



Tim Callaghan – Resource and Exploration Geology
3 Main Rd Penguin 7318 ph. 0428 888 896 email: timcallaghan@netspace.net.au
ABN 50886857181

EL16/2002
ANNUAL AND FINAL REPORT, 2015
KING ISLAND
NW TASMANIA

Prepared for: Scheelite Management Pty Ltd.

Tim Callaghan, April 2015

EXECUTIVE SUMMARY

EL16/2002 is considered an integral component of the tenement package required for the development of the King Island Scheelite Project. The EL covers 17km² of possibly prospective ground around the Grassy Granite southeast of the Dolphin Mine below the sea.

During 2014, King Island Scheelite (KIS) have continued to revise the 2012 DFS with the aim commencing operations through initial production from extensions to the Dolphin open pit and the construction of a lower cost gravity concentration plant. It is anticipated that the mill will be upgraded to the full DFS design and the Dolphin Mine rehabilitated after the operation starts.

RL2/1998 is to be relinquished after the granting of ML1/2006. The Dolphin Open Pit was dewatered during 2014. An infill diamond drilling program was completed during 2014/2015 in the base of the Dolphin Pit.

Limited direct exploration work was completed on EL16/2002. Due to the offshore location of EL16/2002, no effective work is possible until the Dolphin Mine is rehabilitated and access to the lower mine extended. Exploration drilling of the tenement package is only possible once mining operations have commenced. As no work can possibly be completed on the EL in the near future and no other parties will be in a position to complete any meaningful exploration, the board of KIS have decided to relinquish the EL.

The project work program for 2014 is scheduled to include mine optimization, mill engineering and infrastructure development.

CONTENTS

Executive Summary	2
1 Introduction	4
2 Geology	6
3 Exploration Targets EL16/2002	11
3 Work Completed	12
4 Proposed Work 2015	13
Additional Notes	14
References	15

LIST OF FIGURES

Figure 1	King Island Project Geology, Tenements and Major Prospects	6
Figure 2	Regional Geology Northwest Tasmania	8
Figure 3	Stratigraphic column of the Grassy Group	11

1 INTRODUCTION

The King Island Scheelite Project is located in the southeastern corner of King Island, Tasmania (Figure 1). Project tenure includes a Mine Lease (1M/2006), a Retention License (RL2/1998) and two Exploration Licenses (EL19/2001 and EL16/2002). The full tenement package is integral to development of the King Island Scheelite Project.

The Dolphin Mine located on 1M/2006 was originally operated by Geopeko Ltd. along with the satellite Bold Head Mine located several kilometers to the north on EL19/2001.

The Dolphin and Bold Head Scheelite Mines operated intermittently since their discovery and start up in 1920 until the 1990's, with several forced shutdowns due to low tungsten prices. The site was decommissioned and rehabilitated in 1990.

KIS have been investigating the potential of re-opening the mines. Initial investigations into the viability of an open cut and seawall were inconclusive and the focus has changed to rehabilitation of the underground workings and production from remnant resources. KIS completed a definitive feasibility study into a 350ktpa mine and processing facility producing 5700t of concentrate per annum over an 11 year mine life in early 2012.

Project funding has proved to be difficult in the current financial climate and KIS are revising the project to a staged start up commencing with a gravity concentration plant and several low cost open cut mines in the first few years of operations. Ramp up to full production is anticipated in year three with dewatering and rehabilitation of the Dolphin Mine.

Mine rehabilitation and mill construction are scheduled to commence within twelve months of securing full project funding.

Resource estimation of the Dolphin and Bold Head Deposits and historic tailings storage facility (TSF) have been completed by KIS and form the basis of the King Island Scheelite Project (Table 1).

TABLE 1. KING ISLAND SCHEELITE PROJECT RESOURCES			
	MTonnes	WO₃	Tonnes WO₃
Dolphin	0.50% WO ₃ cutoff		
Indicated	7.06	1.06	74,890
Bold Head	0.50% WO ₃ cut off		
Indicated	1.50	0.93	13,950
Inferred	0.15	1.22	1,830
Total	1.65	0.96	15,780
TSF	0.08% WO ₃ cut off		
Measured	2.70	0.17	4,590
Total	11.41	0.83	95,260

Technical studies associated with the Definitive Feasibility Study that have now been completed include:

- Resource estimation
- Mining studies

- Reserve estimation
- Metallurgical testwork
- Process flow sheet design
- Cost estimates and construction plans
- Environmental management plan
- Negotiations with potential market off-taker
- Financial modeling
- Negotiations with potential project funding providers
- Resource extension drilling

Work over the past year focused on the feasibility of commencing mining operations through initial open cut operations on the Dolphin Pit. Resource definition and extension drilling programs were conducted at the Dolphin Mine.

Limited direct exploration work was completed on EL16/2002.

It is anticipated that exploration will focus on resource extension and regional exploration once project funding is completed and construction has commenced in late 2014.

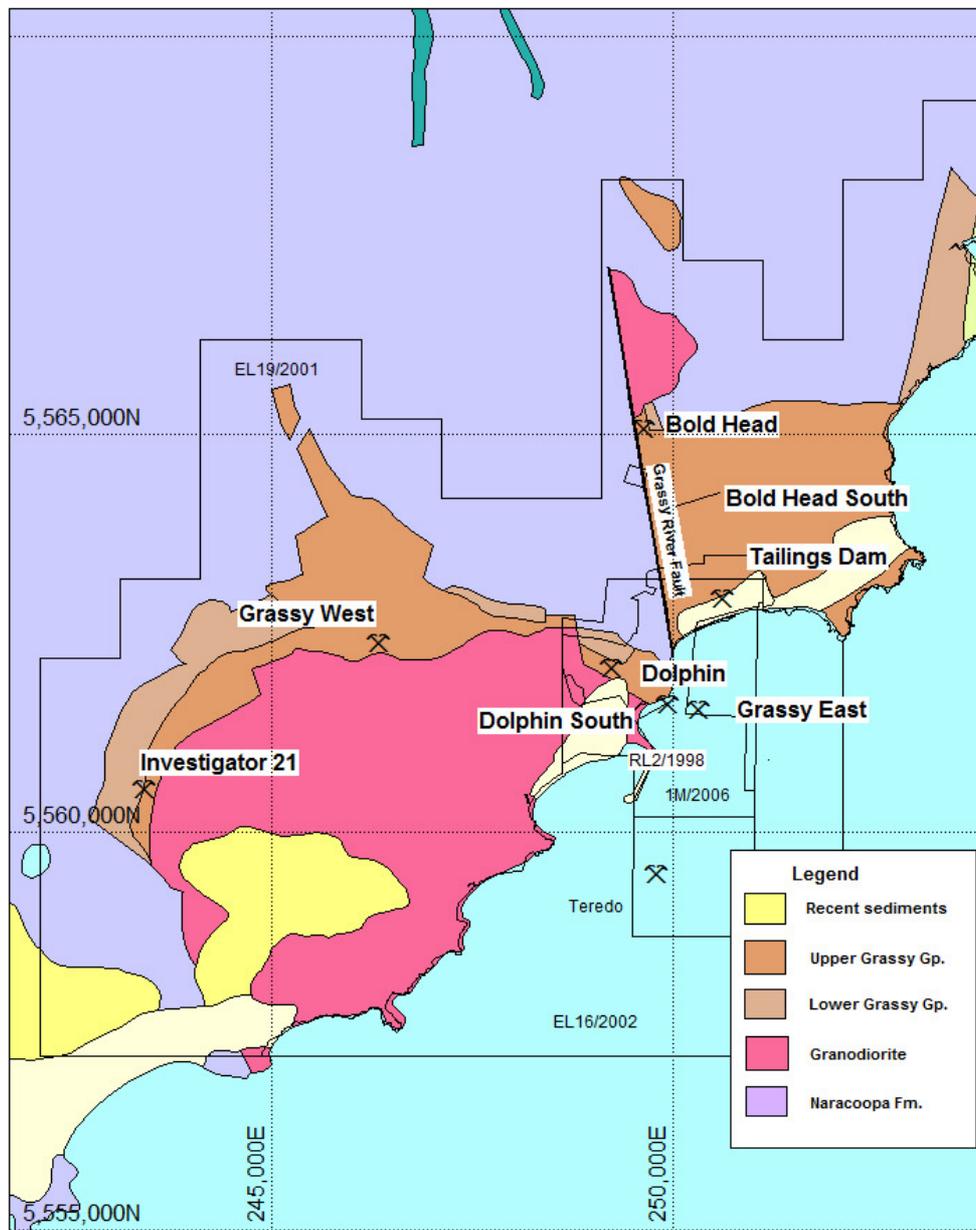


Figure 1. King Island Project Geology, Tenements and Major Prospects.

2 GEOLOGY

The regional geology of King Island is best described in Tasmanian Geological Record 2007/02, *Some Notes on the Geology of King Island* (Calver, 2007). Much of the geology described in this section is summarized from this publication (Figure 2).

The geology of King Island consists primarily of Proterozoic rocks with lesser Devonian Granites and extensive wind blown Pleistocene to Recent sand cover. The Proterozoic Geology of the eastern half of the island (hosting the Bold Head and Dolphin WO₃ deposits) is distinctly different from the geology of the western half. The relationship between the western and eastern halves remains problematic.

The western half is dominated by the Mesoproterozoic (1300Ma) Surprise Bay Formation. The Surprise Bay Formation is dominantly a N-S striking regionally metamorphosed amphibolite grade meta-sedimentary unit with minor mafic intrusives. The western margin of the Surprise Bay Group was intruded by a 790Ma granite body (Calver, 2007) post dating the 760Ma Wickham Orogeny (Cox, 1989, Turner *et. al.* 1998).

The Eastern half of the Island is dominated by the (1000-750Ma) Naracoopa Formation which appears to be a correlate of the Cowrie Siltstone in NW Tasmania (Calver, 2007). The Naracoopa Formation consists of a thick succession of relatively unmetamorphosed shale, siltstone and fine grained muscovite-quartz sandstone. Along the Southeast Coast the siltstone is conformably overlain by the 580Ma Grassy Group which is considered a correlate of the Togari Group in NW Tasmania, (Calver, 2007).

The Grassy Group in the City of Melbourne Bay area is well described by Calver (2007) and Meffre *et al* (2004). A summary of the Grassy group stratigraphic sequence is described below:

Cottons Breccia - A basal unit of polymict cobble to boulder diamictite.

Cumberland Creek Dolostone - Calcareous sediments, shale with limestone/dolomite inter-beds. (Host Horizon for the King Island Scheelite Mineralisation).

Yarra Creek Shale - Planar laminated shale with rare volcanoclastic interbeds.

Grimes Intrusive Suite - Gabbroic intrusive sills of andesitic composition.

City of Melbourne Volcanics - Tholeiitic pillow lava, peperite and volcanoclastic sandstone.

Shower Drop Volcanics – Picritic, high MgO pillow lava and hyaloclastite.

Bold Head Volcanics – Tholeiitic basalt, volcanoclastic sandstone and conglomerate.

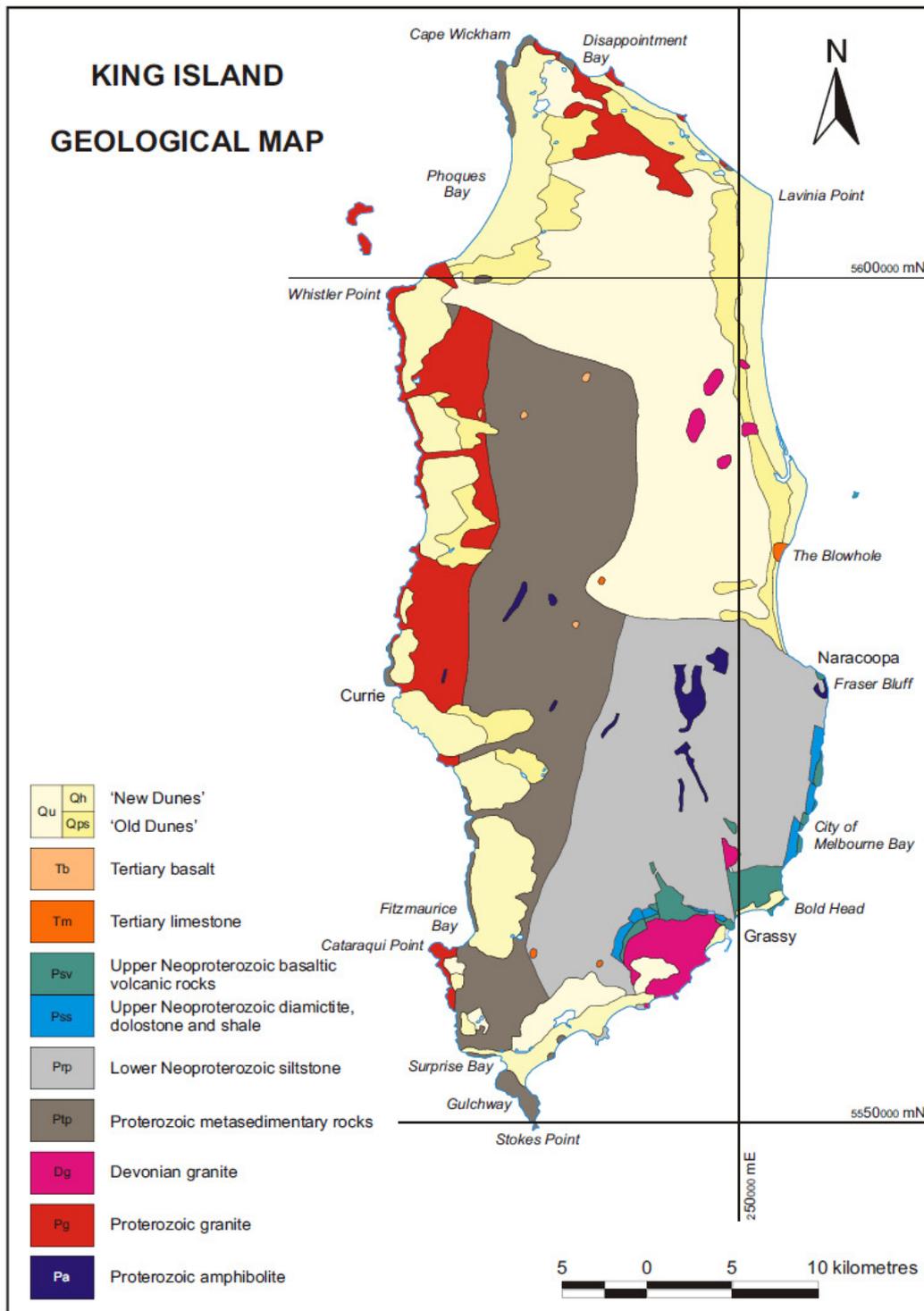


Figure 2. Regional Geology of King Island, (Calver 2007). Coordinates GDA94.

Three granite bodies, the Grassy, Bold Head and Sea Elephant plutons intrude the Proterozoic sediments on the southeast coastline of King Island. The intrusions are classified as I-type monzogranite-granodiorite (Calver, 2007). The Bold Head Granite may be a sliver of the larger Grassy granite, separated by the N-S trending Grassy River Fault (Figures 1 and 2).

The Bold Head Granodiorite is porphyritic with large pink k-feldspar phenocrysts. The mineralogy consists of quartz, k-feldspar, plagioclase, biotite and amphibole with minor apatite, allanite, sphene, magnetite and zircon.

Scheelite skarn mineralisation has formed within the metamorphic aureole of the Bold Head and Grassy Granodiorite plutons where they have come into contact with the calcareous sediments and carbonates of the Lower Grassy Group Cumberland Creek Dolostone. Both the Bold Head and Grassy mineralisation is hosted in a similar stratigraphic sequence, although the carbonate units appear to be thicker in the Grassy area (Danielson, 1975, Figure 2). Mineralisation has formed by selective metasomatism, mainly within and immediately adjacent to carbonate horizons. The deposits formed over a 100-200m sequence of complex skarn mineralogy located in the lower part of the Grassy Group, with two main host horizons known as B and C lens hosted in carbonates of 10-30m thickness separated by a similar thickness of skarn altered volcanic sediments. Mineralisation appears to have occurred where carbonates come into direct contact with the intrusion, or adjacent to brittle faults tapping into the nearby intrusion. Mineralisation grades increase towards major structures such as the Central, Decline and Grassy Faults at Grassy and the Number 2 and Boundary Faults at Bold Head.

Mine sequence rocks have been intensely contact metamorphosed and metasomatised and are described in Geopeko drill logs and maps by the resultant skarn mineralogy and not the stratigraphic protolith described in the regional geology. Geopeko logging codes include:

DDH logging codes

Code	Geology
um	Upper metavolcanics
bh	Biotite-actinolite hornfels
pbh	Pyroxene-biotite hornfels
pgh	Pyroxene-garnet hornfels banded pyroxene andradite skarn (+/- Scheelite)
gh	Garnet hornfels, andradite skarn (+/- Scheelite)
ch	Marble
bfb	Banded footwall beds, interbedded marble and biotite-pyroxene grossularite skarn (+/- garnet, Scheelite)
lv	Lower metavolcanics

Mineralisation occurs predominantly as coarse Scheelite with lesser Powellite in either garnet-hornfels, pyroxene garnet hornfels and garnet-pyroxene altered banded footwall beds.

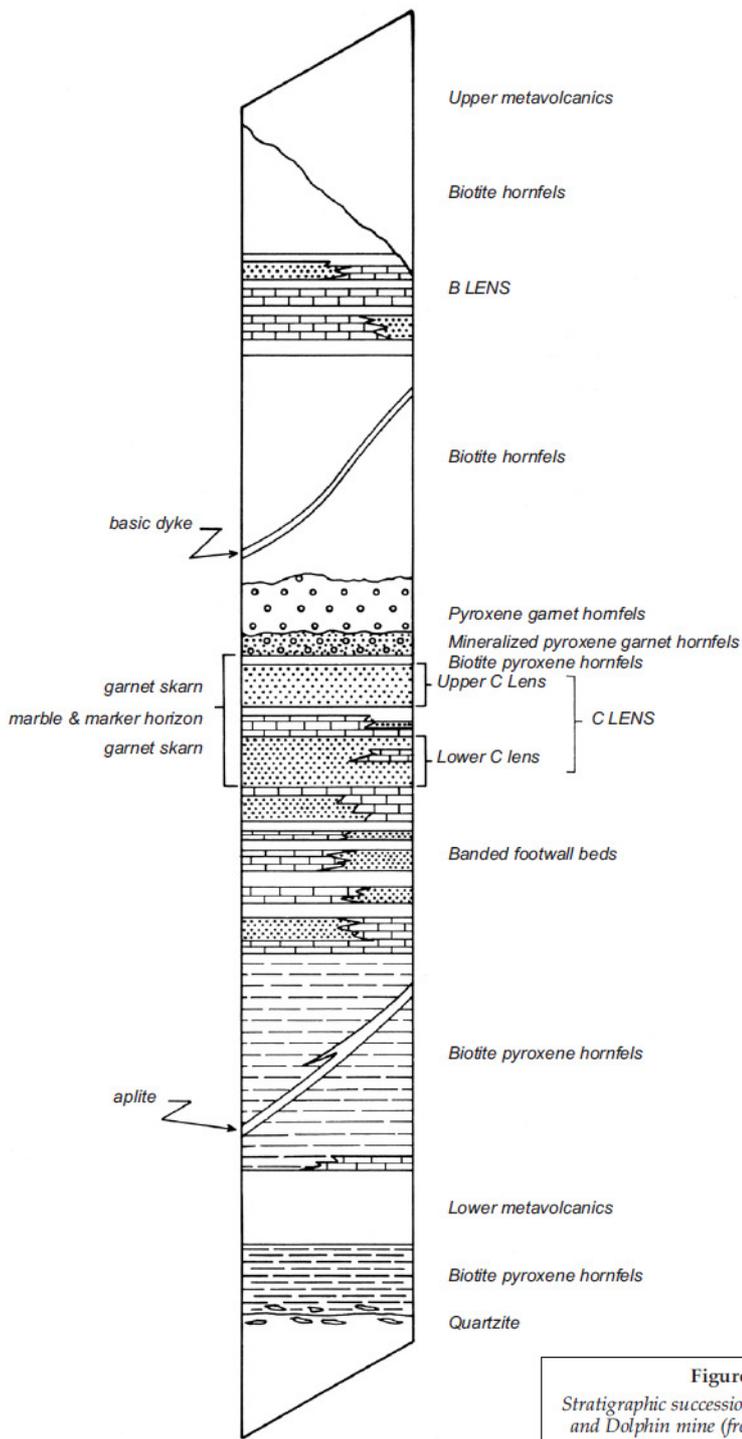


Figure 4
 Stratigraphic succession, No. 1 Open Cut
 and Dolphin mine (from Brown, 1990).

Figure 3. Stratigraphic column of the Grassy Group host sequence in the Grassy open cut (from Brown, 1990). The sequence is very similar to the Bold Head sequence 3km north.

3 EXPLORATION TARGETS EL16/2002

EL16/2002 hosts two conceptual scheelite skarn targets southeast of the Dolphin Mine the Teredo Prospect and Grassy East (Figure 1).

The Teredo Prospect is a conceptual exploration target postulated by Brown (1981) located 1-2km further south along the eastern side Grassy Fault (Figure 1). Aeromagnetic images suggested Grassy Group volcanics are present in the area. One interpretation of the data suggests the Decline Fault swings southwest controlling the eastern margin of the granite. This area is very difficult to test and will require exploration from underground mine infrastructure. However it remains a promising conceptual target and, if proven may significantly extend mine life as the area is large.

The Dolphin South extensions are vital to the exploration of this area. If additional resources are defined at Dolphin South, a drill drive/ventilation drive can be justified to the south, providing access for exploration of this area.

Dolphin East (Figure 4) is a similar conceptual target to the Bold Head South target, with a possible host horizon and granodiorite position located on the eastern downthrown side of the Grassy Fault. As the prospect is located out to sea it is a very difficult area to assess. Extending one of the Dolphin South exploration holes to approximately 1km depth would provide vital information testing this conceptual target. If the concept is confirmed, the area will be a significant area for resource delineation in the longer term.

The target is reminiscent of the Rendeep Project completed a Renison Bell in the 1990's which added significant high grade resources through a focused exploration program on the downthrown side of the Federal Basset Fault. The potential resource of this area is unknown but could conceivably be extensive along the edge of the Grassy River Fault to the north and south.

There is a very real possibility that the Bold Head Mine represents the fault offset eastern side of the Grassy Pluton and therefore the Dolphin East orebody. If this is the case then there is little likelihood of additional resources directly east of the Dolphin Mine and Grassy River Fault. The South Bold Head target (See Section 4.2) is therefore a much better target for mineralisation east of the Grassy River Fault. It is also far more accessible for exploration.

The Dolphin East area is possibly accessible from the Dolphin Mine infrastructure lower levels but would require a designated drill platform extending east towards the Decline Fault.

EL16/2002 is of strategic importance to the King Island Scheelite Project and maintaining tenure of the EL is important for the longevity of the King Island Scheelite Project.

4 WORK COMPLETED 2014

No exploration work was directly undertaken on EL16/2002 during 2014. Work completed on EL16/2002 included in previous reports during the tenure of the EL is tabulated below:

Report Date Work Completed

2004	No work Undertaken
2005	No Work undertaken
2006	No work undertaken
2007	High Resolution Airborne Magnetic-Radiometric Survey
2008	Geophysical Interpretation
2009	No work undertaken
2010	No work undertaken
2011	Geological Interpretation and Targeting
2012	No work undertaken
2013	No work undertaken
2014	No work undertaken

Following on from the finalization of the DFS in 2012 KIS were unable to secure funding from financiers or off take partners. A study into a staged start up involving low cost open cut mining and a gravity only concentration plant is currently underway. This has required some conceptual pit modeling, revised flow sheet design and definition drilling. Work was undertaken on both EL19/2006 and RL2/1998 during the past year.

Exploration and technical studies specifically conducted on the Dolphin project during 2014 involved

- Resource Estimation
- Dewatering of the Dolphin Open Cut
- Resource definition Dolphin Open Cut
- Pit designs for the Dolphin Mine.
- Reserve Definition
- Revised flow sheet design
- Metallurgical testwork

5 PROPOSED WORK PROGRAM 2015

Due to the offshore location of EL16/2002, no effective work is possible until the Dolphin Mine is rehabilitated and access to the lower mine extended. Exploration drilling of the tenement package is only possible once mining operations have commenced. As no work can possibly be completed on the EL in the near future and no other parties will be in a position to complete any meaningful exploration, the board of KIS has decided to relinquish the EL.

The project work program for 2015 is scheduled to include:

- Update resource model.
- Finalize Dolphin pit design and reserve revision.
- Review mine schedule and reserves.
- Finalize metallurgical testwork and flow sheet design
- Modify DFS for staged start up.

With the focus on construction and commissioning next year a limited exploration program is anticipated for 2015, though some historic data collation and targeting in preparation for future exploration drilling programs is likely. Exploration drilling of the tenement package is expected to resume once operations commence.

ADDITIONAL NOTES

LIMITATIONS AND CONSENT

The report is provided to the King Island Scheelite Project in the context of an Annual Report and should not be used or relied upon for any other purpose.

This report has been prepared using information available to the Author at the time of writing. The opinions stated herein are given in good faith and with the belief that the basic assumptions are factual and correct and the interpretations reasonable.

This report is not intended for the use as a public document nor, in whole or in part, in a public document without written consent to the form and context in which it appears.

COMPETENT PERSON AND JORC CODE

The information within this report that relates to Mineral Resources and Reserves and Exploration Results is based on information compiled by Mr Tim Callaghan who is a consultant geologist working for King Island Scheelite. Tim is a Member of the Australasian Institute of Mining and Metallurgy (AUSIMM) and has sufficient experience in the styles of mineralisation and types of deposits in consideration to qualify as a competent person according to the 2004 edition of the Australasian Code for reporting Exploration Results, Mineral Resources and Ore Reserves (the JORC Code). He consents to the inclusion of this material in the form and context in which it appears in this report.

The information within this report that relates to Mineral Reserves is based on information compiled by Consultant Mining Engineer Mr Alan Fudge of Polberro Consulting, who is a Member of The Australasian Institute of Mining and Metallurgy ("AusIMM") and has a minimum of five years experience in the estimation, assessment and evaluation of Mineral Reserves of this style and is a Competent Person as defined in the JORC Code (2004). This announcement accurately summarises and fairly reports his estimations and he has consented in writing to this review in the form and context in which it appears.

STATEMENT OF INDEPENDENCE

Tim Callaghan has no material interest or entitlement in the securities or assets of the King Island Scheelite project or any associated companies.

All coordinates in this report are recorded in GDA94 Zone 55

REFERENCES

- Boardman, 2011. Environmental Effects Report, Amended Mining Operations of the King Island Scheelite Mine, Grassy King Island. October 2011. *Unpublished consultants report for King Island Scheelite.*
- Brown, SG, 1981. Six Monthly Report to the Mines Department, Report No KI/81/5 *Unpublished company report for Warman Services Ltd.*
- Callaghan, TJ, 2011a. King Island Tailings Mineral Resource Estimation. *Unpublished consultants report for King Island Scheelite.*
- Callaghan, TJ, 2011b. King Island Tailings Mineral Reserve Estimation. *Unpublished consultants report for King Island Scheelite.*
- Calver CR, 2007. Some Notes on the Geology of King Island. *Tasmanian Geological Survey Record 2007/02.*
- Cox, S F, 1989. 'Cape Wickham' in Burrett, CF and Martin CF, (editors) Geology and Mineral Resources of Tasmania, *Special Publication Geological society of Australia*, vol15, pp26 - 27
- Danielson MJ, 1975. King Island Scheelite deposits. In Knight CL (editor), Economic Geology of Australia and Papua New Guinea. *Monograph Serial Australian Institute of Mining and Metallurgy.*
- Fudge, A, 2011. Mining Inventory and Grade Tonnage Estimates from a 0.50% WO3 Perimeter Data Set. *Unpublished consultants report for King Island Scheelite.*
- GHD, 2011. Report for King Island Feasibility Study, Tailings Reclamation and Disposal. *Unpublished GHD Report 55371 for King Island Scheelite.*
- GR Engineering, 2011. Dolphin Project Process design. 11806 00041 Dolphin Project FS_REV A – RES. *Unpublished GR Engineering Report for King Island Scheelite.*
- Meffre S, Direen NG, Crawford AJ, and Kamenetsky V, 2004. Mafic Volcanic rocks on King Island, Tasmania: Evidence for 579Ma break up in East Gondwana. *Precambrian research*, vol. 135 pp177 – 191.
- Turner NJ, Black LP, and Kamperman M, 1998. Dating of Neoproterozoic and Cambrian Orogenies in Tasmania. *Australian Journal of Earth Sciences*, vol 45, pp 789 – 806.