

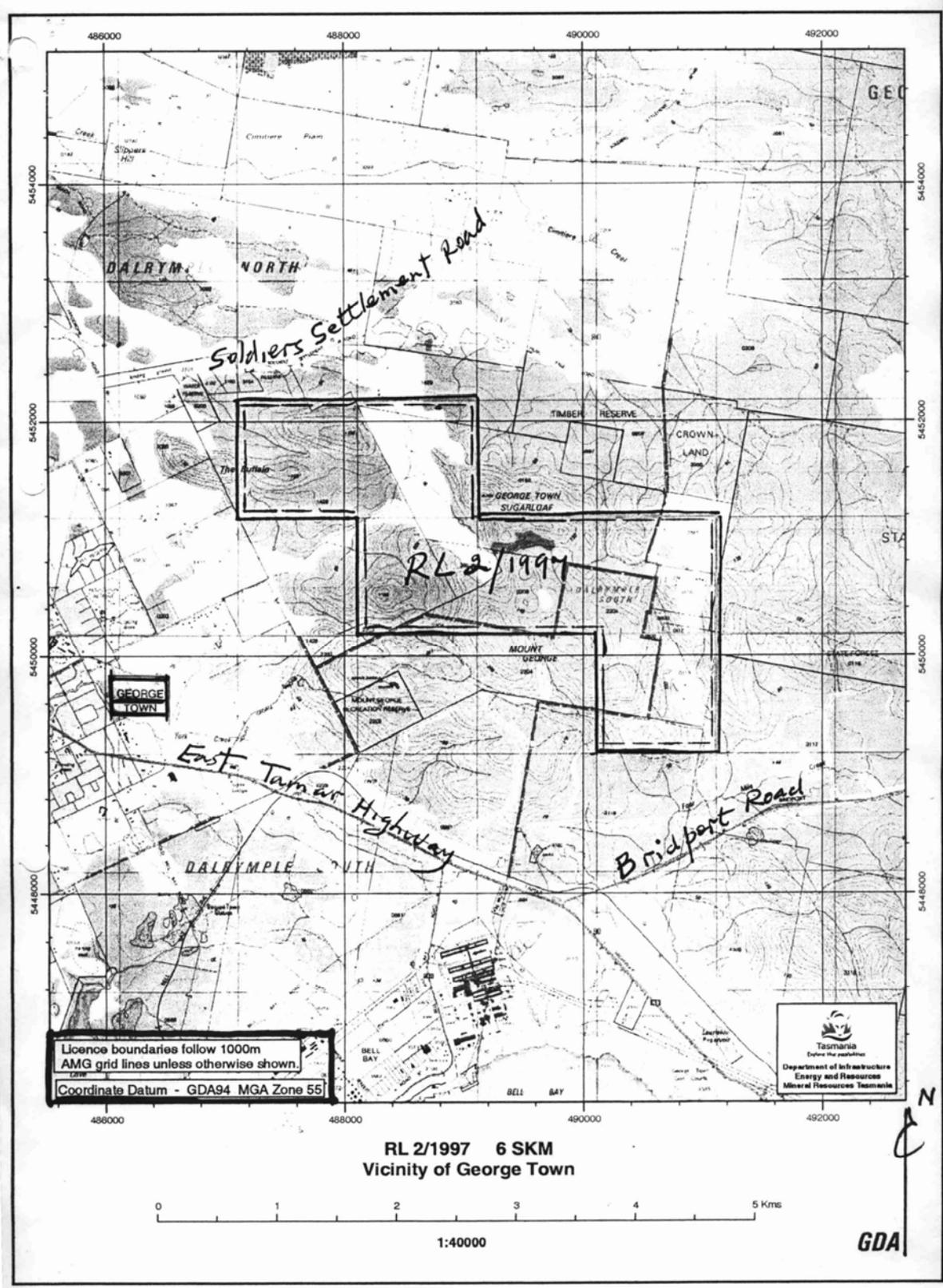
FINAL REPORT

Retention Licence 2/ 1997 George Town

Tasmanian Hardrock Pty Ltd

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Summary: This Retention Licence was granted because a large resource of dolerite rock of high quality had been identified in it and was suitable for a superquarry (new concept) to supply aggregate by ship to ports on the Australian mainland and in overseas countries such as Japan (new concept). The project failed and the licence has been surrendered. The estimated costs of the superquarry and shipping were assembled in a large Business Plan that was lodged with Mineral Resources Tasmania where it could be helpful in development. The project demonstrated that the dolerite near Bell Bay is a major Tasmanian resource. Attempts at commercialisation of another dolerite area continue in RL3/ 1997 Williams Creek in association with Hazell Brothers of Hobart



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24 January 2011

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FINAL REPORT ON RETENTION LICENCE 9702
JANUARY 2011

The **Retention** Licence 2/ 1997 'George Town' was granted as an upgrade of earlier **exploration** licence 10/ 90 that was issued to allow exploration for dolerite for concrete aggregate and road aggregate. The aggregate would be exported from the Port of Launceston to mainland Australian ports, and to other countries.

As an experienced geologist the writer walked over all of the area, which is rugged, and confirmed the geological maps by MRT, which showed the whole licence area to be underlain by dolerite. There were numerous locations at which the rock could be worked, and some of these were shown to MRT officers who were stationed in Launceston, or who visited from Hobart.

These officers were satisfied that a high quantity of good quality workable rock had been demonstrated and in 1997 MRT informed me that I should apply to have the Exploration Licence upgraded to a Retention Licence and that commercialisation could be pursued. The estimated rock resource was so large and so well exposed that a company interested in working it would simply choose a quarry site that was best from its own working and transport perspective and would do its own close drilling and testing to suit its own needs and would have little interest in any done by Tasmanian Hardrock. For that reason no detailed site exploration or drilling and testing was done and no JORC- compliant estimate of the rock resource or reserve was made, but efforts were put into publicity for the deposit, and finance for export possibilities, and into public relations with conservation interests, and with the local Council, and the Port of Launceston Authority.

The Council and the Port Authority both provided the writer with offices from which he worked and local newspapers and the ABC TV and radio provided publicity. The local Council and its officers kept changing in major ways so that new people were constantly being 'educated' about both the project and the quarry industry. They were all supportive, like MRT, and appreciated the possibility of a new industry in the district, **but** did nothing to conduct land zoning to protect the deposit from housing encroachments, possibly because they **also** waned the new housing and resultant income from rates paid to the Council.

Council officers and local residents told me that some quarry companies did look at the deposit without contacting Tasmanian Hardrock but they took no further action, and therefore did not see the Business Plan, **a large document of which a copy was lodged with Mineral Resources Tasmania.**

The most important new concept in the Business Plan was the proposal that rock could be exported profitably by sea to the Australian mainland and to countries like Japan where authorities anticipated with certainty that existing sources of rock would become exhausted 'in a few years'. Consumption of rock is around 7 to 8 tonnes per person per annum in developed regions like Australia and Japan which use rock mainly for roads and for concrete in new buildings. The total consumption of rock in the Tokyo – Yokohama region is, by official figure, about 1100 million tonnes p.a. and Japanese officials predicted exhaustion of supply, but in fact that has not happened. Exhaustion was predicted also for Sydney, but has not happened.

In the North Atlantic region the supply to London and southeast England was from the Welsh Borderland and those sources were abandoned because transport vehicles went through towns and villages that objected to them. A major quarry company, Foster Yeoman (see website) therefore decided that the transport to London must be by sea. They found a suitable quarry site on the coast near Fort William, a town in the Scottish Highlands. The proposed quarry had to be so large to be viable that it was called a superquarry, a new word that is now in widespread use.

That occurred at roughly the same time as people in Australia were developing the idea that very large-scale open-pit mines, new ports and very large ships, were needed to supply Japan's needs for iron ore and coal. The writer took part in the development of that idea in Australia and remembers that many people rejected it as completely impractical in Australia because the proposed iron ore and coal sources were far inland in regions of little or no infrastructure. This was particularly so for iron ore in the Pilbara region, where some deposits are 500 km or more inland. To work them meant the building of railways of that length, and of export ports that could handle Cape-size ships (200,000 tonnes), and of support towns and of water supplies.

Australian companies had a fear of those matters in relation to coal, so they were taken to a small group of financiers in Utah, USA. They formed Utah Coal, took up leases in the Bowen Basin, and were very successful with exports to Japan for a number of years until they were bought out by an Australian company. The finance problems with iron ore were solved by Japanese companies.

Unfortunately, Australian financiers were equally unwilling to accept the idea that aggregate rock would be worked at the superquarry scale and then exported by sea from RL9702. They would not look at finances of the large size required, so two visits supported by Austrade were made to the USA, and one to Tokyo to try to raise the finance, but were unsuccessful. (In passing it is mentioned that Austrade was very supportive of the whole concept).

The financing problem probably arises because the quarry industry is based on so many small quarries as a rule, that it looks like a cottage industry not suited to large-scale finance. In fact it is the largest mining industry in Australia, Japan, and possibly China, larger even than the coal and iron ore industries, which means that it is profitable. Consequently in the North Atlantic several superquarries have been opened since 1965, with each producing up to 15

million tonnes per annum. That example was presented to financiers in relation to RL 2/ 1997 but was not adopted because coal and iron ore are obviously profitable and relatively risk-free, and still are being expanded in a huge way to meet demands in China and India. The expansions take everything that the big companies can put into them in association with their overseas buyers.

That situation was too strong to be changed by Tasmanian Hardrock Pty Ltd in any way that enabled RL 2/ 1997 to be financed. At first the venture seemed to be feasible but it has failed to get finance.

A potential Japanese buyer who twice carefully inspected RL 2/ 1997 seemed to be impressed but had a different problem. This was that ports in Japan are privately owned and so loaded with work that he could not think of one that had space for a load of rock waiting to be distributed.

There is a similar port problem at Sydney, Australia where port land has been sold. The port of Botany Bay takes containers, not bulk shipments, and a Sydney expert has been unable to locate an alternative.

You comment in your letter that the Retention Licence has been in force long enough to get a result, but getting a result can take a **very** long time. An example is that Mrs Gina Rinehart is very well known for her Pilbara iron ore mining (with her father before her) and for her income, said to be over \$24 million p.a., from her leases worked by Rio and BHP. She has a large staff and valuable experience and capital and contracts but nevertheless has some Pilbara leases such as Rhodes Ridge, that are only now beginning to be worked after being held for 45 to 48 years. She also has long-held leases on major coal deposits in Queensland, such as Alpha, but they are not yet in production despite her advantages and despite the demand for coal at high prices. The financial pages of newspapers and of specialist mining publications, often indicate that getting finance is the biggest hurdle for new project, even those of good quality. If Gina Rinehart has trouble with both iron ore and coal I could expect even bigger trouble with a new concept like a superquarry for rock aggregate, and the new concept of shipping rock to Japan and other distant markets. Potential financiers are hard to convince even though superquarries, and the shipping of rock are viable on both sides of the Atlantic Ocean. I could not convince financiers even with the help of Austrade and others.

The Pilbara iron ore mines are all open pit, which means that they are really quarries, but Gina Rinehart does **not** operate one of them, leaving that to major companies which also operate the coal mines, open pit fashion, at a profit so great that the companies seem to have no active interest in rock aggregates.

From all of this there are a couple of positives. Dolerite rock near Bell Bay has become a major potential resource whereas previously it was only important in Tasmania. This is important, and I was told that when the application for EL 10/ 90 was lodged a senior MRT officer said 'Thank goodness. At last somebody has thought of something we can do with the stuff.'

Another positive outcome is that Tasmanian Hardrock did a lot of work assembling data on quarry costs, shipping costs and profits which were set out in a large Business Plan that can be used to promote a new Tasmanian export business probably smaller than Australian coal and iron ore export businesses but very significant nevertheless. Tasmanian Hardrock is still

trying in a determined way to do that with another lease RL 3/ 1997, by operating through B3 (Bell Bay Bluestone) Pty Ltd in association with Hazell Brothers. The association has to deal with finance problems and port problems set out in this report. They have not been solved by Tasmanian Hardrock. Gina Rinehart has similar problems with coal and iron ore leases that have been in existence for up to 48 years.

Rehabilitation Obligations

Tasmanian Hardrock when it held EL 10/ 90 demonstrated that it contained a huge quantity of high-quality rock and MRT advised us to convert the EL to an RL 2/ 1997 and to concentrate on commercialisation. Not a tree was damaged and not a track was made, and no damage at all was done at any time and Tasmanian Hardrock submits that there is no rehabilitation to be done by it.

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