

**EL 12/2015 “Lindsay River”
Partial Relinquishment Report
Nov. 2022 to Nov. 2023
- D & B Mining Pty Ltd**

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Abstract

D & B Mining Pty Ltd is relinquishing 100skm of EL 12/2015 "Lindsay River" due to its relatively lower prospectivity compared to the retained portion. D & B Mining Pty Ltd intend focusing work on the retained portion.

During the life of the licence the only field work on the relinquished portion of EL 12/2015 "Lindsay River" was the collection of five samples of loose float for magnetic susceptibility measurements.

The major body of exploration work on the relinquished portion of EL 12/2015 "Lindsay River" during the licence's life has been carried out in conjunction with work on the other contiguous tenements which constitute the Balfour project, i.e. EL 10/2014, EL 12/2015, EL 9/2021 and ML 1M/1976.

This work has consisted of a thorough review of all historical exploration over the project area, including the appraisal and summary of over 220 reports and has led to the decision to relinquish this area of low prospectivity.

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1.0 Introduction

1.1 Exploration Rationale

D & B Mining Pty Ltd, a wholly owned subsidiary of Zebs Minerals Pty Ltd is exploring the Balfour Copper Belt for copper, gold, tin and tungsten as well as any other commodities of value.

1.2 Location and access

EL 12/2015 “Lindsay River” lies in Tasmania’s west coast south of Smithton in the Balfour area.

Access to the tenement is via the Bass Highway to Smithton from Burnie and then on to Balfour via the Western Explorer Highway and the Balfour track. Access within the tenement is very difficult with no vehicular tracks.

1.3 Land status and usage

All of the land within the licence is owned by the crown.

The majority of the licence area is part of the Arthur-Pieman Conservation area with Future Potential Production Forest occupying most of the eastern side and the Donaldson River Nature Recreation Reserve in the very south eastern corner of the tenement.

1.4 Tenure

The tenement, EL 12/2015 was granted to Zebs Minerals Pty Ltd on 15th November 2016 for a period of five years and applies to all Category 1 minerals. The licence originally covered an area of 246.5 square kilometres.

A decision was made in 2020 to relinquish an area of 36 km² considered relatively non prospective and retain the remaining 210 km² as shown on figure 1.1.

The tenements were transferred into D & B Mining Pty Ltd, a wholly owned subsidiary of Zebs Minerals Pty Ltd in early 2022.

The relinquishment of 100 square kilometres accompanied the application for extension submitted on 14th November 2023.

The areas requested for extension (maroon) and relinquishment (blue) are shown on figure 1.2.

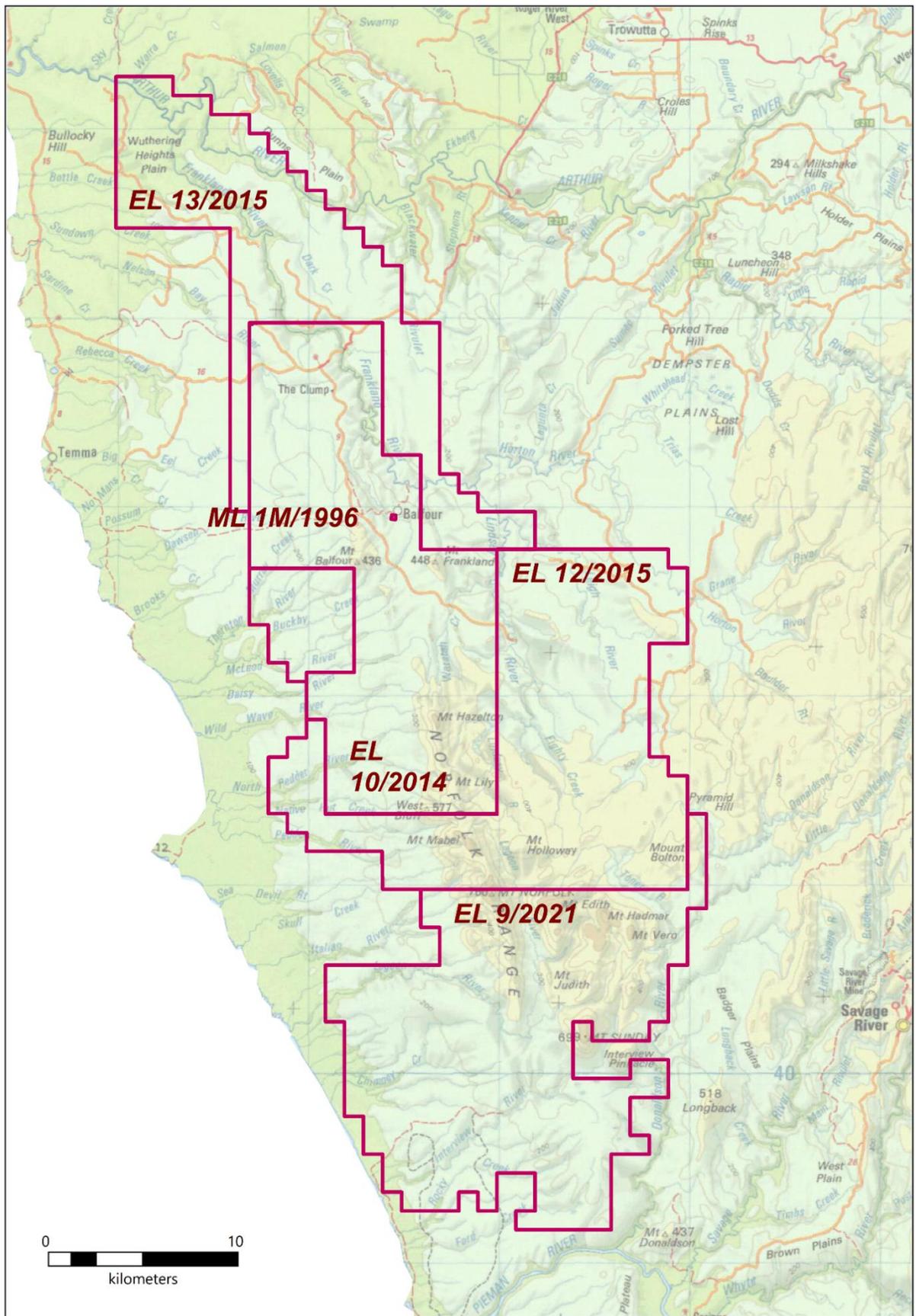


figure 1.1: Location of EL 12/2015 "Lindsay River".

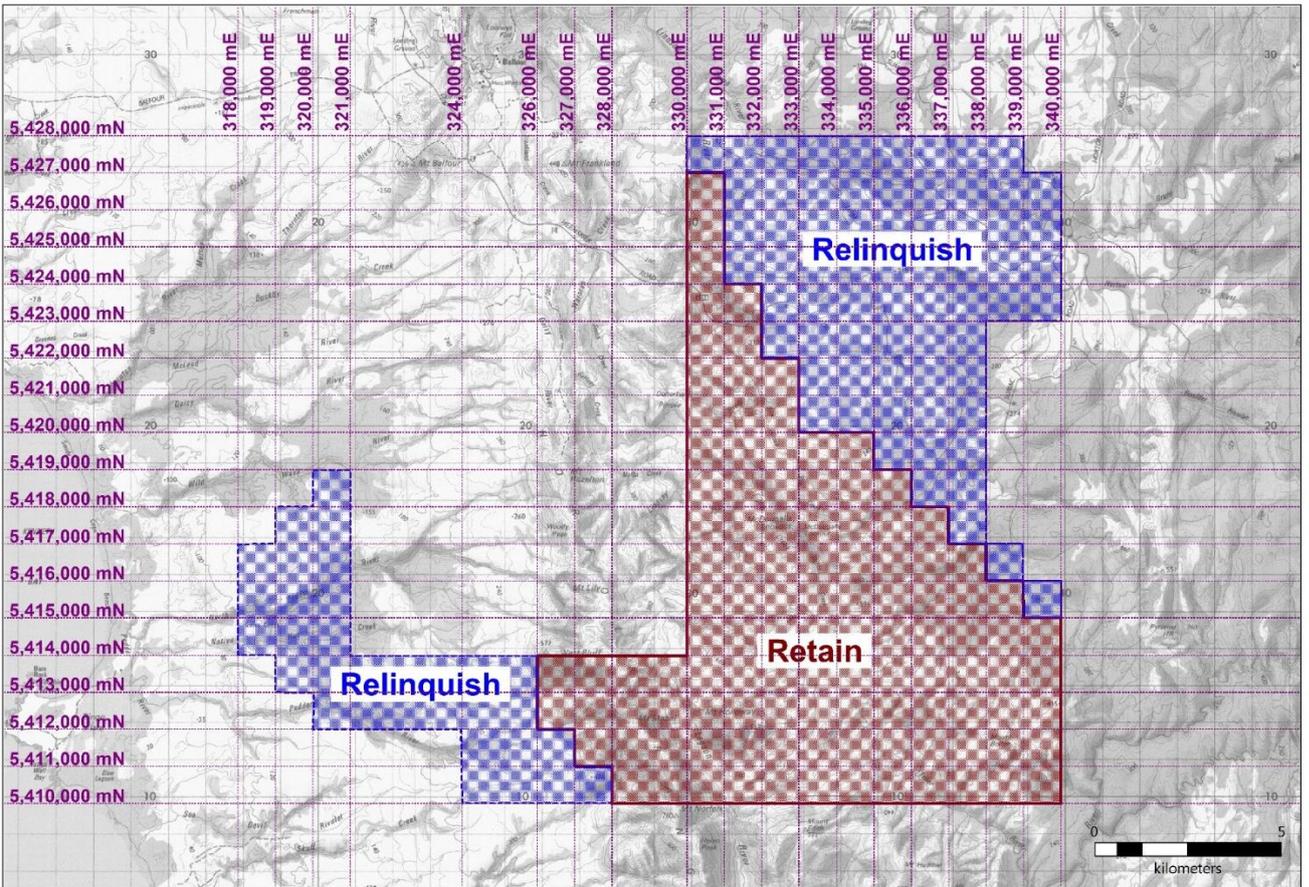


Figure 1.2: EL 12/2015 area applied for extension and that showing areas for relinquishment.

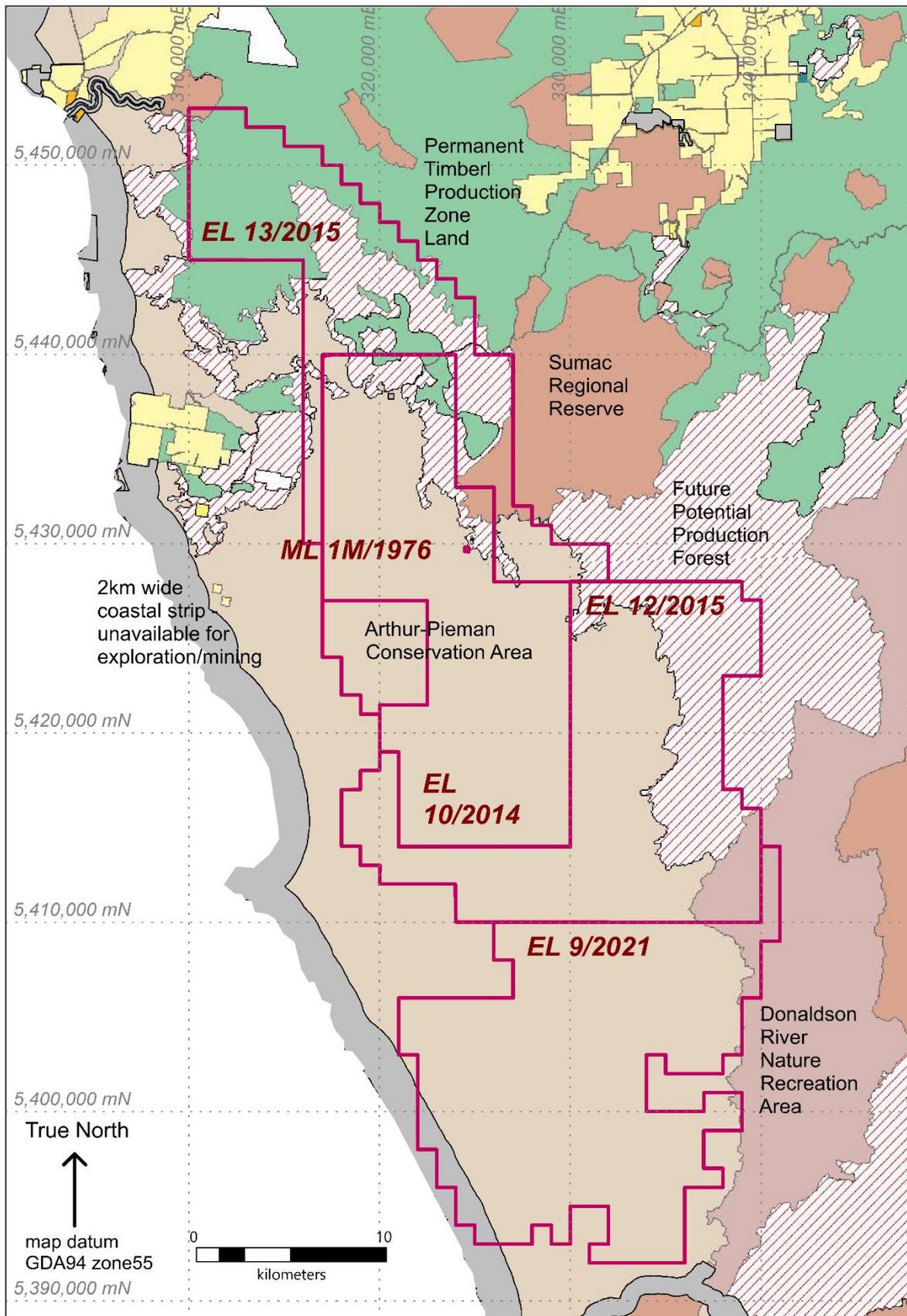


Figure 1.3: Land Tenure showing Balfour Project Area tenements, including EL 12/2015 prior to partial relinquishment, over the Land Tenure layer from The LISTmap (<https://maps.thelist.tas.gov.au/listmap/app/list/map>)

1.5 Geology

The geology of EL 12/2015 consists of early Neoproterozoic-late Mesoproterozoic metasediments (and dolerite dykes) of the Rocky Cape Group, with a thin fault bound wedge of the disconformably/unconformably overlying Cryogenian Togari Group near to the northern boundary of the licence). The Proterozoic geology is summarised neatly in figure 1.3.

Structurally the folded Proterozoic rocks are transected by north-northwest trending west-southwest dipping faults which have been shown in a number of instances to be east verging thrusts. The fault which hosts the copper mineralisation at Balfour (on EL 10/2014) is an example of such a thrust.

The Rocky Cape Group is a sequence of moderately folded silty to sandy shelf facies metasediments, intruded in part by north-northeast trending dolerite dykes.

The Togari Group is a sequence of shelf facies clastics and carbonates with intercalated rift tholeiites which unconformably or disconformably overlies the Rocky Cape Group.

The stratigraphy of both of these Groups is illustrated in figures 1.4 and 1.5.

Gravity data shows that the Middle Devonian Interview River Granite, which outcrops on the west coast to the southwest of the tenement, also underlies the Balfour area (see figure 1.6), with a relatively shallow (<1km) subsurface granite ridge running north-northwesterly beneath the Norfolk Range.

In the very western part of EL 12/2015 the basement geology is obscured by Quaternary sands.

Taheri and Bottrill (2005), citing Reed in Everard *et. al.* (2002) summarise the structural history of the Balfour region as follows. "Two early phases of syndepositional extension were followed by at least four compressional phases of deformation within the area. The first two phase of deformation (D1, D2) are possibly of Cambrian age whereas D3 and D4 are considered to be Devonian in age. D3 is the main deformation phase and is characterised mainly by northwest-trending folding, some cleavage development and major northeast-directed low and high angle thrusts, one of which hosts the copper mineralisation at Murrays Reward mine along the copper belt. East of Balfour east-northeast to northeast trending strike slip faults pre-date late northwest-trending reverse faults."

The Interview River Granite has intruded later in the Middle Devonian orogeny and is associated with Sn and W mineralisation at Specimen Hill and Interview River.

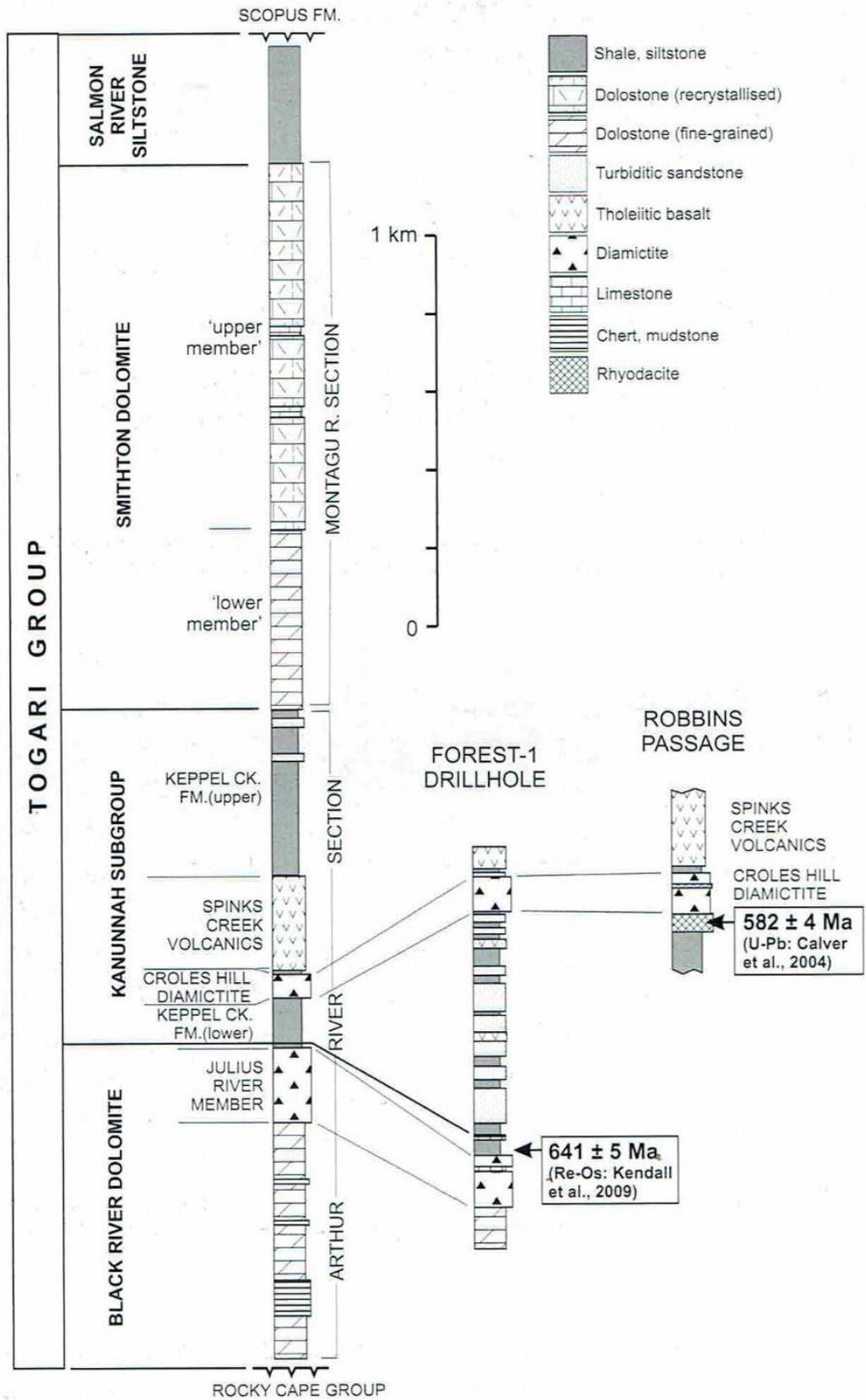


Figure 1.5: Togari Group stratigraphic column (after figure 3.29 in Calver et al. 2014). Note significantly different vertical scale to figure 1.5. The Togari Group is of the order of 3km thick whilst the Rocky Cape Group is of the order of 10km thick.

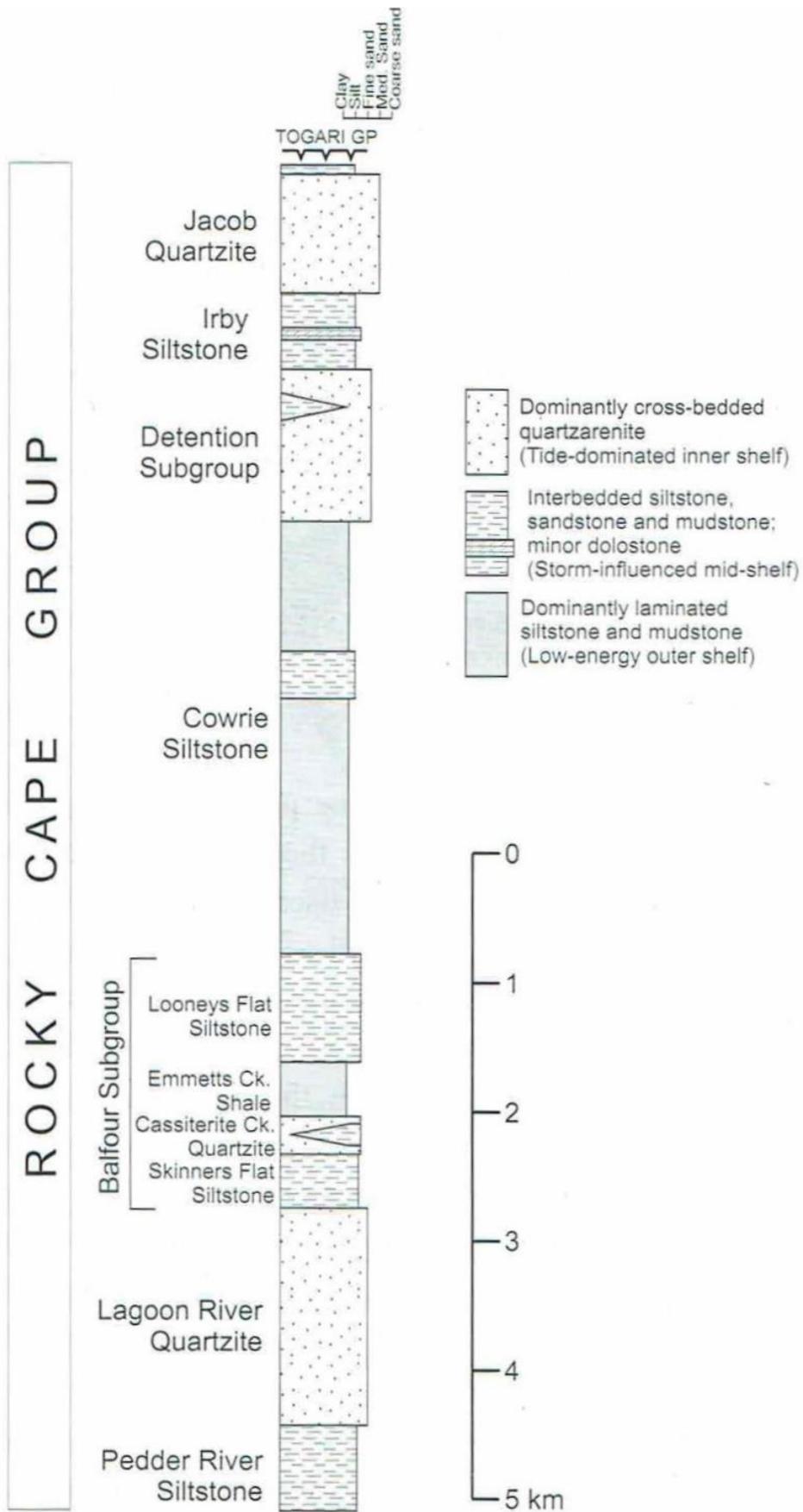


Figure 1.6: Rocky Cape Group stratigraphic column (after figure 3.7 in Calver et. al. 2014)

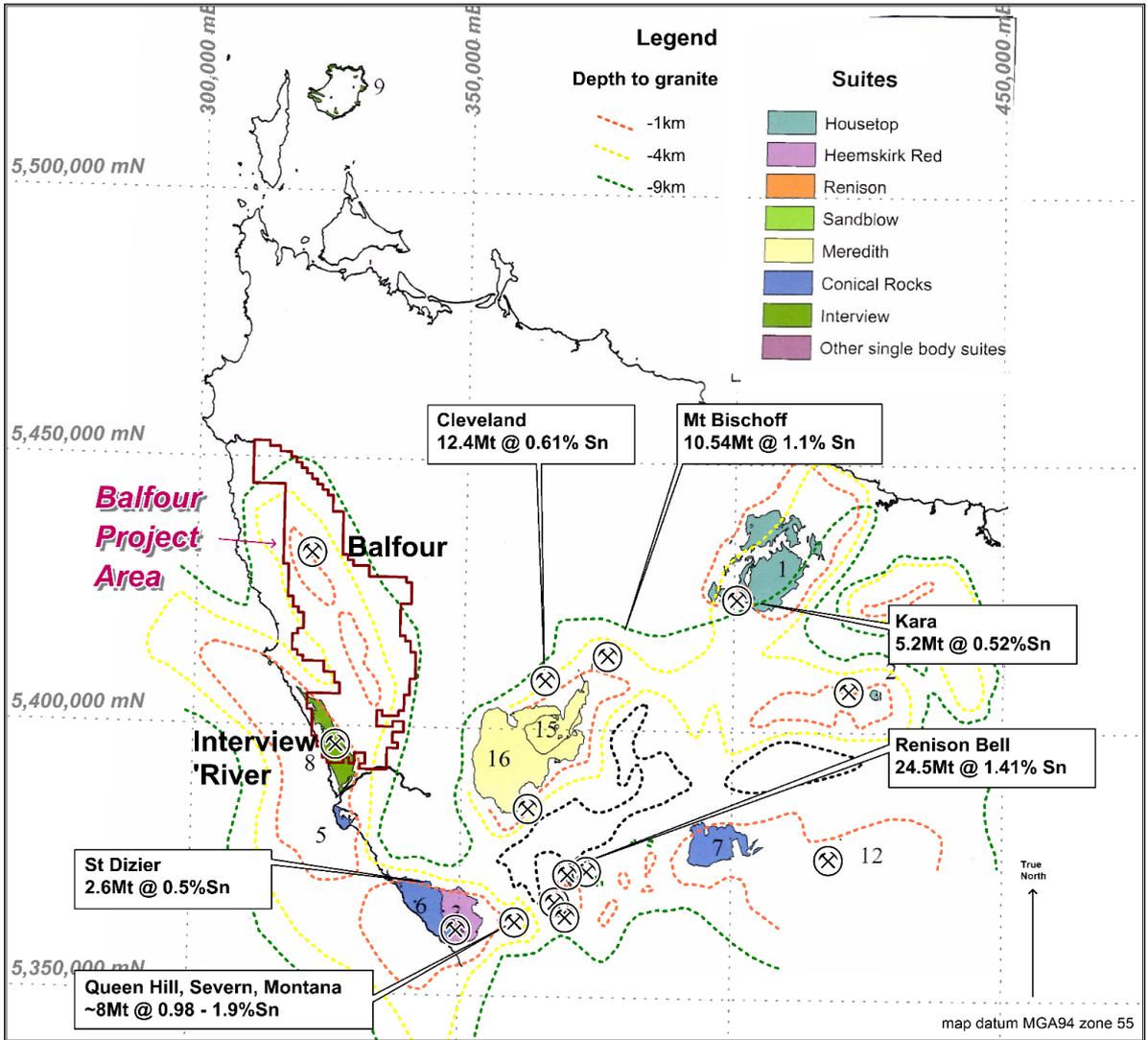


Figure 1.7: Middle Devonian granite outcrop and depth contours with major Tasmanian tin and tungsten deposits. Balfour Project Area is shown as a maroon outline. Depth to granite contours are shown as coloured dashed lines.

2.0 Summary of Previous Work

2.1 Prior to Current Tenement

The summary report compiled all historic exploration. Those sections relevant to the relinquished portion of EL 12/2015 are reproduced in section 4.0.

2.2 During Current Tenement - Zebs Minerals Pty Ltd (2014 – 2022)

The only work undertaken over the area of EL 12/2015 being relinquished during the life of the tenement was the compilation of all historical exploration into a summary report titled Balfour Project Exploration Summary. The relevant sections of this report have been included in section 4.0.

A series of figures detailing the geology, total magnetic intensity, historic workings and 'lodes' (after Ward, 1911) in figures 2.2, 2.3, 2.4 and 2.5.

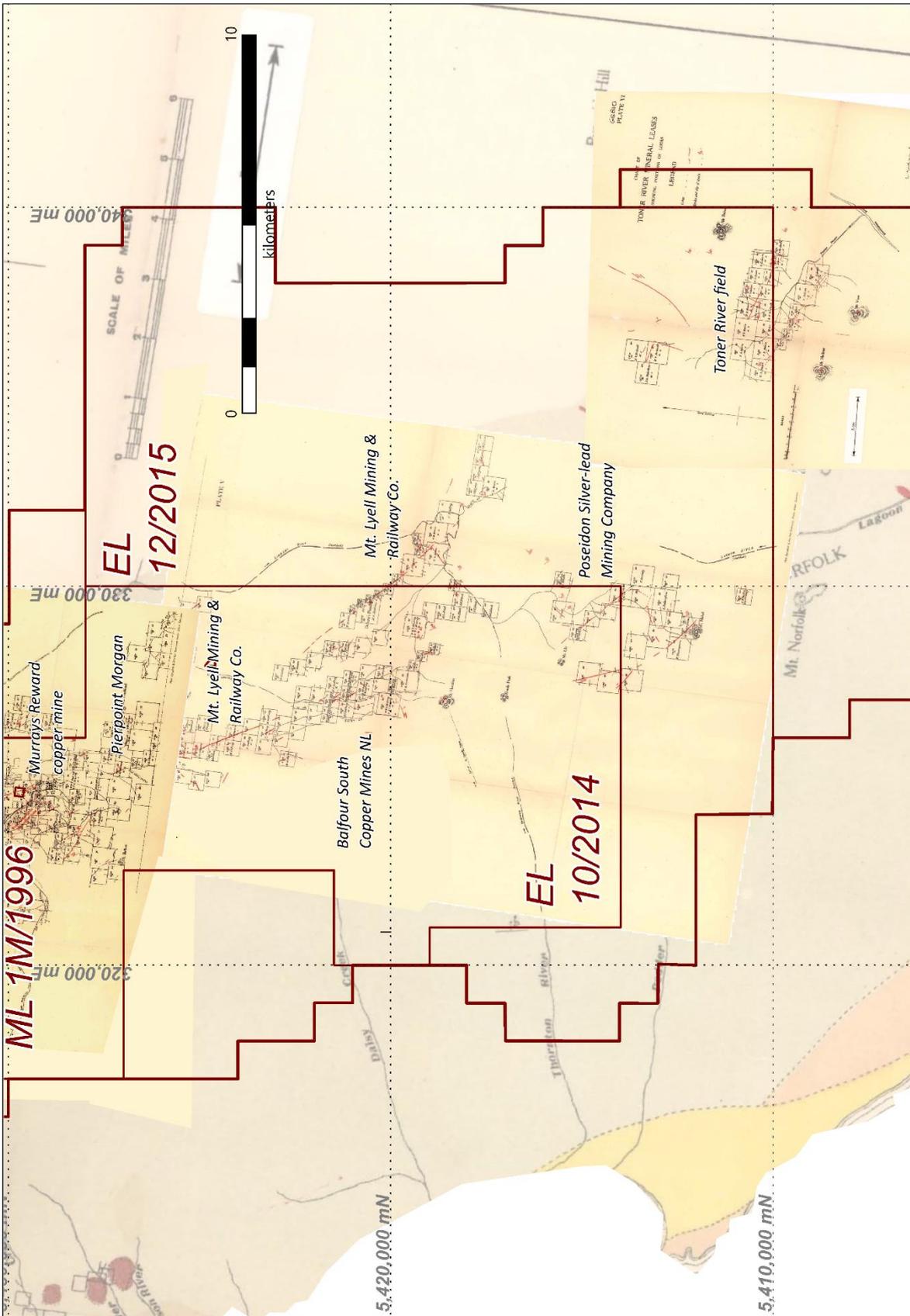


Figure 2.1 Tenement location of EL 12/2015 prior to partial relinquishment on a montage of Ward (1911) maps of the tenement position, and location of “lodes” as red lines. These red lines have been copied and superimposed on subsequent figures.

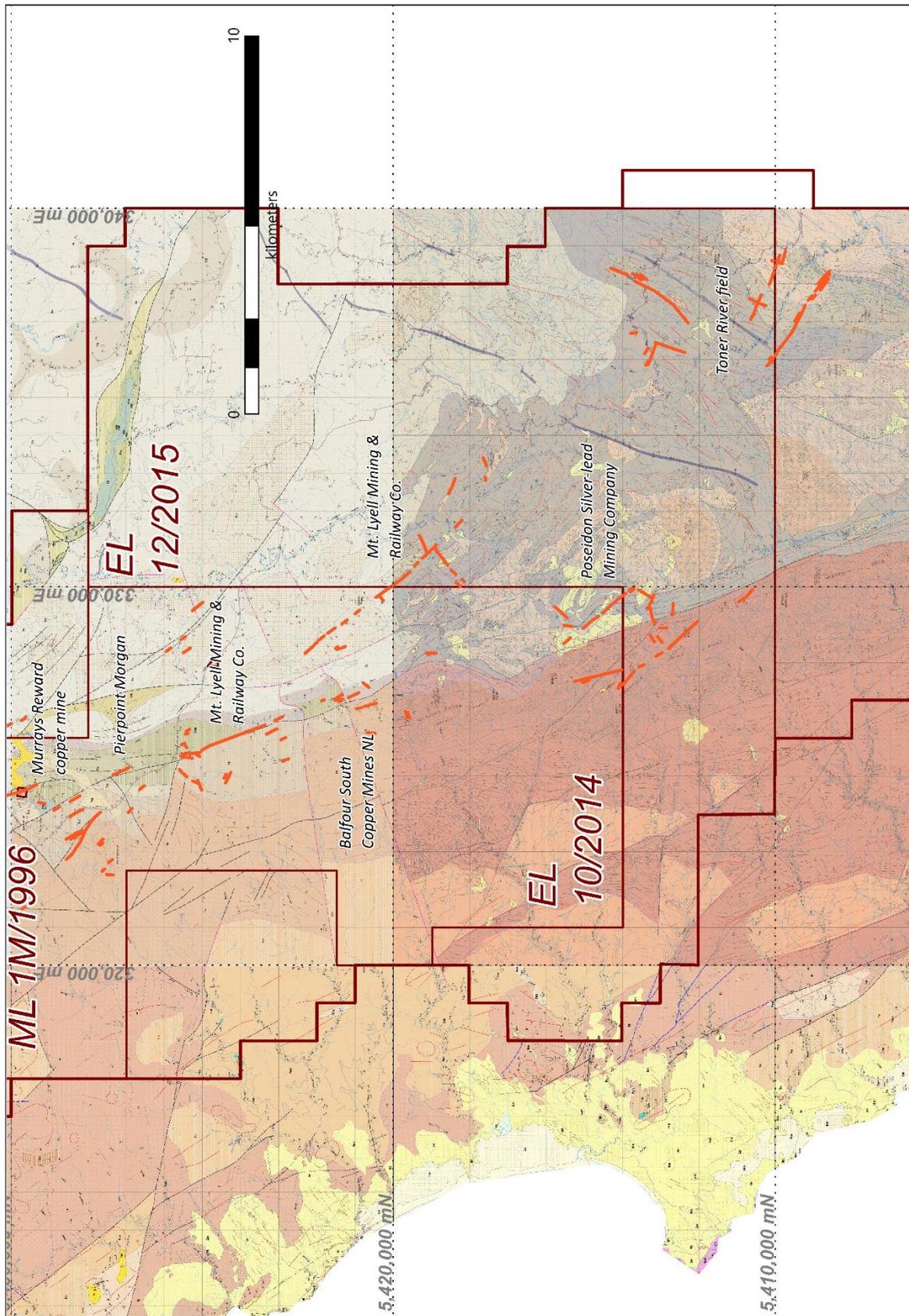


Figure 2.2 Tenement location of EL 12/2015 prior to partial relinquishment on MRT's 1:25,000 maps of the tenement position, with Wards (1911) location of "lodes" as red lines. Note the correspondence between "lodes" and mapped faults in the northern part.

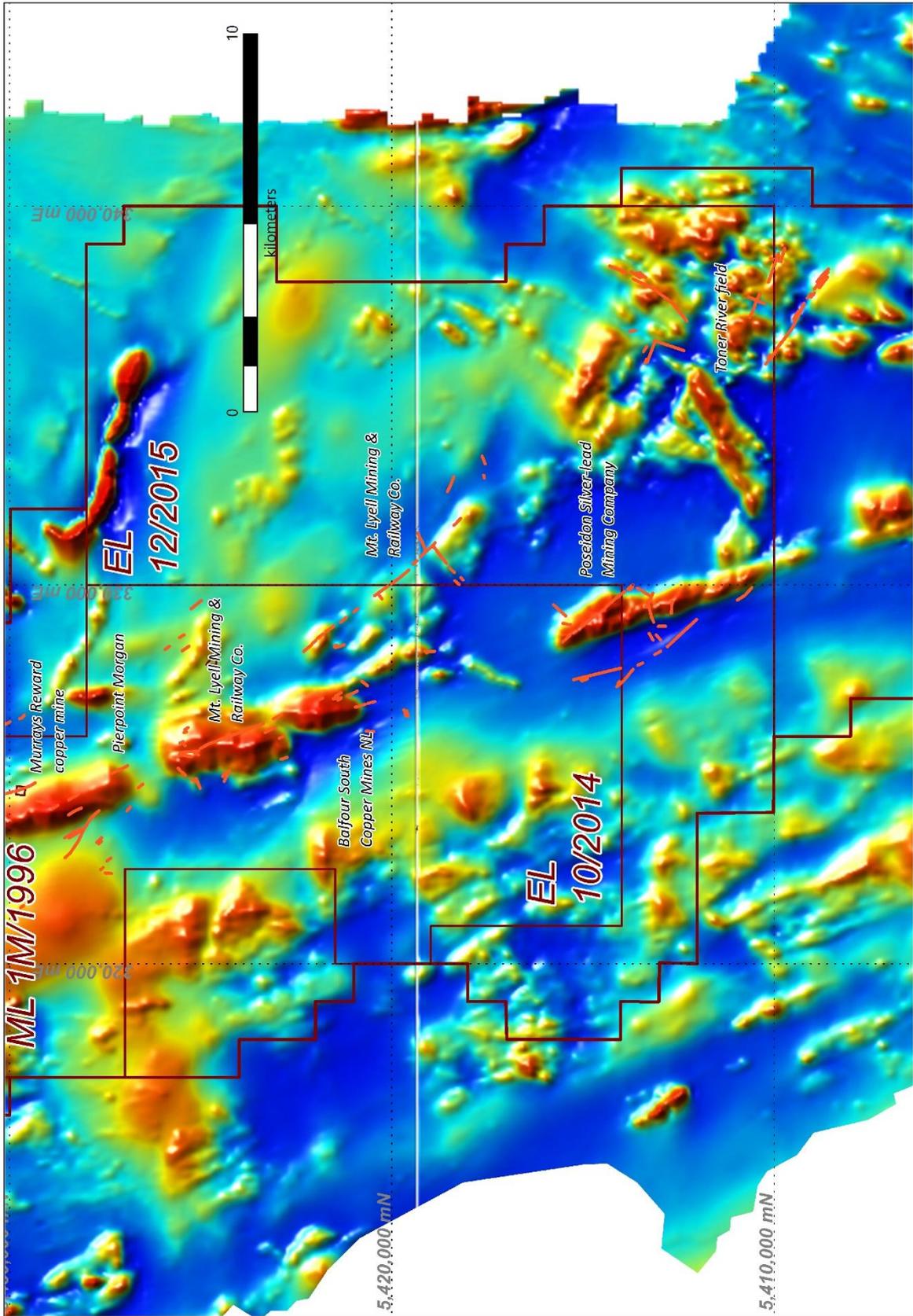


Figure 2.3: Tenement location of EL 12/2015 prior to partial relinquishment on TMI RTP, with Wards (1911) location of “lodes” as red lines. Note the broad correspondence between “lodes” and magnetic highs.

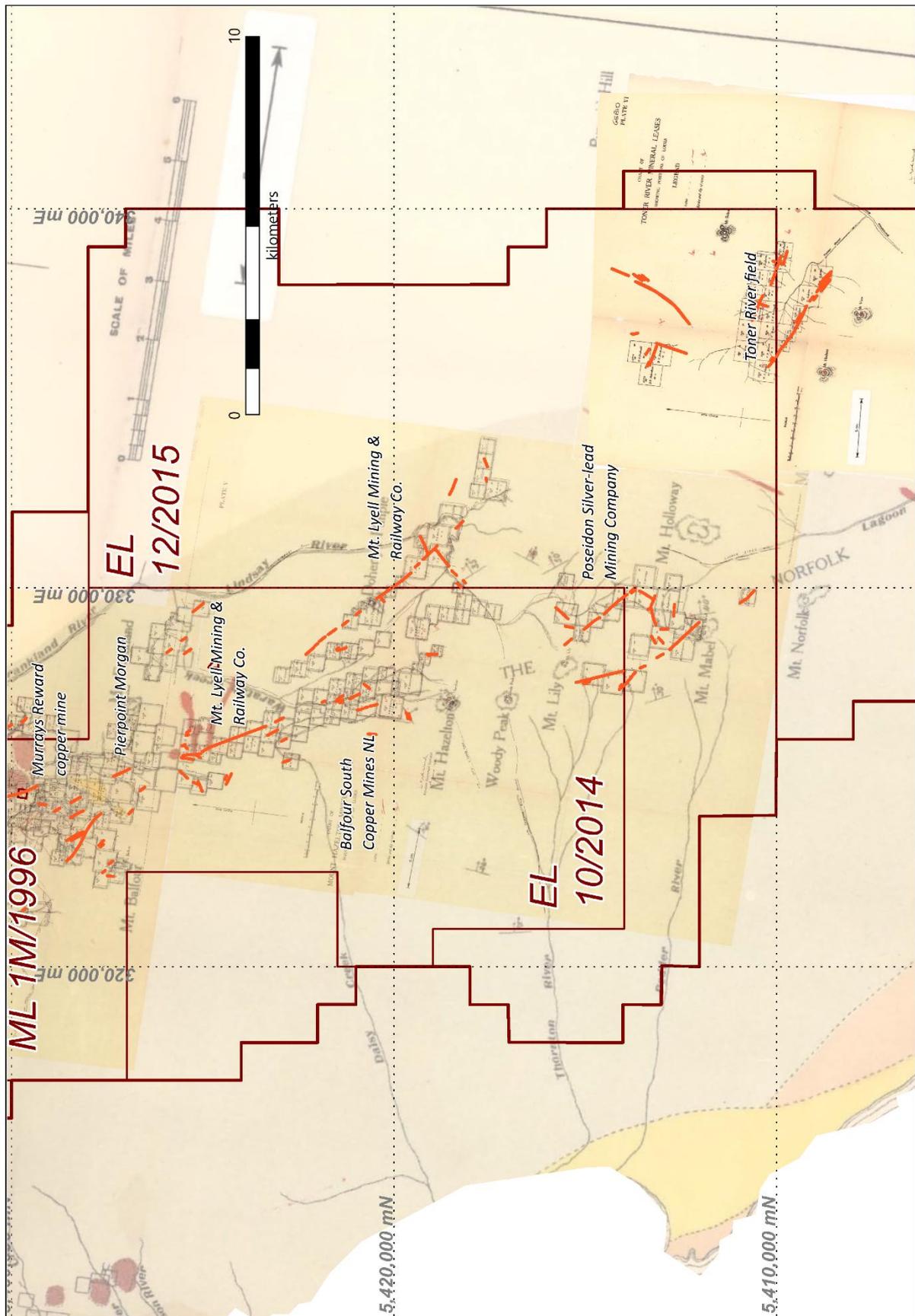


Figure 2.4: Old mine leases from Ward (1911) with red "lodes" i.e. quartz +/- sulphide lodes – except at Toner River where north-northeasterly trending lodes are mafic dykes.

3.0 Exploration Completed During the Reporting Period on Areas Being Relinquished

The exploration summary report was completed early in the reporting year but included in last years annual report which was held over for this reason. The results of that work are summarised in section 4.0.

Work was carried out in the reporting year on the area being retained but there has been no further work on the areas being relinquished.

4.0 Discussion of Results

4.1 Introduction

The results of the compilation are in a report titled Balfour Project Exploration Review which contains summaries of prospects etc. from other tenements in the Balfour project. Most of the report relates to work outside of the two blocks being relinquished and as such cannot be included herein in its entirety.

4.2 Summaries

The following are drawn from the summary report with some modifications. To follow are the historical tenements which included one or both of the two blocks being relinquished.

4.2.1 Pickands Mather International (EL 12/1965)

Pickands Mather carried out a regional stream sediment sampling programme over a large western Tasmanian holding on their EL 12/1965. They sampled -80# and assayed for Cu, Pb, Zn, Ni, Co and As (+/-Mo) by AAS, and Sn by XRF.

Sampling was undertaken of the streams leading into the Leigh and Lindsay Rivers in the eastern block being relinquished, and in the headwaters of the Pedder and North Pedder Rivers, and Native Hut and Skull Creeks in the western block being relinquished (Anon, 1966; 66_0439).

4.2.2 Australian Consolidated Industries Limited (ACI) 1968 – 1974 (EL 16/1968, EL 48/1970, EL 49/1970)

ACI pegged EL 16/1968 over the northern part of the Balfour copper belt (and commenced a systematic body of exploration) and also joint ventured with Renison Limited, Mt. Lyell Mining and Railway Company Limited and Consolidated Goldfields Aust. Limited over EL's 48/1970 and 49/1970 (the latter which includes the western block of EL 12/2015 being relinquished) over the southwestern part of the BPA including the Interview River, Copper/Silver Reward and Chimney Creek areas.

On the latter two tenements work was managed by Renison Limited who carried out an aeromagnetic survey and regional stream sediment sampling programme (including the western block being relinquished) before the bulk of the ground (including all within the BPA) was dropped (Newnham, 1972; TCR 72_0909).

4.2.3 Esso Exploration and Production Australia Incorporated 1973 – 1974 (EL 2/1973)

Esso Exploration and Production Australia Incorporated (Esso) explored the southern half of the Balfour Project Area as part of their larger EL 2/1973.

Initial work consisted of an airborne INPUT EM survey with magnetics and radiometrics also read (Neale, 1973; TCR73_0964 & Neale, 1974; TCR74_0987). INPUT EM anomalies were defined within the Balfour Project area with anomalies X3, X4, X5 and X24 in the western block of EL 12/2015 to be relinquished, and anomaly X50 in the eastern. Anomalies X4, X5 and X24 were followed up with a helicopter borne field visit but no outcrop was noted (Neale, 1973; TCR73_0964) and the licence was dropped (Neale, 1974; TCR74_0987). Other anomalies nearer Sandy Cape were attributed to black shale. The anomalies X3, X4, X5, X24, and X50 remain technically unexplained.

4.2.4 CRA Exploration/Geopeko JV (EL 1/1977)

The Pickands Mather and ACI stream sediment sampling data was compiled by Geopeko as part of work on their EL 1/1977 (Weir, 1982; 82_1801; and Weir, 1983; 83_1960). 400 samples were collected in addition. Data compiled by Geopeko covers both the eastern and western blocks being relinquished.

Anomalies are defined which warrant follow-up.

4.2.5 New Holland N.L. 1987 – 1989 (EL 26/1987 and EL 27/1987)

New Holland N.L. (New Holland) pegged licences EL 26/1987 and EL 27/1987 which cover the western and southern margins of the BPA respectively (including the western block being relinquished). New Holland were exploring for skarn style tin and base metals in the southern tenement (Cromer, 1989; TCR 89_2911) and skarn style tin and copper in the western (Cromer 1988; TCR 88_2892).

Modelling and interpretation of the available gravity and aeromagnetic data revealed the Pieman Granite (referred to as the Interview Granite) to have a more complex shape than previously thought (Leaman, 1988; 88_2892). Proposed detailed helicopter supported gravity surveying in the licences' second year did not eventuate.

4.2.6 Regalpoint Exploration Pty. Ltd. 2008 – 2010 (EL 57/2007)

Regalpoint Exploration Pty. Ltd (Regalpoint) selected the Horton River area along the westernmost margin of the Balfour Project area (including the eastern block being relinquished) for its uranium potential based on a conceptual and empirical, Australia-wide uranium prospectivity analysis that was commissioned by Regalpoint and undertaken by the Centre for Exploration Targeting and which highlighted the potential of the area (Kreuzer, O., 2009).

Reconnaissance rock sampling was carried out with a very limited number rock samples collected within the BPA from brief reconnaissance visits and analysed for uranium with no anomalous results reported (Gauci, M., 2009).

5.0 Conclusions and Recommendations

The conclusion from the exploration work is that the relinquished portion of EL 12/2015 is of significantly lower prospectivity than the retained portion and a recommendation has been made to relinquish 100skm.

6.0 Environment

There has been no field work on the area being relinquished.

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