

Rockwell Minerals Limited

EL15/2011

Betts Ck (8kms S of Luina)

Annual Report for the period 13 September 2012  
to 13 September 2013.

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Attachments: Map of the Exploration License

## 1.0 Introduction

This report details all development work undertaken on Exploration License 15/2011, "Betts Ck (8kms S of Luina)" during the Annual Period 13<sup>th</sup> September 2012 to 13<sup>th</sup> September 2013.

Exploration License 15/2011, "Betts Ck (8kms S of Luina)" covering an area of 34km<sup>2</sup> lies in Western Tasmania and is situated to the west of Waratah and to the south of Luina. The license area is currently inaccessible, but all future access will be via the sealed Waratah-Savage River road and then via a series of old sealed and unsealed mine access and forestry roads/tracks and then via .

The terrain is dominated by steep shrub and tree covered slopes

There has been minimal work on the tenement during the last 12 months. The only expenditure that occurred was the hiring of a helicopter to view from the air the extent of the lease and to understand environmental impacts on the lease due to the Whyte River tailings leach upstream, and also to understand the accessibility on the "plateau" in the centre of the lease for potential drilling.

## 2.0 Tenure

Exploration license 15/2011 (Betts Ck (8kms S of Luina) covering an area of 34km<sup>2</sup> was granted to Rockwell Minerals Ltd on 13<sup>th</sup> September 2011 for a period of 5 years.

## 3.0 Previous Exploration

There has been no previous exploration completed on this license area. The reason Rockwell Minerals generated this license was because of the existence of the Cleveland deposit.

The Cleveland deposit was discovered in 1898. Initial production of the surficial ore commenced in 1908, and ceased in 1914 after production of 295.5 tonnes of cassiterite. Tributing continued until 1917, during which time a further 48 tonnes were produced. Aberfoyle commenced mining in 1968, and mining was ceased in early 1986, primarily due to the collapse of the tin price.

At the cessation of the more recent mining activity, approximately 7 million tonnes of ore assaying 0.82% Sn and 0.35% Cu had been processed.

Various reports show that a significant resource remains in the deposit, with Measured and Indicated resources of 5.2 million tonnes @0.70%Sn and 0.31%Cu and Inferred resources of 1.3 million tonnes @0.72% and 0.22% Cu at a 0.35% Sn cut-off. In addition, a large resource known as the Foley Zone located at the lower levels of the mine had been drilled and is reported to contain 3.8 million tonnes @0.28% WO<sub>3</sub> at a 0.2% cut-off. Data for these estimates has been sourced to archived reports currently stored at Burnie Labs and available online on the MRT website. The most important document for confirmation of this data is Aberfoyle's "close-out report".

## 3.0 Previous Exploration

It is understood that no previous exploration has been completed on this Exploration License area.

#### 4.0 Regional and Local Geology

This tenement is directly to the south of the previous Cleveland mine. The Cleveland ore bodies occur in a steeply dipping northeast trending succession of arenaceous, argillaceous, and chemical sediments and mafic volcanic rocks and ultramafic/mafic complexes. The sequence is unfossiliferous but has been correlated by rock type with the Cambrian Crimson Creek Formation of the Zeehan-Rosebery area. The Meredith Granite, a high level, late tectonic Late Devonian to Early Carboniferous granitic pluton believed to be genetically associated with the mineralisation, intrudes the sequence east and south of the mine. The Cleveland ore bodies are located in a dominantly fine grained sedimentary sequence that is thought to lie in an embayment on the margin of a basaltic eruptive centre.

The tin-copper ore bodies occur as a series of sub parallel, near vertical sulphide lenses within the Halls Formation. The mineralisation is composed largely of fine to medium grained quartz, tourmaline, fluorite, chlorite, and pyrrhotite plus chalcopyrite, cassiterite and stannites.

The area surrounding the Cleveland Mine site is known to host other occurrences of Sn, and base metal mineralisation related to Devonian-aged granite intrusive activity within surrounding host rocks. Identification of repetitions of this style of mineralization will be the primary focus of the proposed exploration program.

#### 5.0 Developmental Activities

The Rockwell Minerals team has decided to wait until receipt of LiDAR data before progressing with development on this EL.

This data was expected to be received in May 2013 after considerable discussion and agreement with Forestry Tasmania regarding acquiring the data during a LiDAR programme they were undertaking, hence the delays.

Now that the LiDAR data has been received, the team will progress with the programme of work outlined below in section 7.0

#### 6.0 Expenditure

Expenditure over the license area totalled \$6,112.50 during the reporting period to 13<sup>th</sup> September 2013, and is broken down by expense in the table below:

LIDAR Data gathering by Forestry Tasmania	6,112.50
Total	6,112.50

The Rockwell Minerals team has been waiting for the LIDAR report (covers also EL9-2006) as the basis for which to begin exploration activities. Now that this report is completed, and funding is becoming more available to conduct the preliminary exploration activities, a significant ramp-up in activities will occur.

## 7.0 Conclusions and Recommendations

EL 15/2011 covers an area to the south of the historic Cleveland Sn/Cu mine area in western Tasmania. It is understood that the lease area has not been subject to minerals exploration.

Recommendations for future activities:

Rockwell Minerals will progress with following exploration programme to be completed over the next 12 months.

### 1. Review of previous exploration activity.

All previous open file exploration activity over the application area will be reviewed in detail to identify any potential tin exploration targets.

### 2. Desktop review of available geophysical information.

All available geophysical information, in particular aeromagnetic and gravity data, will be reviewed in an attempt to identify potential buried granite bodies which may localise Sn mineralisation of the Cleveland or related styles. These features will provide a focus for follow-up exploration activities.

### 3. Review of geochemical data.

All previous geochemical survey data (stream sediment and soil/rock chip surveys) will be collated and reviewed to identify any tin or other pathfinder anomalies that require follow-up work.

### 4. Follow-up Geochemical and Geophysical Surveys.

Any geophysical and/or geochemical anomalies that arise from the above reviews will be followed up by appropriate ground geophysical (gravity or magnetic) and geochemical surveys to define drill targets.

Attachment: Maps of the Exploration License area

**Map: Tenements**

- Lease
- Mining Leases
- Licence
  - Licence Category 1 (Metallic)
  - Licence Category 2 (Fuel)
  - Licence Category 3 (Construction)
  - Licence Category 4 (Petroleum)
  - Licence Category 5 (Non-Metallic)
  - Licence Category 6 (Geothermal)
  - Exploration Release

Click to Refresh Map  
Click to Manage Layers

GDA 1994 - MGA Zone 55 (E, N): 369345, 5403442 (1:83,200)

Overview Results

Details for Exploration Licences 1 feature(s) displayed [Clear Selection](#)

Zoom / Pan	ID	Ten. Ref.	Details	Area	Holder	Product
	33384	EL15/2011	<a href="#">Details</a>	34 sq km/blocks	Bright Phase Pty Ltd,	Category 1 - Metallic Minerals, Atomic Substances

Click on column heading to sort

Tasmania  
Explore the possibilities  
DEPARTMENT OF INFRASTRUCTURE,  
ENERGY and RESOURCES  
Mineral Resources Tasmania

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