



## ASX ANNOUNCEMENT

### EIS CO-FUNDED DRILLING UNDERWAY AT BANGEMALL Ni-Cu-Co-PGE PROJECTS

- **RC drilling underway at Mount Vernon and Trouble Bore Projects**
- **First drilling campaign to target Norilsk-style mafic intrusion-hosted Ni-Cu-Co-PGE deposits within the Capricorn Orogen of WA**

**Miramar Resources Limited** (ASX:M2R, “Miramar” or “the Company”) is pleased to announce the commencement of the maiden drilling campaign within the Company’s 100%-owned Bangemall Project portfolio in the Gascoyne region of WA (Figure 1).

The initial RC drilling campaign is co-funded through the Western Australian government’s Exploration Incentive Scheme (EIS) and will test several airborne +/- ground EM anomalies at Mount Vernon and Trouble Bore highlighted by Miramar’s exploration programmes (Figure 2).

Miramar is the first explorer to specifically target Norilsk-style mafic intrusion-hosted nickel, copper, cobalt and platinum group element (Ni-Cu-Co-PGE) mineralisation within WA’s Capricorn Orogen.

Miramar’s Executive Chairman, Mr Allan Kelly, said mafic intrusion-hosted magmatic Ni-Cu-Co-PGE deposits were some of the largest and most valuable metal deposits in the world, remaining profitable at low nickel prices and therefore worth exploring for, even in the current depressed nickel market.

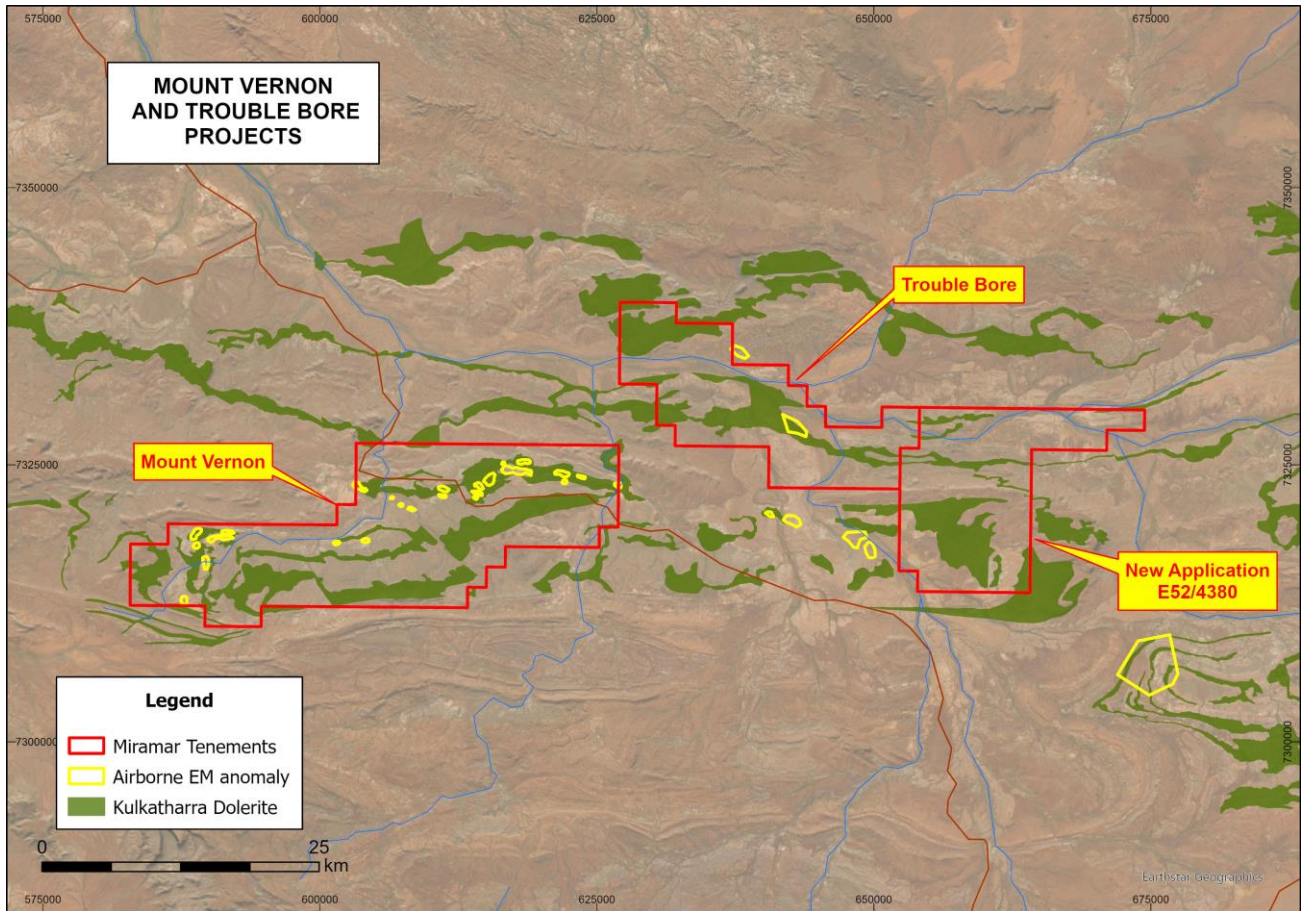
*“The Edmund and Collier Basins are recognised by the GSWA, Geoscience Australia and the CSIRO as displaying all the key ingredients for Norilsk-style mineralisation: major deep crustal-scale structures, Warakurna-age dolerite sills and extensive sulphide and/or sulphate-rich sedimentary units,” he added.*

*“In addition to providing financial assistance, the EIS funding is further endorsement of the merits of Miramar’s geological model and targeting to date,” he added.*

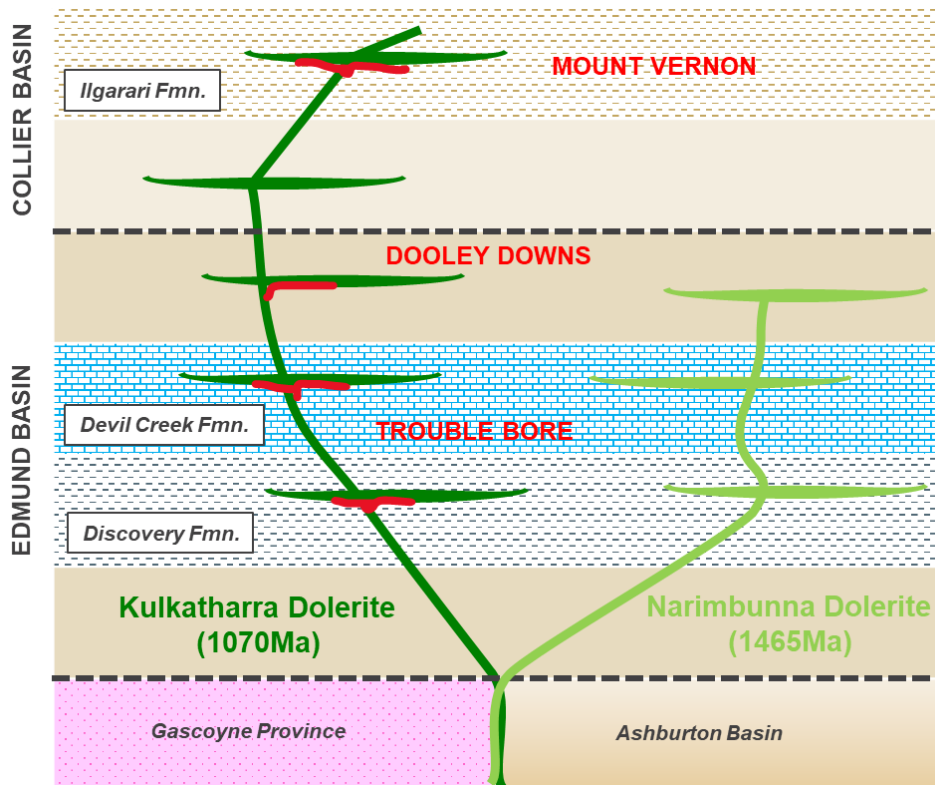
*“We’ve spent the last 3 years gathering data and developing these targets, so we’re excited to be commencing our maiden drill campaign and testing our concepts,” he said.*



**Figure 1.** RC drilling underway at Mount Vernon.



**Figure 2.** Mount Vernon and Trouble Bore Projects showing airborne EM anomalies in relation to Kulkatharra Dolerite sills.



**Figure 3.** Schematic diagram showing relationship between two families of dolerite sills, sedimentary units of the Edmund and Collier Basins, and the relative position of Miramar's Ni-Cu-Co-PGE targets.



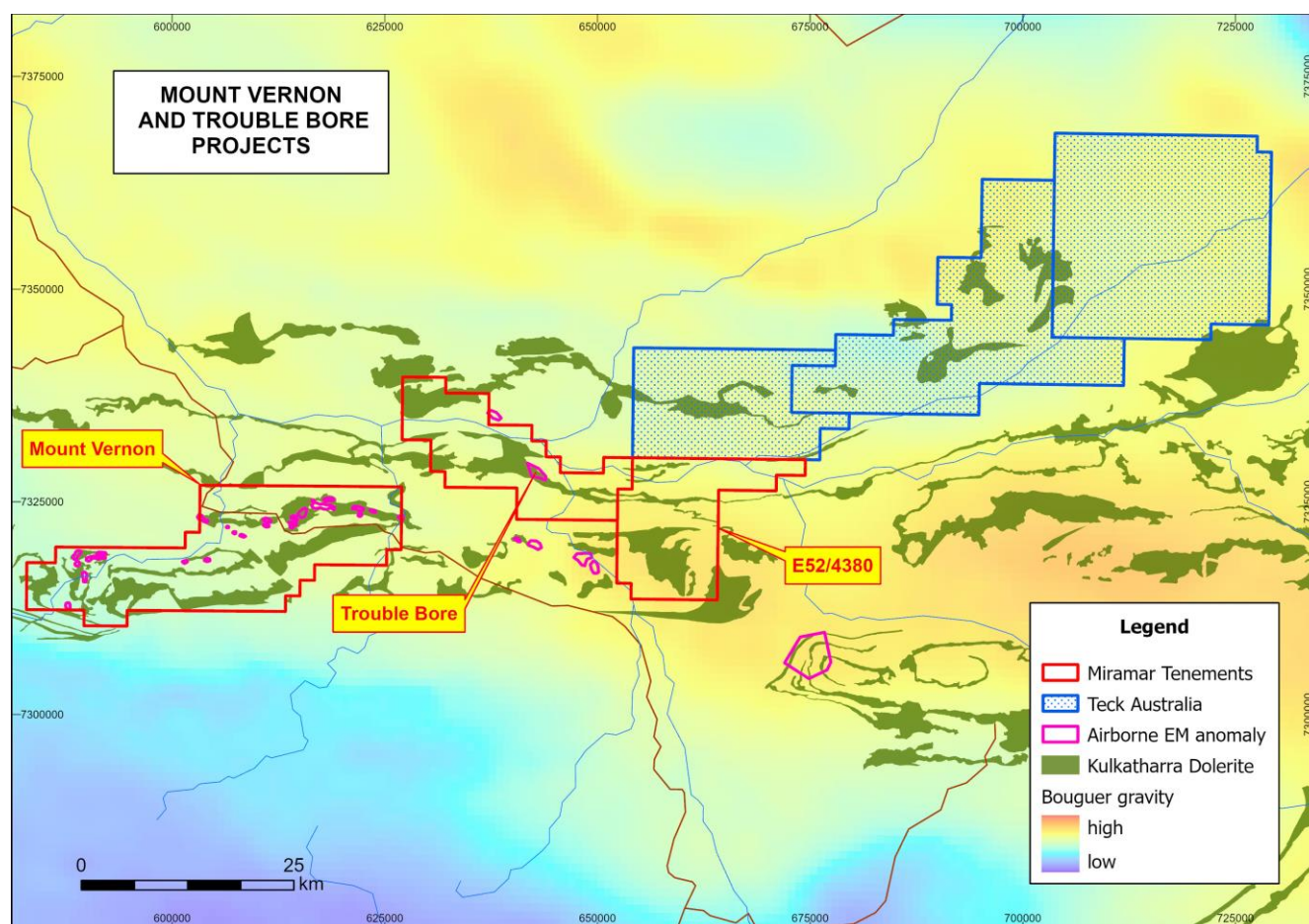


Previous exploration in the area, including RC drilling conducted in 1997, has been almost exclusively for sediment-hosted Cu-Pb-Zn mineralisation and did not have the benefit of either the 2013 Capricorn regional airborne electromagnetic (EM) survey, or more detailed project-scale airborne or ground EM data.

The initial drilling programme will comprise approximately 2500m and should take 2-3 weeks to complete.

Miramar has recently expanded its land position through the application for a new Exploration Licence, E52/4380, adjacent to the Trouble Bore Project. The new Application covers a folded Kulkatharra Dolerite sill underlain by a large Bouguer gravity anomaly which could represent a buried magma chamber (Figure 4). There has been minimal reported exploration over the area covered by the new Application.

The Company notes that Teck Resources Limited has recently increased its tenement holding adjacent to Miramar's tenements and is reportedly also exploring for Ni-Cu-Co-PGE's in the Kulkatharra Dolerite.



**Figure 4.** Mount Vernon and Trouble Bore Projects overlain on regional Bouguer gravity image.

For more information on Miramar Resources Limited, please visit the company's website at [www.miramarresources.com.au](http://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 Bangemall Project, including JORC Table 1 and 2 information, is included in the Miramar Prospectus dated 4 September 2020.

JORC Table 1 and 2 information for recent exploration results within the Bangemall Project is contained in the following ASX Announcements:

- 29 April 2024 – “Miramar Secures EIS Funding for Bangemall Ni-Cu-Co-PGE Drilling”
- 19 March 2024 – “Bangemall Ground EM Surveys Outline Multiple Drill Targets”
- 6 March 2024 – “Strong EM Conductors Identified at Mt Vernon Project”
- 22 February 2024 – “Bangemall Ni-Cu-PGE Exploration Update”
- 13 February 2024 – “Multiple EM Conductors Outlined at Mount Vernon”
- 8 February 2024, “Multiple Large Uranium Targets in Bangemall”
- 5 February 2024 – “Bangemall Exploration Update”
- 15 January 2024 – “Ground EM Survey Underway at Mount Vernon”
- 2 January 2024 – “Tenement Grant Expands Bangemall Project”
- 24 July 2023 – “Approval Received for Mount Vernon Drilling”
- 17 July 2023 – “Gascoyne Projects Update”
- 21 June 2023 – Gascoyne Projects Funded Following Capital Raising”
- 25 May 2023 – “High-Priority Ni-Cu-PGE Targets Identified at Mt Vernon”
- 14 March 2023 – “Gascoyne Plans Finalised Following Capital Raising”
- 9 March 2023 – “Gascoyne Region Exploration Update”
- 17 January 2023 – “Multiple Large REE Targets Identified at Dooley Downs”
- “14 November 2022 – “Large REE Targets Identified at Dooley Downs”
- 3 October 2022 – “Diamond occurrence & uranium targets identified at Bangemall”
- 12 June 2022 – “New Ni-Cu-PGE targets identified at Bangemall”
- 3 February 2022 – “Multiple Large EM Anomalies Identified at Mt Vernon”
- 25 January 2022 – “EM Survey Commenced at Bangemall Ni-Cu-PGE Target”
- 1 September 2021 – “Multiple EM Conductors Identified within Bangemall Project”
- 6 January 2021 – “Bangemall Ni-Cu-PGE Project Tenement Granted”





**About the Bangemall Ni-Cu-Co-PGE Project**

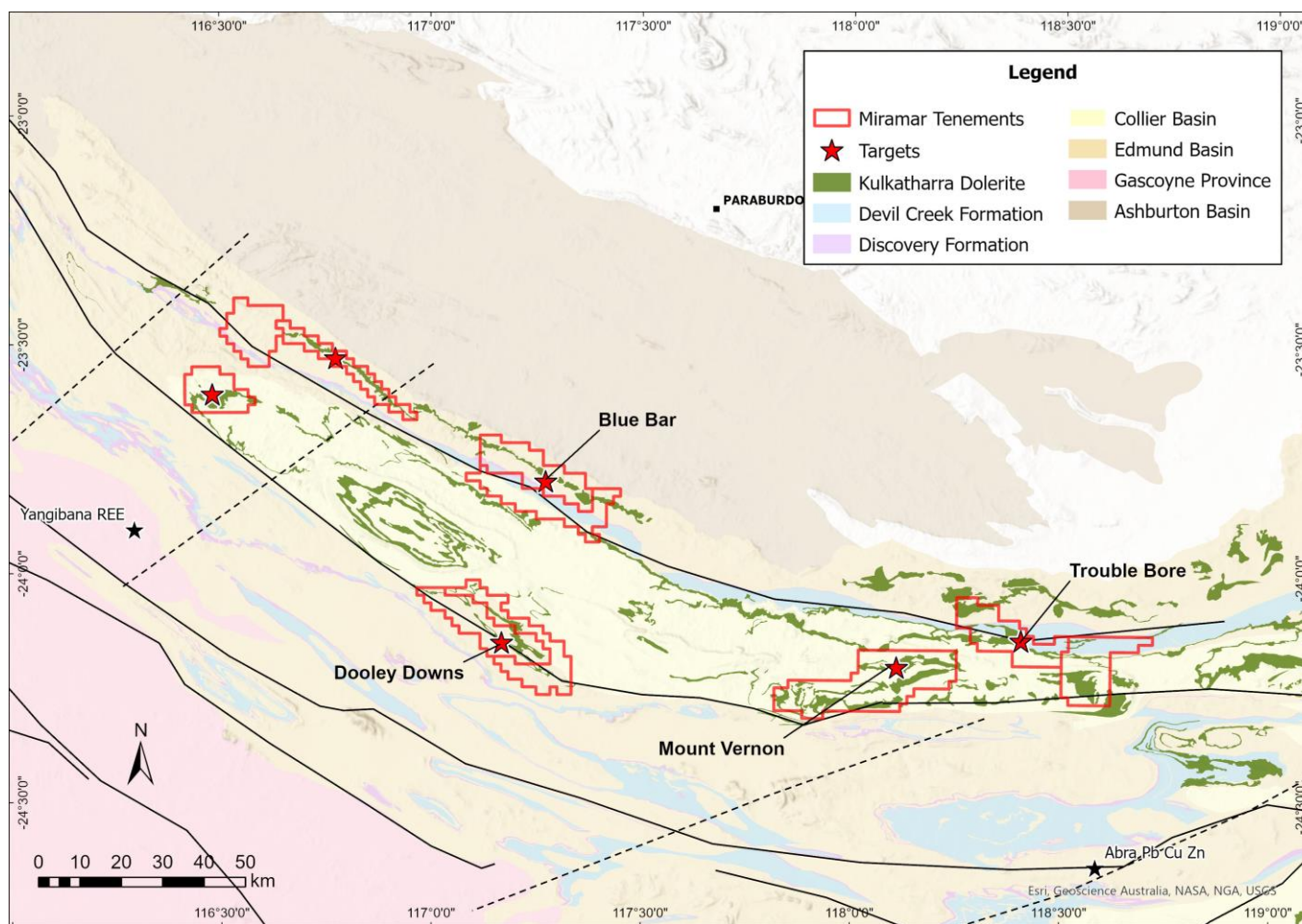
Miramar’s Bangemall Ni-Cu-Co-PGE Project comprises several 100%-owned granted Exploration Licences and Applications covering approximately 2,190 km<sup>2</sup> within the Gascoyne region of Western Australia (Figure 5).

The Proterozoic Edmund and Collier Basins have been intruded by 1070Ma-aged Kulkatharra Dolerite sills, part of the Warakurna Large Igneous Province and the same age as the Giles Complex which hosts the large Nebo and Babel Ni-Cu deposits in the West Musgraves.

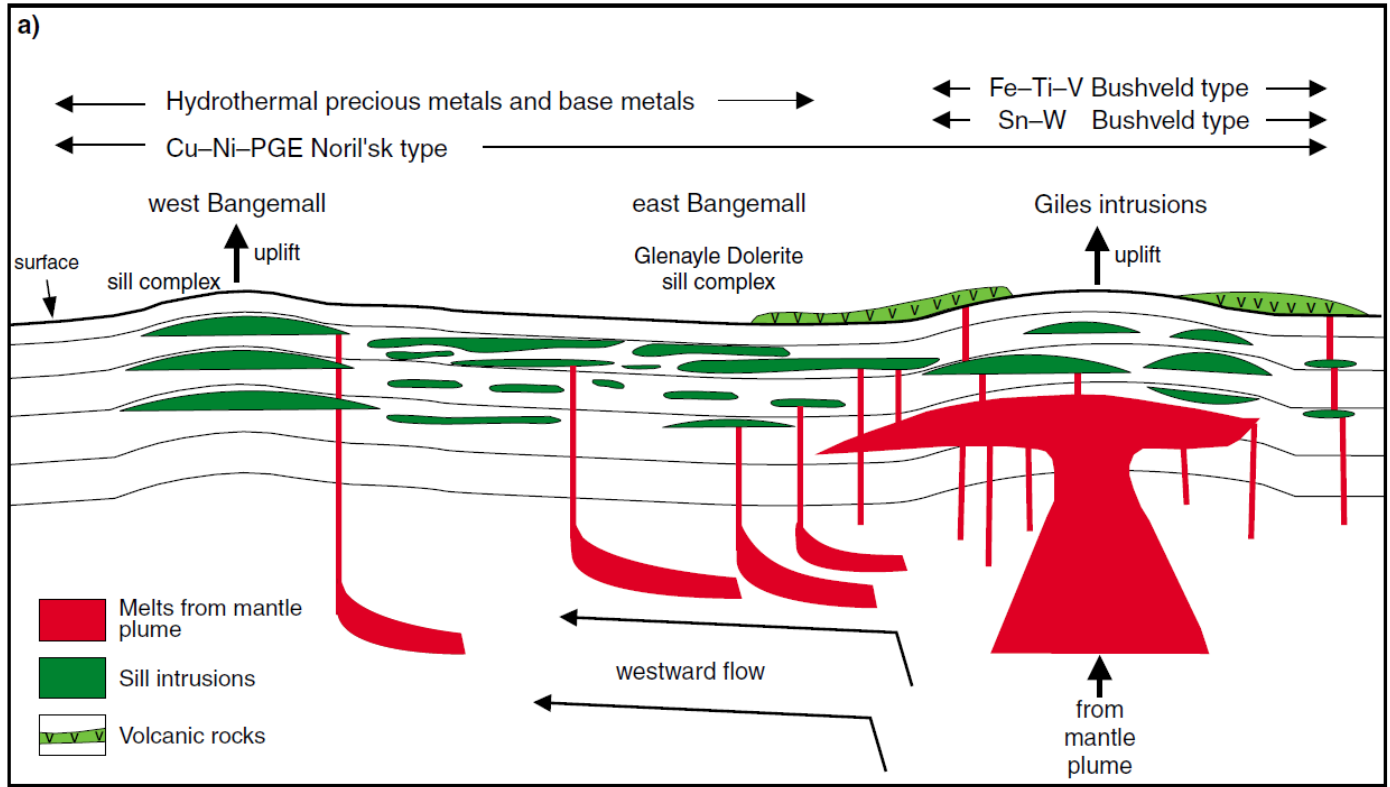
The region has been identified by the Geological Survey of Western Australia, Geoscience Australia and the CSIRO as having high prospectivity for Ni-Cu-Co-PGE mineralisation associated with the Kulkatharra Dolerite sills, like the giant Norilsk Ni-Cu-PGE deposits in Russia (Figure 6).

Since 2020, Miramar has built a strategic land position in the Bangemall region, focussing on areas containing key ingredients and/or regional-scale indicators for Proterozoic mafic intrusion hosted Ni-Cu-PGE mineralisation including:

- Proximity to major deep crustal-scale faults - potential plumbing systems
- 1070Ma Kulkatharra Dolerite dykes and sills – source of Ni, Cu, Co and PGE’s
- Sulphidic and/or sulphate-rich sediments - potential sulphur source
- Regional-scale Ni-Cu-PGE geochemical anomalism (GSWA regional geochemistry)
- Regional-scale EM anomalism (2013 Capricorn AEM Survey)



**Figure 5. Miramar’s Bangemall Project tenements in relation to GSWA geology.**



**Figure 6.** Schematic longitudinal section (not to scale) depicting the regional architecture of the Warakurna Large Igneous Province with potential mineralisation styles (Morris and Pirajno, 2005).

**Reference:**

Morris and Pirajno, 2005, *Mesoproterozoic Sill Complexes in the Bangemall Supergroup, Western Australia: Geology, Geochemistry and Mineralisation Potential*, GSWA Report 99.



**About Miramar Resources Limited**

Miramar Resources Limited is an active, WA-focused mineral exploration company exploring for gold, copper and Ni-Cu-Co-PGE deposits in the Eastern Goldfields 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.

