

Redbank Granted IOCG Prospective Tenements in Gawler Craton, SA

HIGHLIGHTS

- **2018 Project Generation activities for Redbank identified highly prospective Olympic Dam-style Iron Oxide-Copper-Gold (IOCG) targets in Gawler Craton, SA**
- **Applications have been made for Millers Creek and Kingoonya**
- **Combined tenement areas equal 1111 km²**
- **Millers Creek Tenement application granted**
- **New government data release for area expected in December 2018**

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Redbank Copper Limited (ASX: RCP) (**Redbank** or the **Company**) is pleased to announce that following a programme of project generation activities during 2018, it has been granted 154 km² of tenure in the Gawler Craton region in South Australia. The tenement EL6247, known as Millers Creek (**EL6247** or **Millers Creek**), is located in the world-class IOCG Belt, alongside other premier IOCG deposits such as Olympic Dam, Prominent Hill, and Carrapateena.

Millers Creek is located approximately 140 km northwest of Woomera, and was granted in September 2018 for an initial period of one year. The Company has identified at least one compelling undrilled gravity anomaly at Millers Creek from density modelling imagery generated from open file gravity data, which it intends to confirm and drill test.

The Company has also applied for an additional licence contiguous with the Millers Creek tenement. Application EL2008-164 ("**Kingoonya**") is 957 km² and has the potential to bring the combined project size to 1,111 km². The second application takes in two partially drill-tested gravity anomalies (Billa Kalina and Mt Paisley) in the vicinity of Millers Creek.



Figure 1. Location of Millers Creek in South Australia relative to the Redbank Project in Northern Territory.

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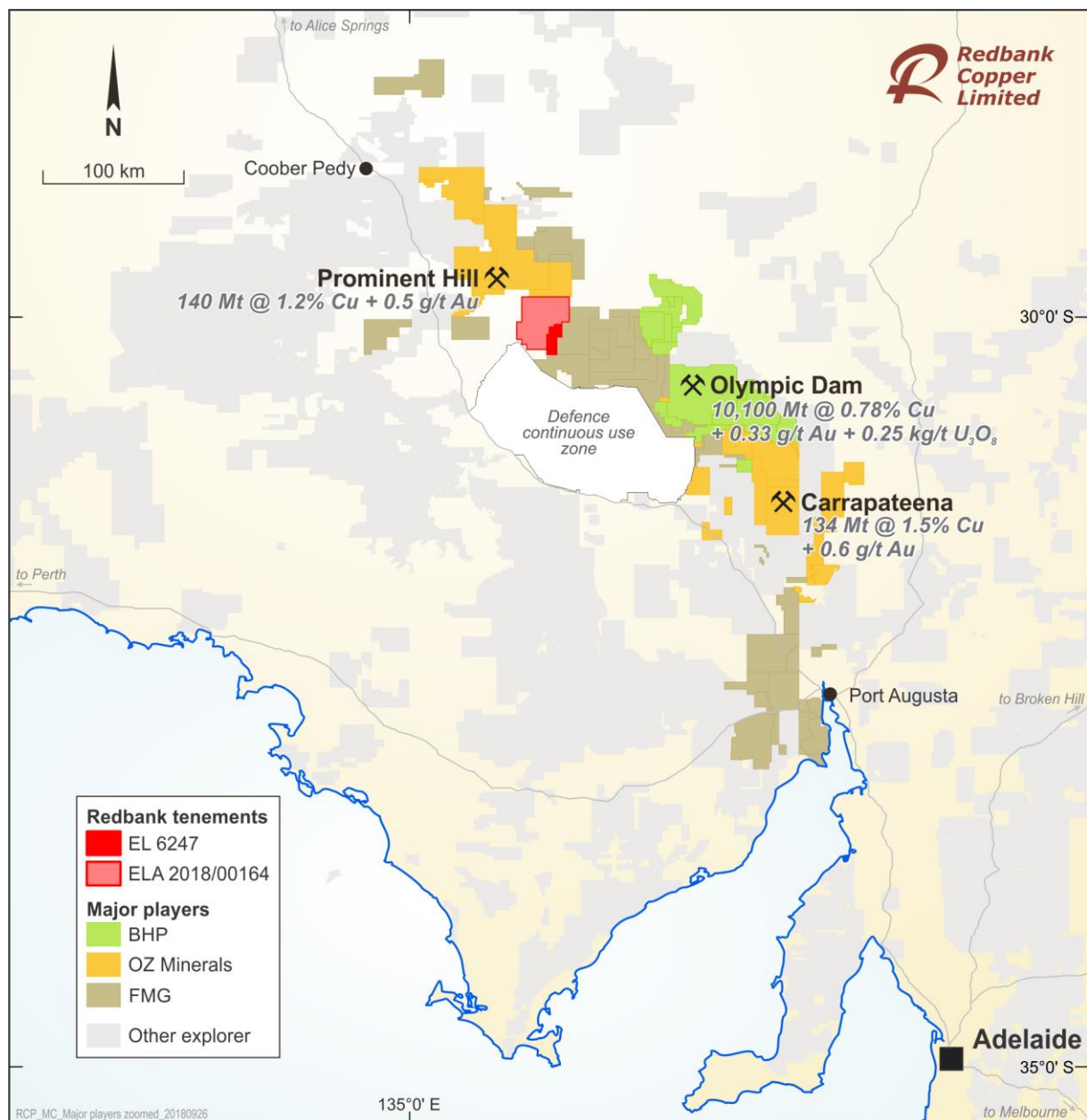
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The Gawler region is currently being surveyed for uniform, high-quality magnetic data collected at 200 m line spacing and 60 m terrain clearance. This is being undertaken by the South Australian Government in partnership with Geoscience Australia. At the time of writing the survey is 92% complete with the survey currently flying in the region of the Millers Creek and Kingoonya tenure. Analytic enhancement images and magnetic source depth estimates from this data are to be produced in partnership with CSIRO. Products from this data are expected from December 2018.

The Company intends to review the new depth to basement model in conjunction with the new aeromagnetic data, and undertake additional gravity surveys on EL6237 to confirm and model the anomaly, and plan drilling.



Figure 2. Location of Millers Creek relative to significant base and precious metal mines and deposits.



https://www.ozminerals.com/uploads/media/171121_Prominent_Hill_2017_Mineral_Resource_and_Ore_Reserve.pdf p1

<https://www.bhp.com/-/media/documents/investors/annual-reports/2018/bhpanualreport2018.pdf> p259

https://www.ozminerals.com/uploads/docs/170824_ASX_Release_Resource_and_Reserve_Statement_-_Carrapateena_August_2017.pdf p5

Figure 3. Location of Millers Creek relative to significant mines and major company tenure.

Discussion of Geology and mineralisation.

The Gawler Craton (see Figure 2) is a region of Archaean to Mesoproterozoic crystalline basement, underlying most of South Australia, which has not undergone substantial deformation in the past 1450 million years. Significant middle Proterozoic deposits (and the Millers Creek target) are typically covered by conductive post-mineral cover sedimentary rocks of the Stuart Shelf.

These sediments are usually barren, and can be of variable thickness, for example at Prominent Hill, depth to basement (mineralisation) is approximately 100 m; at Olympic Dam, 350 m; and at Carrapeteena, 450 m. Depth to basement can vary significantly in short lateral extent, for example at the Acropolis deposit, south-west of Olympic Dam, depth to basement can vary from 600-1000 m over several hundred metres lateral extent.

The depth to mineralising systems deems conventional surface geochemistry and most electrical geophysical techniques ineffective. Significantly, large mineralised systems show a density contrast between stratigraphy

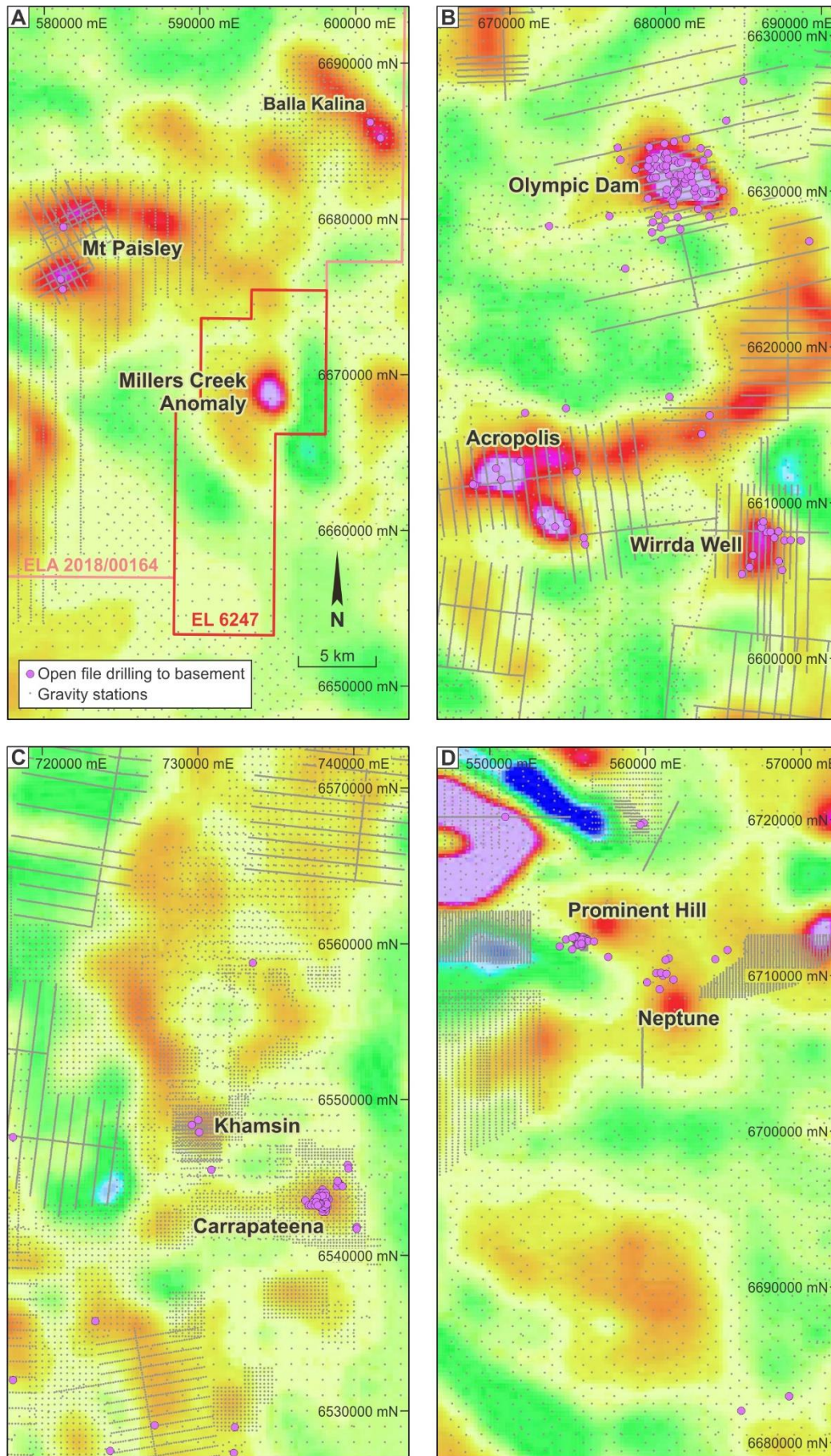


Figure 4. Location of Millers Creek gravity anomaly relative to significant regional deposit footprints at same scale (refer Figure 3). Base image is 1500 m vertical depth slice of gravity model, anomalies are red to magenta.

and alteration system, and to a certain extent show sub-vertical, cylindrical geometry, which can be targeted as potential field anomalies, typically through examination of gravity surveys. Systems tend to be paleo-topographic highs (i.e. resistant ridges in the basement terrain) which amplify the anomaly contrast. However, post-mineral cover can subdue the response to the level of geological noise if basement depth is excessive.

The Company has selected Millers Creek from available open ground and utilised images from available gravity data in order to discriminate gravity anomalies, after preparation of a density model and targets selected from the 1500 m depth slice (refer Figure 4). The Millers Creek gravity anomaly compares favourably with known deposits and prospects in the region. The Company considers anomalies which persist at depth are more likely to represent mineralised systems.

Examining the well-documented discovery history of the larger known IOCG deposits (refer Figures 3 and 4) highlights the risk and reward in the exploration for such systems.

- At Olympic Dam (approximately 350 m of cover), a target was modelled on a coincident magnetic and gravity high, and discovery hole RD1 drilled in June 1975 intersected 38 m @1.05% Cu, 0.27 g/t Au, 70 ppm U_3O_8 from 353 m immediately after passing through the cover, however four of the next five completed holes were barren. The deposit was finally confirmed in September 1976 when hole RD10 intersected 174 m @ 2.03% Cu, 0.66 g/t Au and 620 ppm U_3O_8 from 344 m.
- At Prominent Hill (approximately 100 m of cover) high-grade copper-gold mineralization was discovered in October 2001 through drill testing of the non-magnetic portion on the flank of a gravity anomaly. Results from discovery hole URAN1 included; 20 metres @ 3.0g/t Au, 107 metres @ 1.9% Cu and 0.65g/t Au and, deeper, 152 metres @ 1.1% Cu and 0.6 g/t Au.
- At Carrapeteena (approximately 450 m of cover) two drill holes were planned in mid-2005, one on the bullseye gravity anomaly, with a near coincident magnetic response; and a second designed to test the MIMDAS (then propriety IP and MT) conductivity anomaly. The first hole CAR01 was barren, intersecting an extremely copper-depleted mafic, while discovery hole CAR02, sited south 800 m south, intersected 178.2 m @ 1.83% Cu, and 0.64 g/t Au, from 476 m, including 75 m @ 2.89% Cu & 0.4 g/t Au.

Two local gravity prospects have been partially drilled-tested in proximity to Millers Creek (refer Figure 4). The company has recently applied for ground which takes in these.

- At the Billa Kalina prospect, some 18 km to the north of the Millers Creek anomaly, Eromanga Uranium Limited (earning 50% under JV with Maximus Resources) drilled 2 holes in 2007. Drillhole BKDDH01, sited on the peak of the gravity anomaly, intersected 248 m of Mesozoic and Permian sedimentary cover before penetrating into a sequence of alternating mafic and andesitic volcanics, with the hole terminated at 600 m depth. Drillhole BKDDH02, sited on the flank of the gravity anomaly some 800 m to the north-west of BKDDH01, intersected 317 m of Mesozoic and Permian sedimentary cover before penetrating into a similar sequence of alternating mafic and andesitic volcanics to the bottom of hole at 596 m. Within the mafic units intersected, common quartz-hematite veining and minor pyrite was noted, however no iron-oxide copper gold mineralisation was intersected. Eromanga advised that while these two holes drilled did not fully explain the source of the gravity anomaly it was satisfied that the target had been adequately tested within current acceptable economic limits.

The Company intends to review this drilling and lithologies encountered for confirmation that the mafic sequence did in fact constitute basement, and assess residual targets in the area.

- At Mt Paisley, some 15 km north west of Millers Creek, Esso completed grid-based gravity and ground magnetic surveys further outline two broad gravity highs associated with discrete magnetic anomalies, which it was hoped might have potential for Olympic Dam style Cu-U-Au deposits in the early 1980's. These features were tested by 2 diamond drillholes. DP1 (total depth 616.6 m) entered volcanics of a similar density to the Pandurra Formation at 166 m depth. DP2 entered un-mineralised Pandurra Formation below the Mesozoic cover, and remained in it over the depth interval 204.5 - 860 m. Neither tested basement. A subsequent detailed gravity survey indicated the existence of a fault between the two drill sites, which was thought to account for the major stratigraphic displacement between them.

In February 2008, IMX Resources drilled a single vertical diamond hole, MPD001, to a depth of 1683.7 m, intersecting basement rocks at 1288 m, testing what was referred to as the Marshall gravity anomaly. Core from the basement included a 185 m thick sequence of dense hematite-rich banded iron formation with minor zones of brecciation, underlain and intruded by dolerite dykes. The combination of a dense BIF sequence and intrusions of magnetic dolerites was thought to explain the geophysically modelled deep-sourced, large gravity and magnetic anomaly. No haematitic alteration or other distal vectors to an IOCG mineralised system were observed in the basement drill core. Although trace chalcopyrite was present in the BIF and shales, this copper sulphide mineralisation was not regarded with any significance.

The Company considers that the Mt Paisley gravity anomalism is complex and large, and the presence of mineralised systems in the area cannot be discounted on the basis of the single hole to basement completed to this point.

The Company expects to undertake work at Millers Creek as a compliment to its Redbank Project during the wet season in the Northern Territory. The Company anticipates that the release of the new depth to basement model in conjunction with the new aeromagnetic data in December 2018, and in conjunction with its own studies will assist in the understanding of the potential of this area, and the Company looks forward to updating the market with advances at this exciting project.

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Competent Person Statement

The information in this report relating to Exploration Results was compiled by Mr Craig Hall, who is a contracted employee of the company and a member of the Australian Institute of Geoscientists ("AIG"). Mr Hall has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Hall consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.