THE VALUATION OF MINERAL PROPERTIES TO MEET STOCK EXCHANGE REQUIREMENTS

THE EXPLORATION COMPANY VIEWPOINT

An Address by

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There is presently no formal requirement in The Stock Exchange listing regulations to value a mineral property in a prospectus. There is however a proposed change to official Listing Requirement 2B(II)(a) as follows "A report by an independent expert setting out the basis of the valuation of vendor consideration and expressing the opinion that the consideration is fair and reasonable".

Why should it be necessary to have an independent valuation? It has been said by the Chairman of The Sydney Stock Exchange that investors are entitled to a 'fair go' for their money and should not be ripped off by ravenous vendors and promoters. He goes on to say that the problem lies in determining what is a "fair reward" before the market in that stock can be established.

I question the rectitude and appropriateness of requiring an independent consulting geologist or other expert to establish the level of a "fair reward", when underwriters, stock exchange committees and the investors at large either will not or are deemed unable to, establish that figure.

It has been recognised for many years that underexplored countries with great mineral potential (this includes oil which is also a mineral) like Australia and Canada need to be explored, and that suitable corporate vehicles and financial mechanisms should be available to encourage this high-risk activity. If you accept that development of natural resources is in the national interest and that exploration should be encouraged (and this is without regard to any debate of the "Gregory Thesis")then you must, and I believe the investing public does, understand and accept the risks which go with such an activity. Let us examine for a moment why the public (investor in this context is the wrong word!) buys shares in new *exploration* (as opposed to mining) companies. They buy because they think their shares will rise in value; some the day after listing and some at an indeterminate period in the future.

How do they make the decision which shares to buy? I suggest they make it on one or more of the following grounds:

a. The people associated with the company have a successful track record at ramping the share price of their companies
b. They believe the value of the commodity to be sought by the new company is rising and will continue to rise, and the share price will rise by association essentially without regard to eventual success at finding a payable mineral deposit.
c. A poor third — the exploration areas in the float appear to contain good exploration targets.
d. A poorer fourth — the board of directors and executives of the company appear to be honest competent professionals.

You may consider that I am being mildly cynical, but I feel reasonably confident that on a rising gold market investors would devour "Woop-Woop Mining" with an 80 per cent vendor consideration provided you draw the prospectus map at a small enough scale so that Kalgoorlie appears to be near the prospect. And, I might add — they would make money immediately on listing.

Conversely, we have been recently experiencing a situation where because gold has fallen 10 per cent in value companies are unable to get issues underwritten which could have been underwritten only a few weeks before. Yet surely a commodity price decline of such a small magnitude cannot have made so much difference to the potential viability of the mines which might be developed on those companies'exploration licences?

We may therefore conclude that the quality and value of the exploration licences have little to do with people's perceptions of the chances of success or failure of a float.

In the U.S.A., on some stock exchanges, you can float an exploration company which has no exploration areas. The success or otherwise of those floats depends on good marketing and the track record of the directors and senior executives. I suspect that the long-term success of these companies is just as good or as bad as those which are listed with a basket of grass-roots areas.

Why do we insist on a 'fair value' being paid for exploration areas, the so-called assets being vended, when The Stock Exchange/Corporate Affairs pays scant if any regard as to whether the areas in the float are adequately explored after listing? There are instances where no expenditure has been made on such areas. If the post-float situation is not to be monitored, why be so concerned about the 'value' of an area at the prospectus stage?

THE MECHANICS OF VALUING

If there are established reserves — proven or probable — then the valuer should properly take into account the following major matters:

1. Have the reserves been computed in accordance with industry standards?
2. Are the assay values, intersection widths (for oil — porosity, permeability), etc. properly expressed and the calculations discounted for recovery or are they gross "in-place" figures?
3. What is the likely realisable value of the commodity over the life of the mine or oil-field?
4. What are the capital costs initially and for replacement?
5. What are the operating costs over the life of the project?
6. What is the escalation of operating costs
   (a) due to, for instance, increased depth of operation?
   (b) inflation?
7. What is cost of capital?
8. What are the effects of tax on future cash flows and hence on project net present values?
9. What discount rate is appropriate to reduce future values to present values?

In other words the valuer should construct a feasibility model and use his professional judgement as to the factors he plugs in to his calculations.

Then he *only* has to express an opinion as to the fair and reasonable percentage of that computed present value which should be taken by the vendor.

If there are no established reserves and preferably no sampling done then life is much easier for the valuer because he has few facts to confuse him in making his judgement. He can then only make a highly subjective judgement as to the chances of finding an orebody or hydrocarbon field in the exploration licence, and then discount it for risk.

The factors which he needs to take into account technically in arriving at this subjective judgement need to include the following:

1. Does the geology of the prospect compare in a number of respects with the geological environment of a known commercial operation?
2. Drawing on that comparison, what is the likely order of magnitude of tonnage/grade in the area to be valued?
3. Is the geologically relevant part of the licence owned large enough to contain an orebody of commercial dimensions?
4. Are the logistics of the location a plus or minus factor in the economics of the hypothetical operation?
5. How much exploration work has been done on the property and was it relevant to the current objectives? Should the value of this work be accepted at cost, discounted or given a premium?

Once these considerations have been disposed of, we then turn to the really important questions.

1. If the vendor hawked it up and down Pitt Street or St George's Terrace, could he realistically flog it for the consideration sought?
2. What would it be worth to an exploration company in hard cash? Or does it only have a value as part of a new float?
3. Has its address got a value? According to the guidelines of the Mineral Industry Consultants Association, the valuer should beware the "good address" but we all know it is a fundamental part of the market valuation. A good address, especially if the geology is also of the same address, may be the best recommendation available.

Finally, by how much should he discount for risk? Experience indicates it should not be less than 90 per cent (e.g. a 1 in 10 chance of finding a mine/oilfield) and many would suggest it should be 99 per cent.

Do "investors" really want to know?

We should all accept the fact that exploration is a casino — I am sure the public already has. The risks are reduced but not eliminated if the exploration work is professionally undertaken. It might be more meaningful to value the board of directors rather than prospects — which could be an interesting but hazardous exercise.

CONCLUSIONS AND RECOMMENDATIONS

Concluding — and joking aside — what I am saying is that valuing *exploration* acreage is primarily a market place and secondarily a professional function. If you want to regulate that market place then the stallholders should get together and do it.

The Stock Exchange needs to appoint its own paid experts who would be responsible for keeping abreast of changing values. These experts should be forbidden to write prospectus reports, which is *not* presently the case. They may or may not be geologists, mining or petroleum engineers but they will need to have had extensive exposure to the commercial and technical sides of the industries. Many consulting geologists and engineers are not sufficiently in touch with the market value of acreage to give a sensible appraisal.

The exchange should also ensure that rules as strict are applied to existing companies and backdoor listings.

As one of those rules, setting a limit to the percentage of a float which can be taken as vendor consideration should be seriously considered.

THE NEW ORDER

Alternatively how about a new set of rules something like this for exploration companies:

1. Vendor shares are abolished.
2. A board of directors must have at least one professionally qualified and minimum 15 years' experienced geologist or mining engineer on it.
3. Vendors should be fully reimbursed in cash for all prior expenditure incurred.
4. Vendor consideration be confined to
   a. A net profits interest
   b. Net percent of revenue interest
   c. Royalty interest

   or some combination of all three

   d. A percentage of the valuation given to exploration acreage by the stock exchanges valuation panel.
5. a. Determine the expenditure on exploration (including reasonable administrative overhead costs) on the tenement or permit.

   b. Assuming that no commercial discovery has been made apply a multiplication factor of greater or less than one depending on whether the work has increased or reduced the likelihood of a commercial discovery.

   c. Determine the magnitude of the multiplication factor. The magnitude of the factor in oil exploration may be larger *after* a successful well has been drilled. A permit in which no significant production has been recorded and which has been relinquished by a previous holder, starts with a nil or very low value, and only acquires value as new work produces encouraging technical results. Prior to drilling a well it would be exceptional to apply a multiplying factor greater than 4x.

If you can't agree on a new, practical and effective safeguard then don't impose an ineffectual and ambiguous requirement — don't have one at all — let the market place rule — it's always the best judge in the end.