

KING ISLAND

**SCHEELITE**



# **DOLPHIN PROJECT**

**RL 2/1998**

**ANNUAL REPORT 2010**

## **1. SUMMARY**

Retention Licence 2/1998 was granted over the identified resources remaining at the former King Island open-cut and underground mines near Grassy. The objective of the Dolphin Project is to reopen the former mine operation at Dolphin, which will deliver ore to a new adjacent processing plant for the production of scheelite concentrates for export.

Resources exist both as extensions of bodies mined in the former Dolphin open-cut and as mining remnants and extensions of bodies mined in the Dolphin underground mine.

A detailed Feasibility Study and Development Program and Environment Management Plan (DPEMP) were completed in late 2006. This was based on extending the former open pit operation.

To secure appropriate tenure to the project area, application was lodged in February 2006 for a 560ha Mining Lease, 1M/2006. The conditions of this lease have been determined, and the lease subsequently issued. Payment of bond monies are, however, still required before the lease is activated.

The mining lease falls largely within Retention Licence RL 2/1998 with small peripheral areas within contiguous Exploration Licences EL 19/2001 and EL 16/2002.

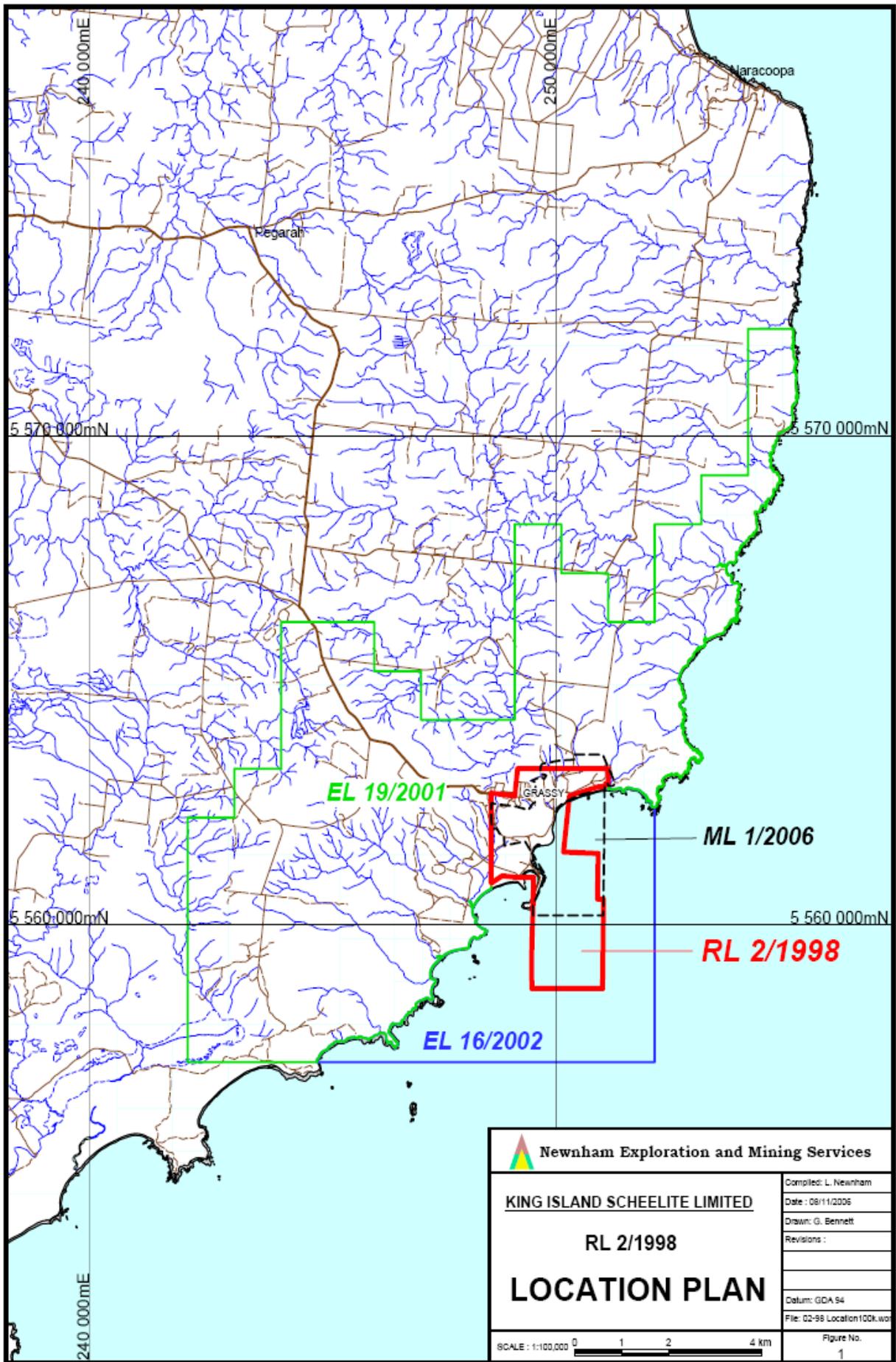
To date, approximately \$11 million has been spent (\$2 million in 2009/10) evaluating the redevelopment potential of these resources. Future work will focus on development of ML 1M/2006, but longer term resource extension opportunities exist on RL 2/1998 and the bordering Exploration Licences.

This project is currently a 50/50 joint venture between Australian Tungsten Pty Ltd (a subsidiary of King Island Scheelite Limited) and HNC (Australia) Scheelite Pty Limited (a subsidiary of Hunan Nonferrous Metals Corp Ltd). This joint venture is in the process of being terminated and a new strategic partner to be confirmed.

## **2. TENURE**

With the granting of ML 1M/2006 over most of RL 2/1998, the latter will now exist in discrete sections (see the map below). The southern section is totally off-shore and south of Grassy Harbour.

The Mining License Application, Retention Lease and Exploration Licences are beneficially held by Australian Tungsten Pty Ltd and HNC (Australia) Scheelite Pty Limited.



The joint venture owns land in the Grassy Township adjacent to the former open cut pit and has secured further land around the site necessary for the proposed redevelopment.

The remaining sections on the outskirts of Grassy are largely private or local council land.

### 3. EXPLORATION OBJECTIVES

The initial exploration objective on RL 2/1998 was to assess the commercial viability of remnant scheelite resources in and around the former Dolphin open cut and underground mines.

Scheelite mineralisation that exists in the area of the Dolphin mines dips in a broadly south eastern direction, towards and into Grassy Bay. Geological interpretation, supported by aeromagnetic survey work earlier, suggests mineralisation may be present in a broadly triangular area located between the Decline Fault and the Grassy River Fault. If so, there may be potential for a significant future underground mining operation. It is envisaged that the opportunity to extend further to the South East would be assessed by a conducting a drilling programme during the proposed initial mine life.

### 4. WORK COMPLETED 2009/10

During the year substantial work has been undertaken on;

#### Mine plan

After significant work undertaken on open cut options, an underground development plan has been developed which removes risk and uncertainty associated with open cut options and the need for sea walls. This improved the risk profile while generating acceptable financial returns.

#### Metallurgy

Detailed test work carried out in China demonstrated the ability to recover >90% scheelite from the ore at Dolphin. From this a revised flow sheet has been developed using whole ore flotation techniques.

#### Mill design

The processing facility and associated infrastructure has been redesigned and costed based on the revised flow sheet.

#### Feasibility

The financial viability of this project has been updated based on the abovementioned revisions to demonstrate an underground operation at Dolphin is viable before additional resources from Bold Head or down-plunge at Dolphin.

Total expenditure in 2008/09	\$1.9 million
Total expenditure in 2009/ 10	\$1.8 million

A key part of the work undertaken this year revolves around a revised resource and reserve and underground development plan at Dolphin, details of which are outlined below.

The Resource and Reserve estimates at Bold Head and Dolphin were reassessed based on an underground redevelopment plans for both mines. Refer to attachment - Ore Reserve Statement for Dolphin Orebody (April 2010) Alan Fudge & Dolphin Mine Mineral Resource Estimate (April 2010) Tim Callaghan.

An underground redevelopment plan was developed for Dolphin and potential to mine Bold Head also reviewed during the year. Refer to attachment - Underground Mining at the Dolphin Mine on King Island (March 2010) Alan Fudge.

A thorough review of the resource potential in the Grassy Mine area was undertaken during the year with encouraging results demonstrating the potential for exploration activities to provide additional ore at both Dolphin and Bold Head. Refer to attachment - Resource Potential of the Grassy Mine Area (Feb 2010) Tim Callaghan.

## **5. WORK PLANNED 2010/11**

The revised development plan involves a programme with total capital expenditure estimates of \$90 million over a 30 month period which could see first production in the second half of 2013.

This would see an underground operation delivering 300,000tpa of ore at average grades of 1.3% WO<sub>3</sub> to a new processing facility which is expected to produce some 3,300 tonnes of WO<sub>3</sub> per annum.

This development schedule requires detailed design, procurement and construction of a new mill and associated infrastructure. Current environment & associated approvals require amending and the former mine is to be dewatered and the decline rehabilitated.

In addition we have plans to further improve the viability of this project through additional high grade ore. This will be achieved by incorporating the resource at Bold Head and demonstrating down-plunge extensions of the Dolphin ore body.

The order and priority of the next stage of our work programme, however, will be confirmed as we work through these plans with a new strategic partner in the coming months.