to drill a second well.

14 See generally Cohen v. McCutchin, 565 S.W.2d 230 (Tex. 1978), a case involving letter agreements between working interest owners, wherein correspondence and other memoranda were insufficient to identify the assignor of certain working interests to parties who had allegedly agreed to pay for certain drilling costs. But even where an interest in real property is concerned, the usual exceptions to the Statute of Frauds will apply. For example, in Lincoln v. Kirk, 243 S.W. 671, 674 (Tex. Civ. App.ÐFort Worth 1922, writ dismissed), the court upheld an oral contract in which the contractor was given possession of the property and improved it by drilling a well. This case also held that a contract providing for a share of the net proceeds of production is not within the Statute of Frauds. Id. However, this result is unlikely in a jurisdiction that regards the conferring of a net proceeds interest as a conveyance of an interest in real estate.

15 Lincoln, 243 S.W. 671, at 674.
16 For example, prudent operators and drilling contractors are careful to allocate risk of loss. Without a written contract, disputes over the intended terms are inevitable should a mishap occur. See, e.g., Halliburton Oil Well Cementing Co. v. Millican, 171 F.2d 426 (5th Cir. 1948).

17 This standard practice can have interesting and, perhaps, unexpected consequences. For example, in Brashar v. Mobil Oil Corp., 626 F. Supp. 434 (D.N.M. 1984), the court noted that this practice makes the operator's signature a condition precedent to being bound. Id. at 436. The court then held that Texas law governed the transaction because the operator signed the contract in Texas, even though the drilling contractor's place of business was New Mexico and the wells were to be drilled in Colorado.

19 Id. at 15-16.
20 Id. at 16.
21 Id. at 15.
22 Id. at 16.
23 In Jordan Drilling Co. v. Starr, 232 S.W.2d 149, 151 (Tex. Civ. App. Ñ El Paso 1949, writ ref'd n.r.e.), the operator prepared the contract, but only the drilling contractor signed it. The
court held that the operator was bound by the terms of the contract since he had acted upon the contract and had allowed the drilling contractor to commence drilling operations on the operator's property.

24 See, e.g., Blackstock v. Culbertson, 127 F. Supp. 828, 831-32 (D. Minn. 1955), where the court refused to find the partnership liable under a drilling contract, even though both partners had actively participated in supervising the drilling operations.


26 Id.

27 Id. at 888.

28 Id. at 888.


30 Id. at 96.

31 Id. at 99.

32 Id.

33 Id. at 99-100.

34 Lemm v. Sparks, 321 S.W.2d 388 (Ark. 1959).

35 Id. at 390-91 n. 2.

36 Id. at 391.

37 Id. at 392.


40 Id. at 22.

41 Id.

42 Id. at 23.

43 Id.

44 In contrast, drilling contracts used in offshore drilling are generally daywork or turnkey contracts. Many provisions in offshore contracts are similar to those found in onshore daywork contracts; however, offshore contracts contain more detailed provisions on liability for safety and environmental hazards and address the special problems of transporting the rig, equipment, and personnel to and from the well site. In addition, since some of the drilling and related operations are governed by federal admiralty law, an offshore contract contains specific provisions that outline the parties' respective rights and obligations under admiralty law.

An arctic drilling contract refers to any drilling contract that concerns the drilling of a well in arctic regions, whether offshore or onshore. These contracts are generally of the daywork type, but they are very detailed and tailor-made for specific drilling programs. Special provisions may address transportation to and from the well site, the boarding and care of employees, weather problems, employment and accommodation of native populations, and other safety and environmental problems unique to arctic operations.

An international drilling contract is any drilling contract that concerns the drilling of either an onshore or an offshore well within the jurisdiction of a foreign government. International contracts are generally of the daywork type and contain provisions that address the special risks of drilling on foreign soil. Some of these risks include the possibility that the foreign government will expropriate the well, right, or equipment; will expel the operator or drilling contractor from the country, will become involved in a war, or will suffer a revolution. A well-drafted contract specifies which country's laws are to govern the terms of the contract, the currency to be used for payment, and the handling of variations in the value of the selected currency. If the laws of the United States are to govern the terms of the contract, the law of a specific state is also specified. In addition, contract provisions are tailor-made for the particular foreign jurisdiction. Such provisions may address employment, safety, and conservation regulations, as well as taxes.

45 The API form, which can be completed as either a daywork or footage form, consists of two parts: API Exhibit A, Bid Sheet and Drilling Order, Model Form 4C2 (February 1983), which serves as a bid invitation and technical specifications document; and the API Drilling Contract, Model Form 4C1 (February 1983). Attached to the drilling contract is Exhibit B, Government Regulations, which incorporates by reference the following federal regulations:


There is no "Certificate of Compliance" required in 40 C.F.R. § 15.20 (1993). These copyrighted forms may be obtained from the American Petroleum Institute, Publications and Distribution, 1220 L Street, N.W., Washington, D.C. 20005.

46 IADC Drilling Bid Proposal and Daywork Drilling Contract (Revised February 1986); IADC Drilling Bid Proposal and Footage Drilling Contract (Revised February 1986); and Model Turnkey Drilling Contract (Adopted February 1988). Each of these forms comes with an Exhibit A, which consists of technical specifications and an Exhibit B, which incorporates by reference the same federal regulations incorporated into the API form (see preceding note, supra). These copyrighted forms may be obtained from the International Association of Drilling Contractors, P. O. Box 4287, Houston, TX 77210-4287. The IADC forms were undergoing revision when this article was written. Thus, the most current forms will contain variations that are not reflected in this article.

47 The author has examined some company forms that followed either the API or IADC format but contained provisions that were significantly different from the officially sponsored forms. Oil and gas practitioners will recall the parallel practice of oil companies that devised their own oil and gas lease forms but identified them as "Producer's 88, revised."

48 In Haas v. Gulf Coast Natural Gas Co., 484 S.W.2d 127, 131 (Tex. Civ. App. Ñ Corpus Christi 1972, no writ), the court defined the types of drilling contracts as follows:

[W]ells drilled in search of oil or gas are customarily drilled on either a turnkey, footage or day rate contract. On a 'turnkey' basis, the parties agree on a fixed sum of money that will be paid to the drilling contractor in return for his furnishing a drilling crew, drilling equipment and certain specified materials and services, to be due and payable only after the hole is drilled to contract depth; all other services, materials and equipment are furnished at the cost of the well owner. On a 'footage' basis, the drilling contractor furnished the drilling crew, drilling equipment and certain specified services, materials, and supplies; he is paid an agreed sum of money for each foot actually drilled, irrespective of whether the proposed depth is reached or not; all other materials, supplies and equipment are furnished by the well owner. On a 'day rate' basis, the drilling contractor furnishes the drilling crew and drilling equipment; he is paid an agreed sum of money for each day spent in drilling regardless of the number of days involved; all materials, services and supplies that are not agreed to be furnished by the contractor are furnished by the well owner.

Occasionally, one may encounter a drilling contract that is a bit difficult to classify. One such contract was at issue in Boger & Boger v. Continental Fire & Casualty Ins. Corp., 234 S.W.2d 133 (Tex. Civ. App. Ñ Dallas 1950, writ ref'd n.r.e.). The contract provided that the contractor would drill the well in return for an interest in the oil and gas lease. The contractor was to furnish the rig and all equipment and do the drilling; however, the operator was to reimburse the contractor for "all out-of-pocket expense." Id. at 134 (quoting brief of appellant). The court correctly held that worker's compensation premiums for coverage of the crew was an out-of-pocket expense. Id. at 135. While the court did not classify the contract, it might best be described as a cost-plus turnkey contract.

49 See, e.g., API Drilling Contract, Article 3.2.

50 Note that daywork contracts often provide that the operator furnish the drill pipe and fuel. In times of high demand for rigs, particularly those of a specialized nature (such as a rig capable of drilling both to deep formations and in high pressures), all daywork rates may be the same, whether the rig is in use or idle.
52 See API Drilling Contract, Article 3.2; IADC Daywork Contract, Preamble.
53 See, e.g., API Drilling Contract, Article 14.
54 Major company contract dated March 2, 1988 (identity is confidential at party's request).
55 IADC Daywork Contract, Preamble (emphasis added).
56 Id. (emphasis added).
57 See API Drilling Contract, Article 3.2.
58 Id., Article 14.
59 See text, infra, § 9.13.
63 IADC Footage Contract, Preamble. See also API Drilling Contract, Article 3.3.
64 See API Drilling Contract, Article 3.3(a)-(d).
65 Id. In Samson Resources Co. v. Quarles Drilling Co., 783 P.2d 974, 976-977 (Okla. Ct. App. 1989), the court held that the operator is entitled to submit evidence of custom and usage to establish whether notice of change of status from footage to daywork is required when the contractor encounters difficult or hazardous formations.
66 See, e.g., API Drilling Contract, Article 3.2; IADC Footage Contract, Preamble.
67 The American Petroleum Institute does not have a model turnkey form. The International Association of Drilling Contractors promulgated a model turnkey contract in February 1988.
68 Under the usual turnkey contract, however, the drilling contractor is entitled to payment even if the well is completed as a dry hole. See Totah Drilling Co. v. Abraham, 328 P.2d 1083, 1091 (N.M. 1958), wherein the court defined a turnkey contract as follows:

[A] turn-key job means the testing of the formation contemplated by the parties and completion of a producing well or abandonment as a dry hole all done for a specific agreed-upon total consideration thereby putting the risk of rising costs, costs of well trouble, delays caused by the weather, etc., upon the contracting driller. In the absence of a clear expression in the contract the driller should not be held to guarantee a producing well . . . .
69 For a discussion of daywork rates, see text, supra, § 9.04[2][a].
71 Id. at 643.
72 Id.
73 Id.
74 Id.
75 Id. at 644. In reaching this decision, the court distinguished the case of J.C. Trahan Drilling Contractor, Inc. v. Cockrell, 225 So. 2d 599 (La. Ct. App. 1969), writ ref'd, 228 So. 2d 482 (La. 1969), wherein the contract required the contractor to condition the hole for the setting of casing.
77 Id. at 638.
78 Id.
79 Id.
80 Id. at 639-40.
81 Id. at 640. See also Justiss Oil Co. v. Samedan Oil Corp., No. 88-3193 (E.D. La. Sept. 27, 1989), aff'd in part, rev'd in part, opinion unpublished, 915 F.2d 693 (5th Cir. 1990) (holding turnkey contractor was not entitled to recover daywork rates after basement salt was reached despite industry custom and usage supporting daywork rates in such circumstance where the contract was clear and unambiguous that contractor was obligated to drill a well to the targeted depth before collecting payment).
82 See, e.g., API Bid Sheet and Drilling Order, Preamble, last paragraph.
83 Id., Article 13.
84 An example of an emergency would be a "kick" Ñ the encountering of unexpected
pressure which, if not controlled, could result in a blowout.

85 See, e.g., API Bid Sheet and Drilling Order, Article 1.
86 API Bid Sheet and Drilling Order, Article 1. See also IADC Daywork Contract, Article 1;
IADC Footage Contract, Article 1.
87 Callon Petroleum Co. v. Big Chief Drilling Co., 548 F.2d 1174 (5th Cir. 1977).
88 Id. at 1177.
89 Id.
90 Id. at 1178.
91 Id.
92 The purpose of directional drilling was to ensure that the well would bottom out at the
location called for in the contract, which was also the permitted location approved by the
Mississippi Oil and Gas Board. Id.
93 Id.
94 Id.
95 Id. at 1179.
96 Id.
97 The depth should be expressed as depth from the surface location, not depth from sea
level. See IADC Turnkey Contract, Article 3.
98 See, e.g., API Bid Sheet and Drilling Order, Article 3.3. Depth specification can be
modified during the course of performance based on the conduct of the parties. See, e.g.,
Bankoff v. Wycoff, 233 F.2d 476 (10th Cir. 1956) and Thomas & Duffield Drilling Co. v.
99 Under a daywork contract, the contractor is paid for each day's work. Generally, the time
that is needed to drill a well grows disproportionately greater as a well gets deeper. For
example, "trips" in and out of a deep well take longer than trips in and out of a shallow well.
Under the typical footage or turnkey contract, the terms of compensation will revert to
daywork for any drilling below contract depth.
101 Id. at 1041.
102 Id.
103 Id.
104 342 P.2d at 1043.
105 Id. at 1044. The court required the operator to pay three-fourths of the additional
drilling costs.
106 Id. at 1044. The court required the operator to pay three-fourths of the additional
108 Ryan, 342 P.2d at 1044-45 (quoting Parkford, 5 P.2d at 443).
109 See, e.g., API Bid Sheet and Drilling Order, Article 3; API Drilling Contract, Article 5.1.
110 See, e.g., API Drilling Contract, Article 5.2.
111 Id., Article 16.
112 See, e.g., API Bid Sheet and Drilling Order, Article 7.
113 Id., Article 9; API Drilling Contract, Article 8.5. If the operator fails to order specified
deviation surveys, the right to those surveys may be waived. See, e.g., Augusta Oil Co. v.
114 See, e.g., API Drilling Contract, Article 8.5.
115 Id. In the IADC daywork form, the contractor makes no representations concerning the
drilling of a straight hole. See generally IADC Daywork Contract.
wrif ref'd n.r.e.), wherein the court, on rehearing, held that the operator under a footage
contract had not waived the right to a straight hole where the contractor had assured the
operator that the hole was within the acceptable deviation range, but which in fact was not. In
contrast, in Matador Drilling Co. v. Post, 662 F.2d 1190 (5th Cir. 1981), the drilling
contractor was not liable for a 21-degree deviation, even though the contractor had taken
deviation surveys showing only a minor deviation and had submitted them to the operator.
117 See, e.g., API Bid Sheet and Drilling Order, Article 2.1.
118 API Bid Sheet and Drilling Order, Article 2.1.
120 In re Heard, 6 Bankr. 876, 884 (Bankr. W.D. Ky. 1980).
121 See, e.g., API Bid Sheet and Drilling Order, Article 15.C.1. See Texaco, Inc. v. Mercury Exploration Co., 994 F.2d 463 (8th Cir. 1993) (holding contractor's failure to commence drilling by stated date entitles operator to liquidated damages notwithstanding contractor's claim of oral modification as to commencement date where drilling contract specified modifications had to be in writing).
122 API Bid Sheet and Drilling Order, Article 18.1.
123 The IADC forms provide that the contractor shall "use reasonable efforts to commence" drilling. IADC Daywork Contract, Article 2; IADC Footage Contract, Article 2; IADC Turnkey Contract, Article 2.1. Like the API form, the IADC forms also provide that the contractor's acceptance of the contract is "subject to rig availability." IADC Daywork Contract, Article 24; IADC Footage Contract, Article 29; IADC Turnkey Contract, Article 27.
125 Where the drilling contract does not make "time of the essence," and most do not, the contractor's duty of timely performance will be determined according to the contract doctrine of substantial performance. See Argos Resources, Inc. v. May Petroleum Inc., 693 S.W.2d 663, 664-65 (Tex. Ct. App. Ñ Dallas 1985, writ ref'd n.r.e.).
126 This situation could arise where the operator's lease was about to expire and did not contain a well completion clause.
127 API Bid Sheet and Drilling Order, Article 2.2.
129 Id. at 1086.
130 Id. at 1088.
131 Id. at 1087. (The italicized portion of the quotation was handwritten.)
132 Id.
133 Id. at 1089.
134 Id. at 1090.
135 Id. at 1088.
136 Id. at 1090-91.
137 For a case concerning a dispute over the duration of a daywork contract and the compensation due, see Wagner & Brown v. E.W. Moran Drilling Co., 702 S.W.2d 760 (Tex. Ct. App. Ñ Fort Worth 1986, no writ).
138 Id.
139 Id. at 762. The case does not specify the printing date for the form, although, the contract was executed on March 12, 1981.
140 Id. at 762-63.
141 Id. at 763.
142 Id.
143 Id.
144 Id.
145 Id. (The italicized portion of the quotation was typed by the parties and the balance was part of the printed form.)
146 Id. at 764.
147 Id.
148 Id. at 765. The reported case does not reveal the reason for this instruction. Perhaps the operator needed to "commence" a well because the operator's lease was about to expire.
149 Id.
150 Id.
151 Id.
152 Id. at 765-66.
153 Id. at 767.
154 Id. at 767-68.
155 Id. at 769.
156 For a discussion of compensation due under a typical daywork contract, see text, supra § 9.04[2][a].
157 See, e.g., API Drilling Contract, Article 5.1; IADC Daywork Contract, Article 6.3(b); IADC Footage Contract, Article 6.1; IADC Turnkey Contract, Article 6.1.
158 See, e.g., API Drilling Contract, Article 5.2; IADC Daywork Contract, Article 6.3(c);
IADC Footage Contract, Article 6.2; IADC Turnkey Contract, Article 6.2.

159 See, e.g., API Drilling Contract, Article 16; IADC Daywork Contract, Article 17; IADC Footage Contract, Article 22; IADC Turnkey Contract, Article 20.

160 See, e.g., API Bid Sheet and Drilling Order, Article 15.

161 See, e.g., N.D. Admin. Code § 43-02-03-16 (1983). In Stamford Energy Co. v. Corporation Comm'n, 764 P.2d 880, 883 (Okla. 1988), the Oklahoma Supreme Court held that an operator could not escape liability by delegating responsibility for noncompliance with conservation regulations to a drilling contractor.

162 For example, Alabama statutes require general contractors to be licensed. Ala. Code § 34-8-1 to 34-8-91 (1991). If a contractor fails to obtain a license, its contracts are null and void as a violation of public policy. However, contractors for oil and gas well drilling are not subject to licensing, because they are not considered "general contractors" within the meaning of § 34-8-1. Louisiana Well Service, Inc. v. MetFuel, Inc., 614 So. 2d 1039 (Ala. 1993); Ronnie Mixon Drilling, Inc. v. MetFuel, Inc., 621 So. 2d 274 (Ala. 1993).

163 The API bid sheet/drilling order form anticipates these possibilities and provides for the identification of the responsible party. See API Bid Sheet and Drilling Order, Article 6.

164 See, e.g., API Drilling Contract, Article 17.1.

165 See, e.g., API Bid Sheet and Drilling Order, Article 5.1.

166 See, Id., Article 6.


168 API Bid Sheet and Drilling Order, Article 14.2a; IADC Daywork Contract, Article 4.1.

169 API Bid Sheet and Drilling Order, Article 14.1; IADC Footage Contract, Article 4.1; IADC Turnkey Contract, Article 4.1.

170 See, e.g., API Bid Sheet and Drilling Order, Article 6.

171 See, e.g., Id., where the responsibility of providing, and the responsibility of paying for, specified equipment, materials, and services are separately addressed.

172 On the related issue of oral modification of written contracts, see text, supra § 9.03.

173 Bankoff v. Wycoff, 233 F.2d 476 (10th Cir. 1956).

174 See also Royal Oil & Gas Co. v. Buick Drilling, Inc. 348 P.2d 148 (Colo. 1960). For a similar ruling concerning a turnkey contract, see Totah Drilling Co. v. Abraham, 328 P.2d 1083 (N.M. 1958).


177 See, e.g., API Bid Sheet and Drilling Order, Article 4. But see IADC Daywork Contract, Article 11 ("Contractor shall make final decision as to where an operation . . . would exceed the capacity of specified equipment"); IADC Footage Contract, Article 9.4 ("Contractor agrees to furnish equipment, workmen and instruments acceptable to operator"); IADC Turnkey Contract, Article 9.5 (same as IADC Footage Contract). Note that IADC Turnkey Contract (IADC Turnkey), disclaims the fitness of equipment provided for any purpose. Id. Art. 10.2.

178 See, e.g., API Bid Sheet and Drilling Order, Article 5.

179 Id., Article 6.

180 Id., Articles 7 to 12.

181 The International Association of Drilling Contractors has a Master Service Contract model form for use by the party (whether the drilling contractor or the operator) who is responsible for securing these third-party services. See IADC Master Service Contract (Revised Dec. 1976). Some major operators and some third-party suppliers of specialized well services use preprinted forms oriented to their respective self interests.

182 See, e.g., API Bid Sheet and Drilling Order, Articles 5.2 and 5.1.

183 Id., Article 5.

184 See, e.g., IADC Daywork Contract, Article 8.2; IADC Footage Contract, Article 9.2; IADC Turnkey Contract, Article 9.2 (contractor controls mud on turnkey basis but operator controls when drilling converts to daywork).


186 225 So. 2d at 602.

187 See, e.g., API Bid Sheet and Drilling Order, Article 6.

188 See, e.g., id. In Louisiana, an operator, due to the absence of a contract between the
service company and the operator, was found not liable for the unpaid invoices of a service company that had been retained by the drilling contractor. Terrebonne Fuel & Lube, Inc. v. Austral Oil Co., 531 So. 2d 1156 (La. Ct. App. 4th Cir. 1988).

189 For a discussion of the differences among the various types of drilling contracts, see text, supra § 9.04.

190 See, e.g., API Bid Sheet and Drilling Order, Article 14.1; API Drilling Contract, Article 3.3; IADC Footage Contract, Preamble.

191 See, e.g., API Drilling Contract, Article 4.2; IADC Daywork Contract, Article 5.1; IADC Footage Contract, Article 5.1-5.2; IADC Turnkey Contract, Article 5.1-5.2.

192 See IADC Footage Contract, Articles 4.3, 4.5.

193 See API Drilling Contract, Article 3.3.a; IADC Footage Contract, Article 4.7(a).

194 See id., Article 3.3.b; IADC Footage Contract, Article 4.7(b). For an illustration of the type of dispute that may arise over improper cementing in a case where the parties failed specifically to agree as to compensation for restoring the hole, see Jordan Drilling Co. v. Starr, 232 S.W.2d 149, 160-62 (Tex. Civ. App. N El Paso 1949, writ ref'd n.r.e.). In Starr, which concerned a footage contract, the court held on rehearing that the drilling contractor had failed to show that the operator had agreed to compensate the drilling contractor for redrilling a portion of the hole that was improperly cemented.

195 Work beyond the scope of the work to be performed on a footage basis includes coring, testing, logging, and completing or plugging operations. See API Drilling Contract, Articles 3.3.d, 7.1, 8.3, 8.4, and 8.5. In the event the well is plugged, however, the contractor may be obligated to furnish a specified number of hours of rig time without charge. See API Bid Sheet and Drilling Order, Article 14.3; IADC Footage Contract, Article 4.7(d).

196 See API Drilling Contract, Article 3.3.c; API Bid Sheet and Drilling Order, Articles 16.1 and 16.2.

197 See API Drilling Contract, Article 16.

198 Id., Articles 3.3.c; API Bid Sheet and Drilling Order, Article 16.3; IADC Footage Contract, Article 4.7(c).

199 See IADC Daywork Contract, Article 4.1.

200 See API Bid Sheet and Drilling Order, Article 14.2; IADC Daywork Contract, Article 4.1-4.4.

201 See, e.g., API Bid Sheet and Drilling Order, Article 14.2.f.

202 For example, the API drilling contract form allows for prorating the day rate in thirty-minute intervals. See API Drilling Contract, Article 3.4.

203 See, e.g., API Drilling Contract, Article 4.2, which provides for monthly payments; IADC Daywork Contract, Article 5.

204 See, e.g., IADC Turnkey Contract, Article 4.1.

205 Turnkey contracts often leave completion responsibilities to the operator. See text, supra § 9.04[2][c].

206 See, e.g., IADC Turnkey Contract, Article 5.1.

207.

208 Id., Articles 4.2-4.7.

208.

208 See text, supra § 9.04 for further discussion.

209 See, e.g., IADC Turnkey Contract, Articles 4.2-4.5.

210 The API bid sheet/drilling order form contains numerous provisions concerning the identification of the party responsible for the expense of supplies, tools, and equipment. See API Bid Sheet and Drilling Order, Articles 5 and 6. See also IADC Turnkey Contract, Article 8.

211 See text, supra §§ 9.05[2]. See also IADC Turnkey Contract, Article 22.

212 See, e.g., API Bid Sheet and Drilling Order, Article 14.4.

213 Id., Article 14.4.g.

214 See, e.g., API Drilling Contract, Article 5.1. See also IADC Daywork Contract, Article 6.3(b); IADC Footage Contract, Article 6.1; IADC Turnkey Contract, Article 6.1.

215 See IADC Daywork Contract, Article 6.4; IADC Footage Contract, Article 6.3; IADC Turnkey Contract, Article 6.3.

217 See, e.g., API Bid Sheet and Drilling Order, Articles 15.A.1 and 15.B.1; IADC Turnkey Contract, Article 6.3(a).
218 See, e.g., API Drilling Contract, Article 11.9; IADC Daywork Contract, Article 14.12; IADC Footage Contract, Article 18.14; IADC Turnkey Contract, Article 17.16.
219 See, e.g., API Bid Sheet and Drilling Order, Articles 15.A.2 and 15.B.2; IADC Turnkey Contract, Article 6.3(b).
220 See, e.g., API Bid Sheet and Drilling Order, Article 15.A.3. In drafting a termination provision in footage contracts, the drilling contractor should make sure that the compensation due will be adequate to recover costs that were to be amortized over the total depth of the well, such as transportation costs or the cost of any specially purchased equipment.
221 See, e.g., API Bid Sheet and Drilling Order, Article 15.B.3; IADC Daywork Contract, Article 6.4(c).
222 See, e.g., API Drilling Contract, Article 5.2; IADC Daywork Contract, Article 6.3(c); IADC Footage Contract, Article 6.2; IADC Turnkey Contract, Article 6.2.
223 See, e.g., API Drilling Contract, Article 16. See also text, supra § 9.05[2][c].
224 See, e.g., API Drilling Contract, Article 5.2. For a discussion of such compensation, see supra § 9.07[2]. See also IADC Daywork Contract, Article 6.4; IADC Footage Contract, Article 6.3; IADC Turnkey Contract, Article 6.3.
225 See, e.g., API Drilling Contract, Articles 4.4 and 4.5. A Texas case has held that the amount of interest specified in a drilling contract is limited only by federal law. See Wagner & Brown v. E. W. Moran Drilling Co., 702 S.W.2d 760, 771-73 (Tex. Ct. App. N. Fort Worth 1986, no writ) (citing the Depository Institutions Deregulation and Monetary Control Act of 1980, 12 U.S.C. § 86a (1982), and holding that such act preempted state usury law, which limited contractual rates of interest). See also IADC Daywork Contract, Article 5.2 and 5.3; IADC Footage Contract, Article 5.3 and 5.4; IADC Turnkey Contract, Article 5.3 and 5.4.
226 See, e.g., API Bid Sheet and Drilling Order, Article 15.C.1. See also IADC Daywork Contract, Article 6.4(a); IADC Footage Contract, Article 6.3(a); IADC Turnkey Contract, Article 6.3(a)(b).
229 For example, in Adobe Oil & Gas Corp. v. Getter Trucking, Inc., 676 P.2d 560 (Wyo. 1984), the contractor, under the terms of the daywork drilling contract, was responsible for the cost of moving the rig onto the location and for rigging-up. Id. at 561 n. 1. The contractor hired a third-party subcontractor to transport the rig from North Dakota to Wyoming and to set up the rig for drilling. Id. at 560. When the subcontractor was not paid, the subcontractor asserted a lien against the oil and gas property. Id. In reversing the trial court, the Wyoming Supreme Court ruled that since the operator was not contractually responsible for transportation and rigging-up costs, the subcontractor could not assert a lien against the property of the operator. Id. at 564-65. Not all such statutes are construed so narrowly.
231 In an unpublished opinion, a Texas Court of Appeals held that a drilling contractor could not file a lien against the mineral property owner where the operator had contracted, and was obligated to pay, for the contractor's services. Noble Exploration, Inc. v. Nixon Drilling Co., No. 3-88-153-CV (Tex. Ct. App. N Austin 1990).
232 Under the Kansas oil and gas lien act, a company that supplied, installed, and lined water tanks at the well site was not entitled to a lien because the company was merely a supplier to a materialman and, thus, not protected under the statute. See Sfield Engineering, Inc. v. Franklin Supply Co., 795 P.2d 60 (Kan. 1990).
233 See, e.g., API Drilling Contract, Article 12.3. See also Phillips Petroleum Co. v. Best
Oilfield Services, Inc., 1994 WL 10180 (E.D. La. 1994) (validating, under Louisiana's Oil and Gas Well Lien Act, La. Rev. Stat. § 9:4861, the operator's lien on the drilling contractor's equipment arising from operator's satisfaction of subcontractors' liens placed on operator's property as a result of the contractor's failure to pay the subcontractors). See also IADC Footage Contract, Article 17; IADC Turnkey Contract, Article 16.

235 Id. at 20.
236 Id.
237 Id. at 21.

239 Fite v. Miller, 200 So. 285 (La. 1940). In Haynesville Oil Co. v. Beach, 105 So. 790 (La. 1925), the contractor ceased drilling under a footage contract and moved the rig to a new location in order to take advantage of a more profitable contract. Id. at 791. The operator hired another contractor to finish the well at considerable expense. Id. at 791-92. The court awarded damages equal to the difference between the balance that would have been due to the contractor had the well been completed and the additional costs, less some credits. Id.
240 Williams & Meyers § 885.1.
241 Id.

242 By analogy, see Guardian Trust Co. v. Brothers, 59 S.W.2d 343 (Tex. Civ. App. Ð Eastland 1933, no writ), a case awarding lost royalty to a nonworking interest owner.
243 Williams & Meyers § 885.2.
244 Id. § 885.3.
245 See Riddle v. Lanier, 145 S.W.2d 1094 (Tex. Comm'n App. 1941, opinion adopted); See also Williams & Meyers § 885.3.
246 See, e.g., Cockburn v. O'Meara, 155 F.2d 340 (C.C.A. 5 1946) and Durbin Bond & Co. v. Gillis, 242 F.2d 176 (5th Cir. 1957). The rule requiring operators to prove the loss of a specific bargain has been criticized where the operator had no intention of selling the property. Williams & Meyers § 885.3.
248 See discussion in Williams & Meyers § 885.4.
249 See, e.g., Riddle v. Lanier, 145 S.W.2d 1094 (Tex. Comm'n App. 1941, opinion adopted).
251 See, e.g., API Drilling Contract, Article 11.9. See also IADC Daywork Contract, Article 14.2; IADC Footage Contract, Article 18.14; IADC Turnkey Contract, Article 17.16.
256 See Williams & Meyers § 885.5.
257 API Bid Sheet and Drilling Order, Article 15.C.1; IADC Daywork Contract, Article 6.4(a); IADC Footage Contract, Article 6.3(a); IADC Turnkey Contract, Article 6.3(a).
258 API Drilling Contract, Article 11.9; IADC Daywork Contract, Article 14.12; IADC Footage Contract, Article 18.14; IADC Turnkey Contract, Article 17.16.
259 API Drilling Contract, Article 6.1.
260 See id.
261 See API Drilling Contract, Article 11.9.
262 Id., Article 6.1.

263 The model forms contemplate this problem but the forms cannot resolve the matter.
266 Id. at 220.
267 Id. at 219-20.
269 See, e.g., API Bid Sheet and Drilling Order, Articles 5.11 and 5.21. Note that state oil and gas conservation regulations specify minimum casing requirements for all wells. See also IADC Daywork Contract, Article 7; IADC Footage Contract, Article 7.1; IADC Turnkey Contract, Article 7.3 (operator controls casing setting after turnkey depth reached).
270 See, e.g., API Drilling Contract, Article 7; IADC Footage Contract, Article 4.7(a); IADC Turnkey Contract, Article 7.3.
271 See IADC Daywork Contract, Article 7; IADC Footage Contract, Article 7.1; IADC Turnkey Contract, Article 7.3.
272 Id. Under the IADC Footage form, a change that materially increases the contractor's risk or costs can only be made by mutual consent. IADC Footage Form, Art. 7.1.
273 API Drilling Contract, Article 8.1.
274 Id., Preamble.
275 Cf. IADC Turnkey Contract, Article 10.12, specifically disclaiming warranty of workmanlike performance in turnkey contract regarding any problems raised more than 24 hours after completion.
277 Id. at 97.
278 Id.
279 Id.
280 Id.
281 Id.
282 Id. at 99.
283 Id. at 98.
284 Id.
285 Id. An interesting aside in this case is that the contractor took the deposition of an inspector for the oil and gas conservation agency. He testified that existing orders required blowout preventers at well sites and that his workload prevented him from uncovering every violation. However, he refused to concede that wells were customarily drilled in the field without blowout preventers. Id.
287 Id. at 810.
288 Id.
289 Id.
290 Id.
291 Id.
293 Elliott, 695 S.W.2d at 811.
294 Id. at 812.
295 Id. at 811.
296 Id. at 812.
297 Matador Drilling Co. v. Post, 662 F.2d 1190 (5th Cir. 1981).
298 Id. at 1193.
299 Id. at 1197.
300 Elliott, 695 S.W.2d at 811-12.
301 Matador, 662 F.2d at 1193.
302 Id.
303 Id.
304 Id.
305 Id. at 1194.
306 Id. at 1197.
307 Id.
308 Id. at 1196. The operator had introduced into evidence a list of "excess" costs. Id. at 1195.
309 Id. at 1196-97.
310 Id. at 1197-98. See text, infra § 9.14.
311 Elliott, 695 S.W.2d at 811.
312 API Drilling Contract, Article 8.5; IADC Footage Contract, Article 9.4; IADC Turnkey Contract, Article 9.5. The IADC daywork form does not contain this clause.
313 662 F.2d at 1198.
314 See API Drilling Contract, Article 3.2; IADC Daywork Contract, Preamble.
316 Id. at 21.
317 Id at 20.
318 724 S.W.2d 863 (Tex. Ct. App. Ñ Texarkana 1986, writ ref'd n.r.e.).
319 Exxon Corp. v. Roberts, 724 S.W.2d 863 (Tex. Ct. App. Ñ Texarkana 1986, writ ref'd n.r.e.).
320 See IADC Turnkey Contract, Article 10.2. As this article was being written, the forms committee of the International Association of Drilling Contractors was considering such a change in its forms.
321 See generally Gillespie v. Ormsby, 272 P.2d 949 (Cal. Ct. App. 1954). This case concerned an agreement whereby the non-operator was to contribute a portion of the costs of drilling a well. The court allowed the non-operator to rescind and to recover contributions paid when the operator was found to have misrepresented the work that had been done on the well.
322 API Drilling Contract, Article 8.2. See also API Bid Sheet and Drilling Order, Article 16; IADC Daywork Contract, Article 8.1; IADC Footage Contract, Article 9.1; IADC Turnkey Contract, Article 9.1.
324 See, e.g., API Bid Sheet and Drilling Order, Articles 5, 6 and 8. See also IADC Daywork Contract, Article 8.2; IADC Footage Contract, Article 9.2; IADC Turnkey Contract, Article 9.3 (operator can control mud program when drilling contract converts from turnkey to daywork basis).
325 See, e.g., API Drilling Contract, Article 8.3; IADC Daywork Contract, Article 8.2; IADC Footage Contract, Article 9.2; IADC Turnkey Contract, Article 9.3. Failure to comply with the mud program can give rise to a cause of action for breach of contract. Sevarg Co. v. Energy Drilling Co., 391 So. 2d 1278, 1281 (La. Ct. App. 3d Cir. 1991).
326 API Bid Sheet and Drilling Order, Article 16.2; IADC Footage Contract, Article 12.2. But see IADC Turnkey Contract, Article 17.9 (contractor has option to discontinue operations).
327 See, e.g., API Drilling Contract, Article 8.5; API Bid Sheet and Drilling Order, Article 9. See IADC Footage Contract, Article 9.4; IADC Turnkey Contract, Article 9.5.
328 See, e.g., API Drilling Contract, Article 8.5.
329 See, e.g., id. Article 10.1; IADC Daywork Contract, Article 8.4; IADC Footage Contract, Article 13.1; IADC Turnkey Contract, Article 12.1.
330 The "driller" is an employee of the drilling contractor who is directly responsible for the rig and the crew for a given work shift. Norman J. Hyne, Dictionary of Petroleum Exploration, Drilling & Production 150 (1991).
331 A tool pusher or toolpusher is an employee of the drilling contractor who is in charge of the entire drilling operation at the well site. The tool pusher is the supervisor of the driller. Norman J. Hyne, Dictionary of Petroleum Exploration, Drilling & Production 529 (1991)
332 In Samson Resources Co. v. Quarelz Drilling Co., 783 P.2d 974, 977 (Okla. Ct. App. 1989), the court suggested that the requirement of daily drilling reports may, if consistent with industry custom and usage, require the drilling contractor to notify the operator of any circumstances that would result in a change from a "footage" to a "daywork" basis.
333 Matador Drilling Co. v. Post, 662 F.2d 1190 (5th Cir. 1981).
334 Id. at 1198-99.
335 See, e.g., API Drilling Contract, Article 10.3. See also IADC Daywork Contract, Article 8.4; IADC Footage Contract, Article 13.2; IADC Turnkey Contract, Article 12.2.
See, e.g., API Drilling Contract, Article 10.2.


See, e.g., API Drilling Contract, Article 11. See also IADC Daywork Contract, Article 13; IADC Footage Contract, Article 16; IADC Turnkey Contract, Article 15.

See, e.g., API Drilling Contract, Article 11.1. In the API form, any inserted amounts of coverage prevail over the pre-printed figures. In practice, many drilling contractors attach certificates of insurance coverage to the contract in lieu of completing this portion of the contract form.

See, e.g., API Drilling Contract, Article 11.1(a)-(d). See also IADC Daywork Contract, Exhibit A, Article 3.1-3.5; IADC Footage Contract, Exhibit A, Article 4.1-4.5; IADC Turnkey Contract, Exhibit A, Article 1.1-1.5.


See API Drilling Contract, Article 11.1(b). See also IADC Daywork Contract, Exhibit A, Article 3.2; IADC Footage Contract, Exhibit A, Article 4.2; IADC Turnkey Contract, Exhibit A, Article 1.2.


For example, in each state where operations occur, the coverage limits must meet the minimum statutory requirements for no-fault, uninsured or underinsured motorist, and minimum liability coverages.

See Battiato & Gilbertson, 17-20.

Id., at 17-21.

Id.

Id., at 17-22.

See API Drilling Contract, Article 11.1(c). See also IADC Daywork Contract, Exhibit A, Article 3.3; IADC Footage Contract, Exhibit A, Article 4.3; IADC Turnkey Contract, Exhibit A, Article 1.3.

See, e.g., API Drilling Contract, Article 11.

Id., Article 11.1(c).

Id., Article 11.1(g). See also IADC Daywork Contract, Article 13; IADC Footage Contract, Article 16; IADC Turnkey Contract, Article 15.

API Drilling Contract, Article 11.1(g).

Id. IADC Daywork Contract, Article 13; IADC Footage Contract, Article 16; IADC Turnkey Contract, Article 15.

IADC Daywork Contract, Article 13; IADC Footage Contract, Article 16; IADC Turnkey Contract, Article 15.

For a more comprehensive article dealing with insurance policies as they relate to drilling contracts, see generally Battiato & Gilbertson.

The "claims made" policy is more commonly used in the manufacturing industry. Most insurance companies and underwriters prefer the "claims made" policy because of the advantage of predictability. Under an "occurrence policy," underwriters have problems predicting losses that might not result in claims until years later. In contrast, under a "claims made" policy, the period for which claims are covered is limited, thereby enabling underwriters more accurately to predict potential losses. See Battiato & Gilbertson, 17-23.

Alternatively, the operator could require the drilling contractor to maintain the requisite coverage under a "claims made" policy for the period necessary to exceed any governing statutes of limitations. However, this would necessitate follow-up certifications of coverage.

See, e.g., API Drilling Contract, Article 11.1(b)-(d). See also IADC Daywork Contract, Exhibit A, Article 3.2; IADC Footage Contract, Exhibit A, Article 4.2-4.5; IADC Turnkey Contract, Exhibit A, Article 1.2-1.4.
In *Advent Drilling, Inc. v. Bituminous Casualty Corp.*, 1990 WL 83996 (Ohio Ct. App. 1990), the court found contractor's losses from having to redrill a well due to fire damage to the original hole and equipment were not covered because the damages resulted from performance required under the drilling contract, (i.e., the obligation to redrill), and were not losses sustained by a third party.

See *API Drilling Contract, Article 11.1(g); IADC Daywork Contract, Article 13; IADC Footage Contract, Article 16; IADC Turnkey Contract, Article 15.*

Generally, insurance companies reserve the right of subrogation—the right to step into the shoes of the insured and sue any party that the insured could have sued. See generally Irwin M. Taylor, The Law of Insurance 20-22 (3d ed. 1983).


See *Brashar, 626 F. Supp. at 437, wherein the court also concluded that such a provision did not violate the New Mexico anti-indemnity statute. See generally Irwin M. Taylor, The Law of Insurance 74 (3d ed. 1983).*

See *Babineaux v. McBroom Rig Bldg. Serv., 806 F.2d 1282 (5th Cir. 1987), held in abeyance, 811 F.2d 852 (5th Cir. 1987), mandate 817 F.2d 1126 (5th Cir. 1987).*

Of course, a drilling contractor may make the same request of the operator; however, the contractor may not have sufficient bargaining power to secure the provision. But, due to market conditions, perhaps not in practice.

391 Redinger v. Living, Inc., 689 S.W.2d 415 (Tex. 1985).

392 See Tovar v. Amarillo Oil Co., 692 S.W.2d 469 (Tex. 1985) (holding operator liable for failing to stop contractor from deviating from the safety provisions specified in the contract). Accord Exxon Corp. v. Roberts, 724 S.W.2d 863 (Tex. Ct. App. N Texarkana 1986, writ ref’d n.r.e.) (holding operator liable for failing to require the use of safer procedures, for failure to require the crew to be able to speak and understand English, and for failure to have safety meetings); Pollard v. Missouri Pac. R.R., 759 S.W.2d 670 (Tex. 1988) (holding the contractual right to control may give rise to a duty to take control of the authority to specify contractor's insurance coverage is an element that shows a right to control).

393 For a comprehensive and thorough discussion of indemnity law with respect to offshore well drilling, see Jeanmarie B. Tade, Drafting Indemnity Provisions in Oil and Gas Contracts: Analysis and Application of Texas and Louisiana Statutes and Case Law, Monograph Series No. 21, A.B.A. Sec. on Nat. Resources, Energy and Envtl. L. (1994). See generally see also IADC Daywork Contract, Article 11.2-11.8, see also IADC Daywork Contract, Article 14; IADC Footage Contract, Article 18; IADC Turnkey Contract, Articles 17.12-17.13.


398 See, e.g., Reames Well Serv. v. El Paso Natural Gas Co., 418 F.2d 646 (5th Cir. 1969), wherein the court summarily upheld an indemnity provision in a well service contract. See also Associated Resources Corp. v. Halliburton Oil Well Cementing Co., 238 F.2d 957, 958 (8th Cir. 1956), cert. denied, 353 U.S. 912 (1957), wherein the court upheld an exculpatory provision in a well service contract, noting that the clause probably affected the price paid for the service. See generally Taylor Hancock, "Some Pitfalls in Liability, Indemnification, and Insurance Clauses in Drilling and Service Contracts," 24 Rocky Mt. Min. L. Inst. 585 (1978).

399 See, e.g., Mohawk Drilling Co. v. McCullough Tool Co., 271 F.2d 627 (10th Cir. 1959), wherein the court struck down an exculpatory provision that relieved a well service contractor from liability for its own negligence and also applied the doctrine of res ipsa loquitur to place the burden of disproving negligence on the contractor. See also ANR Prod. Co. v. Westbourne Drilling, Inc., 581 F. Supp. 542 (D. Colo. 1984), wherein the court upheld an indemnity provision like those commonly found in model form drilling contracts. In dicta, however, the
The court did state that such a standardized printed clause would be "problematic" if the party challenging the clause was small and inexperienced as compared with the party seeking to enforce the clause. *Id.* at 547.

400 *See* Battiato & Gilbertson, 17-13 through 17-15.


402 *Id.* at 98.

403 *Id.*

404 *Id.* at 97.

405 *Id.*

406 *Id.* at 100-01.

407 *Id.* at 98.

408 *Id.* at 99.

409 *Id.* The court obviously wished to take the opportunity that the case presented to establish this test, because the indemnity clause in the master contract, like the clause in the subcontract, was also limited to claims arising from the "negligent act or omission of the Contractor." *Id.* at 98.

410 *Id.* at 102. Since this was a construction contract, the Wyoming anti-indemnity statute, applicable to wells and mines, did not apply.

411 Aymond v. Texaco, Inc., 554 F.2d 206 (5th Cir. 1977). Note that this case predates the passage of the Louisiana anti-indemnity statute.

412 *Id.* at 209.

413 *Id.* at 209-10.


415 *See,* e.g., *API Drilling Contract*, Article 13.9. *See also* IADC Daywork Contract, Article 14.8 and 14.9; IADC Footage Contract, Article 18.10 and 18.11; IADC Turnkey Contract, Article 17.12 and 17.13.


417 758 F.2d at 1066.

418 *Id.* at 1066-67.

419 The parties had stipulated that Louisiana law governed the dispute. *Id.* at 1067 n. 5. The contract predated the passage of the Louisiana anti-indemnity statute.

420 *Ocean King,* 758 F.2d at 1067. The operator cited several cases that could be construed as requiring an express reference to negligence. *Id.*

421 *Id.* at 1067-68.

422 *See* API Drilling Contract, Articles 11.3-11.8.


424 This type of provision was upheld as a valid indemnity against the negligence of the indemnitee in *ANR Prod. Co. v. Westburne Drilling, Inc.*, 581 F. Supp. 542, 546-48 (D. Colo. 1984).


428 *See* Spell v. N.L. Industries, Inc., 618 So. 2d 17, 19 (La. Ct. App. 3d Cir. 1993), *writ denied,* 624 So. 2d 1224 (1993) (holding operator's obligation of indemnity is not excused by contractor's failure to obtain insurance as required by the drilling contract; nothing in the contract requires compliance with insurance provisions before the indemnification provision becomes effective); Maxus Exploration Co. v. Moran Bros., 817 S.W.2d 50, 58 (Tex. 1991) (construing the IADC daywork form, the court held the operator liable to the contractor for damages incurred from satisfaction of injury claims of operator's subcontractor, noting "the
purpose of the cross-indemnification provisions is to make [operator] and [contractor] each responsible for the claims of the people it has itself brought to the well site."

429 See id.

430 API Drilling Contract, Article 11.3; IADC Daywork Contract, Article 14.8; IADC Footage Contract, Article 18.10; IADC Turnkey Contract, Article 17.12.


432 Id. at 58.

433 Id.

434 See, text infra § 9.13[2].

435 API Drilling Contract, Article 11.6.

436 Compare API Drilling Contract, Article 11.6 with IADC Daywork Contract, Article 14.11(b) and IADC Footage Contract, Article 18.12(b).

437 See IADC Turnkey Contract, Article 17.14(a).

438 Id., Article 17.14(b).

439 Id., Article 11.8. The forms do not specify the party having possession above the surface.

440 Id.

441 API Drilling Contract, Article 11.3.

442 A drilling contract form used by a major oil company may considerably broaden the contractor's indemnification of the operator. For example, in *Gulf Offshore Co. v. Mobil Oil Corp.*, 594 S.W.2d 496 (Tex. Civ. App. N Houston [14th Dist.] 1979, writ granted), aff'd in part, vacated in part, 453 U.S. 473 (1981), on remand, 628 S.W.2d 171 (Tex. Ct. App. N Houston [14th Dist.] 1982, writ ref'd n.r.e.), cert. denied, 459 U.S. 945 (1982), the court upheld a contractor's indemnification of the operator against claims by the operator's employees, as well as by the contractor's employees, even where the loss was due to the operator's negligence or due to imperfections in material furnished by the operator. *Mobil*, 594 S.W.2d at 503-06.

443 See API Drilling Contract, Article 11.3. See also IADC Daywork Contract, Article 14.8; IADC Footage Contract, Article 18.10; IADC Turnkey Contract, Article 17.13. The IADC forms are nearly identical. However, the contractor's indemnity also protects the contractor against claims made by the "contractor's invitees." IADC Daywork Contract, Article 14.18; IADC Footage Contract, Article 18.10; IADC Turnkey Contract, Article 17.12.

444 See, e.g., API Drilling Contract, Article 11.5.

445 Id. The IADC forms are similar. However, they except from the indemnity "unavoidable pollution from reserve pits." IADC Daywork Contract, Article 14.11(a); IADC Footage Contract, Article 18.12(a).

446 Cf. text, infra § 9.14[1], which discusses, inter alia, the operator's general indemnification of the drilling contractor for pollution and contamination caused by substances not in the possession and control of the contractor. See also API Drilling Contract, Article 11.6.


449 See API Drilling Contract, Article 13.9. This provision also states that indemnity is assumed without limitation in accordance with the other terms of the drilling contract and that indemnity will operate without regard to the cause or the negligence of any party. This language is inserted to satisfy strict tests for indemnification against negligence.


451 Id. at 894-95.

452 A frac operation is a well-stimulation process whereby the reservoir is artificially fractured to increase permeability and production. Norman J. Hyne, Dictionary of Petroleum Exploration, Drilling & Production 202 (1991)

453 Id. at 893.

454 Id.

455 Id. at 895.

456 Id. at 896.

457 Id.
See API Drilling Contract, Article 13.9 (last sentence); IADC Daywork Contract, Article 14.13; IADC Footage Contract, Article 18.15; IADC Turnkey Contract, Article 17.17.


See API Drilling Contract, Article 11.6.


For a more specific discussion of the operator's indemnification of the drilling contractor, see text, supra § 9.13[1].

See text, infra, for discussions concerning damage to equipment, § 9.14[4], [5], and [6], and damage to the hole, § 9.14[3].

See API Drilling Contract, Article 11.6.

See IADC Turnkey Contract, Article 17.14(b).

This amount would typically be whatever insurance limits the contractor had included in the bid. The cost of such insurance should be reflected in the turnkey price.

See IADC Turnkey Contract, Article 17.14(a).


Id. at 632.

Id. at 633.

Id. at 634.

Id.

Prudent operators carry well control insurance or self-insure against such mishaps. Courts do not always construe risk of loss provisions the way they are written. In Mobil Exploration & Producing U.S., Inc. v. A-Z/Grant Int'l Co., 1992 WL 186975 (E.D. La. 1992) the court denied the contractor's motion for summary judgment as to liability for the operator's loss of equipment downhole, costs associated with efforts to free the drill string, redrilling expenses, and deferred production. The drilling contract specifically provided that the operator assumed responsibility for loss of the hole and loss of its right to minerals not reduced to physical possession. In denying the motion for summary judgment, the court was persuaded by the operator's argument that contractor liability could be found under another provision requiring the contractor to bear losses associated with violation of any applicable laws, orders, rules, regulations or orders of governmental authorities. The losses at issue occurred due to a mislabeling of electrical devices, which resulted in the rig not being in compliance with Coast Guard rules and regulations. Reading the contract as a whole, the court found a sufficient question of fact as to liability, notwithstanding the clear intent of the contractual risk of loss provisions.

See text, supra § 9.04[2][a].

See, e.g., API Drilling Contract, Article 13.7; IADC Daywork Contract, Article 14.10.

See API Drilling Contract, Article 13.7.

See IADC Daywork Contract, Article 14.10 and 14.11; IADC Footage Contract, Article 18.12; IADC Turnkey Contract, Article 17.14(b).

Note that the obligation to control a wild well and the responsibility for loss or damage resulting from a wild well are distinguishable.

See text, supra § 9.04[2][b].

See API Drilling Contract, Article 3.3(c); API Bid Sheet and Drilling Order, Article 16.

See IADC Footage Contract, Article 12.

See text, supra § 9.04[2][b].

API Drilling Contract, Article 13.6; IADC Footage Contract, Article 18.6.

See, e.g., API Bid Sheet and Drilling Order, Article 16.

Id., Article 16.1.

See IADC Footage Contract, Article 12.3.


Id. at 359.

Id. at 360.

Id.

API Bid Sheet and Drilling Order, Article 16.1; IADC Footage Contract, Article 12.3
In addition, these forms provide a total cumulative time for which the contractor must assume the risk of lost circulation and provide that any footage drilled during daywork operations must be deducted from the footage charged. *Id.*

492 Startex Drilling Co. v. Sohio Petroleum Co., 680 F.2d 412 (5th Cir. 1982).

493 *Id.* at 413-14.

494 *Id.* at 413.

495 *Id.* at 414.

496 *Id.* at 414-15.

497 *Id.* at 415.

498 *Id.*

499 *Id.* at 417.

500 *Id.*

A portion of each party's arguments as summarized by the court are illustrative of the definitional problem:

Sohio [operator] argued that the explanation for the footage rate/day rate distinction was a simple one. When the contractor is making drilling progress it gets paid by the foot and is only entitled to a day rate when no footage progress is being made. Accordingly, Sohio defined loss of circulation as a loss of fluid sufficient to stop drilling progress, regardless of the particular percentage of returns that might be involved. Sohio told the jury the proof is in the drilling. It contended that it was incongruous for Startex [drilling contractor] to claim a day rate for periods like July 26-29 when it drilled over 1000 feet irrespective of what its returns were. This absurd construction meant that a day rate should be paid when even a single drop of fluid doesn't return to the surface.

Sohio's other argument to the jury was predicated on the language of [the contract] that the operator must concur in the loss of circulation condition before the contractor can receive a day rate. Sohio's witnesses testified that because a contractor on day work is being paid by the hour, and not for his progress, it is customary in the industry for the operator, after concurring, to take over and minimize the time the contractor spends on day work. The jury was told that the surest sign in the industry of whether a contractor is on day work is to look to see who's in charge of the well. If he's not there, it is understood that the job is by the foot. . . .

Startex . . . explained that the day rate is negotiated not just to protect the contractor when drilling progress has ceased, but also when drilling progress has ceased, but also when it slows. Startex sponsored testimony that a contractor submits his bid based in part on the mud program (i.e. the drilling fluid) specified on the drilling order. Here, that mud program essentially called for the use of water and oil emulsion. Both sides' witnesses agreed that when the contractor loses circulation, it must inject special materials into the drilling fluid such as gels, paper, cottonseed hulls, and fiber. This is done to plug the leaks in the formation and regain circulation. Adding these materials not only slows down drilling because they are thicker than water, but the materials themselves are an additional expense. Startex argued that the footage rate isn't designed to compensate for the added expense and diminished progress occasioned by a change from the mud program specified in the drilling order. Startex's ultimate position was that in light of the admitted loss of circulation on July 25-26 the question became: when was normal circulation restored? It submits . . . never, because Startex was unable to get back to the specified mud program. So, in rebuttal to Sohio's claim that the
determining factor is who's in control of the well, Startex said the proper indication was to look at the mud program.

Startex also attacked Sohio's argument that a day rate can't be collected when drilling progress is being made. It pointed out that drilling progress was made during the July 25-26 period when Sohio concurred the day work rate was applicable.

Id. at 415-16.

While this author believes that Startex had the better argument, the parties to a drilling contract would be better served by a more precise definition of lost circulation than by rolling the dice with a jury.

502 Inland Drilling Co. v. Davis Oil Co., 158 N.W.2d 536 (Neb. 1968).
503 Id. at 538.
504 Id.
505 Id.
506 Id. at 539-40.
507 Id. In a factually similar case, the court in Big Chief Drilling Co. v. United States, 26 Ct. Ct. 1276, 1292 (1992), held that the contractor was entitled to recoup expenses incurred from loss of a casing shoe and lost circulation under a turnkey contract due to the government's deficient design specifications. But see Samson Resources v. Quarles Drilling Co., 783 P.2d 974, 977 (Okla. Ct. App. 1989) (striking demurrer to operator's evidence that damage to the hole was caused by contractor's negligence under a footage contract, which had converted to daywork, reasoning the risk of loss provision assigning such liability to operator must be strictly construed and would not allow the contractor to escape liability for damage to the hole caused by its own acts).
508 See IADC Turnkey Contract, Article 17.14(a). This predetermined cost would reflect the amount of insurance the drilling contractor has to cover well control. The cost of this insurance should necessarily be reflected in the turnkey price.

509 One deficiency in the model forms is that the term "hole" is not defined.
510 See text, supra § 9.04[2][b].
511 See Smith v. L.D. Burns Drilling Co., 852 S.W.2d 40, 42 (Tex. Ct. App. Ñ Waco 1993) (holding operator could not recover for damage to the well under a daywork contract where contractor's employee dropped casing down the hole).
512 See API Drilling Contract, Article 13.7. See also IADC Daywork Contract, Article 14.5; IADC Footage Contract, Article 18.7; IADC Turnkey Contract, Article 17.8. In Samson Resources Co. v. Quarles Drilling Co., 783 P.2d 974 (Okla. Ct. App. 1989), the operator alleged that the contractor, drilling under a footage contract, was negligent and fraudulent in a series of actions that ultimately led to loss of the hole. The contractor contended that the problems arose after it encountered a formation that was difficult or hazardous to drill. These problems would have occurred at a time when drilling operations were being conducted on a daywork basis and when the risk of loss was on the operator. The Oklahoma Court of Appeals reversed a jury verdict in favor of the contractor on the ground that evidence of custom and usage should have been admitted on the issue of whether the contractor must give notice of a shift from a footage to a daywork basis, or whether the shift is automatic and required no notice to the operator. Id. at 976-77.
513 See text, supra § 9.04[2][b].
514 See API Drilling Contract, Article 13.6(a).
515 IADC Footage Contract, Article 18.6.
516 IADC Turnkey Contract, Article 17.7.
517 See, e.g., In re Incident Aboard D/B Ocean King, 758 F.2d 1063 (5th Cir. 1985), wherein the court stated that such liability encompasses all "damages necessarily flowing from loss of the hole." Id. at 1069.
518 API Drilling Contract, Article 11.9. See also IADC Daywork Contract., Article 14.12; IADC Footage Contract, Article 18.14; IADC Turnkey Contract, Article 17.16.
519 See, e.g., API Drilling Contract, Article 13.6(a). See also IADC Footage Contract, Article 18.6; IADC Turnkey Contract, Article 17.7.
Most operators do carry such insurance. However, the policies provide coverage only for mishaps specifically mentioned in the policy.

For a typical listing of equipment to be furnished by the operator in a footage or daywork contract, see API Bid Sheet and Drilling Order, Article 5.

IADC Daywork Contract, Article 14.7; IADC Footage Contract, Article 18.9; IADC Turnkey Contract, Article 17.11. Some operator-oriented contracts provide that the contractor owes a general duty to inspect materials furnished by the operator but then relieve the contractor from responsibility for "latent" defects.

API Drilling Contract, Article 13.8. See also IADC Daywork Contract, Article 14.4; IADC Footage Contract, Article 18.5; IADC Turnkey Contract, Article 17.6.

Warren-Bradshaw Exploration Co. v. Tripplehorn, 220 F.2d 291 (5th Cir. 1955).

API Drilling Contract, Article 13.1; IADC Daywork Contract, Article 14.1; IADC Footage Contract, Article 18.1; IADC Turnkey Contract, Article 17.1. The API form differs from the IADC forms by placing a $100,000 limit on such a reimbursement.

See, e.g., API Drilling Contract, Article 13.1(a); IADC Daywork Contract, Article 10; IADC Footage Contract, Article 15; IADC Turnkey Contract, Article 14.2. Under the API and IADC model forms, the operator is responsible for preparing a sound location and road. See text, supra § 9.05[2][a].

API Drilling Contract, Article 13.1(a); IADC Daywork Contract, Article 10; IADC Footage Contract, Article 15; IADC Turnkey Contract, Article 14.2. The API form differs from the IADC forms by placing a $100,000 limit on such a reimbursement.

See, e.g., API Drilling Contract, Article 13.1(a); IADC Daywork Contract, Article 10; IADC Footage Contract, Article 15; IADC Turnkey Contract, Article 14.2.

IADC Turnkey Contract, Article 17.4.

See API Drilling Contract, Articles 13.1(b) and 13.2; IADC Daywork Contract, Article 14.3; IADC Footage Contract, Article 18.4; IADC Turnkey Contract, Article 17.5.

Compare API Drilling Contract, Articles 13.1(b) and 13.2.

See id.

See IADC Daywork Contract, Article 14.3; IADC Footage Contract, Article 18.4; IADC Turnkey Contract, Article 17.5.


Historically, drilling contracts did not specifically address the loss of in-hole equipment. Hence, cases involving loss or damage to a contractor's in-hole equipment were often decided under the law of bailment. For example, in Ryan v. Schwab, 261 S.W.2d 605 (Tex. Civ. App. N Fort Worth 1953, no writ), the operator was directing drilling operations on a daywork basis when hot flowing salt water was encountered. Id. at 606. When other well control measures failed, the operator ordered the drill pipe to be dropped into the hole and the well sealed off. Id. The court concluded that the operator was a bailee of the drill pipe, but was acting in the mutual benefit of both the bailor (contractor) and itself, and that the operator was not negligent in ordering the release of the drill pipe. Accordingly, the court held that the
operator was responsible for the lost drill pipe. *Id.* at 609.

547 See text, *supra* § 9.04[2][a].

548 See API Drilling Contract, Article 13.4.

549 IADC Daywork Contract, Article 14.2; IADC Footage Contract, Article 18.3; IADC Turnkey Contract, Article 17.3.

550 See, e.g., API Bid Sheet and Drilling Order, Article 14.6. In *Newitt v. Camden Drilling Co.*, 552 S.W.2d 928 (Tex. Civ. App.  Corpus Christi 1977, *no writ*) an operator leased a drilling barge, drill pipe, and other equipment in an arrangement analogous to a daywork contract. *Id.* at 929. Drill pipe was lost in the hole, and under the terms of the contract, the operator had to return the used pipe or pay 100% of the new replacement cost. *Id.* at 930. The operator estimated "fishing" costs to retrieve the pipe to be $9,000 to $18,000 and estimated replacement costs to be $22,000. The operator then contacted the owner of the pipe (lessor) to discuss the matter. The operator contended that the owner agreed to accept "fair market value" for the lost pipe, so the operator plugged and abandoned the well leaving the drill pipe in the hole. *Id.* In a suit between the operator and the owner, the jury found that the lessor had agreed to accept fair market value for the lost pipe and that the operator had plugged the well and abandoned the pipe in reliance upon this agreement. This action prompted the appellate court to conclude that the parties had reached a novation. This case is yet another illustration of a written contract being modified by oral agreement and course of performance. See text, *supra* § 9.03.

551 See API Drilling Contract, Article 13.4.

552 See IADC Daywork Contract, Article 14.2; IADC Footage Contract, Article 18.3; IADC Turnkey Contract, Article 17.3.

553 API Drilling Contract, Article 13.4.

554 IADC Daywork Contract, Article 14.2; IADC Footage Contract, Article 18.3; IADC Turnkey Contract, Article 17.3.


556 See API Drilling Contract, Article 13.3; IADC Footage Contract, Article 18.2; IADC Turnkey Contract, Articles 17.2 and 17.4.

557 See API Bid Sheet and Drilling Order, Article 16.

558 See IADC Footage Contract, Article 12.

559 See API Drilling Contract, Article 13.3; IADC Footage Contract, Article 18.3.

560 See, e.g., IADC Turnkey Contract, Article 3.2.

561 *Id.*, Article 17.3.

562 *Id.*, Article 17.5.


564 Zephyr Oil Co. v. Cockburn, 215 S.W.2d 647 (Tex. Civ. App.  Galveston 1948, *writ ref'd n.r.e.*).

565 *Id.* at 648.

566 *Id.* at 649. A Schlumberger (pronounced slum-bur-jay) as used here is a special electric well-logging device. 8 Williams & Meyers 1119.

567 Zephyr Oil, 215 S.W.2d at 649.

568 *Id.* at 650.

569 *Id.*

570 *Id.* at 650-51.

571 See, e.g., API Drilling Contract, Article 16.1. See also IADC Daywork Contract, Article 17; IADC Footage Contract, Article 22; IADC Turnkey Contract, Article 20.

572 *Id.* The *force majeure* rate is specified in the bid sheet/drilling order form. See, e.g., API Bid Sheet and Drilling Order, Article 14.2h. This provision sets forth a day rate to be paid to the drilling contractor for any continuous period that normal operations are suspended due to conditions of *force majeure*. It also specifies the number of days after which either party may terminate the contract with respect to the particular well. However, the operator may maintain the contract by continued payment of the *force majeure* rate.

573 See IADC Daywork Contract, Article 17; IADC Footage Contract, Article 22.


575 *Id.* at 676.

576 *Id.* While *Logan v. Blaxton* was actually a case involving a lessee's obligation to market
production from a lease, the principles underlying a *force majeure* clause are essentially the same regardless of whether such a clause is incorporated into a lease, drilling or other contract.

577 *Id.* at 677.
579 *Id.* at 1197-98.
580 *Id.* at 1198.
581 *Id.*

582 See API Drilling Contract, Article 23.1; IADC Daywork Contract, Article 19; IADC Footage Contract, Article 24; IADC Turnkey Contract, Article 21.
583 See API Drilling Contract, Article 23.1.
584 Some major operators have amended this clause to make the drilling contractor a fiduciary with respect to this promise.
585 See IADC Daywork Contract, Article 18; IADC Footage Contract, Article 23; IADC Turnkey Contract, Article 17.18(a).
587 Restatement (Second) of Conflict of Laws §§ 6, 188 (1971).
588 This discussion presumes that the parties have entered into a standard form daywork, footage, or turnkey-type drilling contract under which the drilling contractor agrees to drill a well in return for monetary compensation. This discussion does not relate to conflict of laws issues arising from a farmout or other agreement under which a drilling party earns a property interest in the well as compensation for drilling.
589 See Restatement (Second) of Conflict of Laws § 196 (1971); Maxus Exploration v. Moran Bros., 817 S.W.2d 50, 54 (Tex. 1991) (applying Kansas law as place of performance of drilling contract, rather than applying Texas law where contract was executed). *But see ANR Prod. Co. v. Westburne Drilling, Inc.*, 581 F. Supp. 542, 545-46 (D. Colo. 1984), wherein the court, purporting to apply the Second Restatement, held that Colorado law governed a drilling contract that was to be performed in North Dakota. In noting that the contract was negotiated and signed in Colorado, the drilling contractor's principal place of business, the court cited Sections 6 and 188 of the Second Restatement, but did not cite the more pertinent and specific Section 196. *Compare Brashar v. Mobil Oil Corp.*, 626 F. Supp. 434 (D.N.M. 1984), wherein the court, purporting to apply the conflict of laws principles of the First Restatement, held that a drilling contract was governed by the law of the state where the contract was made. The court noted that the operator had made its execution of the contract a condition precedent to being bound. The New Mexico-based drilling contractor signed the contract first and then forwarded the contract to the Texas-based operator, where the operator executed the contract. The court stated that the contract was governed by Texas law because that was where the final act that created the contract had been performed, even though the wells were drilled in Colorado. *See id.* at 436.
591 See *id.* § 187. See also MetFuel, Inc. v. Louisiana Well Service Co., 628 So. 2d 601, 603 (Ala. 1993) (holding no error where district court dismissed action in state where wells were drilled in favor of the forum designated in the parties' contract).
592 *Id.*
594 *See id.* § 187 comment g.
595 See *id.* § 196 (1971).
596 See e.g., Hollier v. Union Texas Petroleum Corp., 972 F.2d 662, 666 (5th Cir. 1992) (declining to apply Texas law of parties' choice, reasoning their choice violates the public policies of "Louisiana and federal public policy in the Outer Continental Shelf Lands Act which seeks to apply the substantive law of adjacent states to problems arising on the Shelf").
597 Restatement (Second) of Conflict of Laws §§ 145-147 (1971).
598 *Id.* 181-185.
599 See generally *id.* § 181 comment b.
600 Id. § 182 and comments.
601 Id. § 183 and comments.
602 See id. § 184.
603 See generally id. §§ 173 and comment c, 184, 187, 188.
604 See Clark v. Zapata Gulf Marine Corp., 1990 WL 84561 (E.D. La. 1990) (upholding parties' choice of maritime law and enforcing operator's obligation to indemnify drilling contractor for damages resulting from injuries to employee of operator's service company that was retained to provide transportation to and from offshore rig).
608 Davis & Sons, Inc. v. Gulf Oil Corp., 919 F.2d 313 (5th Cir. 1990).
609 Id. at 316. See also Dupre v. Penrod Drilling Corp., 993 F.2d 474 (5th Cir. 1993) (applying Davis factors to find contract for supply and use of vessel for drilling, completing, and tying-back oil wells was maritime, therefore upholding the parties' contractual indemnity provision under the parties' choice of Texas law); Campbell v. Sonat Offshore Drilling, Inc., 979 F.2d 1115 (5th Cir. 1992)(applying Davis factors to find contract for drive pipe, hammer work, and casing services on the rig maritime, and therefore subject to the parties' indemnity agreement, which is valid under the parties' choice of Texas law; the service company was required to indemnify the operator for damages incurred in a suit by a service company employee).
611 Davis & Sons, Inc. v. Gulf Oil Corp., 919 F.2d 313 (5th Cir. 1990).
612 Id. at 317.
613 Thurmond v. Delta Well Surveyors, 836 F.2d 952 (5th Cir. 1988).
614 Id. at 955. See also Domingue v. Ocean Drilling & Exploration Co., 923 F.2d 393 (5th Cir. 1991).
615 Lewis v. Glendel Drilling Co., 898 F.2d 1083 (5th Cir. 1990).
616 Historically, liability for personal injury has been the greatest concern. Today, liability for pollution and contamination is the growing concern.
617 IADC Drilling Bid Proposal and Daywork Drilling Contract (Revised June 1994); IADC Drilling Bid Proposal and Footage Drilling Contract (Revised June 1994); and IADC Model Turnkey Contract (Revised October 1994).
619 853 S.W.2d 505 (Tex. 1993).