

LIFE INSURANCE COMPANY LOANS ON OIL & GAS PROPERTIES

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General Loan Considerations for Life Insurance Companies

Three broad considerations which apply to any investor are (1) Security of Principal; (2) Yield; and (3) Liquidity. Of these, the most important to a fiduciary institution such as a life insurance company is security of principal. Life insurance companies, like banks, do not invest their own funds, but funds of others. Policyowner reserves and other reserves for liabilities are analogous to a depositor's funds held by a bank, and equal about 91 percent of the average life insurance company's assets.

Life companies operate under state charters and are subject to regulation by the insurance commissions of the various states in which they operate. Investment policies in particular are subject to control. These state investment policies vary, but their purpose is to regulate the life company investments primarily into safe "fixed-dollar" investments in order to protect the asset value and policyowner reserve.

Within the framework of legal investments the life insurance company investment staff, of course, attempts to obtain the best yield possible for, like all business enterprises, life companies must make money to stay in business. Their constantly changing portfolios are a reflection of constantly changing investment opportunities.

Life companies are not as concerned with investment liquidity as commercial banks and other investors holding demand deposits, or other short-term obligations. Liabilities of a life insurance company are essentially long-term obligations, thus encouraging investment in long-term issues which offer more attractive rates of return. Considering all aspects of investments, a life insurance company will seek to keep its assets primarily in long-life securities. Revenue from premium payments, income from interest and maturing securities usually offer ample liquidity for day-to-day life insurance company operations.

Oil Loan History

Until about two years ago, oil loans and production payments were attractive investments for life companies even though they were of a comparatively short-life when related to other investments. First, they offered a much greater investment yield than the bond market and usually from one to two percent better interest return than the average residential or commercial mortgage loan. Also, the oil loan was usually for a larger amount than the average mortgage loan, thus, reducing

service and overhead charges per dollar invested. In addition, oil investments were self-liquidating out of assigned pipeline runs.

But, in today's money market, the attractiveness of oil investment opportunities has changed. There has been a dramatic increase in yields offered by bond investments. For example, Composite "A" bonds in 1965 offered an average yield to maturity of $4\frac{2}{3}\%$. In 1966 such bonds averaged $5\frac{1}{3}\%$, and in 1967— 5.8% . This year we have seen the same bonds available at a yield of more than $6\frac{1}{2}\%$.

In this same period the prime interest rate for mortgage loans has increased from $5\frac{1}{2}\%$ to $7\frac{1}{2}\%$, and in the last 18 months we have commercial mortgages yielding a higher rate of interest than residential mortgages. Texas life insurance companies are now permitted to put limited investments into income producing real estate, and such ventures offer attractive equity investments for the insurance company dollar.

Oil loans must now compete with the bond market and the commercial mortgage loan market, which offer high yields, longer maturities, and better call protection. Oil loans must also compete with equity investments such as real estate and stocks. Some life companies that once invested in oil loans are not now attracted to this type investment. Most, like Southwestern Life, have money available, but competition from these other investment opportunities has (1) tended to increase the minimum size of oil loans that are now acceptable. (For example, at one time we would consider a \$25,000 oil investment for our Company. Our minimum investment is now \$100,000.); (2) tended to increase the minimum loan maturity. (For our Company, this minimum period has gone from 5 years up to 10 years.); and (3) tended to increase the maximum loan maturity. (For our Company, this maximum maturity for loans has gone from 7 years up to 15 years.)

We find that prospective borrowers and production payment sellers are generally agreeable to the interest rates we ask on these investments, but are often unable to provide enough long-life producing properties to sustain a 10 to 15 year loan under life insurance company loan requirements.

One other point might be mentioned here—we find banks have now generally shortened the terms of the petroleum producing property investments they make, so there is a noticeable lack of interest in such investments that would ordinarily mature in 4 to 10 years. Some trusts, pension funds, and a few other lenders and production payment purchasers can sometimes be

found to fill this gap in financing, but in today's market we would say there is little money attracted to loans maturing between 4 and 10 years.

Legal Requirements of Oil Investments

Under the Texas Insurance Code, Authorized Investments and Loans for Domestic Life Insurance Companies, such companies are allowed to make loans secured by first liens on real estate, which include oil producing interests, provided title is good and the property value is at least $\frac{1}{3}$ more than the amount loaned. In other words, we are legally allowed to loan 75% of the appraised value on any mortgage loan.

Prior to 1961 we participated in ABC transactions and in production payment financing by lending to the production payment purchaser, taking a first lien on the production payment as security, or by making a legally qualified corporate loan to the production payment purchaser.

Since 1961, however, Texas life companies have been allowed to purchase and own production payments directly.

This has eliminated the need for finding a willing production payment purchaser that would be able to borrow the money to finance the purchase. Domestic life companies, as we mentioned before, are now permitted to own certain income producing real estate, but ownership of leasehold or perpetual mineral interests is still prohibited.

Oil Loan Policy

In our general policy for oil and gas investments, we make both oil loans and production payment purchases, and we do make them with individuals and partnerships as well as corporations, although most other life companies make them only to corporate borrowers.

In considering individual or partnership borrowers, we first try to establish that they are knowledgeable, competent business men with satisfactory net worth. We must also establish that the property which will be security for our investment will be operated capably, whether by the borrower or a third party. This is especially important when we are considering a production payment purchase. For, unlike a loan where we have personal or corporate guarantees, we can look only to the property and its operation for security when purchasing a production payment.

For loans to corporations or large independents that have an established reputation within the industry, this is no problem, but in considering the small, independent operator, we do try to ascertain his operating record and ability as carefully as possible.

We loan only on developed and producing properties having a minimum of 18 months' producing history, preferably longer. Property diversification is preferred, but not essential, if we have what we consider an above-average property for collateral. We do not consider any loan or production payment purchase on a property

containing less than two producing wells.

Generally, we, as do other life insurance companies, limit our oil loans and production payments to about 60% of the fair market value of the property. On occasion, we have loaned up to the legal 75% limit, but only where we have had an exceptional property for security and usually with a qualified corporate borrower.

We would probably limit any oil investment that we would consider to about one-half of one percent of our admitted assets. We have, though, for many years participated with large banks and other life insurance companies in loans and production payments and would be interested in considering participation up to our maximum loan limit in any large venture. When participating with banks, life insurance companies usually agree to let the banks have the early repayments of principal or primary amounts. Repayment of our oil investment is based on application of a certain percentage of the gross pipeline income as projected by the engineer's report. We require the loan or production payment to be amortized out of the first half of the net reserves securing our investment.

The loan or production payment is amortized monthly out of the pipeline runs which are assigned to us. As we mentioned before, the minimum term for oil loans is ten years and the maximum term is 15 years. We reserve the right to have up to 100% of the pipeline runs from the property interests securing our investment assigned to us under appropriate division or transfer orders. We tailor our loan amortization schedule to fit the borrower's needs for cash flow from the properties in order to insure he will have sufficient operating funds. We do, however, like to maintain a certain minimum repayment schedule and apply not less than 50% of the gross pipeline income toward servicing the investment.

Insurance companies are not banking institutions and do not want to rework or alter an investment once it is on the books. However, this is not to say that we never make exception to this rule. We have in the past, and will probably continue, deferring principal payments from time to time and, on occasion, extending the loans where the safety of our investment is not jeopardized. We prefer, however, that our borrowers depend on their banks rather than the insurance company for temporary, extra needs. We likewise do not want to allow any prepayments during the first half of the life of oil loans. We allow prepayments thereafter only with prepayment premiums.

On all applications for loans or production payment purchases, we require an up-to-date engineer's report furnished to us at the applicant's expense. This report must be made by an evaluation engineer acceptable to us. On loan applications above a certain minimum size, usually one million dollars, we may require reports from two such independent engineers.

We require a title opinion by an attorney selected by or approved by the Company. Attorney's fees, abstracting and recording fees, as well as any other closing costs, are paid by the applicant.

We can summarize the general guidelines and maximum loan limitations for life insurance company investments in producing oil properties by referring you to the booklet entitled "Valuation Procedures and Instructions for Bonds and Stocks", prepared by the Committee on Valuation of Securities of the National Association of Life Insurance Commissioners (NAIC). This booklet is used in preparation of annual statements by life insurance companies, societies, and associations and is a standard guideline for life insurance company asset valuations. You will find in this booklet a section on the determination of values for oil and gas loans.

Engineer's Reports

Our evaluation of any prospective oil investment is based on an up-to-date engineer's report, addressed to us and furnished us by the prospective borrower. We require such reports to be made by an independent, competent, and experienced petroleum engineer whose reports have been found acceptable by other large lenders, including banks and life insurance companies. This report, for our evaluation purposes, must contain the following information:

1. A complete description of the property and interest being appraised.
2. The estimated gross reserves to the properties and the net reserves to the interest being appraised. They should be classified in accordance with the definitions for proved reserves adopted by the S.P.E.E. and S.P.E. for use when evaluating an individual property in an existing oil or gas field. Probable and possible reserves, if worth showing, should be listed separately and are usually not counted as security for oil investments by life insurance companies.
3. A projection of gross and net production by classification of reserves by years for a period exceeding the loan amortization by at least two years, the remainder, and the total for producing life.
4. Gross pipeline income (after production taxes) to the appraised interest by years for the required period, the remainder, and the total for producing life.
5. A similar projection of all operating expenses, including ad valorem taxes, but before general overhead, depreciation, depletion, or income taxes.
6. A similar projection of any capital expenditures by years.
7. The net cash flow ("future net operating income") by years for the required period, the remainder, and the total for producing life.
8. A field inspection of the property and equipment and well tests as required by the appraisal engineer and us on certain properties.

9. The discounted present worth of the future net cash flow by months, usually now at a 6% discount rate, should be included.

Fair Market Value

The fair market value of an oil and gas producing property has been described in many ways from "price agreed on by a willing seller and a willing buyer" down to "dollars per net daily barrel produced" and other rule-of-thumb opinions. In our evaluations of property interests that are going to be used to secure our oil investments, we make engineering or analytical valuations based on the engineer's report of projected net cash flow to those interests. Many different approaches to such valuations are used by knowledgeable evaluation engineers, bankers and other investors. For our purposes, we use the empirical market value yardstick developed by K. Marshall Fagin and presented in 1956. This yardstick is based on a number of oil and gas property sales with which he was familiar and which he analyzed over a 5-year period from 1951 to 1956. This yardstick has been referred to in several papers on valuation and may be found in the Petroleum Production Handbook by Thomas C. Frick, published in 1962. It is included in that book in John J. Arp's chapter 38 on Valuation of Oil and Gas Reserves. For your reference, we have attached the yardstick to this paper.

Conclusions

The life insurance company investment dollar is exposed to ever-changing market conditions. Today, yields in the bond market and commercial mortgages and in some equity investments, together with the long-life aspects of such investments, have hurt the attractiveness of short-term oil investments.

Ten to fifteen year oil investments on profitable long-life properties based on acceptable engineering appraisals are still quite attractive investments for most life insurance companies.

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TABLE I

Empirical Yardstick for Appraising the Fair Market Value of *Steady* Future Net Operating Income from Oil & Gas Producing Properties

Future Life, Years	Ratio: Fair Market Value to Future Net Operating Income
1	.860
2	.814
3	.769
4	.734
5	.700
6	.670
7	.641
8	.618
9	.597
10	.580
11	.561
12	.547
13	.530
14	.516
15	.500
16	.486
17	.471
18	.457
19	.444
20	.430
21	.419
22	.407
23	.397
24	.388
25	.380
30	.345
35	.320
40	.300
45	.280
50	.260
55	.240
60	.222

For use with the Fair Market Value Yardstick, properties that are projected to produce increasing or declining rates of future net operating income may be converted to equivalent years of *steady* future net operating income in the following manner:

(1). Find the present worth of the projected income by the use of appropriate present worth factors, using any selected discount rate.

(2). Divide the present worth of this cash flow by the undiscounted cash flow to find the "average" present worth factor.

(3). Using "Present Worth of 1 Per Period" tables at the same discount rate selected in (1) above, find the Present Worth of 1 Per Period which, divided by its period, will give the same present worth factor found in (2) above.

(4). This period is equal to the "*average*" *steady life* of the future net operating income of the property, which is shown on the "yardstick" as "*Future Life, Years.*"

(5). The fair market value of the property being appraised is simply the future net operating income times the decimal ratio for the period determined above.