



# **Redbank Copper Limited**

## **Final Surrender Report**

**EL 28487**

**Redbank Project**

**For the period 2<sup>nd</sup> August 2011 to 14<sup>th</sup> November 2017**

**Distribution:**

**Department of Mines and Energy NT**

**Redbank Copper Limited**

**May 2018**

<b>Tenement Operator:</b>	Redbank Copper Limited
<b>Tenement Holder:</b>	Redbank Operations Pty Ltd
<b>Report Type:</b>	Final Surrender
<b>Report Title:</b>	Final Surrender Report
<b>Tenement</b>	EL 28487
<b>Report Period:</b>	<b>02</b> /08/2011 to 14/11/2017
<b>Author:</b>	Scott Bilben
<b>Date of Report:</b>	16/05/2018
<b>1:250 000 map sheet:</b>	Calvert Hills SE5308
<b>1:100 000 map sheet:</b>	
<b>Target Commodity:</b>	Copper
<b>Keywords:</b>	Copper, Breccia Pipes, Aeromagnetic's
<b>Prospects drilled:</b>	NA

## **SUMMARY**

The tenement form part of Redbank Copper Limited's, Calvert Project which 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 life of the tenement no field work was completed on ground, with work restricted to desktop studies and literature/data review. After a partial surrender in 2016, the remaining tenure was surrendered on 14<sup>th</sup> November 2017 due to the apparent lack of prospectivity for Copper mineralisation.

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## **1. INTRODUCTION**

This report details exploration activities on tenement EL 28487 between 2<sup>nd</sup> August 2011 and 14<sup>th</sup> November 2017. The tenement was owned by Redbank Operation Pty Ltd a wholly owned subsidiary of Redbank Copper Limited, a company listed on the Australia Stock Exchange. The tenements formed part of the company's Calvert Project which comprised mineral titles covering an area of approximately 1,165 sq. kilometres.

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 on this tenement.

### **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. Wologorang Station in the center of the project area is the closest habitation.

Vehicle access is restricted to the main Borrooloola – Wologorang 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. 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 tenement is on the Calvert 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.

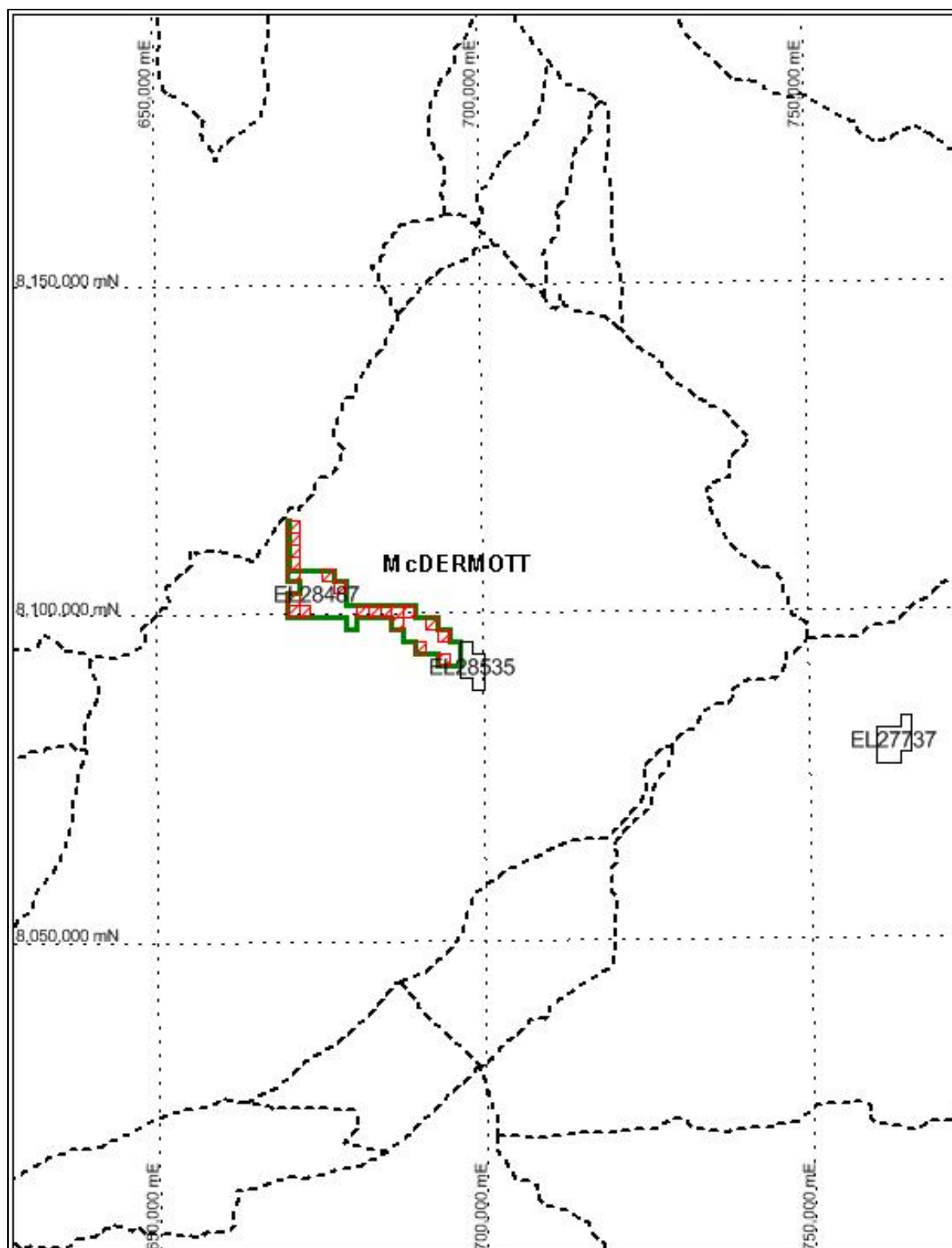


Figure 1: Location Plan (Partial Surrendered area from Oct 2016 in Red)

## 1.2 Tenure

The tenement was held by Redbank Operations Pty Ltd a wholly owned subsidiary of Redbank Copper Limited. Details of the tenement is provided below.

Table 1

Exploration License Number	Total Area (after Partial surrender in 2016) Sq. km	Grant Date	Partial Surrender Date	Holder
EL28487	76	02/08/2011	14/10/2016	Redbank 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 was 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.

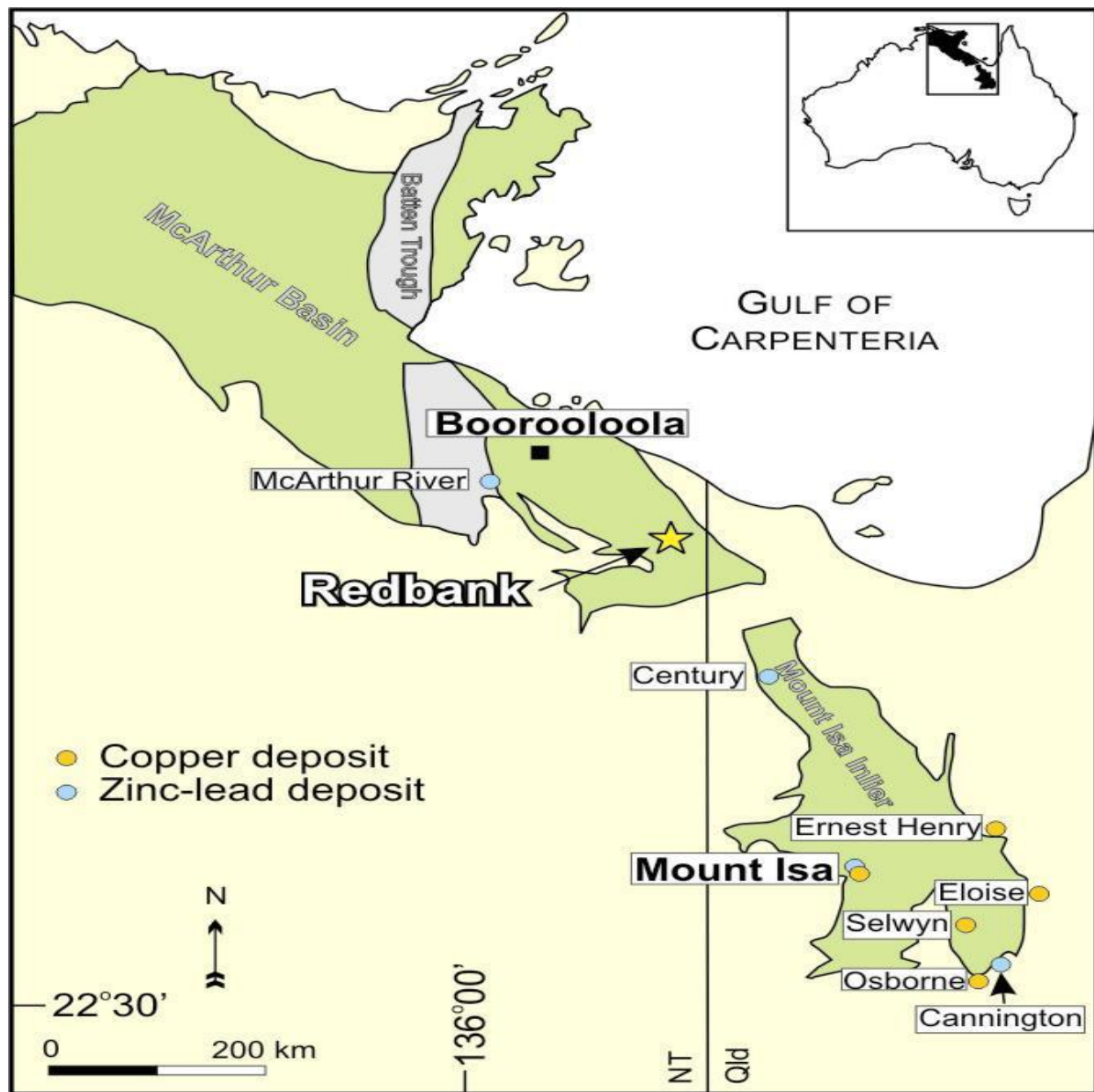


Figure 2: Regional Geological Setting



## 2.2 Tenement Geology

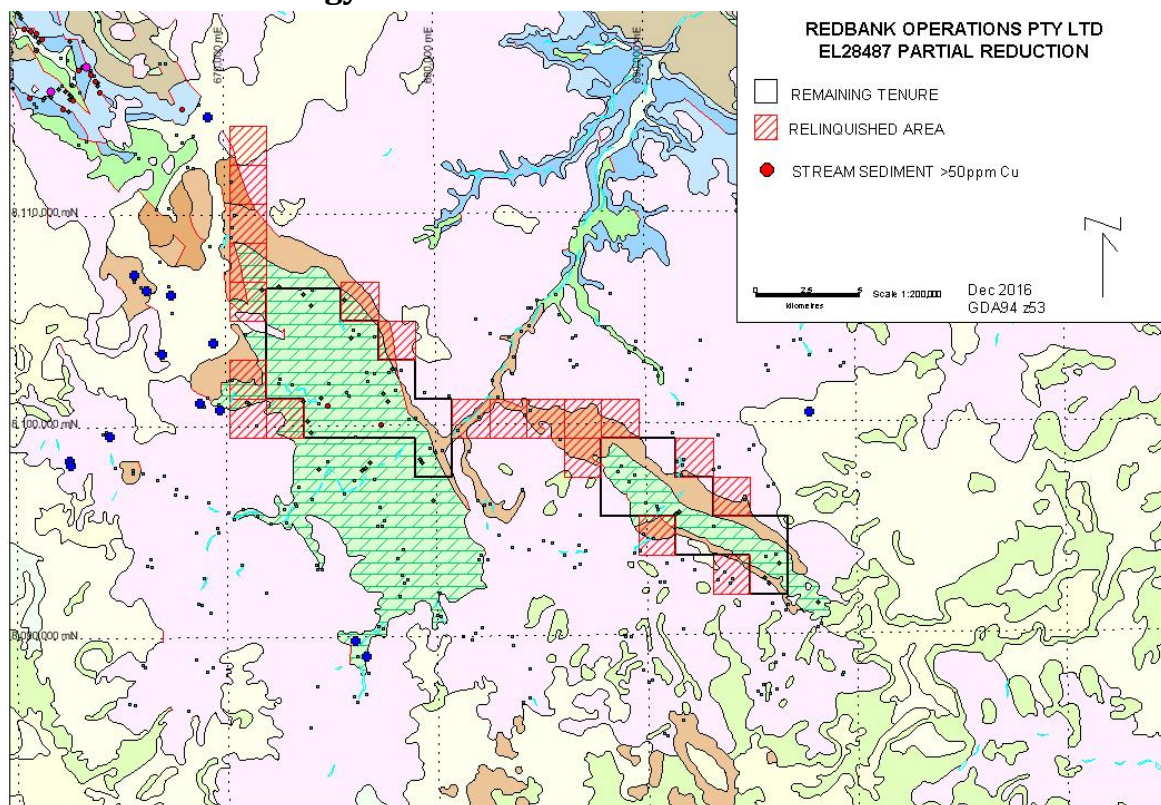


Figure 3: Redbank Area Geology (Partial Surrendered area from Oct 2016 in Red)

The project area overlies Tawallah Group stratigraphy. These units are considered to be prospective for breccia pipe hosted copper mineralisation as well as strataform base metal mineralisation (Figure 3).

## 3 EXPLORATION DURING THE TERM OF TENURE

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

During the life of the tenement no exploration work was completed on ground, with work restricted to desktop studies and literature/data review. After a partial surrender in 2016, the remaining tenure was surrendered on 14<sup>th</sup> November 2017 due to the apparent lack of prospectivity for Copper and Base metal mineralisation.

## 4 REFERENCES

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