

LITHIUM POTENTIAL IDENTIFIED AT RANDALLS PROJECT

- **Comparable geological setting to the Bald Hill and New Dawn Lithium Projects**
- **No previous exploration for lithium within Randall Project tenements**
- **New applications consolidate land position over prospective geology**

Miramar Resources Limited (ASX:M2R, “Miramar” or “the Company”) advises it has identified potential for lithium-bearing pegmatites at the Company’s 100%-owned Randalls Project (“Randalls” or “the Project”), located approximately 70km east of Kalgoorlie in the Eastern Goldfields of WA.

The Randalls Project is located on the northeastern margin of the “Randall Dome”, a folded sequence of black shales, banded iron formation (BIF) and other sediments of the Mt Belches Formation, underlain by a central granitoid core (Figure 1).

According to the Geological Survey of WA, the Randall Dome was formed by the combination of granite emplacement and east-west compression resulting in a doubly-plunging anticline with a NNW-SSE-trending central axis (Figure 2).

As such, Miramar’s tenements are diagonally opposite and in a similar stratigraphic position to several significant lithium-bearing pegmatites on the southwestern margin of the Randall Dome including:

- **Bald Hill** – the subject of a takeover by Mineral Resources Ltd (*ASX Release 4 Sept 2023*)
- **New Dawn** – recently purchased by Torque Metals Ltd (*ASX Release, 5 Sept 2023*)
- **Cowan** - multiple lithium-bearing pegmatite occurrences

Regional radiometric data shows significant potassium anomalism associated with these known lithium pegmatites. Similar potassium anomalism is seen within the Randalls Project tenements north of Lake Randall (Figure 3).

Pegmatites are common south of Lake Randall however a review of historical open file data reveals no evidence of exploration for lithium over the Randalls Project tenements, with previous work mostly limited to gold exploration within the folded BIF which hosts the Mt Belches gold deposits operated by Silver Lake Resources Limited.

Miramar’s Executive Chairman, Mr Allan Kelly, said that, given the strong similarities between Randalls and the Bald Hill area and the lack of previous exploration, there was significant potential for the discovery of lithium bearing pegmatites within the Company’s tenements.

“Our Randalls Project is basically a mirror image of the Bald Hill and New Dawn areas, on the other side of the Randall Dome,” Mr Kelly said.

“The regional radiometric data strongly suggests that there could be lithium bearing pegmatites hidden under thin surficial cover within our tenements but they could be easily missed even when specifically targeted,” he added.

“We are excited about the opportunity to discover lithium bearing pegmatites on our ground,” he added.

The Company will complete a soil geochemical survey over the granted tenement, E25/596, and undertake reconnaissance sampling over its existing tenement applications.

Miramar has also increased its land position over the most prospective geology by submitting applications for four new Exploration Licences.

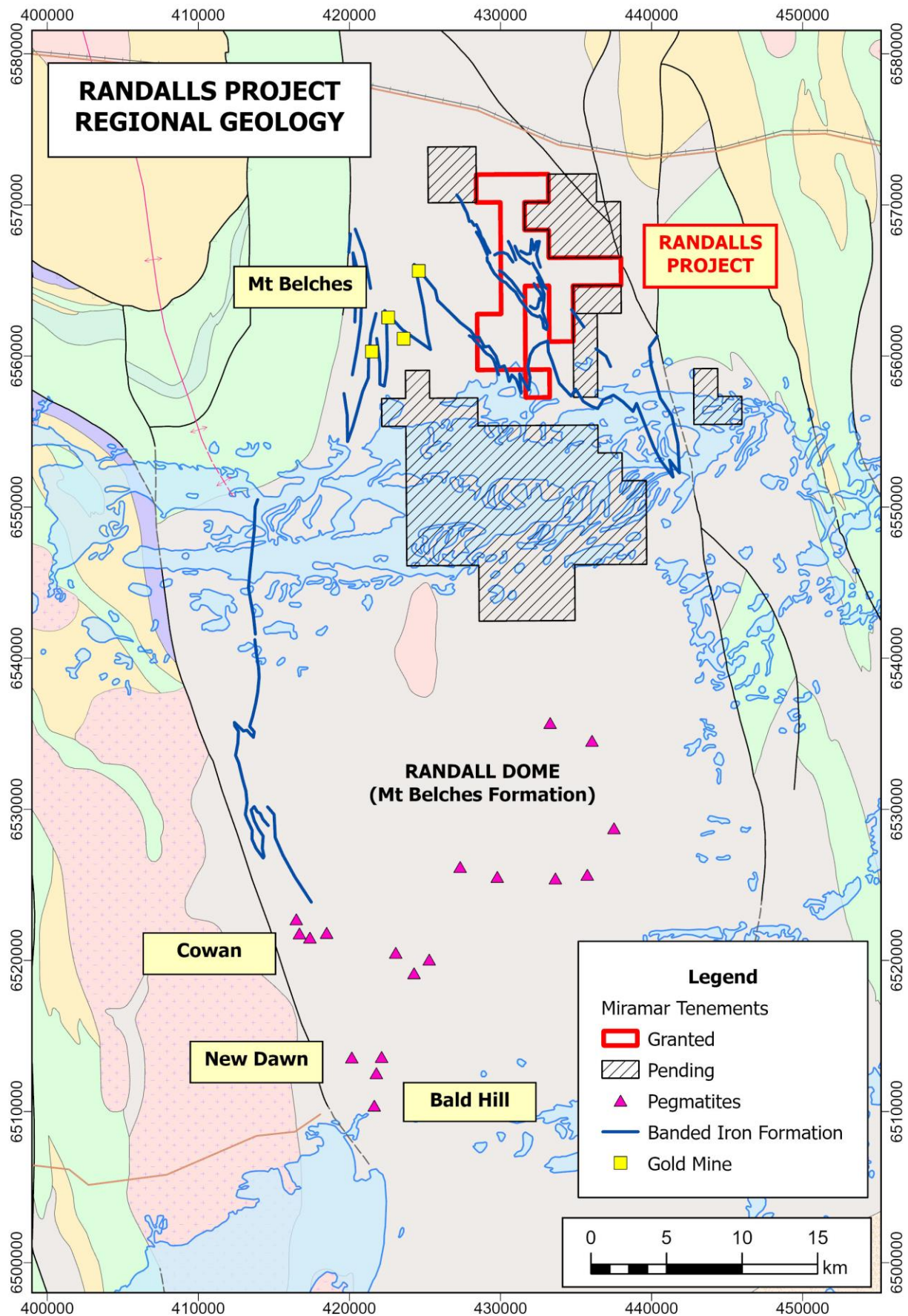
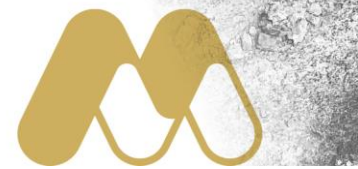


Figure 1. Randalls Project regional geology showing lithium projects and pegmatites.

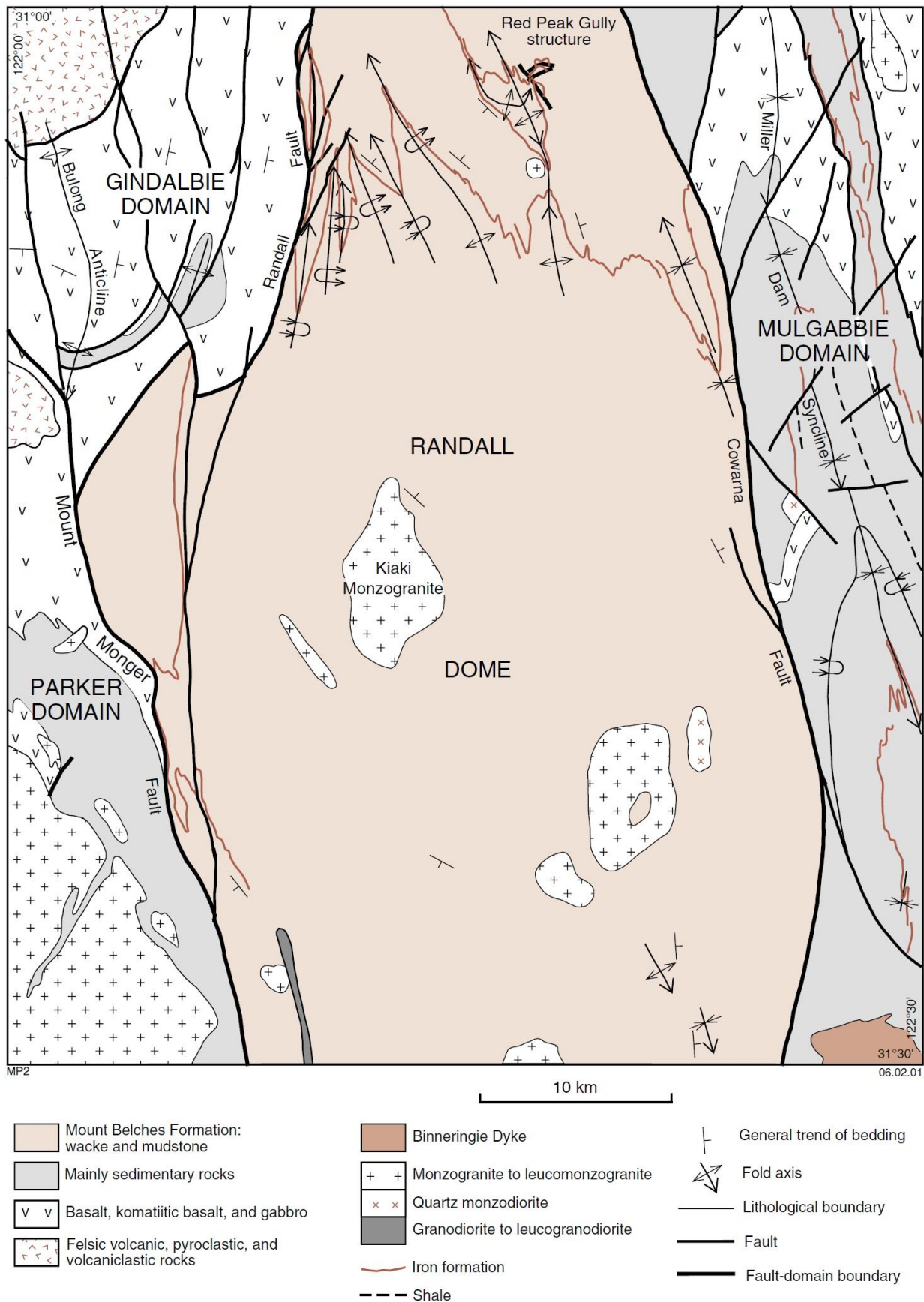
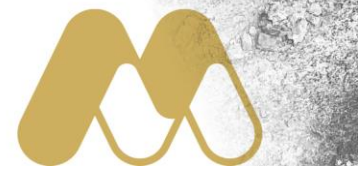


Figure 2. Interpreted geology of the Mount Belches 1:100,000 sheet (Painter and Groenewald, 2001).

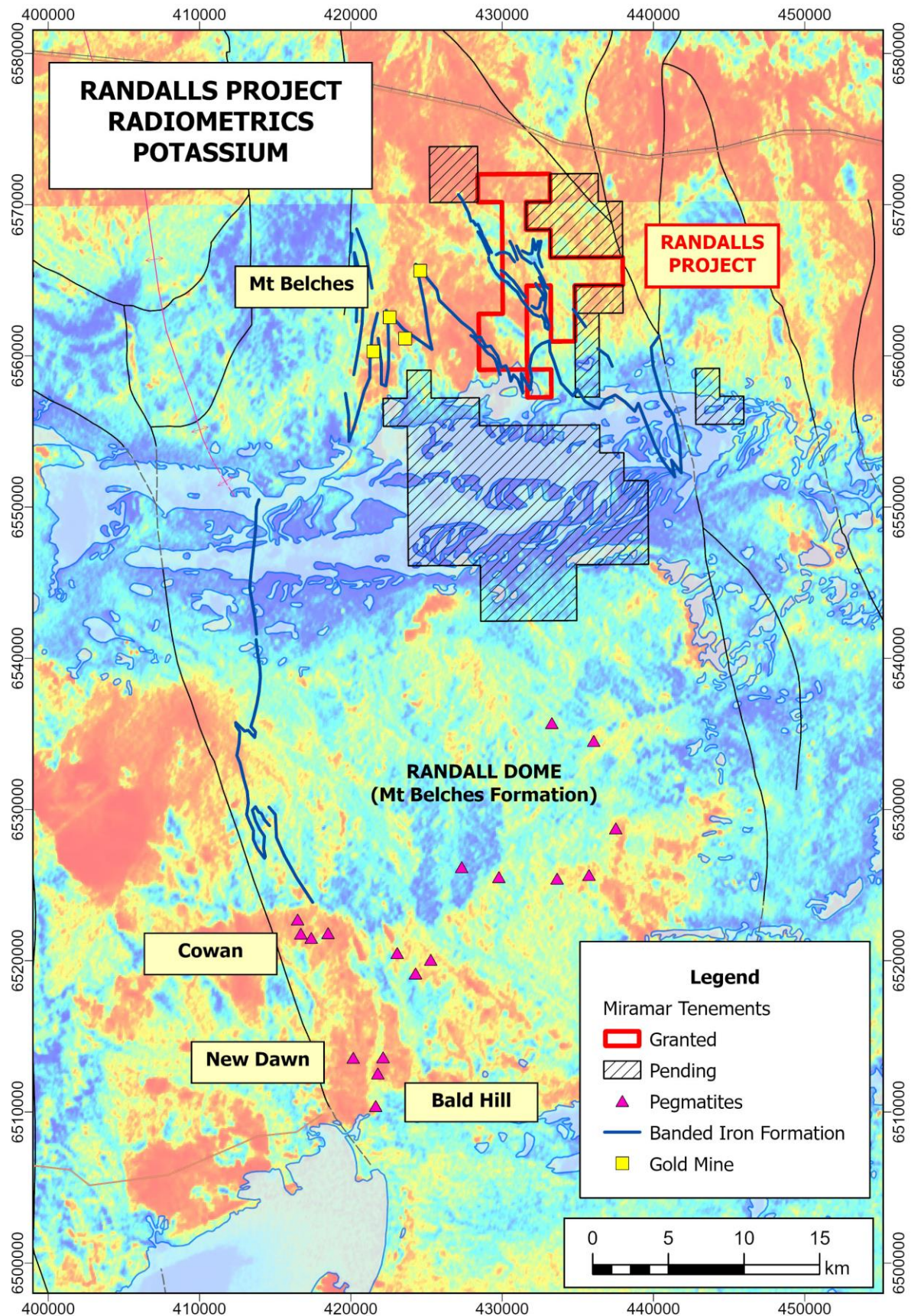
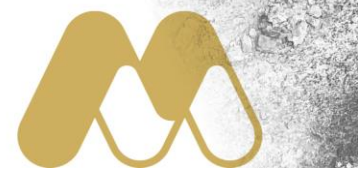
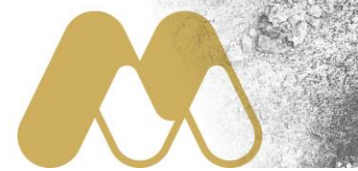


Figure 3. Radiometric image showing potassium anomalism over known lithium pegmatites and the Randalls Project tenements north of Lake Randall.



For more information on Miramar Resources Limited, visit the Company's website at www.miramarresources.com.au, follow the Company on social media (Twitter @MiramarRes and LinkedIn @Miramar Resources Ltd) or contact:

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This announcement has been authorised for release by Mr Allan Kelly, Executive Chairman, on behalf of the Board of Miramar Resources Limited.

COMPETENT PERSON STATEMENT

The information in this report that relates to Exploration Results is based on information compiled by Allan Kelly, a "Competent Person" who is a Member of The Australian Institute of Geoscientists. Mr Kelly is the Executive Chairman of Miramar Resources Ltd. He is a full-time employee of Miramar Resources Ltd and holds shares and options in the company.

Mr Kelly has sufficient experience that is relevant to the style of mineralisation and type of deposits under consideration and to the activity being undertaken 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 Kelly consents to the inclusion in this Announcement of the matters based on his information and in the form and context in which it appears.

Historical exploration results for the Randalls Project, including JORC Table 1 and 2 information, is included in the Miramar Prospectus dated 4 September 2020.



About Miramar Resources Limited

Miramar Resources Limited is an active, WA-focused mineral exploration company exploring for gold, IOCG, Ni-Cu-PGE and REE deposits in the Eastern Goldfields, Murchison and Gascoyne regions of WA.

Miramar's Board has a track record of discovery, development and production within Australia, Africa, and North America, and aims to create shareholder value through discovery of high-quality mineral deposits.

