

**MOORINA EL 22/2002  
NE TASMANIA**

**ANNUAL REPORT  
FEBRUARY 2003 – FEBRUARY 2004**

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July 2004

Annual Report – Moorina  
A R Nicholas & S Summers



CREEKCO MOBILE BULK SAMPLING/PRODUCTION PLANT UNDER CONSTRUCTION

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<u>No</u>	<u>TITLE</u>	
1	LOCALITY OF EL	SCALE : AS SHOWN ON MAP



## **SUMMARY**

Exploration of the Moorina EL 22/2002 during 2003-2004 was confined to site reconnaissance and detailed checking of historical records. The field work confirmed the need to conduct systematic bulk sampling of the alluvium at a number of sites within the EL. The historical records covering the EL strongly indicate that it may contain significant tonnages of low-grade, but economically recoverable, alluvial cassiterite. A decision was therefore made to design and construct a bulk sampling/production plant (see photograph, page two) that could be used to accurately assess the economic viability of the cassiterite contained within the EL.

At time of writing, construction of the bulk sampling/processing plant is nearing completion. Sampling is scheduled to begin within the EL during summer of 2004-2005. The optimum number of samples, their location and size is currently under consideration.

## **INTRODUCTION**

The Moorina EL 22/2002 has a total area of approximately five square kilometers. It is about five kilometers east of the township of Derby in north-east Tasmania near the old township of Moorina. Tin mines in the past processed alluvial wash that was removed from the Weld, Frame and Ringarooma Rivers and surrounds as well as the Echo Deep Lead.

## **TENURE**

The EL is currently held by Alistair Roy Nicholas (50%) and Shane Summers (50%). It was granted on the 21<sup>st</sup> February, 2003. Mr. Summers has formally agreed to transfer his shareholding to Mr. Nicholas and an application for the transfer has been lodged with MRT Tasmania.

The EL is comprised of a mix of Crown Land, State Forest, Informal Reserves, Private Land, and Public 'Crown' Reserve.

## **PREVIOUS MINING AND EXPLORATION**

George Renison Bell discovered tin near Derby in the vicinity of the Cascade River, just upstream of the EL in January 1875. This led to the discovery of tin at Moorina by Benjamin Brooks and his brothers and the establishment of the Native Youth and Weld Mines. The area is dotted with old diggings with the most recent mining having taken place on the Ringarooma River section of the EL by Blue Metal Industries in 1974. Unfortunately, despite some very encouraging grades, up to sixteen ounces of tin per cubic yard, production soon ceased. This was caused primarily because of difficulties experienced by BMI in mining the alluvial wash from within the river. The type of processing circuit used by BMI may have exacerbated these difficulties and contributed to making the project uneconomic.

## **GEOLOGY**

The rocks within the EL are Mathinna Group beds of early Ordovician to early Devonian age, substantially covered by Tertiary sediments and quartz-rich detritus from weathered granite. The Mathinna Beds are considered to represent an essentially uninterrupted period of greywacke-shale (flysch) sedimentation. The area is characterized by rolling hills, regrowth forest and grass-covered alluvial flats, with the latter being used nowadays, predominantly for grazing cattle. The Ringarooma River centrally traverses the EL.

## **DISCUSSION**

A programme of systematic bulk sampling is planned to be undertaken during the coming summer of 2004-5. A purpose-built bulk sampling plant has been designed and built for the project. It should enable rapid estimates of recoverable alluvial cassiterite (tin oxide) grades and inferred/probable tonnages to be determined for each of the sites of interest. Costs to date of building the plant amount to several hundred thousand dollars.

The final decision on the exact location for each of the bulk samples and the optimum size for each of them will be made shortly. The samples will be removed from the areas of interest and transported by truck to a nearby mining lease (most probably ML 14M/1998 or 7M/2001) for processing by the bulk sampling plant. The gangue material will be returned to each site of extraction by truck and the original ground covering replaced.

G R LEAR

## REFERENCES

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