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The Secretary
 House of Representatives
 Standing Committee on Industry and Resources
 Parliament House
 CANBERRA, ACT 2600

Inquiry into Resources Exploration Impediments

The writer has been actively involved in Australian exploration for petroleum, minerals and groundwater. His summarised CV is attached as Appendix 1.

Australia's resource endowment

Australia's resource endowment is immense, and compared to USA has hardly been scratched. Its potential is held back by numbers of reasons dealt with below. For instance in the northwest of Australia there are a number of salt diapirs (salt domes) just off the coast and probably extending onshore. Spindletop in USA on top of a salt dome was the great discovery in the 1920's which lowered the price of crude oil to 10cents/barrel it was so large. Only one well has been drilled into the top of one dome at Pelican Island in the Bonaparte basin. This well nearly blew out but was closed down by Arco without testing despite our requests as the then junior partners. I attach as Appendix 2 two papers that I delivered at APEA conferences on the petroleum resources of Australia. The Broken Hill mine was discovered because it was just exposed at the surface, but no one has carried out a systematic search for a similar deposit because of the difficulties of acquiring a large enough exploration area. The same applies to Mt Morgan in Queensland. The coal resources of the Bowen Basin are also immense as are the brown coal resources of Gippsland. It would be foolish to repeat the fallacy of the 'Club of Rome' whose calculations were based on existing reserves and not likely undiscovered deposits. Economics dictates that companies only explore for deposits that can be produced in the next 15 years.

Industry structure

The players in Australian exploration fall into the following categories:-

- Australian individuals – geologists, miners or prospectors, sometimes in private companies or syndicates. A majority of new discoveries are initiated from this group. They are aided by the geological maps and reports issued by the State government Mines Departments, and by the exploration tenements issued at low cost by them. As well as a consequence of issuing exploration tenements of various kinds the State Mines Departments require that data –reports, cores and cuttings, geophysical and geophysical data is deposited with them; and this data is released to the general public as open file reports usually two years after the expiration of the tenement. If something of interest is found the next step is to either to get a small company floated, or interest one of the big players.

- Small Australian companies floated on the stock exchange. Most of the successful ones have been taken over. When Alliance Oil Development N.L., the company for whom I worked for 10 years, was about to earn \$12,000,000 per year from their Cooper Basin discoveries they were taken over by Santos, a South Australian company protected from takeover by South Australian legislation.
- State governments supply maps and reports, issue permits, store data from former tenement holders and release it to the public as open file information usually after two years. Their help to the exploration industry is immense, particularly in the storage of previous exploration data and releasing on open file to the public after a period, usually two years.
- Commonwealth government –AGSO (formerly BMR) carry out geological mapping and regional geophysics. Their work resulted in several major mineral discoveries, notably Groote Island manganese, Duchess phosphate, a gold deposit at Tennant Creek, and oil in the Perth Basin. From 1959-1969 they ran the Petroleum Search Subsidy Act which subsidised exploration and geophysics on the condition that the results were released to the public after six months. This provided a great boost to exploration and resulted in many discoveries. Unfortunately the old Bureau of Mineral Resources came under Dr Rutland, who converted it into a research organization full of Ph.D.'s doing theoretical research.
- Major International Companies carry out exploration but are only interested in large deposits. The international petroleum companies are really only interested in keeping Australia as a market for their Middle East oil. To this end they carry out exploration in Australia attempting to write off areas and discourage smaller companies. Sometimes they join in as partners to small active companies and exhaust their resources by expensive exploration. The State governments have to watch them closely to see that they release all their data.
- Independent overseas companies are skilled explorers and excellent to have as partners. Moonie oilfield was discovered by one Union Oil, Phillips Petroleum was another who discovered Gilmore gasfield. Both have passed into the hands of the major oil companies as has Arco.
- Companies owned or part owned by foreign governments explore in Australia. AGIP (Italian), is an example. In fact in the 1960-70 period Australia was one of the few countries without a government owned company exploring in Australia. There was an attempt to set one up in the Whitlam era.

Impediments to accessing capital

Small companies depend on capital raised in the market. For this they need the backing of stockbrokers. Unlike Canada or the United States Australian stockbrokers are not very sophisticated and bypass projects, which have a good prospect of success in favour of ones, which any geologist would know, had no chance. In the 1960's and 1970's funds once raised were put into safe term deposits until required, but in later periods they were invested in risky projects, resulting in a loss of longevity for the company. If they did keep a capital reserve, they were liable to be taken over just to get at it. I see the same promoters of doubtful probity coming successfully time and again to the market and using up some of the limited sources of capital that could otherwise be used for exploration projects that have some chance of success. Until the early 1970's subscriptions and calls to exploration companies were tax deductible until this avenue was used as a tax dodge. The tightening up of listing rules has made things difficult for

genuine explorers and not shut out the crooks.

Access to land

The Queensland state government has allowed one company to squat on prospective oil and gas bearing land since the 1930's in one case, and since 1954 in the other case. Round Roma the 4 Roma Block companies were bought by Associated Australian Oilfields N.L. in 1950. They were taken over first by CSR, then Santos. That prospective gas bearing land has never been up for tender since 1930. The other highly prospective area was taken out by Associated Freney N.L a sister company of AAO in 1954. Oil Company of Australia bought into that area which is now held by them and Santos as inheritors of AFO. The other known prospective area the Cooper Basin in SW Queensland was taken out by Santos by special act of the State parliament in 1957. Santos still hold most of it. Compare the practices of the Alberta State government in Canada. The two other prospective areas in Queensland are the Toko Basin in far SW Qld held for 10 years by Dyad Petroleum , a Texas based land company who have done no substantial work, and the Adavale Basin reserved by the State government.

In November 1996, after six months study of open file reports on behalf of someone, I put in an application to the then Queensland Department of Mines and Energy. After 3 years nothing was resolved because of the Wik case, and there were 1500 unresolved other applications. This is the result of the mess made by the ignorant High Court indulging in their social consciences in defiance of good law and in usurpation of the rights of elected parliamentarians. The Mabo case was based on Torres Strait islanders who are Melanesians like Papuans with a distinct tribal structure, settled locations, crops, and with ownership of land. The aborigines travelled around in small family groups with no numeric system. They cannot be equated with Maoris, Inuits, or North American Indians. They never considered that they owned the land, and certainly never the mineral resources. In Queensland, in contrast to the Northern Territory where aborigines continued to live in their own areas by agreement with the pastoral lease owners, all the aborigines who were not killed were shifted to reserves. The British Colonial Office in framing the Western Australian state constitution recognised the impossibility of making any treaty with the aborigines or dealing with them over land rights, so they put a provision in the constitution that 2% of the gross income of the state was to go for aborigine welfare. The Forest government on independence got this section removed.

When the Mabo Act was passed no distinction was made between the full blooded aborigines living in their original state, and fully assimilated people with only a small amount of aboriginal blood. These latter are dominating ATSIC and taking the most of the funds meant to help the full bloods, and now there is a quid in it more people are appearing from the woodwork claiming aborigine blood.. When the Mabo Act was passed only the mining industry received the full brunt of the act despite the preamble to the act exempting pastoral leases, and consequently ability to take out mining tenements. In 1972 passing through Docker River, the aborigines were very keen to develop a copper deposit with us but ten years later we got involved with the Central Land Council and it was quite impossible. The aborigines want mining and the money and jobs coming from it. It should be possible to frame an Act which provides for a one off determination before a tribunal as to who has native title, a marking of sacred sites usually a small area, and a payment of 5% of the licence fee and 1% royalty for minerals produced. Lawyers should be excluded and this could be managed by limiting their fees to \$50/hour – the amount I charge. An alternative would be a one off payment to all aborigines eliminating native title altogether. In the meantime the High Court with the Parliamentarians standing by, have created a country with dual land titles, and giving the

majority of inland Australia to the descendants of nomads forming only a small percentage of the total population. Even W.S.Gilbert could not have envisaged the situation, and he was an expert on the stupidity of lawyers.

Environmental and other approval processes

I was in Temora carrying out a search for groundwater for the Gidgibung gold mine. They were seeking approval for a mining lease and this had to go through six separate State government departments some with directly conflicting requirements. In Queensland we dealt with only the Mines Department but the environmental responsibilities have now been handed over to the EPA.

Apart from the gold dredge sites in the Ovens Valley where the Victorian Mines Department refused to enforce resoiling as they did at Newstead near Bendigo, you have to look very carefully to see old mining sites . The hill slopes of the Ovens valley were stripped bare by the 1920's to provide fuel for the steam engines of the mines and dredges, but they now appear to be virgin bush.

The Green movement must recognise that you cannot have 18 million people inhabiting a land formerly occupied by 300,000 people, and have multitudes of planes and ships every day and preserve all the native fauna and vegetation. Some must become extinct.

Public provision of geoscientific data

The State Mines departments as mentioned above, carry out this important function very successfully, A search of their data is where most discoveries start and they should be credited with some of the income from royalties. Kennett when premier of Victoria did a terrible thing in selling the whole carefully acquired groundwater data base to a private organization Sinclair Knight Mertz who now mismanage it. It is now inaccessible to the general public except at great cost.

AGSO – the Australian Geological Survey Organisation hold a great deal of data, but have no proper computer record system, so the data is difficult of access.

Relationships with indigenous communities

As mentioned above in my experience indigenous communities are primarily interested in jobs and money, but are used and manipulated sometimes by environmentalists, not really interested in them, but pursuing their own agenda.

Contribution of industry to regional development

Exploration brings money and jobs into regional areas. In my exploration days, we were always welcome quite apart from anything else, we paid cash for everything.

Appendix 1 – The writer's summarised CV

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Colin Laing graduated B.Sc.,A.O.S.M.(Associate Otago School of Mines) in 1950, later in 1963 completing M.Sc. at Victoria University of Wellington.

1951-1954 he worked in the N.Z.Geological Survey on geothermal ,regional geology and NZ tectonics.

1954-1960 he worked in AAR(Minad) mainly on regional geology and gravity work but also in reinterpretation of Roma area that led to the 1959 and later gas discoveries.

1960-1962 he worked in NZ for BP Shell & Todd Petroleum Development.

1963-1973 he was Senior then Chief Geologist for Alliance Oil Development during their great period of operating and discovery. During this period he carried out basin studies of nearly all Australian basins.

1973-1981 he was environmental geologist then acting OIC Groundwater Section Victorian Geological Survey.

1966-1981 he was a councillor Heidelberg City Councillor, Mayor 1972, Commissioner MMBW 1969-1972 and 1979-1981.

1981 appointed life member of Heidelberg YMCA as one of founders and chairman for 3 years.

1981-1985 he was involved in starting Queensland Petroleum . Developed Sambas Gold Mine for them.

1983-1996 Technical adviser finding mineral and spring water for Cottonwood Valley Pty Ltd, a major water exporter.

1985-1986 consulting geologist.

1986-1990 he was Chief Petroleum Geologist and Chief Petroleum Inspector in charge of the Petroleum Division, PNG Dept. of Minerals and Energy. Was instrumental in getting Kutubu Oilfield and Hides Gasfield developments going.

1990-present consulting geologist A.C.M.Laing & Associates

1996-present Tutor in Environmental Geology, Brisbane University of the Third Age

2000- present Director Kokstad Mining Pty Limited planning to produce sodium bicarbonate from groundwater north of Roma in Queensland

Appendix 2 – Some good onshore prospects in Australia