

# **Redbank Copper Limited**

## **Annual Exploration Report**

## **GR238**

EL 24654,EL 28288, EL 28289,EL 28290

**Redbank Regional Project** 

For the period 1<sup>st</sup> April 2013 to 31 March 2014

Distribution:

**Department of Mines and Energy NT** 

**Redbank Copper Limited** 

June 2014

Tenement Operator: Redbank Copper Limited

**Tenement Holder:** Redbank Mine Operations Pty Ltd

Report Type: Annual

**Report Title:** Annual Report Combined Group GR 238

**Tenements:** EL 24654, EL 28288, EL 28289 EL 28290

**Report Period:** 1/04/2013 to 31/03/2014

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**Date of Report:** 20/06/2014

**1:250 000 map sheet:** Wollogorang 6463 and Selby 6464

1:100 000 map sheet:

Target Commodity: Copper

**Keywords:** Copper, Breccia Pipes, Aeromagnetic's

Prospects drilled:

List of Assays:

NA

List of Elements:

NA

#### **SUMMARY**

The tenements form part of Redbank Copper Limited's, Redbank Copper Project the project is located 300km south east of the township of Borroloola near the northern Territory/Queensland border. The tenements cover a sequence of sediments and volcanics of the Tawallah Formation. The tenements are prospective for breccia pipe hosted copper mineralisation.

During the current reporting period work no field work was completed within the combined reporting group tenements

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#### 1. INTRODUCTION

This report details exploration activities on tenements within the GR238 Combined Report (EL 24654, EL 28288, EL 28289, EL28290) between 1 April 2013 and 31<sup>st</sup> March 2014<sup>th</sup>. The tenement's are owned by Redbank Operation Pty Ltd a wholly owned subsidiary of Redbank Copper Limited, a company listed on the Australia Stock Exchange. The tenements form part of the company's Redbank Copper Project which comprises 26 mineral titles covering an area of approximately 4,300 sq. kilometres. The project is centered on the mining operation at Redbank (figure 1) where the company has infrastructure including mine camp and offices, airstrip that support the companies activities in the district. The mine site has been on care and maintaince for a number of years, and is currently staffed by full time caretakers

Redbank Copper Limited was suspended from the ASX between the period 24<sup>th</sup> November 2011 and 10<sup>th</sup> May 2013, whilst the company was restructured and raised funds. Since relisting the company has commenced regional compilation work, but has not undertaken any on ground field exploration.

#### 2.1 Location and Access

The tenement is located approximately 300 km south-east of the township of Boorooloola, and immediately west of the Northern Territory – Queensland border. Wollogorang Station in the center of the project area is the closest habitation.

Vehicle access is restricted to the main Borroloola – Wollogorang road and local station tracks. There is a 1200m airstrip at Redbank which can be used to access the project.

Topography is dominated by escarpment country with a maximum elevation of 226m. The well-developed dendritic drainage network is dominated by Settlement Creek, which drains to the north-east into the Gulf of Carpentaria. Vegetation consists mostly of open woodland and native grasses that support cattle grazing.

The tenements is on the Wollogorang Pastoral Station

The area has a tropical climate with a wet season between November - March during which time access to and around the project can be blocked by flooding creeks and a dry season between March and October during which time the majority of field operations occur.

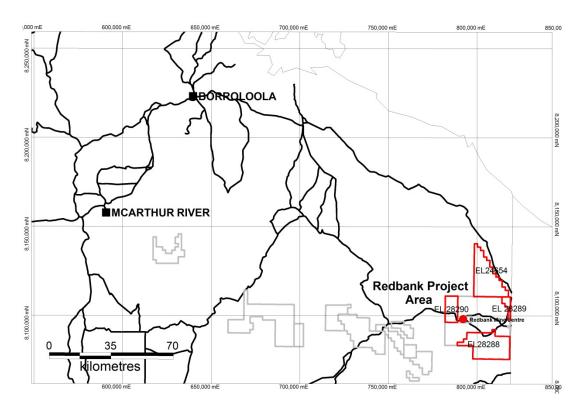


Figure 1. Location Plan.

### 1.2 Tenure

The tenements within the combined report are held by Redbank Operations Pty Ltd a wholly owned subsidiary of Redbank Copper Limited. Details of the tenement are provided below.

Table 1. Tenement details for Combined Report GR238

Exploration License Number	Total Area Ha	Grant Date	Holder
EL24654	315	5/12/2005	Redbank Mine Operations Pty Ltd.
EL28288	327.6	19/04/2011	Redbank Mine Operations Pty Ltd.
EL28289	37.8	19/04/2011	Redbank Mine Operations Pty Ltd.
EL28290	100.8	19/04/2011	Redbank Mine Operations Pty Ltd.

#### 2.0 GEOLOGY AND MINERALISATION

#### 2.1 Regional Geology

The tenements are situated in the south-eastern portion of the Proterozoic McArthur Basin in the Northern Territory (Figure 2.). The tenements are located on the Wearyan Shelf tectonic unit within basin. The geological sequence comprises a mix of shallow water and continental sedimentary units intercalated with volcanics of the Tawallah Group which is the lower most sequence within the Macarthur Basin sequence. The sequence has been intruded by various granitic bodies.

The McArthur Basin sequence contains the world class McArthur River lead-zinc deposit (227 Mt grading 9.2% zinc, 4% lead, 0.2% copper, and 41g/t silver) approximately 200 km north of the tenement. Within the region copper mineralisation associated with trachyte breccia pipes is mined at Sandy Flat and Redbank, and copper uranium mineralisation is recognized within the Westmorland Conglomerate Formation to the south of the tenement . The Merlin Diamond field is approximately 250 km to the west of the tenements

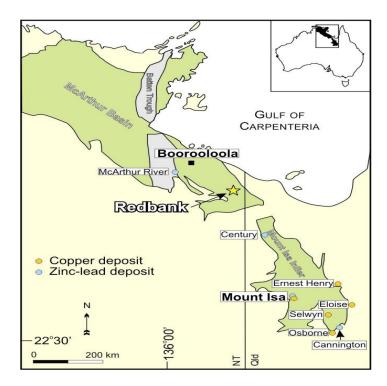


Figure 2.Regional Geological Setting.

## 2.2 Tenement Geology

The project area overlies Tawallah Group stratigraphy. The southern parts of the project area overly lower member of the group including the Aquarium Formation and the Sly Creek Sandstone. The northern parts of the project cover Wollogorang, Masterton and Gold Creek Volcanics Formations intruded by the Packsaddle granite to the east. These units are considered to be prospective for breccia pipe hosted copper mineralisation as well as strataform base metal mineralisation

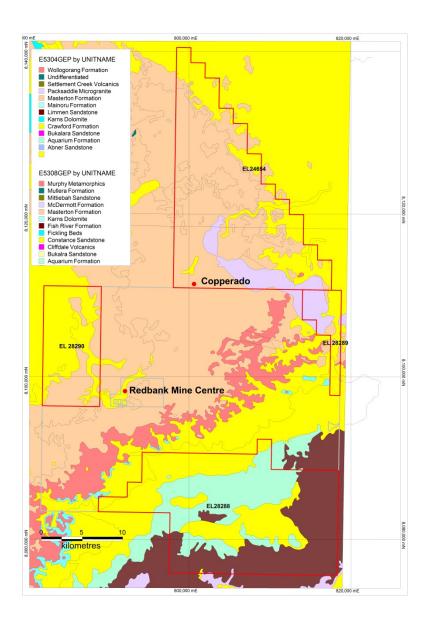


Figure 3 Project Geology

#### 2. PREVIOUS EXPLORATION

The tenements have had several phases of exploration for base metals as well as gold, uranium and diamonds since the 1940's. Programs have included regional stream sediment surveying, field mapping aeromagnetic surveying and interpretation. No significant anomalism was identified by this work.

More recently Redbank completed low level aeromagnetic surveying over EL 24654, and defined a copper breccia pipe target at Copperado in the SW corner of the tenement (figure 3), and completed two drill reverse circulation drill holes but failed to intersect mineralisation. No further work was undertaken.

Redbank also completed a detailed low level aeromagnetic survey over the remaining tenure in the combine project as well as the main Redbank mine area during 2012. The data was merged with the earlier survey leveled and reprocessed during 2013 by Resource Potentials Pty Ltd.

#### 3. EXPLORATION DURING THE REPORTING PERIOD

The company relisted on the Australian Stock Exchange in March 2013 and exploration work has focused on advanced copper target within the immediate Redbank area.

Within the Redbank Combined Group area the company intends to finalise the interpretation of the aeromagnetic data and define unprospective stratigraphy for surrender so as to concentrate on ore prosective areas of the package.

During the coming year Redbank intends to complete first pass field inspection, geological mapping and rock chip /soil geochemistry over targets identified by the aeromagnetic interpretation.

#### 4. REFERENCES

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