MINERAL HOLDINGS AUSTRALIA PTY LTD

RETENTION LICENCE 1/2005
HOGARTH CREEK, NW TASMANIA

ANNUAL REPORT ON EXPLORATION
TO JUNE 2010

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ABSTRACT

This report gives a review of the marketing and exploration work carried out by Mineral Holdings Australia Pty. Ltd. over the past 12 months on RL 1/2005.
The licence covers 5 sq km in the Dip Ranges and encloses the Thomas Mountain Silica Mine.

The licence covers the Detention Quartzite of the Rocky Cape Group and the target of exploration is silica, silica sand and quartzite for the chemical, metallurgical glass and coal seam methane industries.

Previous exploration by Mineral Holdings Australia Pty. Ltd. and its joint venture partners has outlined a substantial inventory of potential silica products in the RL namely 0.35Mt of hard, silicified quartzite, 1.55Mt of hard sandstone, 0.65Mt of poorly consolidated, soft sandstone and 2.45Mt of very soft unconsolidated sand. Some infill drilling would be required to raise this resource estimate to the Indicated Level (JORC Code)

MHA has now been asked by Temco to supply two separate bulk samples of quartzite from this area to determine its suitability in the manufacture of Ferro – silicon at the Temco plant in Bell Bay.

The first of these test samples is of 1000 tonnes which will be used to determine the furnaceability of the material at a trial scale and to determine the optimum settings for a full scale furnace run of 4000 tonnes of quartzite. The bulk samples are currently being mined and shipped to Temco.

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1.0 INTRODUCTION

RL 1/2005 was applied for by Mineral Holdings Australia Pty Ltd on 21th Feburary 2005 and was granted on 15th June 2005. This is the Annual Report for year three of the licence. There was no report for 2005 as no work was carried out during the first year of the Licence.

RL 1/2005 covers the site of the Thomas Mountain Silica Resource which was originally covered by CML 8M/1989 and 1W/1088. Under its policy of revoking non performing mining leases Mineral Resources Tasmania suggested that a Retention Licence would be a more appropriate title for the marketing and industrial testing activities currently being pursued by MHA. Consequently Rl1/2005 was granted and the mineral leases cancelled.

The Thomas Mountain Mine and prospect occurs in the northern Dip Range about 25 km south-west of Wynyard and 20km south-east of a deep water harbour at Port Latta. Access is via the township of Montumana on the Bass Highway, 25 km west of Wynyard, thense 6 km south along Montumana and Newhaven roads to a turn-off just east of Hogarths Creek.

Over the past several years, MHA has had discussions with a number of industrial companies, within Australia and overseas, as potential customers or developers of the deposit. There has been considerable interest in the potential for producing “frac” sands from the site and renewed interest in the area as a source of fine silica sand for the glass and specialized silica products.

Bulk samples of quartzite are currently being taken for full scale furnace trials at Temco Bell Bay

2.0 GEOLOGY

Resources of high grade quartzite have been reported in various government publications as occurring within the Proterozoic rocks of north- west Tasmania. The better quartzite occurred within the Detention Quartzite sub-group and rocks of this sub-group underlie most of the licence area..

Gee(1971) described the Proterozoic sequence within the Rocky Cape Group from youngest to oldest as – the Jacob Quartzite (1130m in thickness), the Irby Siltstone (760m) and the Detention Sub-group (1400m). Gee suggested The Detention Sub-group contained about 10% siltstone in beds from a few metres to more than 80 metres in thickness. The Rocky Cape Group, in turn, overlies the Cowrie Siltstone which was at least 2400m in thickness.

Structurally the Detention Quartzite is folded into a tight series of anticlines and synclines with north-east trending and dipping axes with folds becoming overturned in the east resulting in north-west dipping beds at 45 degrees or above.

Gee (1971) described the quartzites as uniformly fine grained orthoquartzites with 99% quartz grains and a granular to glassy texture depending on the degree of cementation by silica. Turner (1989) on the other hand preferred to call the mature, quartzose, sandy sediments quartz arenites and attributes their variable physical character as mostly due to variable silicification and occasionally to metamorphism.

The silica resources currently outlined in the licence are 0.35Mt of very hard, silicilied sandstone or quartzite, 1.55 Mt of hard sandstone, 0.65 Mt of poorly consolidated or soft weathered sandstone and 2.45 Mt of unconsolidated sand. The potential uses of the resources include silicon metal, silica sand and quartzite for the chemical, metallurgical, glass petroleum and coal seam gas industries.

3.0 PREVIOUS EXPLORATION AND EVALUATION

There has been a long history of exploration by MHA and a series of joint venture partners for a wide range of silica products at Thomas Mountain. Details of that work were provided in the 2007 report.

In 1993/4 MHA developed 42 hammer drill holes along 8 sections for 666m in the area SW of Hogarths Creek. This has allowed a resource estimate to be made for an area of about 25 Ha extent to a depth of 10 metres extending south- west of the Quarry site. (Duncan (2005) estimated an inferred resource of **5 million tonnes** of siliceous material in the area just south of Hogarths Creek which breaks down to –

0.35 Mt of very hard, silicified sandstone,
1.55 Mt of hard sandstone,
0.65 Mt of poorly consolidated, soft sandstone and
2.45 Mt of very soft sand

Duncan suggested some infill drilling would be necessary to lift the resource to the Indicated level of the JORC Code. He also suggested a significant increase in resource was likely at depth and along strike to the NE and SW with an inferred 20 Mt of high grade sand and sandstone available as a conservative figure in the area of the Retention Licence.

In recent times considerable effort was put into testing the unconsolidated sand from Thomas Mountain as a propping agent in oil drilling. Dip Range sand was tested by **Stim Laboratories, Halliburton Services and Dowell Schlumberger** of the USA and **Santos and Amdel** in Australia. Tests were carried out on the 20/45 size range (US screen) which is the -850 to +420um fraction. Dip range sand is a fine / medium grained sand with a median value of about 250um with about 50% in the 20/45 size fraction

As summarized by Stim, the Dip Range sample passed the size analysis, the acid solubility test and the turbidity test but was slightly below standard for shape factor, grain clusters and crush resistance tests for deep wells. From the Amdel tests, it is found that the sand grains have a dramatic decrease in crush resistance at about 4000 psi which would, according to Halliburton, restrict the use of the sand to shallow wells where less than 1200 psi is required in the recovery of methane gas from coal seams.

4.0 CURRENT EXPLORATION AND MARKETING

MHA has been asked by Temco to supply two separate bulk samples of quartzite from Thomas Mountain to determine its suitability in the manufacture of Ferro – silicon at the Temco plant in Bell Bay.

The first of these test samples is of 1000 tonnes which will be used to determine the furnaceability of the material at a trial scale and to determine the optimum settings for a full scale furnace run. Mineral Resources Tasmania indicate that this sample is within the size limit that can be taken from an Exploration Title (Exploration Licence or Retention Licence) and as the material is to be taken from an existing quarry site they have given their approval to take the initial sample and the material is currently being dispatched to Temco.

The second bulk sample required by Temco is for a full furnace test and 4000 tonnes of quartzite crushed to specific size fractions is required. However a sample of this size, even though it is only for test purposes, cannot be taken from an exploration title and can only be taken from within a Mining Licence. Mineral Holdings Australia Pty. Ltd. (MHA) has therefore been forced to apply for a Mining Licence (23M/2009ML) in order to supply the sample even though actual mining of the area will be entirely dependent on the success of the furnace trials and the negotiation of a satisfactory contract.

The application for a Mining Licence is not a simple matter and triggers all sorts enquiries and investigations. It is also a long and costly process and out of all proportion for the collection of a simple bulk sample which may or may not lead to an eventual mining operation. Mineral Resources Tasmania have recognised this and suggested a provisional grant of a Mineral Licence over the whole area of the Mining Licence Application (206 Hectares to cover the whole of the Quartzite resource) but will only give permission to take the sample from a very restricted area immediately around the existing quarry site (about 60 X 60 Metres) and for the material to be crushed to the required size fractions at an existing crushing site of 40 x 40 metres.

All the necessary legislative and environmental requirements have been fulfilled and at the present time about half of the required quartzite has been mined and shipped to Temco.

5.0 CONCLUSION

Marketing efforts by MHA have generated the request by Temco to carry out full scale furnace trials on Thomas mountain quartzite. It is hoped that once the trials have proved successful that full scale mining of the deposit will occur.

Considerable interest in the potential for the Thomas Mountain mine to produce proppant sands for the expanding coal seam methane industry has also been generated. Some 40 to 60% of the unconsolidated sand falls within the favourable 20 to 40 mesh size range and in a commercial operation the run of mine material could be screened to produce a +30mm fraction of metallurgical silica, a 20 to 40 mesh fraction of frac sand and a -40 mesh fraction for glass sand. The deposit is too coarse for silica flour.

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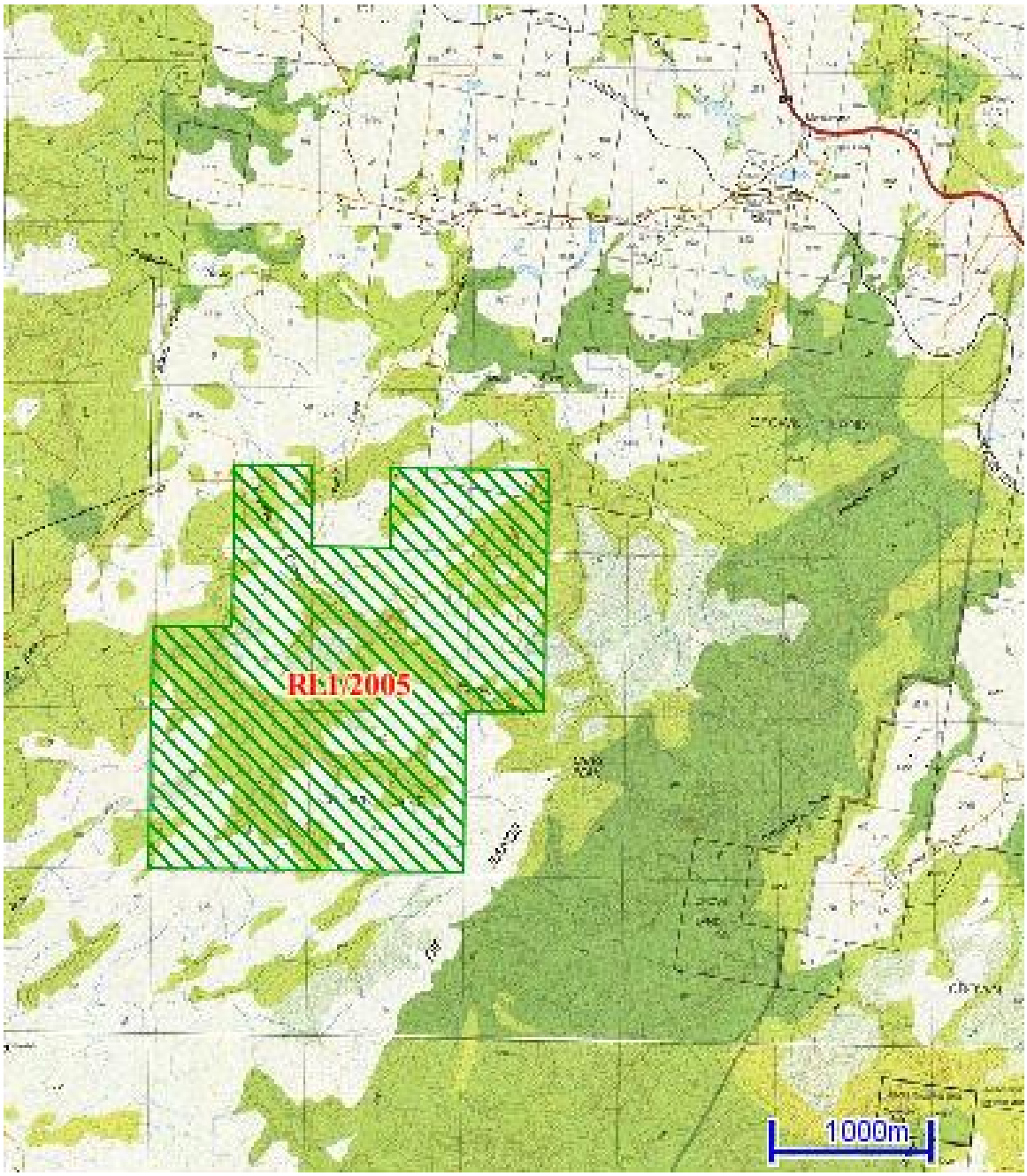
7.0 KEYWORDS

Dip Range, Thomas Mountain, Detention Subgroup, Rocky Cape Group, Sand, Quartzite, Silica Resources.

Location diagram RL 1/2005



PLAN 1 Location diagram RL 1/2005