



ASX ANNOUNCEMENT

BANGEMALL GROUND EM SURVEYS OUTLINE MULTIPLE NORILSK-STYLE DRILL TARGETS

- **Ground EM survey completed at Mount Vernon and Trouble Bore Projects**
- **Multiple large shallow Ni-Cu-Co-PGE targets outlined for RC drill testing**
- **Regional, project and target-scale similarities to giant Norilsk Ni-Cu-Co-PGE deposits**

Miramar Resources Limited (ASX:M2R, "Miramar" or "the Company") is pleased to advise that ground electromagnetic (EM) surveys have identified multiple drill targets at the Company's large 100%-owned Mount Vernon and Trouble Bore Projects in the Gascoyne region of Western Australia.

Miramar's Executive Chairman, Mr Allan Kelly, said the Company was excited about the district-scale opportunity evolving within the Bangemall Projects and looked forward to the maiden drilling campaign.

"Whilst many nickel producers are under pressure at the moment, mafic intrusion-hosted deposits such as Nova and Nebo Babel can be large and very valuable, due to the mix of metals present, which makes them immune to short-term fluctuations in the nickel price," he added.

"At Mount Vernon and Trouble Bore, we are seeing all the ingredients needed for the formation of this type of deposit," he said.

"We have nickel and copper-bearing dolerite sills intruding into sulphidic sediments, evidence of differentiation, including mafic cumulate rocks, and indications of accumulations of conductive sulphides within and/or beneath the sills," he added.

Miramar is exploring for mafic intrusion-hosted nickel, copper, cobalt and platinum group element (Ni-Cu-Co-PGE) sulphide mineralisation related to 1070Ma aged Kulkatharra Dolerite sills, part of the Warakurna Large Igneous Province and the same age as the large Nebo-Babel deposits in the West Musgraves.

Geophysical contractor Wirelines Services Group has finished a ground EM survey comprising a mixture of Fixed Loop (FLTEM) and Moving Loop (MLEM) methods which tested five airborne EM anomalies within the Mount Vernon and Trouble Bore Projects (Figure 1).

The survey has confirmed and refined each of the airborne EM anomalies and outlined large shallow conductive drill targets consistent with Miramar's Norilsk-style Ni-Cu-Co-PGE deposit model (Figure 2).

Target D is the last target to be tested within the Mount Vernon Project as part of the current programme.

The FLTEM survey at Target D covered part of a large airborne EM anomaly at the western end of the Project (Figure 3). The FLTEM survey refined the location of the southern VTEM anomaly, which remains open to the east.

When modelled, the FLTEM data indicates the presence of two large shallow, sub-horizontal plates with strong conductances, up to approximately 1600 Siemens (Figure 4).

Upcoming work programme

Miramar's initial aim is to show "proof of concept" of the Norilsk-style deposit model by discovering Ni-Cu-Co-PGE sulphide mineralisation.

Over the previous 24 months, the Company has progressed from regional-scale area selection to collection of project-scale datasets and, more recently, to delineation of individual drill targets.

Upcoming work includes systematic rock chip sampling and preparation for the maiden drilling campaign.

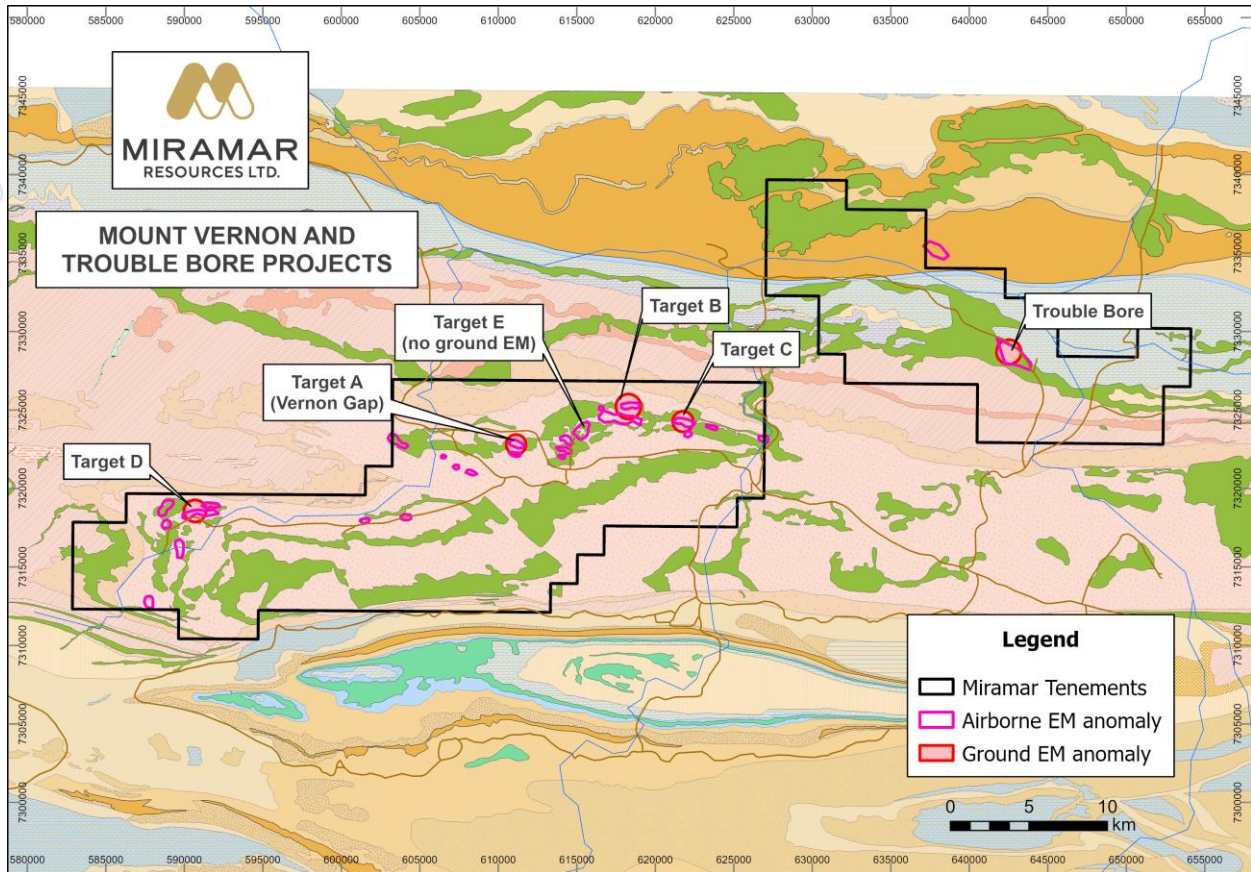


Figure 1. Mount Vernon and Trouble Bore Projects showing airborne and ground EM anomalies in relation to Kulkatharra Dolerite sills.

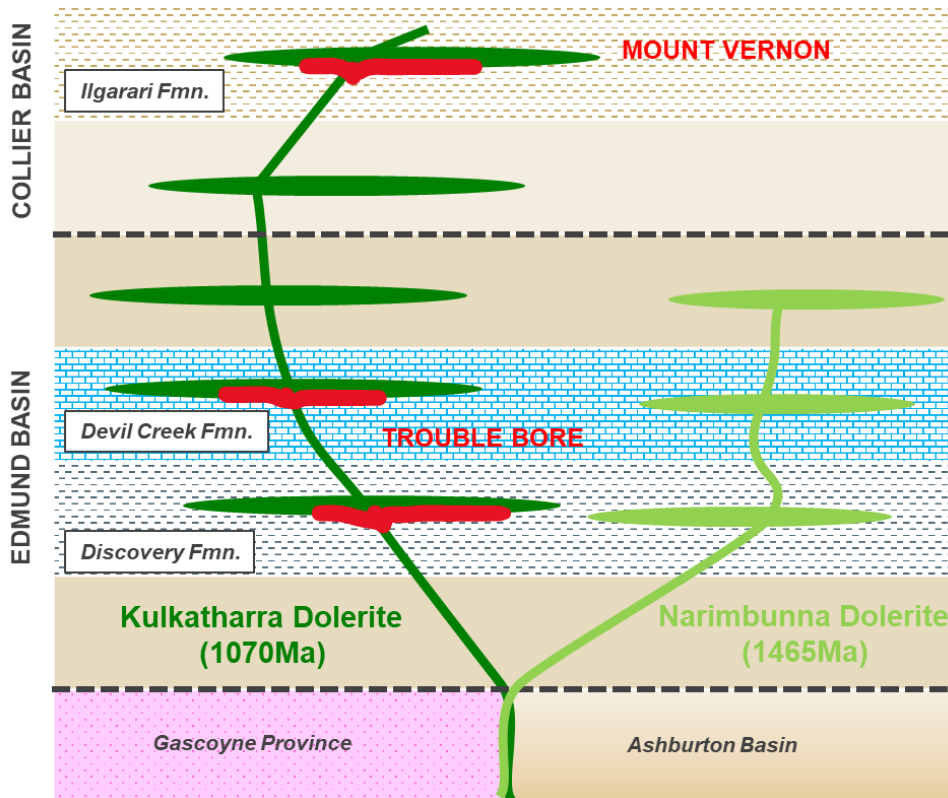


Figure 2. Schematic diagram showing relationship between dolerite sills (green) and sedimentary units of the Edmund and Collier Basins, and the relative position of Miramar's Ni-Cu-Co-PGE targets (red).

For personal use only

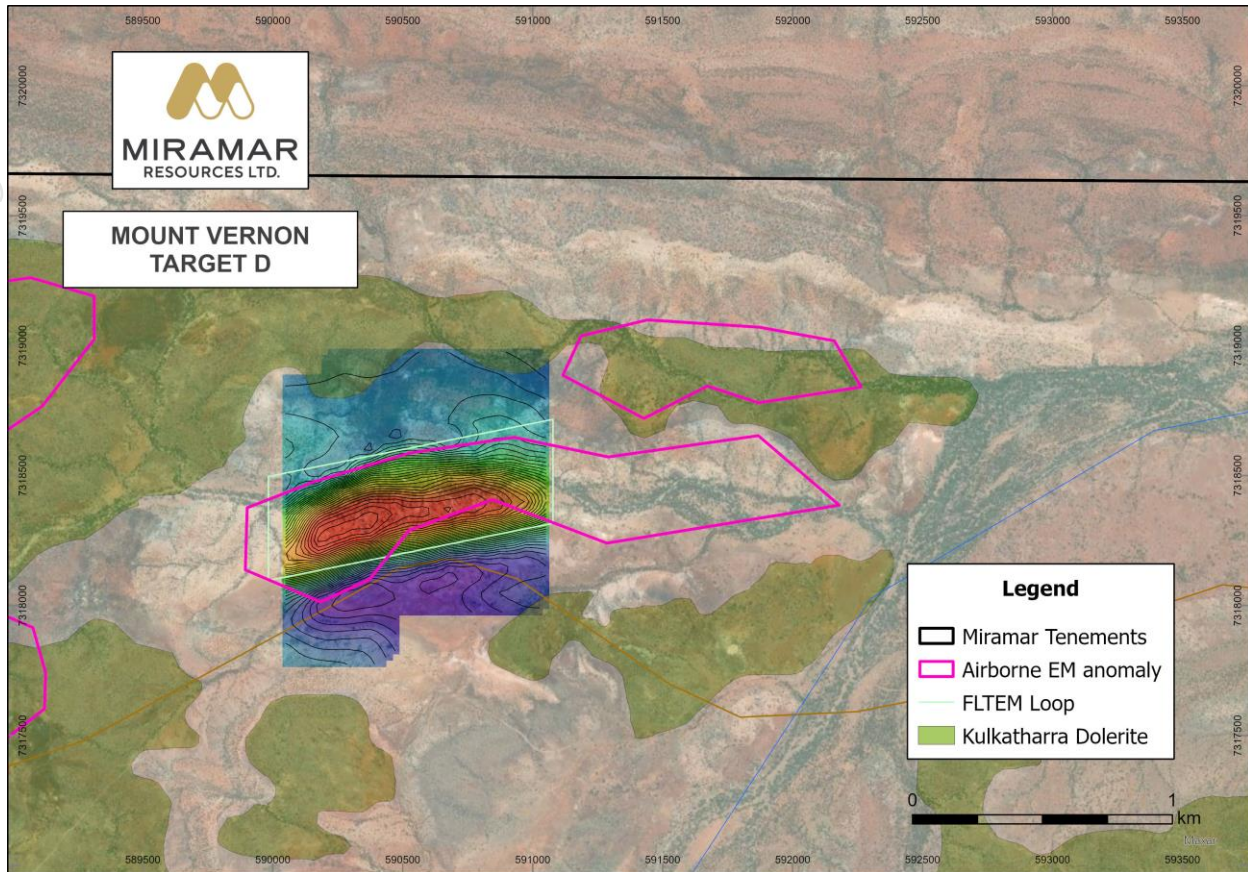


Figure 3. Mount Vernon Target D showing FLTEM anomaly (channel 30) in relation to airborne EM anomaly (FLTEM contour interval is 20 Siemens).

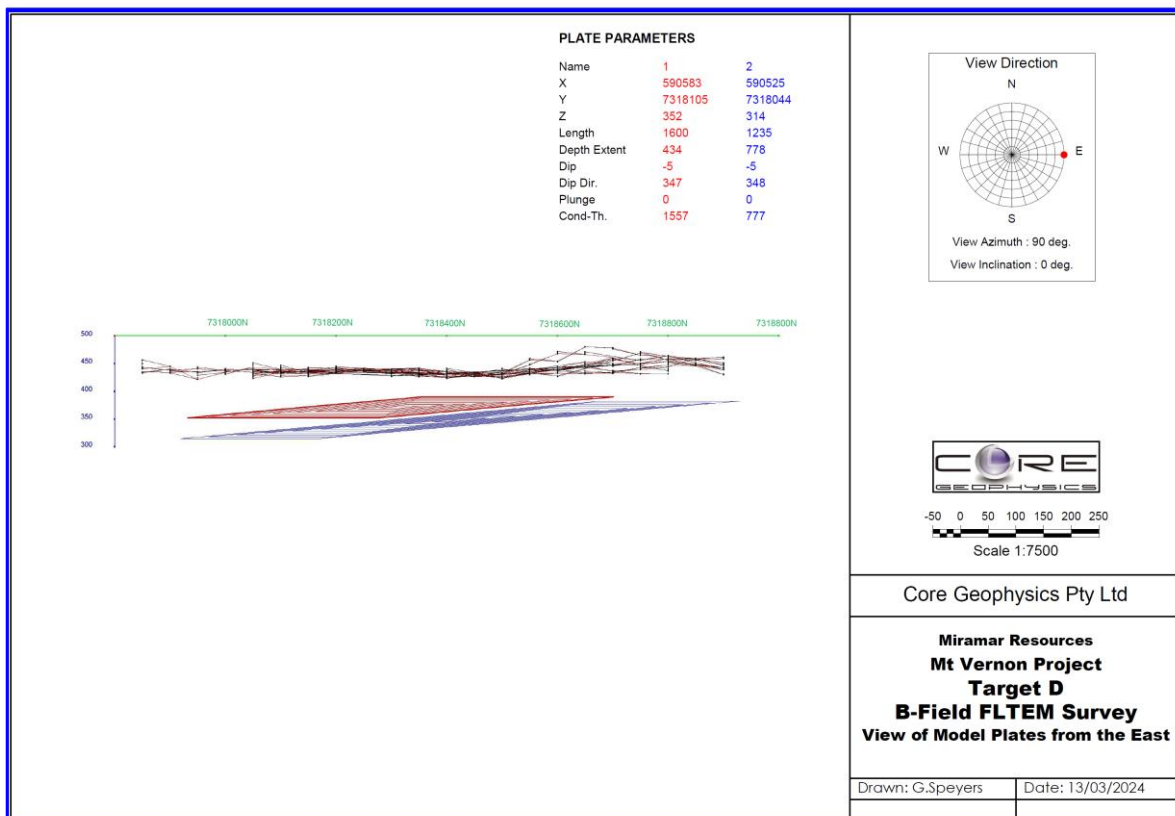
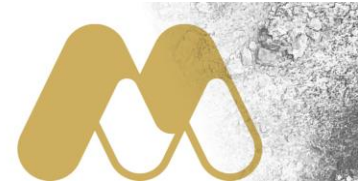


Figure 4. Mount Vernon Target D modelled FLTEM data.

For personal use only



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:

Allan Kelly
Executive Chairman
info@miramarresources.com.au

Margie Livingston
Ignite Communications
margie@ignitecommunications.com.au

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

References

Barnes, S.J., Cruden, A.R., Arndt, N. and Saumur, B. 2015, The mineral system approach applied to magmatic Ni-Cu-PGE sulphide deposits. *Ore Geology Reviews* 76(94).

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



APPENDIX

The Bangemall Project and the Norilsk Ni-Cu-Co-PGE model

Miramar's 100%-owned Bangemall Project comprises granted Exploration Licences and Applications covering approximately 2,190 km² within the Gascoyne region of Western Australia (Figure A).

The Proterozoic Edmund and Collier Basins have been intruded by numerous 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 both the Geological Survey of Western Australia and Geoscience Australia as having high prospectivity for Ni-Cu-PGE mineralisation associated with the Kulkatharra Dolerite sills, similar to the giant Norilsk-Talnakh Ni-Cu-PGE deposits in Russia (Figure B).

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 Ni-Cu-PGE mineralisation:

- Kulkatharra Dolerite sills – source of Ni, Cu +/- PGE's
- Proximity to major crustal-scale faults - potential plumbing systems
- Cross faults - traps
- Sulphidic sediments - potential sulphur source
- Regional-scale geochemical anomalism (GSWA regional geochemistry)
- Regional-scale EM anomalism (2013 Capricorn AEM Survey)

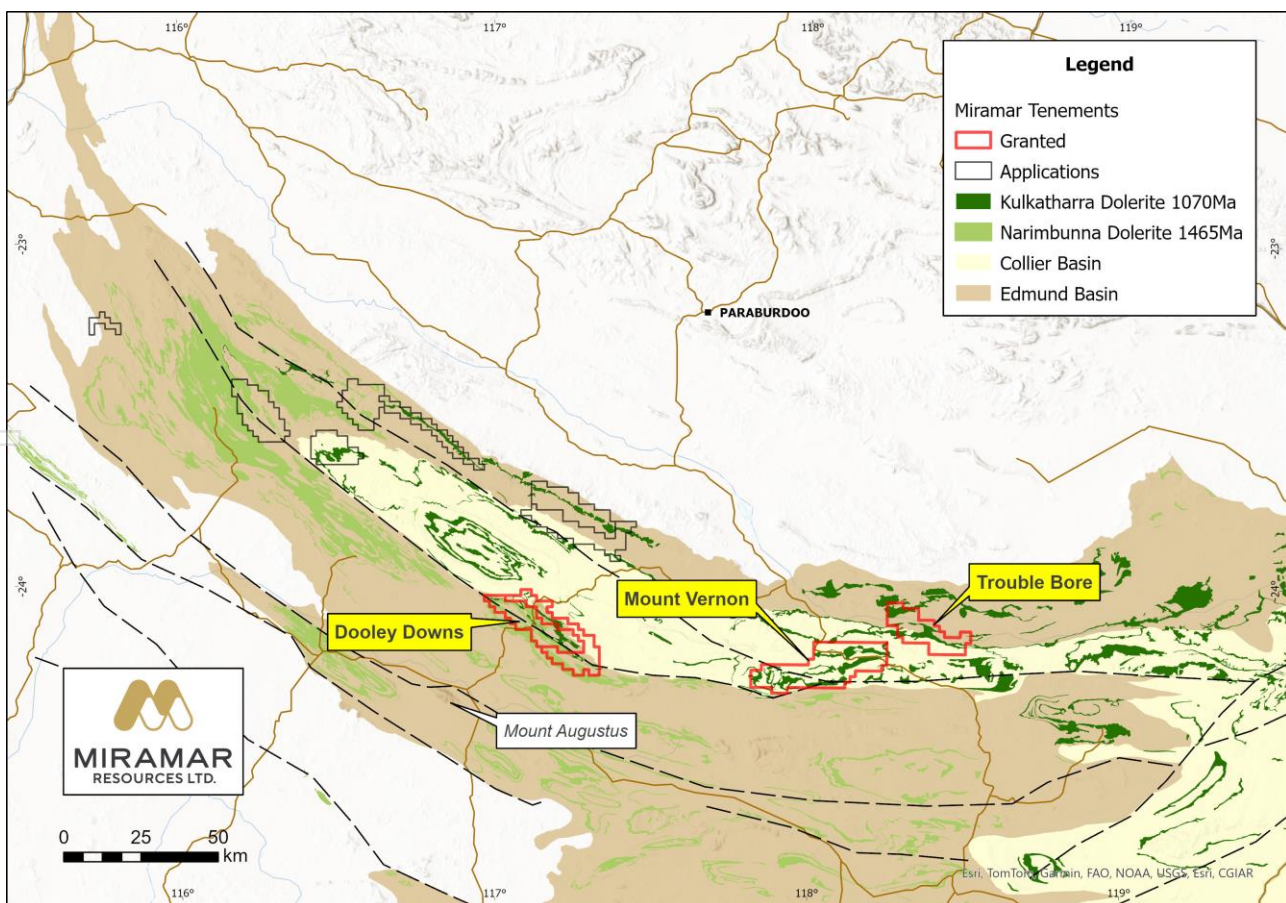


Figure A. Bangemall Projects showing Kulkatharra Dolerite sills and major crustal-scale faults.

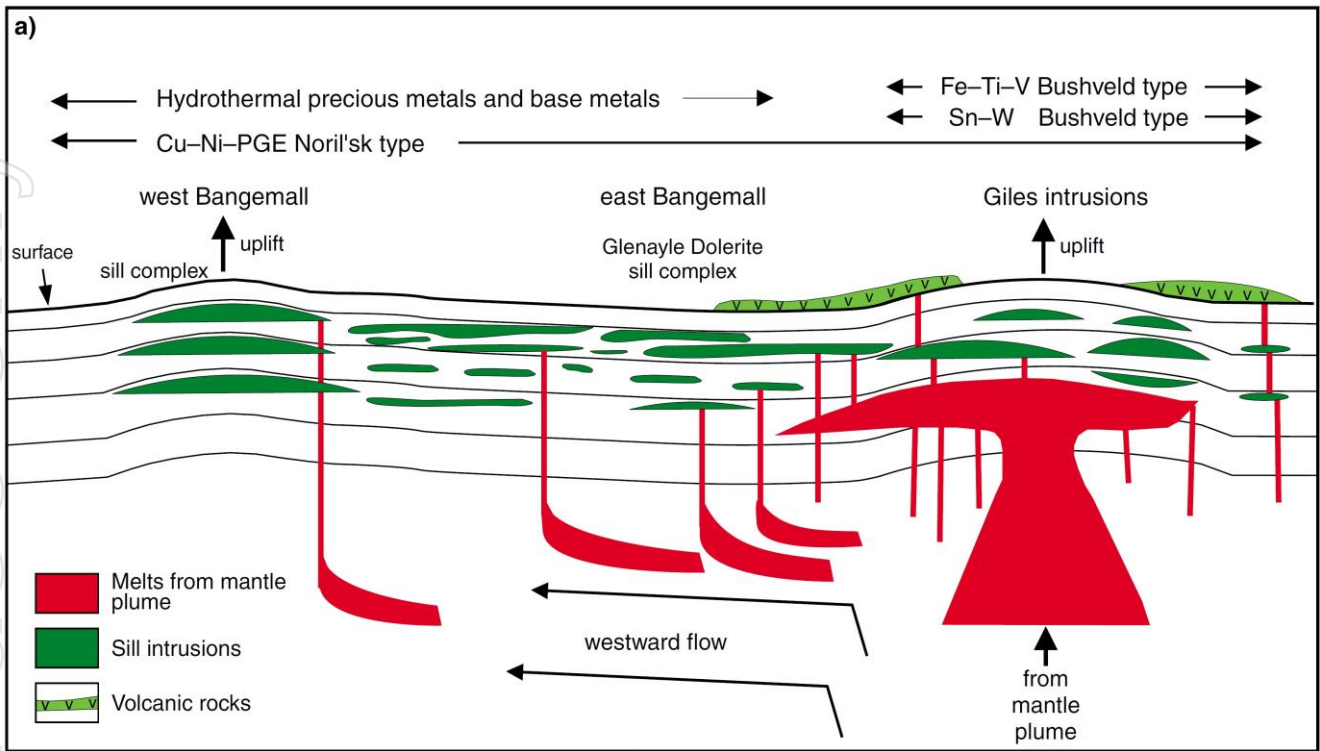


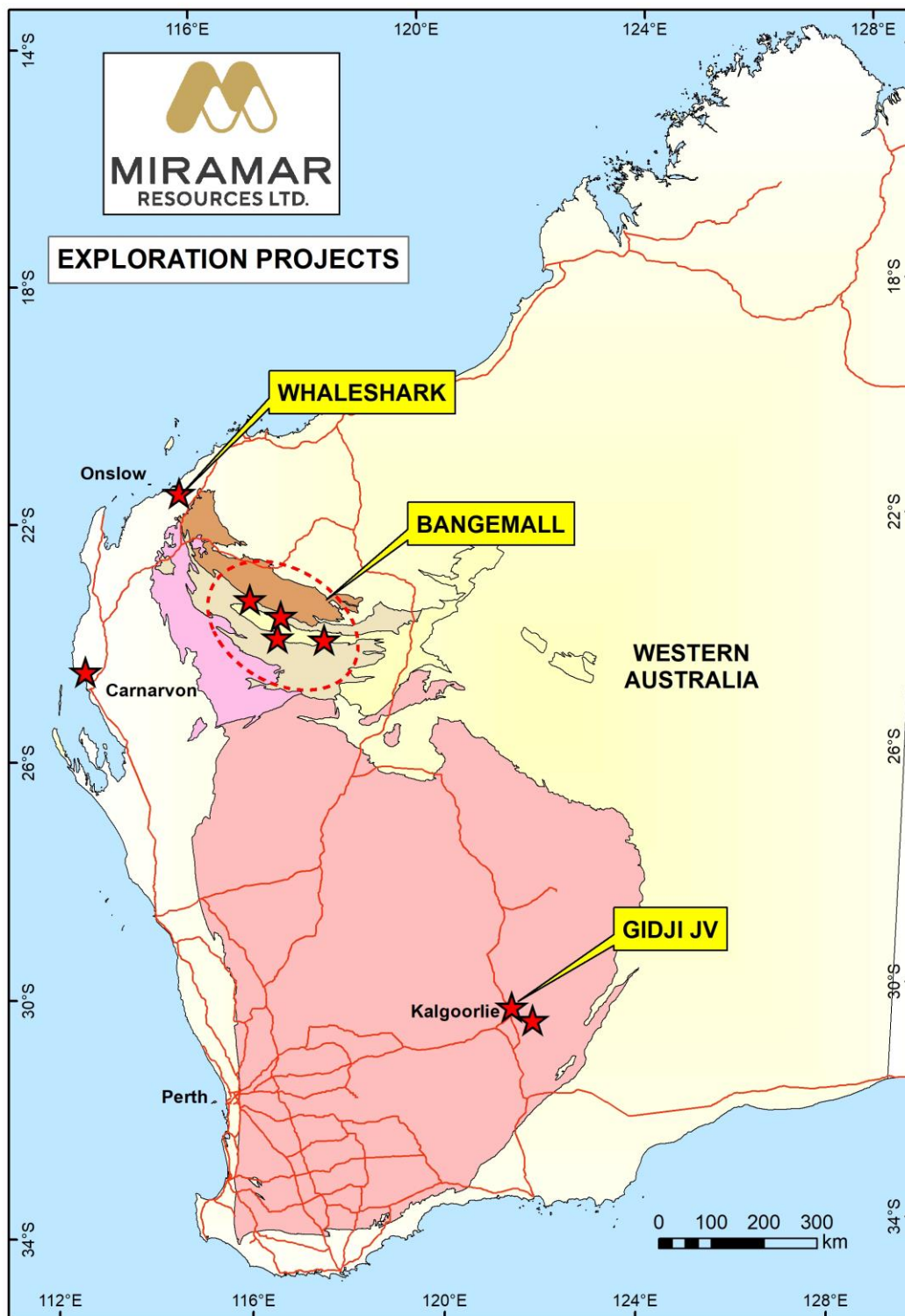
Figure B. Schematic long section of the Warakurna Large Igneous Province showing mafic rocks and potential mineralisation styles (Morris and Pirajno, 2005).



About Miramar Resources Limited

Miramar Resources Limited is an active, WA-focused mineral exploration company exploring for gold, copper and Ni-Cu-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.





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:

- 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”