# Petroleum development - financing

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*In this paper Michael Walls explains the factors which influence the decision to develop established sources of natural petroleum. He also discusses the various financing structures and methods used for petroleum development and their relationship to the general law.*

New Zealanders have been conscious over the last few months of the air of excitement and expectation that has pervaded the sharemarket and other financial markets. In large part, this has been related to the programme of exploration for petroleum, particularly in the offshore licensed areas, which has produced definite indications of progress with the arrival of drilling rigs and the announcement of definite timetables for the commencement of holes. New Zealand does not have a very long history in the development of petroleum mining, although its record in exploration has been a consistent, and increasing, one. The McKee oilfield apart, most of the development of New Zealand's own oilfields is yet before it. This consideration of petroleum development and the law is therefore timely.

## I. PUBLIC EQUITY FINANCING FOR EXPLORATION

New Zealand readers may be forgiven for thinking that the major focus of this paper will be on public financing, particularly through share market issues, through the trading of shares resulting from such issues, or through the options attached to those issues. The recent floats by Petro Taranaki N.L., Kupe Petroleum N.L., Cue Energy Resources N.L., Oilfields N.L., Southern Petroleum N.L., New Zealand Oil & Gas Limited, and Horizon Oil Exploration N.L., from which tens of millions of dollars have been raised, give a rather misleading impression. They should be seen as examples of only one of the avenues available to finance the process of exploration, and not as examples of financing development. Public floats are favoured as a method of raising exploration capital, because the investment in such circumstances is pre-eminently a speculative one. Not many prospectors or licence holders wish to commit themselves to debt obligations to institutional financiers and banks, or to using too much of their own hard-won capital, when the money might conceivably end with no worthwhile or saleable result, even when risks are spread over several drilling prospects. If the expenditure on exploration

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and drilling is to be seen as a gamble, then it is best portrayed in that fashion to financiers who are prepared to take such a gamble, in hopes of eventually receiving a very good return. Institutional financiers and banks are not ordinarily in that category, whereas the public, as recent experience in New Zealand and overseas can witness, do seem able to be persuaded to be so. The public's interest in such investments, of course, has been enhanced by the taxation provisions in the Income Tax Act 1976 which give deductions for subscription or call money with respect to exploration expenditure. At the heart of the investment lies, probably, the New Zealand investor's interest in an exciting gamble.

Even were oil to be found from some of the holes now being drilled, that is by no means the end of the process for the public companies or their shareholders. The "no liability" companies are particularly prone to the danger that, when the prospects for commercial exploitation of a successful find are assessed, they would need to have a more than marginally attractive possibility to persuade shareholders to meet further calls upon their shares, or to take up options for the acquisition of further shares. If an existing shareholder does not wish to meet calls upon shares, so that shares are forfeited, the forfeited shares themselves may have little attraction to other possible investors. Then, too, it is unlikely that, in the circumstances of the areas now being drilled, public equity finance would ever suffice for the proper development of any finds. External financing from specialist financiers, on probably quite an involved and complicated basis, would almost certainly be required. It is with the legal aspects of that further phase of the financing of the development of oil finds already made that this paper deals.

## II. SYNTHETIC PETROLEUM

It should also be stressed that the subject of this paper is natural petroleum. The development of the technology for the manufacture, on a commercial scale, of synthetic petroleum is something of which many New Zealanders are conscious. The government, with Mobil Oil, and with the assistance of a large syndicate of international banks, has devoted very large resources to the successful completion of a synthetic petrol plant at Motunui in Taranaki, and for the utilisation of gas from the Maui gas field to relieve the burden which oil imports place upon New Zealand's balance of payments. To the extent that the underlying motive for undertaking the considerable investments in the synthetic petroleum venture is the relieving of this burden, the same motive should impel any New Zealand government to assist the prompt development and exploitation of any oil finds. Government assistance is, internationally, of great importance in persuading private equity and debt providers to risk further capital in the early exploitation of difficult or expensive developments for the production of oil.

## III. FACTORS INFLUENCING DECISION TO DEVELOP

A decision to develop an oil find will depend very much upon the expectations of the finding company or group of companies concerning —

(a) Future trends in oil prices — this depends on developments in technology, and on the likely appearance of substitute sources of energy;

(b) The predicted costs of extraction and transportation of the crude oil to a suitable refinery. This is largely a process of engineering assessment, which is complicated very much by physical factors and the unpredictability of such influences as weather and geology. It is also influenced greatly by environmental considerations, and the reaction which particular engineering proposals might bring from those parts of the population of New Zealand which might be affected;

(c) The predictable costs of refining the oil to a saleable product, if that is required, or the likelihood of finding available markets for oil in an unrefined form;

(d) Government or local authority policy. Particularly in the case of the central government, this depends largely upon financial matters such as taxation, the imposition of energy levies and the like, and the availability of financing assistance. There is often substantial infrastructure to be provided by a government to enable the proper exploitation of oil and other mineral resources, and much will depend upon the ability of central and local government to countenance such infrastructure development and finance it. Of prime importance here is the confidence which developers can have in not only a particular favourable group of policies, but on their consistency in future years, since oil developments are not rapid affairs; and

(e) Lastly, non-economic factors, such as political stability, overall national development policy and the like. For example, the havoc which changing government policies in relation to uranium development has played with projects in Australia, are common knowledge. An atmosphere of unpredictability or of doubt would be severely inimical to the rational and beneficial financing and development of oil finds in New Zealand.

The costs of development of a major oil find are usually high, even in the "big number" world of oil fields. The current received wisdom in New Zealand is that the development of any such finds in New Zealand would be especially likely to be costly, since the areas now being prospected (apart from the onshore licences currently being drilled with success by Petrocorp) are in waters which are notoriously turbulent, or of unusual depth. For all that the present prospects of success look good, there is no denying that the recovery of any oil found, and in particular its transportation to suitable shore sites, would be difficult, and would involve the development of some new technology. Inevitably, also, it would be expensive. The net result is simply that, on the assessment of the expectations mentioned earlier, the end profits would have to be considerable to justify not only the finders of the oil, but also those prepared to finance them, taking a risk on such projects.

## IV. INCOME TAX CONCESSIONS

Worthy of notice at this stage are the provisions of the Income Tax Act 1976 which are designed to encourage the exploration and development of our oil resources. These are set out principally in sections 214A, 214B and 214C. Their effect, in short, is to permit "petroleum mining companies" as defined, and also "non-resident petroleum mining operators" as defined (being individuals), to deduct

against profits, which would otherwise be taxable, any "development expenditure", which includes the cost of site acquisition, site preparation, production installations, vessels or aircraft, infrastructure, pipeline, and consumables, other than office building or transportation expenditure. These deductions can be made over a minimum period of five years, commencing in the year commercial production is capable of being commenced. Such losses and write-offs are also usable by other companies in a taxation group to be offset against their taxable profits, with some exceptions. Further, any company shareholders which contribute to the cost of development expenditure can themselves take advantage of the ability to write-off losses incurred in such expenditure against their own profits. The provisions are far more complicated than can be dealt with accurately here, but there effect is to make it possible for any profits arising from the recovery of oil to be received in the early years with a lower, or no, deduction for New Zealand income taxation, a move designed to improve the cash flow and profitability figures of companies and individuals willing to invest in the development of oil finds. The theory is a reasonably sound one, although oil companies would probably have liked even more favourable concessions. The net effect, in the case of successful finds, must await judgment.

## V. GOVERNMENT CONSENTS

A further factor to bear in mind is that the Petroleum Act 1937 does bestow upon the Minister of Energy certain discretions as to the need to approve rearrangements or assignments of rights to develop oil finds, or to take out mining licences necessary for the development and exploitation of those finds. The principal provisions, in this context are usually sections 22 to 24, which deal with the assignment of prospecting or mining licences, and section 82, which affects the assignment of pipeline authorities.

## VI. JOINT VENTURE ARRANGEMENTS

If oil exploration is being conducted by a single entity, that entity will often have formulated preliminary or tentative policies for action upon the discovery of a commercial oil field. In reality, though, decisions will not be made until a proper assessment has been made of the points referred to in Part III and, in particular, assessments have been made of the size of the find, and of the engineering problems in recovering the oil from it. Discussions will then go on at a relatively frantic pace on the options available to that company, and on the attractiveness of those options to potential sources of finance. The company concerned would retain the discretion to develop the field on its own, but it is certain, at the least, to give serious consideration to a spreading of the costs and risks associated with development by inviting participation from other owners, who would "farm in" or take an assignment of the rights and obligations inherent in the exploitation and development of the oil find. In such a case, detailed agreements would be reached setting out the precise individual responsibilities of each participant or part owner.

In those cases where the exploration has been carried on by a joint venture or other grouping of companies, then almost certainly, if the ordinary practice has

been followed, the joint venture or partnership or participation agreement will have gone to some lengths to set out what the responsibilities and obligations and options are upon the ascertainment of a commercially exploitable find. For example, as is explained elsewhere in this set of papers,[1] the agreement might have appointed an "operator", who will in effect be the agent of the participants or owners of the project. If a discovery has been made, then that operator, on the instructions of the "operating committee" or "management committee", will have to prepare tentative programmes for appraisal of the field, and for the expansion necessary to make that appraisal work possible. The programme in the budget will have to be approved and authorised, and will have to be subject to review. The appraisal must then be considered by the participants, and a decision will need to be made as to whether development is to proceed. Clearly, that is no easy matter. Once such a decision has been made, then a development work programme and budget will need to be formulated and approved, expenditure will have to be authorised, consents will have to be obtained from the Minister of Energy under sections 14A, 14B and 14C of the Petroleum Act 1937, and the development work will have to be undertaken. A further distinction is often made between development work and production work, which itself requires the evolution of a programme, budget and authorisation procedure. Sometimes, agreements provide for one or more participants to carry out supplementary or further exploratory work at their "sole risk", and for their own benefit in the case of success. Joint venture agreements commonly have express provisions for each of the participants to have the right to take in kind and separately dispose of its proportionate interest in the quantities of oil produced from the development of the find. As an alternative, the recovered oil can be dealt with for the benefit of all the participants in their agreed proportions. Subject to certain restrictions and the necessity to obtain any ministerial or other governmental consents, the agreements also usually provide for the assignment of all or part of any participant's interest and obligations under the agreement and in the petroleum development to one or more other parties of adequate financial standing. There are frequently rights of the other participants to have first option to purchase the interest and obligations of any participant who is contemplating such an assignment. Lastly, joint venture or similar agreements customarily provide for participants to mortgage or charge their individual interests in the development, though with certain restrictions as to the rights of enforcement of that mortgage or charge.

The financing of this wide variety of potential interests in a successful oil find is, clearly, a complicated matter, and the difficulties should not be played down too much. The principal decision which participants will need to make at the first stages of consideration of a financing programme is whether to undertake the financing on a joint basis, or whether to require each of the participants to fund its own obligations to finance the development and production separately. If the latter course is chosen, then clearly there can be a wide variety of different funding arrangements, depending on the credit rating of each of the participants, their sources of finance, the legal regime which they choose to utilise, and their

1 See O'Regan and Taylor "Joint Ventures and Operating Agreements".

own cash flow or financing requirements. In such circumstances, it would be necessary to have some form of co-ordination to ensure that the financing arrangements of one participant did not complicate or detrimentally affect the financing arrangements for any of the other participants. Bill Burslem has dealt with that particular problem,[2] and the practical difficulties associated with such a decision.

## VII. CHOICE OF FINANCING ROUTE

There are a number of commercial influences affecting the financing route to be chosen. They include:

(a) The extent to which recourse to the borrower (be it the group of participants or an individual participant), as opposed to the project itself, is to be limited;

(b) The nature of the project, the anticipated period to its completion and to being productive, and the subsequent productive life;

(c) The willingness of the borrowers to bear any additional cost associated with a "limited recourse" structure over the more conventional types of financing;

(d) Whether the financing structure proposed is for just one aspect of the project, or for a series of associated aspects, such as the well head facilities, pipeline construction and general working capital;

(e) The factors mentioned in Part III in relation to the expectations of the developers and their financiers, and the individual credit-worthiness and other attributes of the proposed borrower or borrowing group.

It is probably right to see the possible sources of financing as relating to two methods:

(1) The raising of equity finance, through resources available to the participants, or through special purpose issues of shares, whether to the public or to institutional financiers or banks, so that those financiers can take an equity risk, with the associated potential benefits, in the project; and

(2) Finance by way of loan or similar debt arrangement. This itself can be subdivided into:

(a) Conventional "full recourse" borrowing, where the lender essentially is relying, not only upon the worth of the project and the assets owned by the borrower, but also on the general credit-worthiness of the particular borrower or group of borrowers; and

(b) "Project" finance arrangements, which depend essentially upon the assets and projected returns for the development of the oil find, rather than relying upon such "external" factors as the creditworthiness and obligation of the effective borrower. For this reason, the wide range of potential methods which fall into the loose concept of "project financing" are customarily associated with special

2 See supra in this volume, Burslem "Financing Petroleum Development".

purpose subsidiaries or other entities which are limited to the particular project, or to a group of projects, and are not part of the existing, mainstream, operations of a particular participant.

**VIII. PARTICULAR FINANCING STRUCTURES**

Particular structures which are found in oil development and production financings can be divided into major groups[3] such as

(a) Limited or non-recourse loans. These are generally structured as borrowings which differ from conventional borrowings by virtue of the fact that the lenders take some risk in the project, the terms of the repayment being linked to a greater or lesser extent to the success of the project, rather than the borrower's assets and ability to repay in general. The basic structure may be simple, although there are many variations on the theme. In particular, the extent to which lenders can look beyond the project and as a result have recourse to the borrower, is an issue which turns a great deal upon detailed negotiations after the initial structure is established. Frequently, one comes across arrangements in which there is full recourse to the project sponsors or participants until the production stage, when their effective obligation or guarantee is dispensed with. The test for the freeing of the sponsors from this obligation, however, are in many financings, anything but simple;

(b) Take or pay or throughput arrangements. These are arrangements which are often used, for example, in pipeline financings. The arrangements usually require a loan to be made to a company or other entity whose sole function, preferably is the construction and operation of a pipeline transporting the crude oil from the well site to a storage depot or refinery. The pipeline company has an agreement with the participants in the oil well whereby those participants agree to use the pipeline, when it is built, for the transportation of petroleum or oil, in sufficient quantities to produce, at agreed rates, the funds necessary for the pipeline company to discharge its own obligations to its own financiers. As in the "tolling agreements" found in many mineral projects, these obligations have the nature of "hell or high water" arrangements, since they compel the owners of the oil, the participants in the oil well, to pay tariff rates whether or not there is any extraneous reason for the failure to transport sufficient oil through the pipeline to make up the required amounts, or at least those amounts necessary to enable the pipeline company to pay its creditors. The rights of a pipeline company under this agreement are usually charged or assigned to the creditors to give them some security for the assurance that there will be sufficient money coming from the project operators to enable the particular pipeline financing to be serviced;

(c) "Sale of asset" approaches. These are arrangements known as "forward purchase" or "advance payment" financings, which in essence involve the provision of funds by the lenders as the purchase price of oil yet to be delivered or

3 See generally Roberts, International Financial Law Review, April 1983, and McCormick (1983) 1 J. Energy and Natural Resources Law.

produced. Clearly, this depends upon the original joint venture or similar agreement permitting the assignment of such rights to financiers in these circumstances. If the agreement does permit it, then the lenders have the right to take quantities of the oil in proportion to the servicing and staged repayment of the financing. The actual mutation of the oil into cash is usually handled by virtue of a side agreement between the financiers and the project participants. As would be expected, there is normally provision to protect the financiers against insufficient oil being produced, or against the prices at which the oil is sold being insufficient to service the debt obligations. A further possibility is the "production payment" technique, widely used in the United States, which in essence involves the assignment to lenders, in return for the funds, of rights to receive oil or its proceeds of sale when extracted, until the value of that oil or those proceeds equals a certain amount. There are various security permutations around the theme, but the essence of the arrangement is a kind of mortgaging of proportions of the production from the well, or its value, sufficient to ensure reasonable security to the lenders for the servicing of their debt;

(d) Alternative forms of financing. There are a number of other forms of financing which are possible, and which do not involve conventional borrowings. These include leasing arrangements, hire purchase arrangements, acceptance credit or other bill facilities, factoring, and other similar arrangements. It is not possible to deal adequately with the particular aspects of each of them in this paper, but they should not be lost sight of.

## IX. LEGAL PROBLEMS

Whatever financing structure is chosen, it will have associated with it not only its own complexities, but also particular legal concerns or problems. Two of them are dealt with here.

1. The question of security, and of the real access of lenders to that security, is uppermost in the minds of many potential lenders when they are asked to fund a project with as many unquantifiable risks as oil wells in difficult locations. Security has two values. The first is to ensure that the lender has a favourable position, when compared with other persons potentially having an influence upon worth of a project or its development. The second is to give the lender a right to enforce security, so that whether by operation of the secured assets or their sale, the debt will eventually be repaid and serviced. The first aspect, that of the provisional preferred position, should not be underestimated. Too often, too much is made of the ability to enforce security and obtain repayment. In practice though, the mere blocking position of a secured lender is sufficient to enable it, or a group of lenders, to have very considerable influence at the early stages of a project, and to maintain an effective monitoring position on the development of the project, so that any resources or advice which they may be able to summon can be found for a project before it might lapse into a dangerous position. As to the worth of security over what might be "valuable" items of plant, or rights, in assets of a project which might have effective security over them, in isolation, are not of great value unless they can be sold or used in conjunction with other assets.

If the lenders do not have access to, or control over, those other assets, then the worth of security over what might be "valuable" items of plant, or rights, in isolation, could be very questionable indeed. It should not be forgotten, also that in New Zealand the most likely source of the very substantial funds necessary for the development of potential oil wells would be overseas financiers, and the provisions of the Overseas Investment Regulations 1974 will have to be dealt with very carefully, not only in the giving of the initial security, but also in contemplation of any rights to enforcement which might become relevant.

2. The taxation consequences for financiers of the particular arrangements which they choose to use is of particular significance in the imposition of non-resident withholding tax on interest, dividends and royalties flowing from a New Zealand resident borrower to non-resident financiers. The recent abolition in the Income Tax Amendment Act 1983 of the right to gain agreement from the government that interest on international loans would be exempt from non-resident withholding tax has been the final step in an unfavourable chain of events for offshore financiers in New Zealand. It is a pattern which, in many ways, seems illogical and very damaging to the interests of New Zealand in being able to finance the development of any successful oil wells. It is an unavoidable fact of life in the financial markets that financial documentation, not least in project financings associated with oil developments, customarily includes "gross-up" clauses, requiring the borrower or ultimate user of funds to meet any taxation obligations which may be imposed by the country of residence of the borrower or user of those funds upon debt servicing payments, lease payments or the like. The consequence is therefore that the New Zealand user of funds pays the New Zealand tax for the offshore lenders or providers, whatever the theory of the New Zealand income tax legislation. Even this pain is aggravated, because the payment of the tax itself is regarded as a taxable payment, and bears its own tax. This seems to be a wholly undesirable consequence for the developers of any oil well and for their financiers. It will obviously have some influence on decisions whether any oil finds are to be regarded as sufficiently likely to be profitable to be worth developing. It would be a pity if such decisions were influenced by what may be a short-sighted taxation policy with respect to offshore financing.

## X. GOVERNMENT CONSISTENCY

It is useful to bear in mind the important point that equity or debt financing, in whatever form and whether it be domestic or foreign, will not be attracted to oil development in New Zealand if, in the words of the chief executive officer of a major institutional financier[4]

> We are going to be subjected to constant threats of changes in the rules of play. Governmental requirements in respect of royalties, freight rates, supertaxes etc. must be spelled out at the outset and adhered to over time. The propensity of Government to impose extra burdens on the successful is disastrous, and there must be a recog-

4 A. W. Coates, Chief Manager, AMP Society. See "Institutional Investment in Mining and Petroleum Resource Projects" paper presented to the Conference of the Australian Mining and Petroleum Law Association, Perth, 1979.

nition that we are dealing with a high risk area which deserves to know what it can retain through acceptance of those risks.

## XI. CONCLUSION

It is hoped that this paper has shown that if the development of oil finds becomes a real prospect in New Zealand, there will be a multitude of problems which will require solutions. Those problems will be unconventional and will require unconventional solutions.