

ASX Code: RDM

Red Metal Limited is a minerals exploration company focused on the exploration, evaluation and development of Australian copper-gold and basemetal deposits.

Issued Capital:

245,591, 743
Ordinary shares

10,975,000
Unlisted options

Directors:

Rob Rutherford
Managing Director

Russell Barwick
Chairman

Joshua Pitt
Non-executive Director

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DECEMBER 2020 QUARTERLY REPORT
29 JANUARY 2021

HIGHLIGHTS

ALLIANCE WITH OZ MINERALS

Three Ways, QLD, Nickel-Copper-Cobalt-PGE & Zinc-Lead-Silver

- Semi-massive pyrrhotite veins in drill hole TWD2001 return anomalous levels of nickel and platinum group elements.
- Re-modelling of the magnetotelluric data show the location of the strong conductance anomaly east of TWD2001 that remains to be drill tested.
- Follow-up ground electromagnetic surveying planned.

Gulf, QLD, Copper-Gold

- Heritage surveys completed in preparation for drilling at the start of the 2021 field season.

Lawn Hill, QLD, Zinc-Lead-Silver & Copper

- Processing and interpretation of new magnetotelluric data in progress.

Yarrie, WA, Copper-Gold-Cobalt

- Final land access deed executed allowing the tenement applications to progress through to granting.
- Preparations for airborne and ground electrical surveys in 2021 are underway.

RED METAL FUNDED PROJECTS

Maronan, QLD, Silver-Lead & Copper-Gold

- 2D seismic survey completed across the deposit.
- Interpretation in progress.

GREENFIELDS DISCOVERY ALLIANCE WITH OZ MINERALS

Three Ways Project: Nickel-Copper-Cobalt-PGE & Lead-Zinc-Silver

Mount Isa Inlier QLD

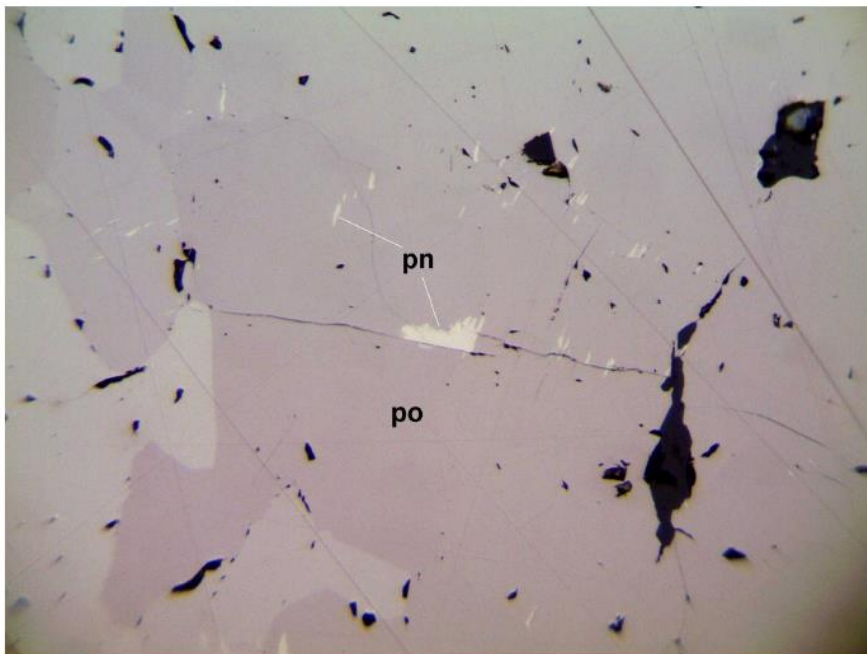
Initial proof of concept drill tests on two separate high conductance magnetotelluric targets (TWD2001 and TWD2002) intersected mafic intrusive rocks types (gabbro and dolerite) that did not clearly explain the source to these strong and laterally continuous magnetotelluric anomalies.

Assays from a 7.8 metre interval of semi-massive pyrrhotite veins in drill hole TWD2001 returned anomalous levels of nickel and platinum group elements with the best one metre sample returning 0.28% nickel, 399ppm copper, 672ppm cobalt, 258ppb palladium, 43ppb platinum (refer to Red Metal ASX announcement dated 28 January 2021). Subsequent petrology has revealed the presence of fine nickel sulphide inclusions within the vein-hosted pyrrhotite (Figure 1).

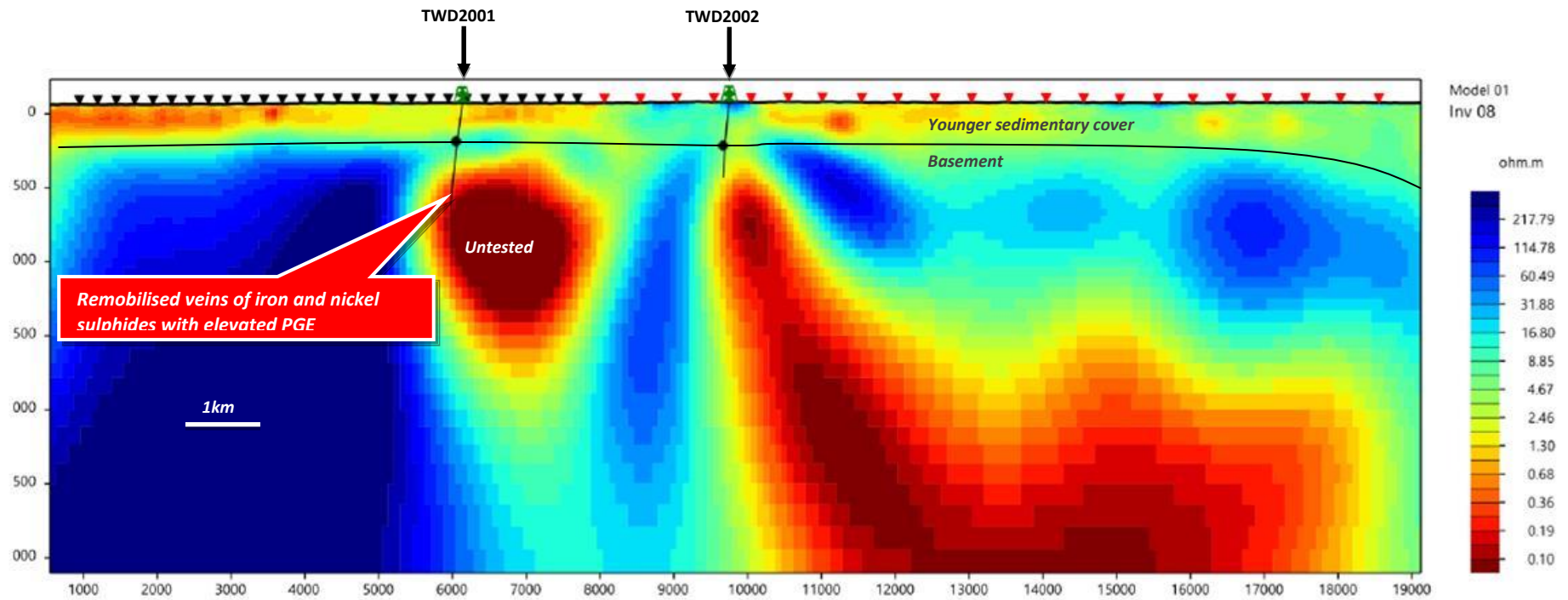
Reprocessing of the magnetotelluric data subsequent to the drilling has generated an alternative interpretation that shows the location of the high conductance anomaly east of TWD2001 (Figure 2). This new interpretation remains to be drill tested.

The thick mafic intrusive host rock, together with the elevated nickel and platinum group elements in the remobilised pyrrhotite veins point to the nearby potential for magmatic nickel sulphides. This mineralisation style may relate to the unresolved high conductance magnetotelluric anomalies at Three Ways (Figure 2).

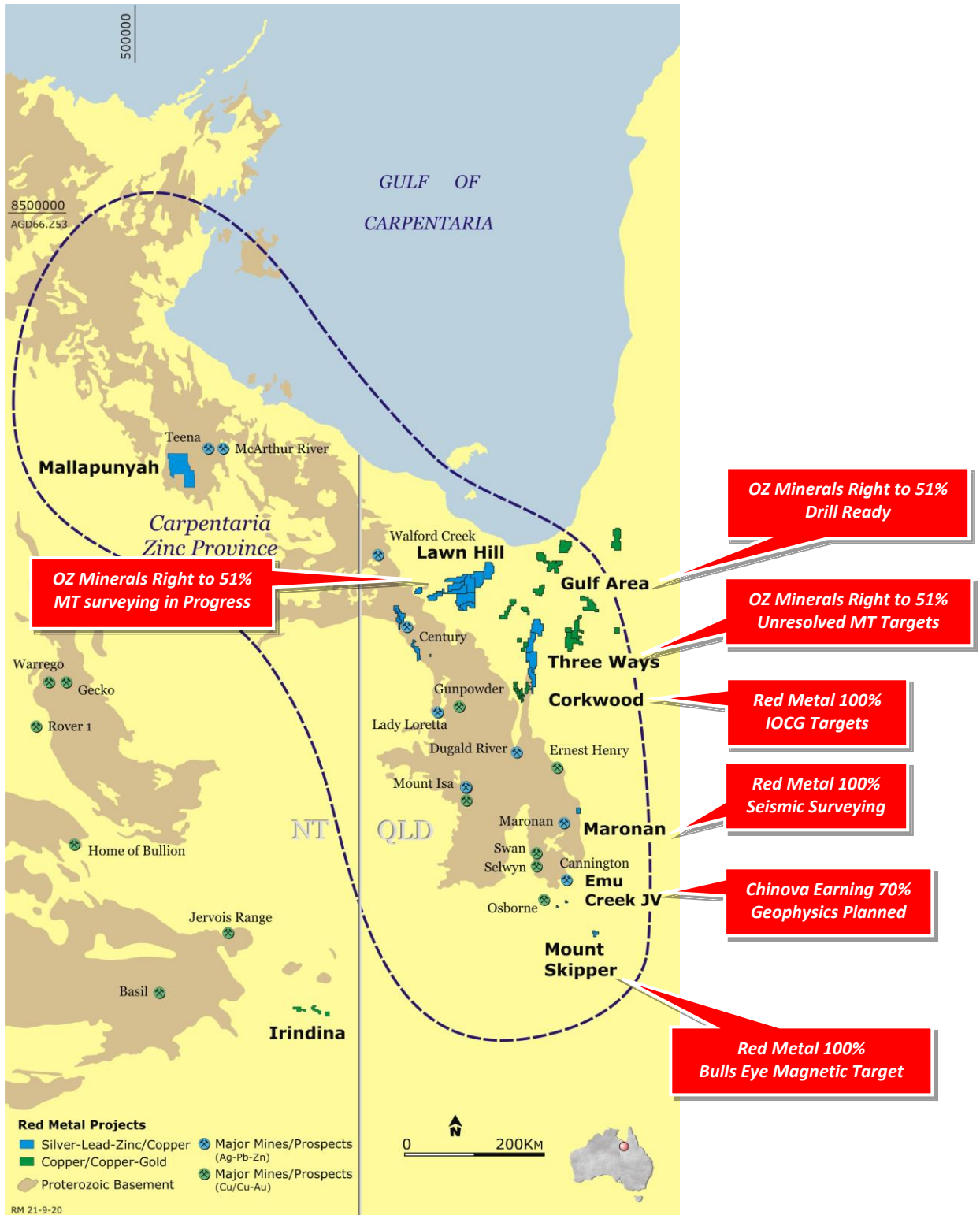
Re-modelling on the magnetotelluric data is ongoing. A deep penetrating, moving loop electromagnetic survey is planned across the drilled magnetotelluric targets to refine follow-up drill positioning. This work is scheduled to commence as soon as climatic conditions permit.



[Figure 1] Three Ways Project: Coarse polycrystalline pyrrhotite (po) containing late exsolved flames of pentlandite (pn). Reflected light image of sample TWD2001 from 675.5 metres. Field of view is 0.6mm.



[Figure 2] Three Ways Project: Reprocessed 2D conductance depth image with the first pass drill holes TWD2001 and TWD2002. This imagery indicates the bulk of the high conductance anomaly is east of TWD2001 and remains untested. A deep penetrating, moving loop electromagnetic survey is planned across the unresolved magnetotelluric targets to improve follow-up drill positioning. Vertical distance = 2 x horizontal distance.



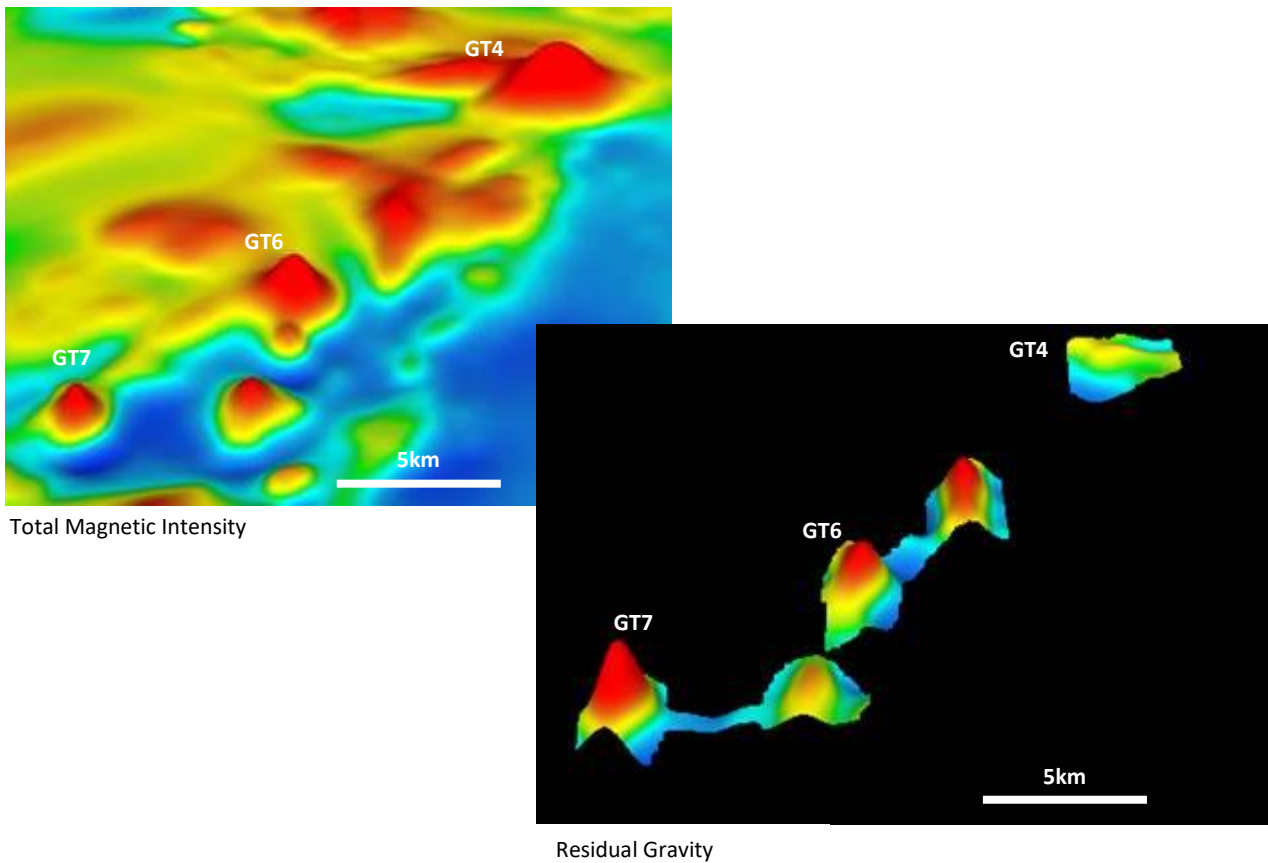
[Figure 3] Northwest Queensland and Northern Territory: Major deposits and Red Metal tenement locations.

Gulf Project: Copper-Gold

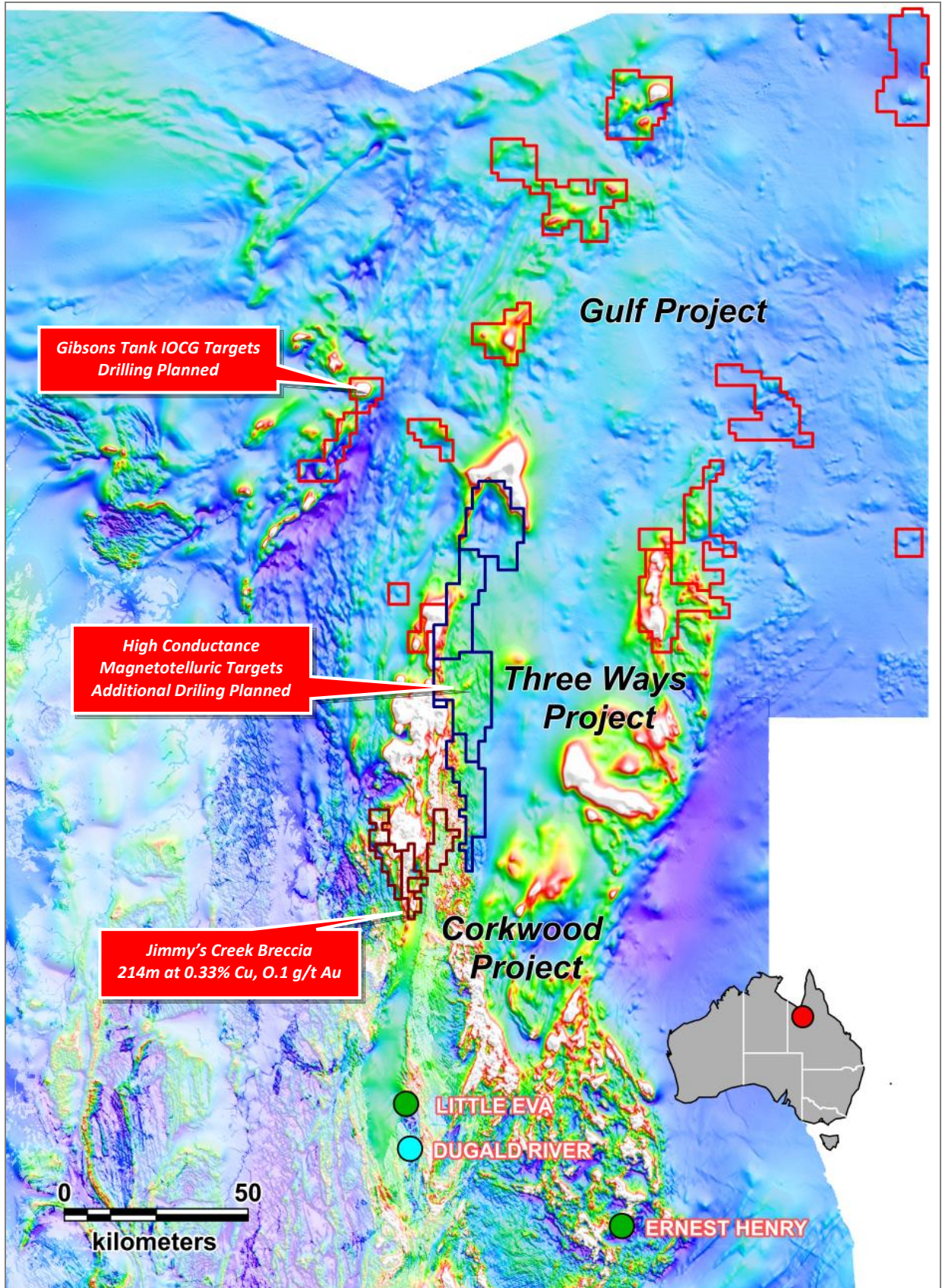
Mount Isa Inlier QLD

Heritage surveys in preparation for drilling were completed over four key targets on the Gibson's Tank project last quarter (Figures 3 and 5). The Alliance with OZ Minerals have allocated a budget to drill test two of these targets with the program scheduled to start at the beginning of the 2021 field season.

The Gulf project targets several standout geophysical anomalies in an under explored extension of the Cloncurry terrain which offers scope for the discovery of large Iron Oxide Copper-Gold (IOCG) breccia systems (Figure 4).



[Figure 4] Gulf Project: Gibson's Tank 3D oblique topographic view of the total magnetic intensity image (top left) and the residual gravity images from Red Metal's surveying (bottom right). Key targets for drilling testing in 2021 include the high magnetic and high gravity targets GT7 and GT6 and the high magnetic, weak gravity target GT4.

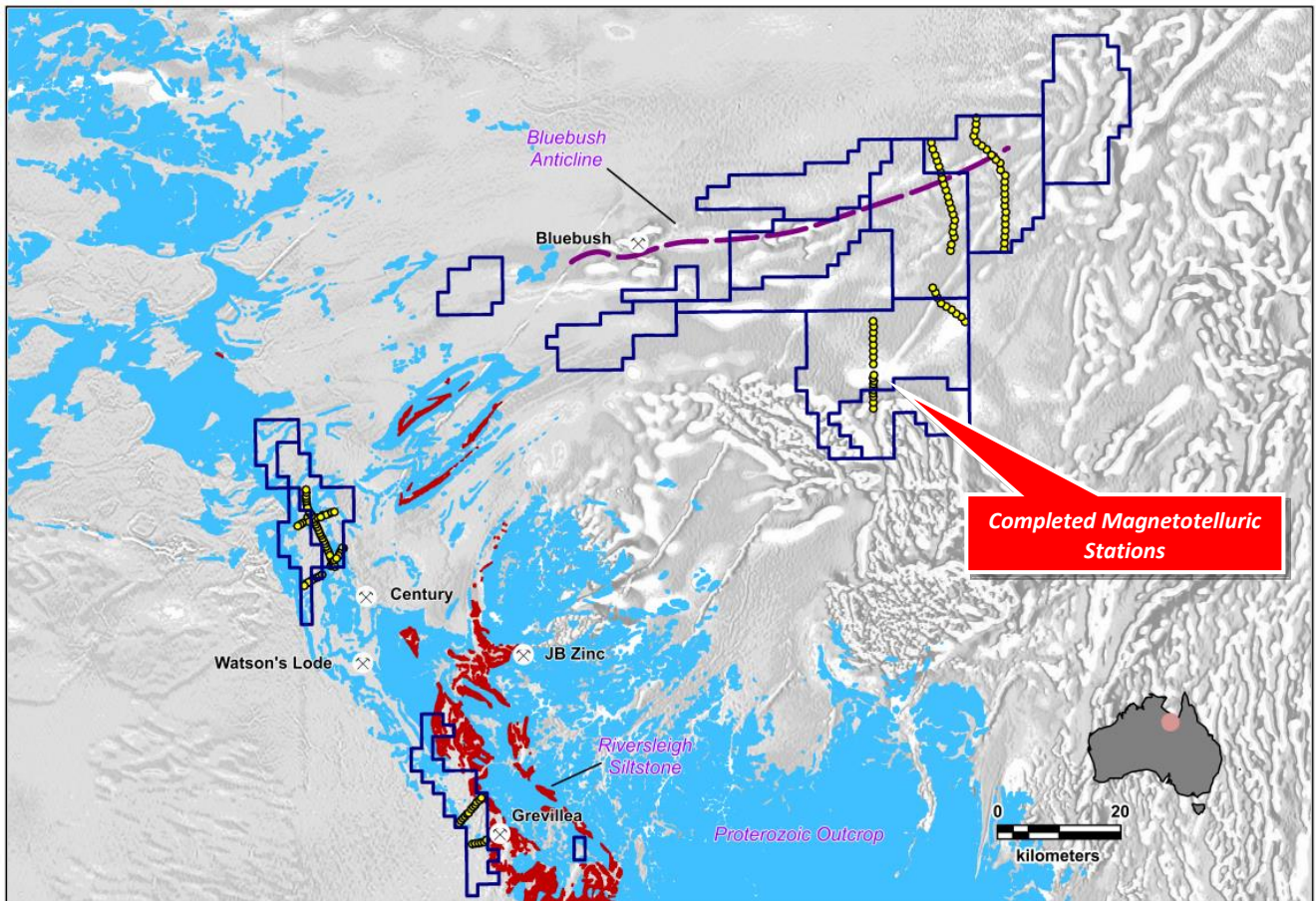


[Figure 5] Three Ways (blue), Gulf (red) and Corkwood (brown) Projects: Total magnetic intensity image highlighting regional project locations. Regions of exposed or outcropping geology highlighted as white translucent areas.

Lawn Hill Project: Zinc-Lead-Silver & Copper-Cobalt

Mount Isa Inlier QLD

Magnetotelluric surveying continued until the end of the 2020 field season. This work is aiming to map prospective stratigraphy and trap sites for giant zinc or copper deposits in stratabound or more structurally controlled breccia settings. To date, a total of 165 stations have been collected (Figure 6). Processing and interpretation of the new data is in progress. Additional surveying is planned to recommence in 2021 after the wet season.



[Figure 6] Lawn Hill Project: Tenement locations on greyscale vertical gradient magnetic imagery overlain by outcropping Proterozoic geology (blue), highlighting the exposed, stratiform zinc prospective, Riversleigh Siltstone (red) with major zinc mines and prospects. The Bluebush stratiform zinc prospect occurs on the western closure to the regional Bluebush Anticline. Completed magnetotelluric stations shown as yellow circles.

Mount Skipper Project: Lead-Zinc-Silver & Copper**Mount Isa Inlier QLD**

The follow-up diamond core drill hole designed to test the Mount Skipper magnetic anomaly intersected hydrothermally derived magnetic minerals (pyrrhotite and magnetite) associated with the weak copper sulphide mineralisation (refer to Red Metal ASX announcement dated 23 October 2020). The hydrothermal alteration overprints a coarse spotted sillimanite-biotite-quartz-garnet-feldspar gneiss and quartz-biotite granofels after metamorphosed sedimentary rock types.

Detailed petrology and magnetic remanence tests are in progress. These studies will quantify the magnetic properties of the rocks and validate whether the drilling has adequately tested the anomaly or not. This data will also better constrain future magnetic models for drilling.

OZ Minerals withdrew the Mount Skipper project from the Greenfields Discovery Alliance this quarter, however Red Metal continues to consider follow-up programs.

Yarrie Projects: Copper-Cobalt, Copper-Gold**Paterson Province WA**

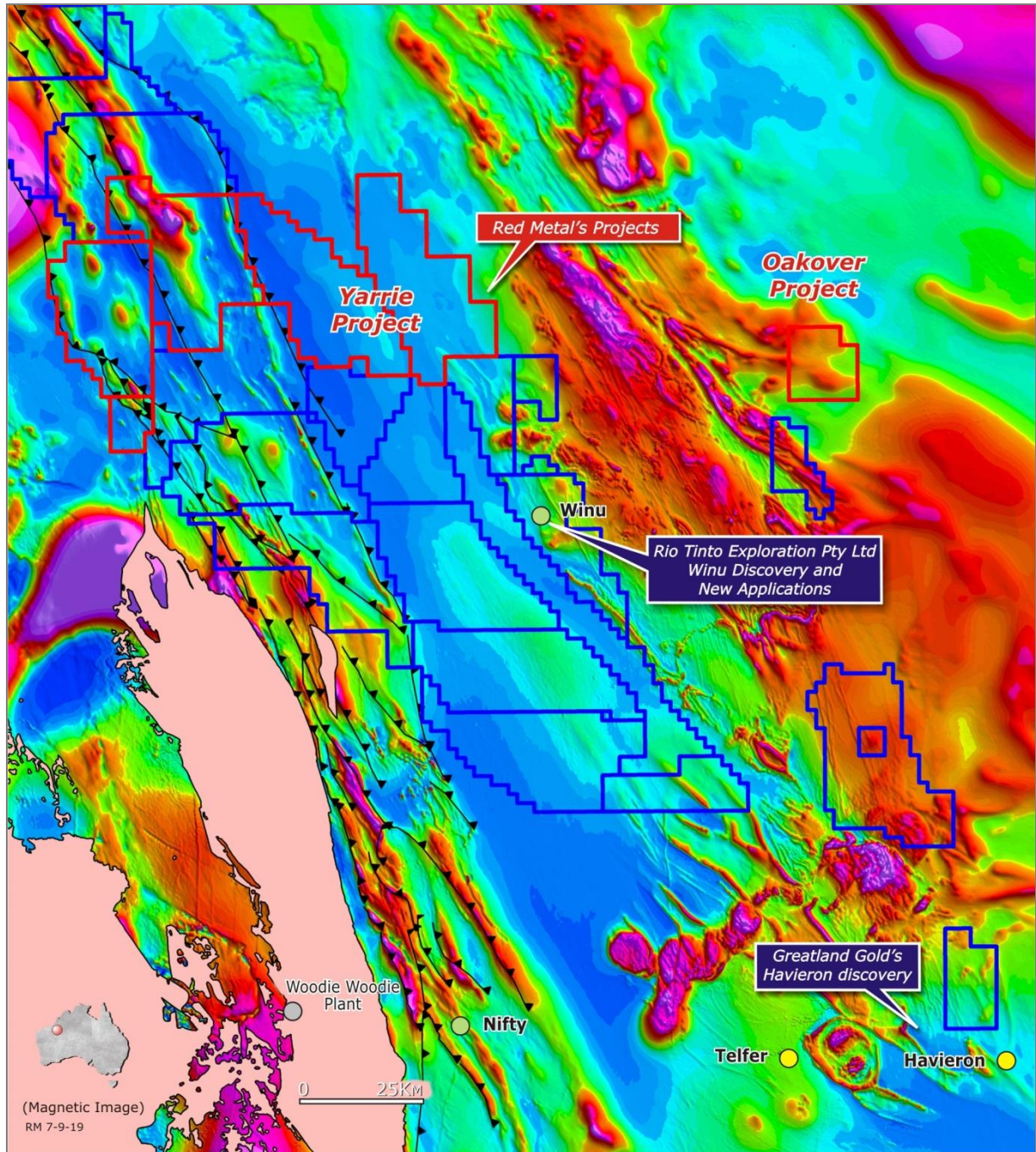
The final land access deed needed to progress the Yarrie tenement applications through to granting was executed last quarter. Planning for the 2021 field programs is underway.

The new Winu and Haverion copper and gold discoveries (Figure 7) have shifted the targeting strategies of many explorers active in the Paterson Province of Western Australia leading to a boom in the use of modern electrical geophysical survey methods over this proven, yet under explored, copper and gold terrain. In late 2018 Red Metal secured a significant land position in this highly sought after province and has identified a number of targets for electrical geophysical surveying and drill testing in the 2021 field season.

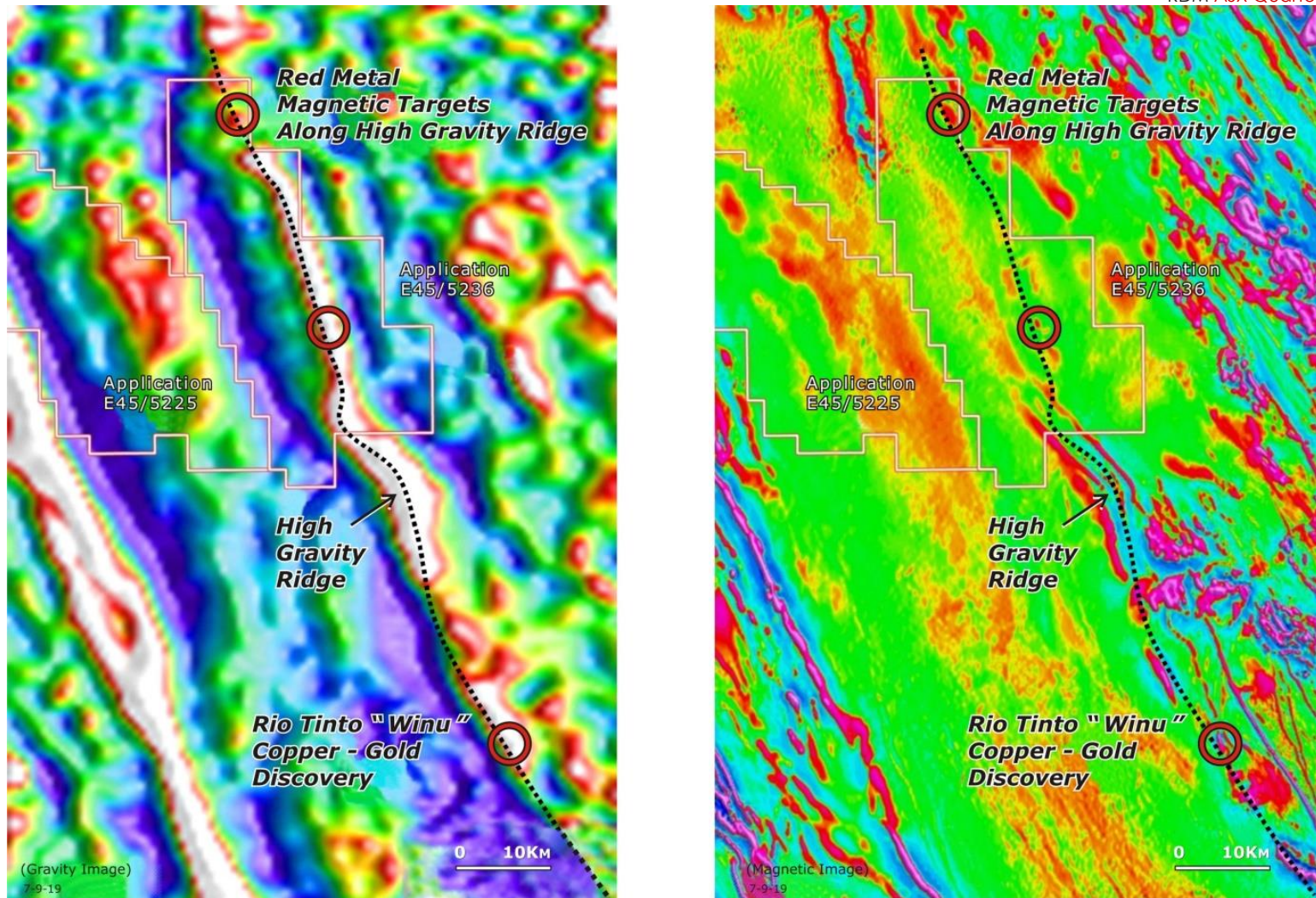
Yarrie has seen little past exploration but is well located along trend from Metal X Limited's Nifty copper mine and Rio Tinto's new Winu copper and gold discovery (Figure 7).

Combining airborne gravity imagery with vertical gradient magnetic imagery has allowed Red Metal to highlight Rio Tinto's Winu discovery as a low-amplitude, bullseye magnetic target along a high-gravity ridge (Figure 8). Two very similar low-amplitude magnetic bullseye targets are evident in Red Metal's tenement application along the same high-gravity trend further to the north northwest (Figure 8).

The Alliance will utilize modern, deep penetrating, airborne and ground electromagnetic surveying methods to rank prospective magnetic bullseye targets for drill testing.



[Figure 7] Paterson Province Yarrie and Oakover Projects: Magnetic imagery with Nifty mine, Telfer mine, Haverion and Winu prospects and Red Metal's Yarrie and new Oakover tenement applications (red line) and Rio Tinto's new applications (blue line). Note the exposed basement terrain of older Archaean rocks (buff coloured polygon).



[Figure 8] Yarric Project: New Falcon airborne gravity imagery (left) highlighting high gravity ridge. Vertical gradient magnetic imagery (right) highlights a magnetic feature associated with the location of the Rio Tinto copper discovery “Winu” sited along the high gravity ridge. Note two intriguing bullseye magnetic features on Red Metal’s new tenement application E45/5236 along trend to the north northwest. Falcon data was flown by the Geological Survey of Western Australia and Geoscience Australia.

RED METAL FUNDED PROJECTS

Maronan Project: Silver-Lead & Copper-Gold

Mount Isa Inlier QLD

This quarter saw completion of trial 2D seismic lines over the deposit which attempt to create an image of the continuation of mineralisation at depth and de-risk any future deep drilling on the deposit. Interpretations of the new seismic data are in progress.

The Maronan lead-silver and copper-gold project is a large base and precious metal deposit that Scoping Studies suggest is worthy of infill drilling and further mining studies. With over 100 million ounces of contained silver, Maronan is one of the largest undeveloped silver resources in Australia.

Maronan has JORC 2012 compliant Inferred Resources of 30.8Mt @ 6.5% lead with 106 g/t silver (using a 3% lead cut-off grade) plus 11Mt @ 1.6% copper with 0.8 g/t gold (using a 1.0% copper cut-off grade). Refer to Red Metal ASX announcement lodged 27 October 2015 for details on the resource.

The lead and silver mineralisation is soft, coarse grained, and returned recoveries of between 92-96% for the lead and 91-94% for the silver from preliminary metallurgical testing (refer Red Metal ASX announcements lodged 29 July 2015 and 8 March 2016). Current commodity prices and exchange rates have been applied to the 2016 preliminary mine scoping study for Maronan to provide metal equivalence calculations. This has shown that the resource grade of 6.5% lead with 106 g/t silver is equivalent to a lead grade of 10.6% or an equivalent copper grade of about 3.2%.

The deposit comprises multiple ore horizons with steep dipping planar geometries and excellent hanging wall and footwall ground conditions. Sulphide mineralisation comes to within about 90 metres of surface.

In addition, Red Metal has deduced vectors from analyzing the drilling to date that suggest the possibility of a large, higher grade Cannington style silver-lead-zinc deposit and enriched copper-gold system existing at depth below the presently outlined resources.

Red Metal is reviewing options for further development including securing a suitable funding partner to drill-out the shallower inferred resources to higher confidence levels and test the deeper higher-grade concept plays.

Corkwood Project: Copper-Gold

Mount Isa Inlier QLD

During the quarter Red Metal completed a single drill test on a low amplitude magnetic target north of the Jimmy Creek Breccia prospect (refer Red Metal September 2020 Quarterly Report). Core cutting and assaying for base metals, gold and other trace elements are pending.

The Corkwood project is situated about 100 kilometres northwest of Glencore's large Ernest Henry copper-gold mine and about 60 kilometres north of Altona Mining Limited's advanced Little Eva copper-gold deposit (Figures 3 and 5).

Historic exploration drilling over the Corkwood area has identified favorable porphyritic volcanic host rocks, alteration, trace-element geochemistry and low-grade copper and gold mineralisation typical of that observed in the halo surrounding the large Ernest Henry breccia deposit.

On the Jimmy's Creek prospect, the porphyritic volcanic units are brecciated and host wide zones of low-grade copper, gold and silver mineralisation: a good indicator of the potential for these styles of deposits elsewhere in the district. Better intercepts include 211 metres at 0.33% copper with 0.16 g/t gold and 153 metres at 0.41% copper with 0.1 g/t gold plus 10 g/t silver, including 32 metres at 1.16% copper with 0.3 g/t gold (refer Red Metal ASX announcement dated 21 March 2011).

Geological observations from historic drill cores indicate that the better copper and gold mineralisation occurs with red feldspar-silica alteration and post-dates the early formed, strong magnetite-biotite alteration. This mineralisation appears to be magnetite destructive and associated with second order magnetic anomalies or low magnetic zones (Figure 9). This important observation backed with the new high resolution magnetic survey has generated several priority copper-gold breccia targets for evaluation in 2021.

[Figure 9] Corkwood Project: Porphyritic volcanic rock showing early magnetite-biotite alteration (black colour at the top) demagnetised by red feldspar-silica alteration and associated chalcopyrite (weak magnetite) veining.



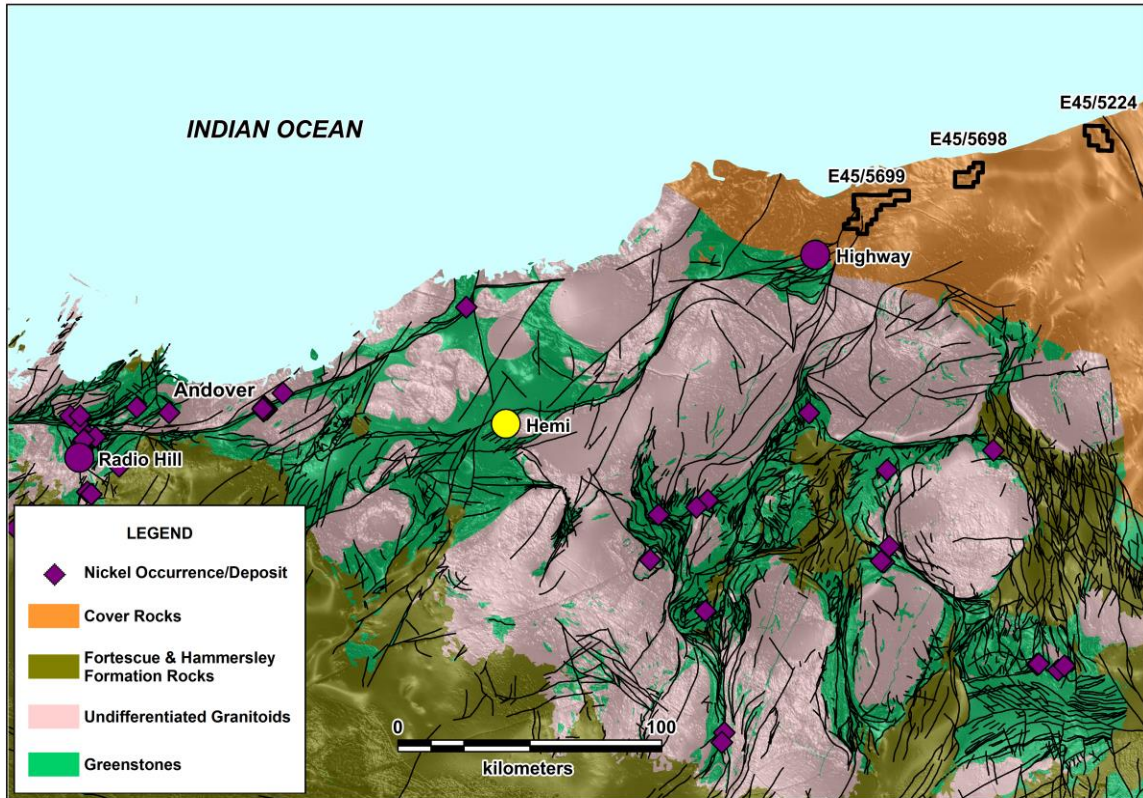
Pardoo Project: Nickel-Copper-PGE

Pilbara Craton WA

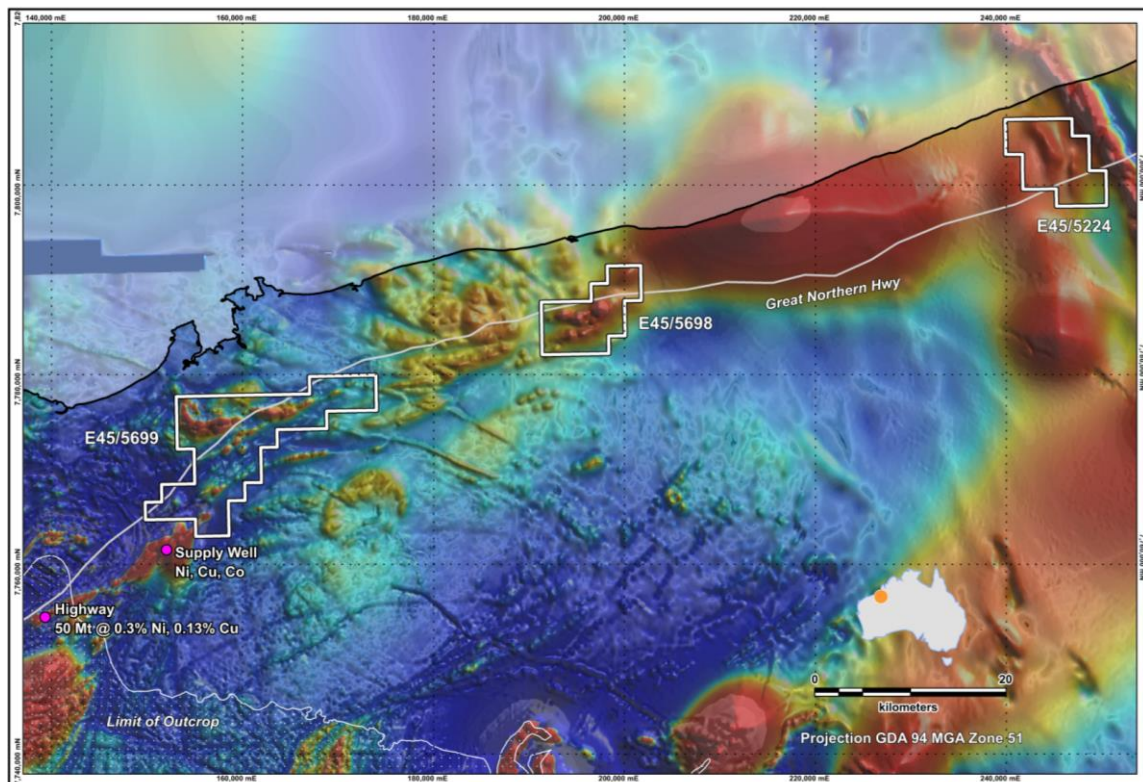
The new Pardoo project targets magmatic nickel-copper deposits and gold along the northwest margin of the Pilbara Craton where it extends under younger sedimentary cover.

This project takes in several shallow covered magnetic targets located along strike from the known Highway nickel and copper deposit (50Mt @ 0.3% nickel and 0.13% copper) and two deeper covered plays towards the northeast. These previously untested targets lie along a broad, east northeast trending structural corridor which on a crustal-scale also appears to include the Radio Hill, Mount Sholl, Ruth Well and Highway nickel and copper deposits, the Mundi Mundi PGE deposit as well as DeGrey Mining's recent Hemi discovery (Figures 10 and 11). The project is well located within close proximity to the Great Northern Highway and about 100 kilometres from Port Hedland.

Once the new tenement applications have been granted, Red Metal will use high resolution gravity and ground electromagnetic surveying to rank the key targets for proof of concept drill tests.



[Figure 10] Pardoo Project: Tenement locations on regional geology showing major structures with known nickel deposits and occurrences and the world class Hemi gold discovery.



[Figure 11] Pardoo Nickel Project: Regional magnetic image with Red Metal tenement locations and the known Highway and Supply Well nickel prospects (pink circles). Note the previously untested magnetic targets that will be the focus of Red Metal’s ground based electromagnetic surveying. The project is well located within close proximity to the Great Northern Highway and about 100 kilometres from Port Hedland

Punt Hill and Pernatty Lagoon Projects: Copper-Gold-Zinc**Gawler Craton SA**

Preparations for trials of electrical geophysical surveying over key magnetic targets are underway.

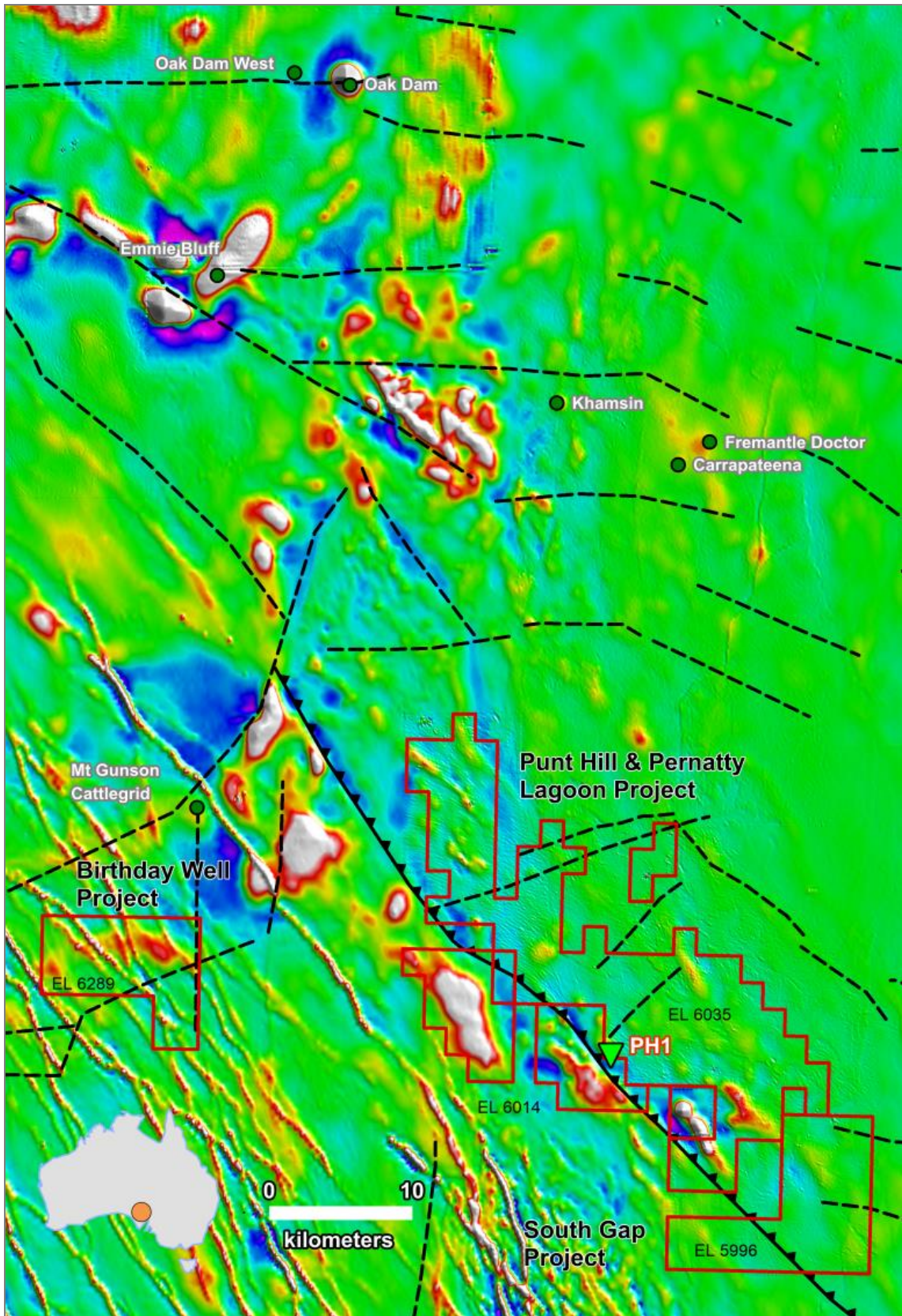
Interest in the Gawler Craton's Olympic Domain has intensified following BHP's announcement in November 2018 of a world class intercept of 438 metres grading 3.0% copper with 0.6 g/t gold at their historic Oak Dam West prospect (Figure 12). This and subsequent spectacular results re-enforce the fertility of the Olympic Domain and the opportunity for other large high-grade discoveries in the province.

Red Metal's Pernatty Lagoon and Punt Hill projects are located 30 kilometres south of OZ Minerals' large Carrapateena copper-gold deposit and target magnetic skarn style deposits where the regional Iron Oxide Copper-Gold mineral systems invade carbonate host rock types (Figure 12).

All past exploration drilling at Punt Hill and Pernatty Lagoon was directed towards gravity anomalies seeking hematite breccia similar to Carrapateena, but this drilling regularly intersected dense garnet altered rock types (or skarns). When drilled near a magnetic target signs of copper mineralisation associated with magnetic minerals become evident. To date the magnetic targets on Pernatty Lagoon and Punt Hill remain poorly tested and offer potential for large base metal skarn (or manto) deposits associated with magnetic minerals.

For example, the first hole into the PH1 target (Figure 12), which is a near coincident gravity and weak magnetic anomaly, was directed towards the gravity portion of the anomaly and intersected an impressive 244 metre interval averaging 0.26% copper. This mineralisation occurs as wide spaced chalcopyrite ± bornite veins with associated magnetite ± hematite. The veins show more intense retrograde chlorite, K-feldspar and siderite alteration. One of the better zones returned 35 metres @ 0.6% copper from 841 metres which included a 1% copper interval over the first 10.8 metres (refer to Red Metal ASX announcement dated 11 April 2019).

The wide interval of anomalous copper mineralisation, proximal K-feldspar, magnetite, chlorite alteration minerals and subsequent geophysical modelling suggest the first hole into the PH1 target is a "near-miss" and step-out drilling directed towards the more magnetic portion of the anomaly is the priority.



[Figure 12] Birthday Well Project, Punt Hill Project and Pernatty Lagoon Joint Venture Project: Total magnetic image showing the location of the Birthday Well airborne electromagnetic conductor (black circle) in relation to the Punt Hill and Pernatty Lagoon tenements and the Carrapateena, Khamsin and Oak Dam copper and gold deposits.

OTHER PROJECTS

Some of Red Metal's other projects are briefly summarised below in Table 1. There were no substantive exploration activities at the projects during the quarter.

[Table 1] Red Metal Limited: other projects.


Project	Description	Status
QUEENSLAND		
<u>Emu Creek JV</u> <i>Cu-Au & Pb-Zn-Ag</i>	Joint venture partner Chinova Resources Pty Ltd is seeking Iron Oxide Copper-Gold and Cannington style lead-zinc-silver within trucking distance of the Osborne Mine	Ongoing prospect evaluation
SOUTH AUSTRALIA		
<u>Barton</u> <i>Zircon, Titanium & Cu-Ni</i>	Large tonnage, low-grade heavy mineral sand deposit discovered in Eucla Basin near Iluka's Ambrosia zircon mine. Scope for magmatic nickel-copper sulphides on large chonolith-like mafic intrusion recognised.	Seeking third party funding.
<u>Callabonna JV</u> <i>Cu-Au</i>	Red Metal has recognized the potential for large Iron Oxide Copper-Gold deposits (IOCG) along the northern margin to the Curnamona Province. Several large magnetic and gravity targets remain to be tested for their copper potential.	Ranking with electro-magnetic surveying.
NORTHERN TERRITORY		
<u>Mallapunyah</u> <i>Pb-Zn-Ag & CuAgCo</i>	Application on Aboriginal Land located within the McArthur Basin targeting zinc-lead-silver deposits similar to the giant McArthur River and Century mines as well as sedimentary-hosted styles of copper mineralisation. Recent success on the Teena project by Teck has highlighted the potential for additional deposits within this fertile terrain	Currently seeking new third party funding
WESTERN AUSTRALIA		
<u>Nullarbor</u> <i>Cu-Au Cu-Ni</i>	Red Metal has applied higher resolution infill gravity surveying on seventeen target areas with several targets identified for follow-up electrical geophysics and proof of concept drill holes. Scope for magmatic nickel-copper sulphides is being assessed.	Ranking with electro-magnetic surveying.

This announcement was authorised by the Board of Red Metal. For further information concerning Red Metal's operations and plans for the future please refer to the recently updated web site or contact Rob Rutherford, Managing Director at:

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www.redmetal.com.au



Rob Rutherford
Managing Director



Russell Barwick
Chairman

ADDENDUM TO DECEMBER 2020 QUARTERLY ACTIVITIES REPORT

ASX Additional Information

1. ASX Listing Rule 5.3.1: Exploration and Evaluation Expenditure (excluding staff costs and expenditure incurred by the Alliance) during the Quarter was \$282,000. Full details of exploration activity during the Quarter are set out in this report.
2. ASX Listing Rule 5.3.2: There were no substantive mining production and development activities during the Quarter.
3. ASX Listing Rule 5.3.5: Payments to related parties of the Company and their associates during the Quarter \$133,000: These payments relate to non-executive director's fees and the managing director's salary (\$81,000), and part payment (\$52,000) of a short-term incentive cash bonus awarded as remuneration to the managing director in 2019.

Table 1 - Granted exploration tenements held at the end of the Quarter are as follows:

Project	Tenement Reference	Company Interest %	Comment
Maronan	EPM 13368	100	
Corkwood	EPMs 13380, 26032, 26125, 27472	100	
Lawn Hill	EPMs 25902, 25905, 25985, 26157, 26293, 26406, 26819, 26820, 26821, 26822, 27179, 27224, 27206, 27335	100	Refer note 1.
Gulf	EPMs 26434, 26436, 26654, 26655, 26656, 26657, 26672, 26674, 27308, 27309	100	Refer note 1.
Three Ways	EPMs 26941, 26943, 26947, 27371		Refer note 1.
Mount Skipper	EPM 19232	100	
Chinova JV	EPM 15385	100	Refer note 2.
Barton	EL 5888	100	
Callabonna JV	EL 6204, 6318	51	Refer note 3.
Pernatty Lagoon JV	EL 6014	90	Refer note 4.
Punt Hill JV	EL 6035	100	
South Gap	EL 5996	100	
Birthday Well	EL 6289	100	
Irindina	EL 27266	100	
Nullarbor	ELs 3428, 3432, 3433, 3436, 3437, 3438, 3439, 3441, 3595, 3596, 3602, 3603	100	

Notes:

1. Greenfields Discovery Alliance Agreement between Red Metal (diluting to 49%) and OZ Minerals Limited (earning 51%). No change in interest during the quarter.
2. Joint venture between Red Metal (diluting to 30%) and Chinova Resources (Osborne) Pty Ltd (earning 70%). No change in interest during the quarter.
3. Joint venture between Red Metal (51% earning 70%) and Variscan Mines Limited (49% diluting to 30%). No change in interest during the quarter.
4. Joint venture between Red Metal (90%) and Havilah Resources NL (10%).

Table 2 - Exploration tenements acquired or disposed of during the quarter are as follows:

Project	Tenement Reference	Status	Comment
N/A	N/A		

Competent Persons Statement

The information in this report that relates to Exploration Results is based on and fairly represents information and supporting documentation compiled by Mr Robert Rutherford, who is a member of the Australian Institute of Geoscientists (AIG). Mr Rutherford is the Managing Director of the Company. Mr Rutherford 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” (the JORC Code). Mr Rutherford consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

The information in this report that relates to Exploration Results and estimates of Mineral Resources for the Maronan Project was previously reported by the Company in compliance with JORC 2012 in various market releases with the last one being dated 27 September 2018. The Company confirms that it is not aware of any new information or data that materially affects the information included in those earlier market announcements and, in the case of the estimate of Mineral Resources all material assumptions and technical parameters underpinning the estimates continue to apply and have not materially changed.

The lead and copper equivalent values were determined by Red Metal using the 2016 Preliminary Mine Scoping Study determined by AMDAD. Mine modelling is based on the following parameters:

- Current metal prices of \$US1804 per tonne lead, \$US22.34 per ounce silver, \$US6416 per tonne copper, \$US1855 per ounce gold
- Processing recoveries provided by the CORE Group were 95% for lead and 93% for silver, based on initial metallurgical test results
- Conceptual realisation costs, covering concentrate transport, smelting, refining, deductions, insurance and royalty, provided by Red Metal, equating to A\$7.71/10kg lead, A\$0.065/g silver, A\$15.67/10kg copper, and A\$3.45/g gold, using an exchange rate of US\$0.71/A\$
- Net recovered values of A\$15.54/10kg lead, A\$0.85/g silver, A\$62.89/10kg copper, and A\$68.4/g gold
- Lead equivalent multipliers of 0.05546 for silver,
- The lead equivalent percentage value is calculated as follows: $\text{lead equivalent\%} = \text{lead\%} + (\text{silver ppm} \times 0.0546)$
- The copper equivalent percentage value is calculated as follows: $\text{copper equivalent \%} = \text{lead equivalent\%} / 4.0476$

These values will vary depending on metal prices assumed, and when metallurgical test work is completed for copper and gold, and further test work is completed for lead and silver. It is Red Metal’s opinion that all the elements included in the metal equivalents calculation have a reasonable potential to be recovered and sold.