Money Sources For Drilling And Production

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When the money requirements for drilling and production for the petroleum industry are considered, the sums involved are indeed staggering. According to information compiled by a joint effort of the American Petroleum Institute, The Independent Petroleum Association of America, and the Mid-Continent Oil and Gas Association, the average cost per well in 1953, including drilling, casing, tubing and well head connections, but not including tanks, flow lines, separators, treators or other surface equipment, was approximately $78,700 for wells drilled in the Texas portion of the Permian Basin. The average depth of wells in this area in 1953 was 5,400 feet. Since costs in general and also average depths have gone up since 1953, it seems reasonable to assume that the actual average cost per well at present is probably close to $90,000 each.

During 1955, a total of 3,912 producing wells were completed in the Permian Basin of West Texas (Texas Railroad Commission Districts 7-C and 8). At an average cost of $90,000 per well, the total amount of money required would be $352,080,000. In Southeast New Mexico, the average cost per well is higher; it amounts at present to approximately $110,000. Total producing wells drilled in 1955 in this area, amounted to 849 which called for an outlay of $93,390,000. When added to the figures of West Texas, we arrived at a total of $445,470,000 for the Permian Basin alone in 1955. These figures do not include all of the costs. Additional expenditures are required for:

Exploration Activities such as geophysical and geological.
Lease Purchases and Rentals.
Tank Batteries, pumping units, treaters, flow lines and other surface equipment.
Production Personnel Payrolls.
Production and Lease Supplies.
Lease and Road Maintenance.
Insurance.
Record Keeping and Administrative Costs.
Interest and Loans.
Dry Hole Costs.
Taxes (County, State, School, Federal and Production).
Miscellaneous.

These items plus the above figure of nearly one-half billion dollars per year emphasizes the vast amount of money required just to keep West Texas and New Mexico going at the present rate.

When the money requirements for the entire free world petroleum industry are considered, the sums involved become more and more astonishing. The petroleum department of the Chase Manhattan Bank of New York has just published a rather exhaustive study indicating that over the next ten years, the petroleum industry will be required to spend 15 billion dollars. This figure assumes a stable dollar. If the dollar depreciates as it has been doing for the past 20 years, the figure will be higher. If the assumption is made of a dollar depreciation at the rate of one percent per year, not compounded, the requirements will rise to about 121 1/2 billion dollars.

It is difficult for most of us to comprehend or appreciate the magnitude of the sums involved for the entire industry which we have been discussing. However, I believe that we can appreciate a discussion of the approach of the average corporate or individual producer to the problem of acquiring money to carry on his operations.

Individuals or companies who drill and develop oil properties seem to fall into two categories.

First, established concerns (oldtimers) who do the major portion of this work, and second, newwcomers.

Sources of money for each of these are somewhat different. The established company usually looks for funds to:

1. Current Net Income.
2. Corporate or Individual Savings.
3. Depreciation of Tangible Assets.
4. Depletion Allowance.
5. Capital Stock Sales (for corporations).
6. Borrowing.

The corporate or individual newcomer to the oil business may look to many of the same sources. The newcomers principal source of funds are, however:

1. Savings, either corporate or individual.
2. Stock Sales if the business venture is a corporate entity.
3. Personal credit of the individuals involved.

Since a newcomer has no current production income and no equipment purchased, he cannot benefit from depreciation or depletion allowances.

The newcomer in the business sometimes is an individual who has been promoted into drilling a well. He is usually induced to try his hand in the new business by one or more persuasive individuals who are helped by widely publicized stories of the fabulous profits that can be made in the oil business. Contour lines drawn on a map can have a strange effect on the uninitiated when they are properly presented.

If a newcomer is successful in his initial wildcat venture, which is rare, he can very shortly look toward the same sources of money for drilling and production as the oldtimer. In fact, once he acquires a valuable producing lease, he frequently finds that some of his money problems are eliminated. However, his money requirements may stagger him by their magnitude if a rapid drilling program proves to be necessary.

There are many pitfalls which deserve to be mentioned. These pitfalls are present in the path of both the established concern and the newcomer, although the newcomer is most apt to fail to recognize some of them.

Overextension of credit is perhaps one of the most dangerous errors that can be made in attempting to get into the oil business or in attempting to stay in it after having entered it. As all of you know, the hazards involved in drilling a well are considered and if a man has all of his credit and resources staked on one well, then a mechanical failure, a blowout, or any number of things may happen to boost costs astronomically. Law suits may occur over surface and other damages and, of course, the well may be dry. Sometimes one of the biggest misfortunes that can befall an operator is drilling a well that can be classified as a "stinker."

Enough shows may be found to cause him to commit more and more of his capital to an attempt to complete a well with the result eventually being the possession of a producing property that will barely pay operating expenses. Of course, such well can promptly take care of any "tax problem" that the newcomer was faced with.

Another very serious pitfall is the failure to anticipate the effect of income taxes. Most of us have heard the statement that "if I could only get the income, I would be glad to pay the income taxes." However, in the drilling and production business, especially where an individual is concerned, success is sometimes obliterated by the grasping hand of our internal revenue service. Expenditures must be carefully planned to minimize the effect of income taxes. The individual must realize that he can be taxed up to 91 percent of his net income and that the corporation tax runs up to 52 percent of its net income.

Still another pitfall which ties in with the extension of credit, is underestimating the capital requirements for a given situation. Experience has indicated that most people underestimate money requirements for any project. This is especially true in the oil business; as many of you know, it is possible to drill and complete a good well and then because of difficulty in division order and title requirements, a delay of as many as six to twelve months may be experienced before any actual money is received by the operator. This can sometimes stretch a shoestring to the breaking point.

Another pitfall that individuals are prone to fall prey to is allowing themselves to become over-optimistic about the prospects of any given oil enterprise. This may be brought about by individual gullibility and by failure to realize that those who make fantastic profits in the oil or any other business are exceedingly few and far between. The road to financial success in the oil business is strewn with the carcasses of many, many failures.

In the belief that it would be of interest to most of you, I will attempt to explain some of the details involved in the various types of financing arrangements available. These explanations are necessarily brief and there

are many variations of each basic form. When we speak of financial arrangements, most of us mean borrowing arrangements; therefore most of the items listed below are concerned with loans. The basic forms are as follows:

1. Bank Loan—secured or unsecured, evidenced by a time or a demand note.
2. Production Payment Loan—secured by a note and a deed of trust on producing property.
3. Insurance Company Loans (usually secured by a pledge of producing property).
4. Sale of Capital Stock (or sale of part interests in unincorporated business).
5. Sale of Bonds.
6. Sale of Debentures.
7. Sale of Oil Payment.

The simple bank loan is perhaps the basic method of raising money for drilling and production purposes. If the individual or company approaching the bank has substantial net worth, then the money may be advanced on an open or unsecured basis; the note that is signed merely will read that the loan is made on the basis of the banker having in his possession a satisfactory financial statement of the borrower.

Five of the significant aspects of the bank loan application are:

1. The bank's estimate of your ability, particularly in a managerial capacity.
2. A record of past loan experience of the company and perhaps the bank loan record and credit data of the individuals involved.
3. Soundness of the venture itself.
4. Collateral available.
5. Current financial statements prepared by reliable accounts Collateral may be in the form of:
   a. Real Estate.
   b. Machinery and Equipment.
   c. Inventary of marketable materials.
   d. Accounts Receivable.
   e. Stocks and Bonds.
   f. Cash value of Insurance Policies.
   g. Producing oil, gas or other mineral properties.

In general, a bank will loan approximately 40 to 60 percent of the current market value of the collateral. Bankers like short-term loans. On real estate loans the limit is usually two to three years and the banks prefer even shorter periods.

A demand note is quite popular. This is normally an unsecured loan payable on demand to the bank and is a common means of getting emergency operating capital. It permits a bank to exercise its own judgment as to when to request payment of its principal and interest. If the project is going well, then the banker may allow the demand note to run for several months without requesting a settlement. Generally speaking, however, most bankers operate on the principal of having all short term debts cleaned up completely at least once a year.

It is well to mention one of the characteristics of a properly prepared promissory note. In the event it is not paid when due, the lender can go to court and obtain a judgment which can be used to force the borrower to either pay or have any property he owns sold at a sheriff's sale in order to satisfy the obligation. Most promissory notes state that the money is payable at some specific time and at some specific place. Also you may notice that not only notes but frequently invoices are imprinted with the words, "payable at Odessa, Texas," or "payable at Lubbock, Texas." The legal effect of this is that if you are forced to sue for non-payment, then the suit may be filed in the county in which the money is due. In other words, it would not be necessary to go to the county of residence of the borrower in order to file the suit.

For those who are already in the oil and gas producing business, the production payment loan is a common mechanism for financing drilling and production. The producer gives the banker a deed of trust for his lease. A note is signed and the money is provided for the borrower. Through an appropriate division order sent to the purchaser of the crude from the pledged lease, the income from such production is deposited in the bank making the loan. The bank extracts its principal and interest by withholding some agreed amount, usually 60 to 90 percent of the gross income, and then credits the account of the borrower with the balance. Bankers usually like these loans also to be on a short term basis with a verbal understanding that the loan can be renewed or extended if necessary. It should be realized however, that the banker is under no obligation or legal compulsion to extend the loan and the prudent producer should consider this fact in all of his planning. It should also be kept in mind that banks are in the business of lending money and that acquisition of production is not their primary aim.

Most bankers will go to great lengths to cooperate with a borrower and in turn, he expects cooperation and full disclosure of all data that would be likely to affect the loan or business venture. If the banker cannot handle as large a loan as is needed, he can frequently arrange to participate with one of his large city correspondent banks and thereby make the money available.

The sale of a production or oil payment may also be used to raise capital with which to pursue a drilling and producing commitment. It is very similar to the production payment loan except that no note is signed. The banker or lender can look only to the production from the lease for retirement of the purchase price. The other property of the borrower is not endangered in the event production never repays the amount of the purchase price. For this reason, the maximum amount of money that can be procured from the sale of a production payment from a specific lease is usually less than that which can be obtained from the proceeds of a production payment loan. This is a natural thing since the banker or the party making the production loan receives not only a deed of trust for the property in question, but also the normally legal option of a suit to acquire other property or assets of the borrower or to force their sale. Sometimes this method of financing will result in a tax saving to the operator especially if the funds received are used in the further development of the lease.

In all oil property loans, an accurate apprasial is necessary. A banker must have an appraisal in his file to justify putting out the money. Most successful appraisers, like bankers, take a conservative limit of the loan a bank will make, it results in what might be called an ultra-conservative risk on the bank's part.

Another fact which frequently is overlooked is that a one-well lease normally does not constitute adequate collateral for a loan. There are too many hazards involved. If mechanical troubles or other interference causes the well to be out of production for say, 60 to 90 days, and if the land owner can show that a reasonable and diligent effort to get the well back into production has not been made, then the lease may lapse. Also mechanical troubles, such as casing collapse, blowout, fire, or many others, may necessitate the expenditure of quite a sum of money to get the well back into production and certainly such mishaps would stop the flow of income from the lease.

An Insurance Company loan is a commonly used method of financing drilling and production expenses. This is very similar to a bank loan except that it may, under certain circumstances, be for a larger amount or for a longer term. A good many insurance companies have large investments in oil property loans.

Money can also be raised by the sale of capital stock in a corporation. However, this is a subject with so many ramifications that a thorough discussion would far exceed the time allotted for this paper, and therefore, it will be treated very breifly. A corporation may be defined as a voluntary association of investors endowed without autonomy and continuity of existence through a government granted license or charter. Business corporations have the further characteristic that they exist for designated purposes only and that participation in them is secured through ownership of transferable shares of stock. A corporation at the time of its formation must have at least three stockholders. This is a requirement in most states. A corporation is not limited to an initial stock issue. The charter can be amended to provide for issuance of additional shares of stock for expansions or other purposes. A corporation has the further advantage in that in case of business reversal, the creditors of the corporation cannot look to the assets of the individual stockholders for satisfaction of indebtedness.

The only exception to this is in the case of some sort of fraud or illegal maneuvering on the part of officers and stockholders.

Investing in capital stock has some disadvantages. Only two avenues are open that will allow you to make a

profit on your investment. One is through dividends which are paid out of the net income of the corporation after taxes have been paid. In other words the income from which dividends are derived is taxed before the dividends are ever paid out to the stockholders. Then, the stockholders themselves, upon receipt of dividends, have to report them as income and they are taxed again. The other method of receiving a financial gain in stock investments is to sell the stock at a higher price than paid for it. If it has been held more than six months, then the seller's tax liability is limited to the capital gains figure of 25 percent. If the corporate venture is successful, then the gain in value of the stock can be very attractive.

Starting from scratch, and with no oil production assets, it would probably be extremely difficult to raise capital to start a drilling and production concern by sale of stock. The lack of a successful record of performance in the drilling and production business would certainly be a huge obstacle to be surmounted.

For a corporation, the sale of bonds represents another approach to the problem of money raising. Bonds can be divided into various types, but we are concerned most with Industrial Bonds.

An Industrial Bond is a secured corporate obligation usually issued for a special purpose and secured by pledging specific property or other assets. There are many varieties and types of bond collateral and one corporation may have outstanding at one time several types of bonds with varying interest rates and different options for the holders. Another fund-raising avenue is the sale of Debentures. A debenture is merely an unsecured bond. Actually, it is a promise to pay, backed up by no special lien on assets. At best, a debenture occupies a weak technical position, especially when other outstanding indebtedness is high. A strong company with a good background of credit performance finds debentures easy to sell. However, a new and struggling firm would probably have a great deal of difficulty in raising money in this manner. The lender is attracted to the purchase of debentures by the rate of interest coupled with his own estimate of the integrity of the issuer.

We have discussed the means for raising money for drilling and production by both established firms and newcomers. A method used by many to get into the oil and gas producing business is by purchasing production. The money required for accomplishing this can be raised by virtually any one of the methods already outlined or by a combination of several. It is a favorite and frequently profitable means of getting into the business because although in general, a higher price is paid for a given piece of property, a much surer payout is available and no immediate dry hole risk is involved.

A rather common technique used in financing the purchase of production is known as the A-B-C Transaction. This is perhaps the best-known method of acquiring producing properties and is the most advantageous from a tax standpoint.

The basic pattern of the A - B - C Transaction is the acquisition of a producing property largely with funds provided by the sale of an oil payment carved out of the property to be acquired.

For example, assume the following set of facts:

"A" owns the working interest in an oil gas lease with estimated reserves of 300,000 barrels of oil. Oil is selling at $2.50 per barrel, lifting costs are 30 cents per barrel, and it is expected that the working interest will produce 50,000 barrels of oil in the current year. "A" is willing to sell his property for $300,000 if the proceeds will be taxed at capital gains rates. "C," an operator, has $50,000 in cash, but he knows that he can borrow $250,000 from a bank at 4 percent interest by pledging the oil property as security for the loan and assigning 80 percent of the oil runs from the property to the bank until such time as the loan is liquidated. "C" wishes to purchase the property, but he realizes that the oil runs will constitute gross income to him, despite the fact that they are assigned to the bank to pay off the loan and that therefore, he will incur heavy taxes during a period when he will not have the cash to pay them.

So, "C" arranges to purchase the property in an A - B - C Transaction. "B," an investor, is called into the picture. "C" purchases the property from "A" for $300,000, payable $50,000 in cash, and $250,000 out of 80 percent of the first oil to be produced from the property. The oil payment of $250,000 is to bear interest at 5 percent on any unpaid balance. Immediately after or coincidental with the purchase of the property by "C" from "A," "B" acquires the oil payment from "A" for $250,000. "B" borrows the face amount of the oil payment from the bank at 4 percent interest, assigning the oil runs to the bank for liquidation of the loan.

Under current Treasurery Department rulings, "A" realizes capital gain with respect to his sale of the working interest and his sale of the oil payment. "B," the holder of the oil payment, is allowed to take cost depletion as a deduction so that his taxable income is limited to his real profit on the transaction, which is the difference between the interest he is receiving on the oil payment and the interest he is paying the bank on his loan; in this example, one percent. Because the oil payment is an economic interest in the oil in place which was never acquired by "C," the operator, it is not necessary for "C" to include in his income the oil which goes to pay off the oil payment.

In general, the money problems of a drilling contractor are similar to those of a producer but he may not have as wide a choice of types of financing as the producer. He normally secures money through personal or business earnings or savings, or borrowings secured by real estate or other assets, or his overall record of credit performance, financial condition and business ability. He may pledge his equipment as collateral for a bank or insurance company loan which he needs in the operation of his business. Drilling contractors are sometimes able to get into the oil business by trading rig time, man power and drilling know-how for an interest in any production found as a result of a drilling venture. This may be a means of the contractor getting production without a big cash outlay and at the same time, it may be a means for a lease owner with limited assets to determine production possibilities and perhaps realize profits from his land or lease.

Both the producing company or individual and the drilling corporation or the individual contractor may participate in a number of related activities all aimed at developing oil properties. Some of the terms used to describe these are briefly discussed below.

A Farm Out is an agreement by which a company which holds a lease on a certain tract of land assigns it to a second party who agrees to do a specific amount of development work in return for the principal working interest in the acreage. The owner of the lease will usually retain from 1/16 to 3/8 overriding royalty which will be in addition to a standard 1/8 interest of the owner of the land who made the original lease. A farm out may be a means of dispersing risk in the case of wildcat acreage of doubtful production possibilities. Frequently, a farm out is the result of a difference of opinion among the officials of the company involved as to the merits of the acreage. At times, the financial or tax situation of the company may dictate such a maneuver. If leases are apt to expire for lack of fulfilling drilling requirements, then a farm out may be in order.

An overriding royalty is merely an additional percentage share of production which may be sold or otherwise assigned by the lease owner. It shares in production only and has to bear no development or producing costs.

Dry hole money is a term used for money promised by the owner or owners of adjacent leases to furnish an extra inducement to the individual or company drilling a well. It enables them to determine the oil or gas producing potential of their own leases without having to bear the expense of drilling an exploratory well of their own. This money is payable only if the well fails to make a commercial producer.

Bottom hole money is a term applied to an agreement by which interested owners of adjacent leases agree to pay a certain amount of moned whether the well produces or not. In each case, the contributors are permitted full access to geological information and other data obtained as a result of the operation. They also may obtain an option to take over the operation if the original driller of the well fails to take it to the contract depth. In the event the contract depth

is not reached, then the bottom hole money is of course, not paid.

An acreage contribution is made to encourage the operator to drill the well. It has the same purpose as the dry hole or bottom hole money agreement. It merely substitutes contribution of offsetting or adjacent acreage for a contribution of money.

It is common now for farm outs and similar agreements to cover exploratory drilling to a certain limited depth only.

Royalty is the term applied to the mineral reservation which the land owner reserves when he makes a lease. A more or less standard figure is 1/8 of the gross production obtained from the lease. However, there are many cases, especially in proven fields where a lease from a fee owner of land is acquired carrying a much higher royalty than the conventional 1/8. In some cases, a royalty as high as 5/8 has been paid. The royalty holder does not contribute in any manner to the cost of drilling or producing any wells on the acreage.

Money sources for drilling and production and the term "capital formation" are very nearly synonymous. Actually, any money that is advanced to the oil industry or to any other industry, is money that has been saved by someone. It represents capital that has been accumulated by the labor and ingenuity of individuals.

In spite of the vast income of the American oil industry, there is not enough capital available within it to finance its rapid growth. I believe you will find on any major oil company balance sheet a record of stock sales, debentures, long term insurance loans or other means of raising capital. Not only must this money be attracted to the industry, funds for interest and dividends must be provided out of earnings to induce the public to risk savings.

Progress of the oil industry has been made because of the workings of the capitalistic system which allows each man to progress to the limit of his ability; which places a premium on ability and which allows the individual to accumulate savings of his own.

I have maintained for some years that the individual or company that makes the most profit does the most good for all mankind.

Some people however, have maintained or implied that a profit is essentially evil and that it can be procured only by:

1. Underpaying employees or,
2. Overcharging customers or,
3. By a combination of both.

The profit motive is a healthy thing and is the normal and natural means for man to provide for himself and his family. Its roots are in morality and its results grant the greatest good to the greatest number.

Let's take an example of a basic capitalistic transaction. Suppose a shoemaker makes a pair of woman's shoes in Lubbock. You see them, like them, ask the price and find it is, say, $10.00. You then journey to Brownfield and see a school teacher who wants a pair of shoes. You describe the pair of shoes to her and find that she will pay $15.00 for a pair. You then return to Lubbock, buy the shoes, and if all goes well and she finds them to be as you have described, she buys them and you have made a $5.00 profit.

The shoemaker is happy since he received his asking price. He accepted the money voluntarily. He would rather have the $10.00 than the shoes. The school teacher is happy for she would rather have the shoes than her $15.00. She made the exchange of money for material voluntarily.

You are happy. The $5.00 profit you made was your reward for efforts in locating a product and a customer and also it was pay for the risk which you took when you tied up your money in the shoes.

This is an elementary profit motive transaction in a capitalistic voluntary, free market economy. The net result was that three people were made happier; three people actually made a profit.

Now there is a built-in protective device. If your price to the school teacher is too high and particularly if you start selling to quite a few people in Brownfield, you will surely find that someone else will enter the business of buying and selling shoes. You may find that the other party entering the business will sell the shoes for $12.00 or some lower figure than $15.00. The governor called competition will start working and will protect both the consumer and the producer. This development will also come about if you start making a lot of money in any business which you happen to be operating.

If you could maintain a monoply on the supply of shoes, then you could, and if you were immoral you would gouge your customers and make excessive profits. However, you as an individual trader cannot long maintain a monoply. The only monoply that can long endure is one which has the power of aggressive government force to maintain it. The United States Post Office is a government-operated monoply. My information is that you can ship a gallon of crude oil weighing about seven pounds from Houston to New York City for less than you can send a post card. There is no question in my mind but that the Post Office could be operated much more economically if it were a privately managed business.

At present, the United States operates under a modified competitive free market system which is to some extent governed by the demand-supply-price relationship. The progress of the petroleum industry and the progress of our nation is a result of this system. Our future progress depends upon its continuation unhampered by further restrictive governmental rules and regulations. It is in this type of buiness and political climate that the greatest profits indicate the doer of the greatest good.

The capitalistic system also in my opinion, encourages the continuation and further development of moral principles and a universal, eternal, unchanged concept of right and wrong. The alternative is a controlled society regulated by the force of government rather than by free competition.

Our economy is still making tremendous progress, but it is in spite of an appalling combination of forces that has developed in our nation which tends to stifle business development, places a damaging handicap on high income people, inculcates our youth with the idea that our government is a cornucopia from which flow all the necessities and luxuries of life and which preaches that the incapable, and the shiftless all over the world deserve the same standard of living as everyone else. And all of this must of course be paid for by the capable and the thrifty.

The fact that we are not now stagnating or going backward is a credit to the enormous vitality of our system. The continuation of the system depends on the fight that can be made by its supporters. And to be supported, it must first be understood.

I would like to close with a repetition of my earlier observation; in our capitalistic free-market system, the company or individual who makes the most profit is the one who does the most good for the greatest number.