



MIRAMAR
RESOURCES LTD.

Investor Update

December 2023



miramarresources.com.au | ASX: M2R



Disclaimer/Competent Person Statement

Forward-Looking Statements

Statements in this presentation which are not statements of historical facts, including but not limited to those relating to the proposed transactions, are forward-looking statements. These statements instead represent management's current expectations, estimates and projections regarding future events.

Although management believes the expectations reflected in such forward-looking statements are reasonable, forward-looking statements are based on the opinions, assumptions and estimates of management at the date the statements are made and are subject to a variety of risks and uncertainties and other factors that could cause actual events or results to differ materially from those projected in the forward-looking statements. Accordingly, investors are cautioned not to place undue reliance on such statements.

Competent Person Statement

The information in this report that relates to Exploration Targets or Exploration Results is based on information compiled by Allan Kelly, a “Competent Person” who is a Member of The Australian Institute of Geoscientists. Allan 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.

Allan 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’. Allan Kelly consents to the inclusion in this presentation of the matters based on his information and in the form and context in which it appears.

Information on historical results for all projects within this presentation, including JORC Table 1 and 2 Information, is included in the Miramar Resources Limited Prospectus dated 4 September 2020.

JORC Table 1 and 2 Information for Miramar results for all projects within this presentation are included in the relevant ASX releases.

Aiming to create value through discovery

Systematically advancing three large discovery opportunities across WA

- Multiple large **Ni-Cu-PGE** targets within **Bangemall** project tenements
- **Whaleshark** – unique landholding with **multi-commodity potential**
- Potential for a **new gold camp** at **Gidji JV**
- Board track record of successful **discovery, development** and **production**
- Substantial share price leverage to exploration success

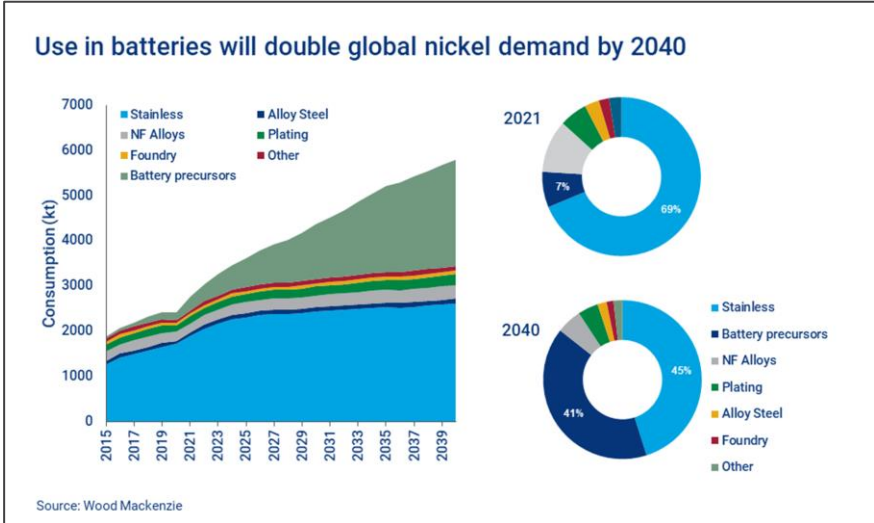


Exploring for in-demand commodities

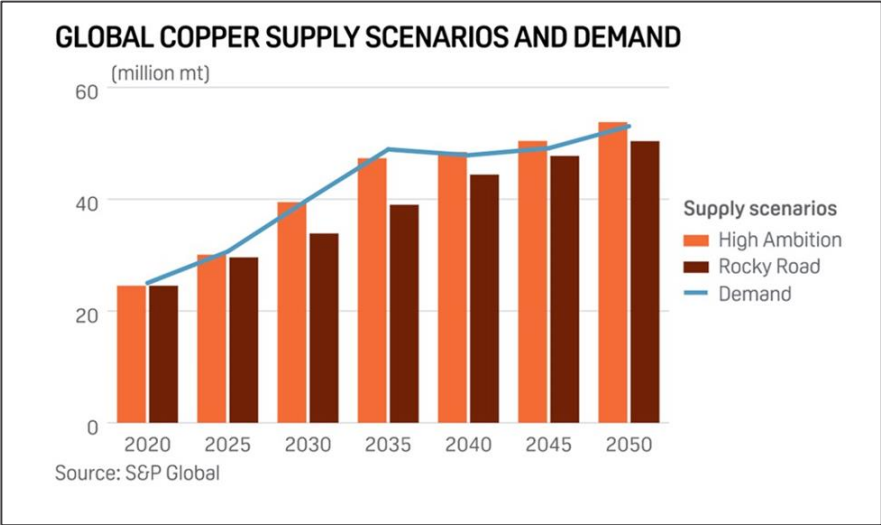
Au



Ni



Cu



Experienced Board with proven track record



Allan Kelly
Executive Chairman

- 30 years' exploration-development-production experience
- Founding MD, **Doray Minerals Ltd** (2009-2016)
- **AMEC "Prospector" Award – 2014**



Marion Bush
Technical Director

- 25 years' experience in exploration, management, directorship and marketing
- Former CEO, Cassidy Gold (TSX-V)



Terry Gadenne
Non-executive Director

- 30 years' experience in military/civil aviation, agriculture and mining services
- Former MD - Mining Logic Pty Ltd



Mindy Ku
Company Secretary

- 15 years' experience with public and private companies

ASX Code

M2R

Shares on Issue 148.9M

Listed Options (@ 25c) 59.7M

Market Cap (@ 2.8c) \$4.2M

Cash (Sept '23) \$1.0M

Enterprise Value \$3.2M

JMEI Credits \$0.7M

Major shareholders

%

XGS Pty Ltd (Allan Kelly) 9.4

Faraday Investments 6.5

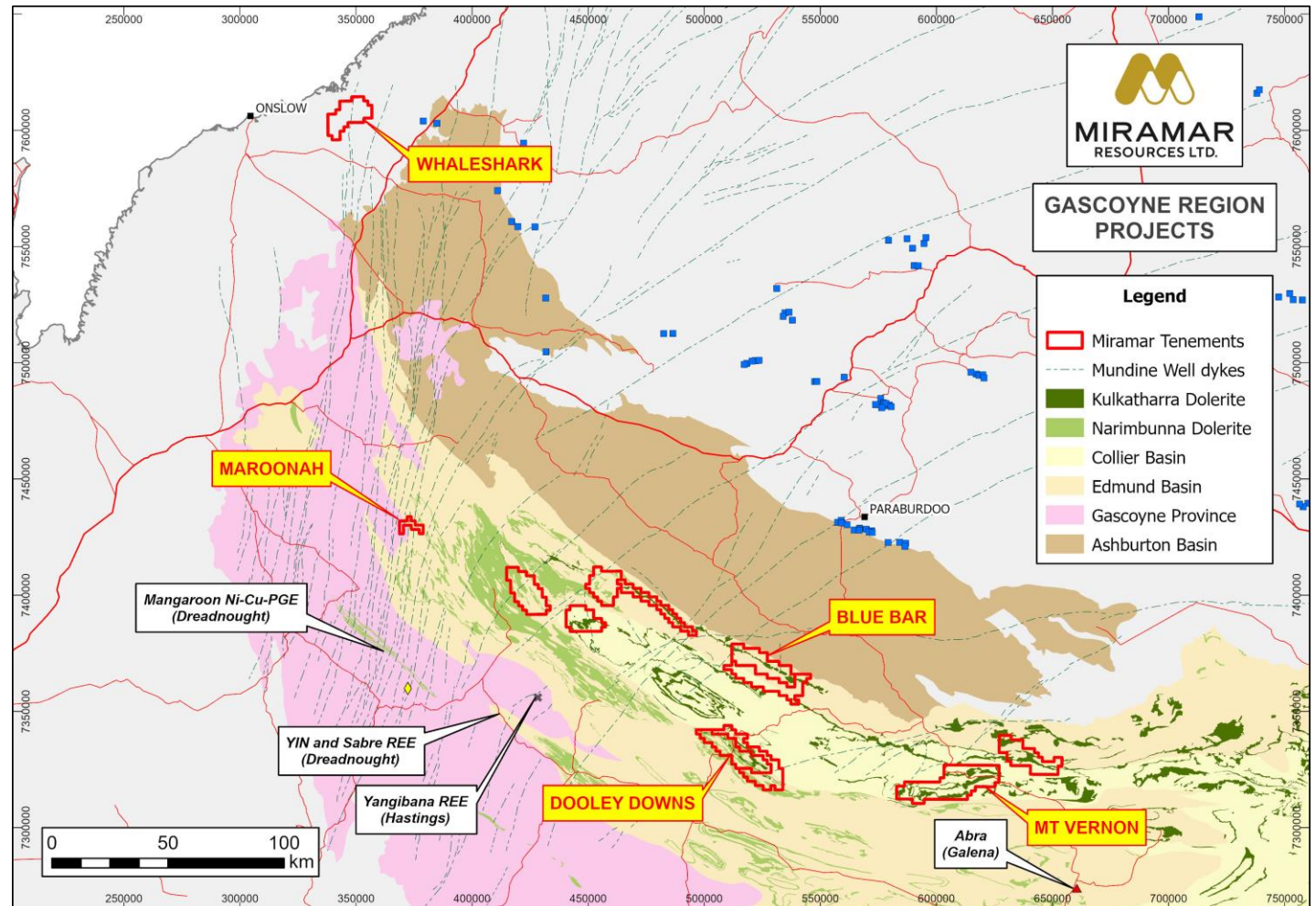
Valorem Capital 5.0

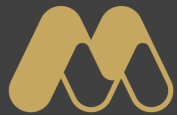
Top 20 47.7

Combined Board 10.2

Gascoyne Region Projects

- Proterozoic Orogens host major mineral deposits
- The **Capricorn Orogen** is relatively underexplored despite potential for multiple commodities and deposit types
 - **Ni-Cu-PGE's**
 - **IOCG**
 - **Gold** (e.g. Mt Olympus)
 - **Lithium** (e.g. Yinnetharra)
 - **REE's** (e.g. Yangibana, YIN)
 - **Cu-Pb-Zn** (e.g. Abra)





MIRAMAR
RESOURCES LTD.

Bangemall Ni-Cu-PGE Projects

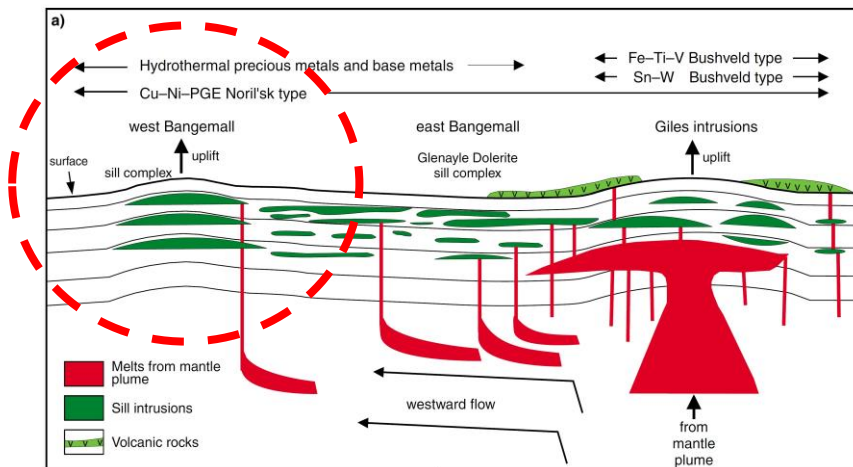
Ni

Cu

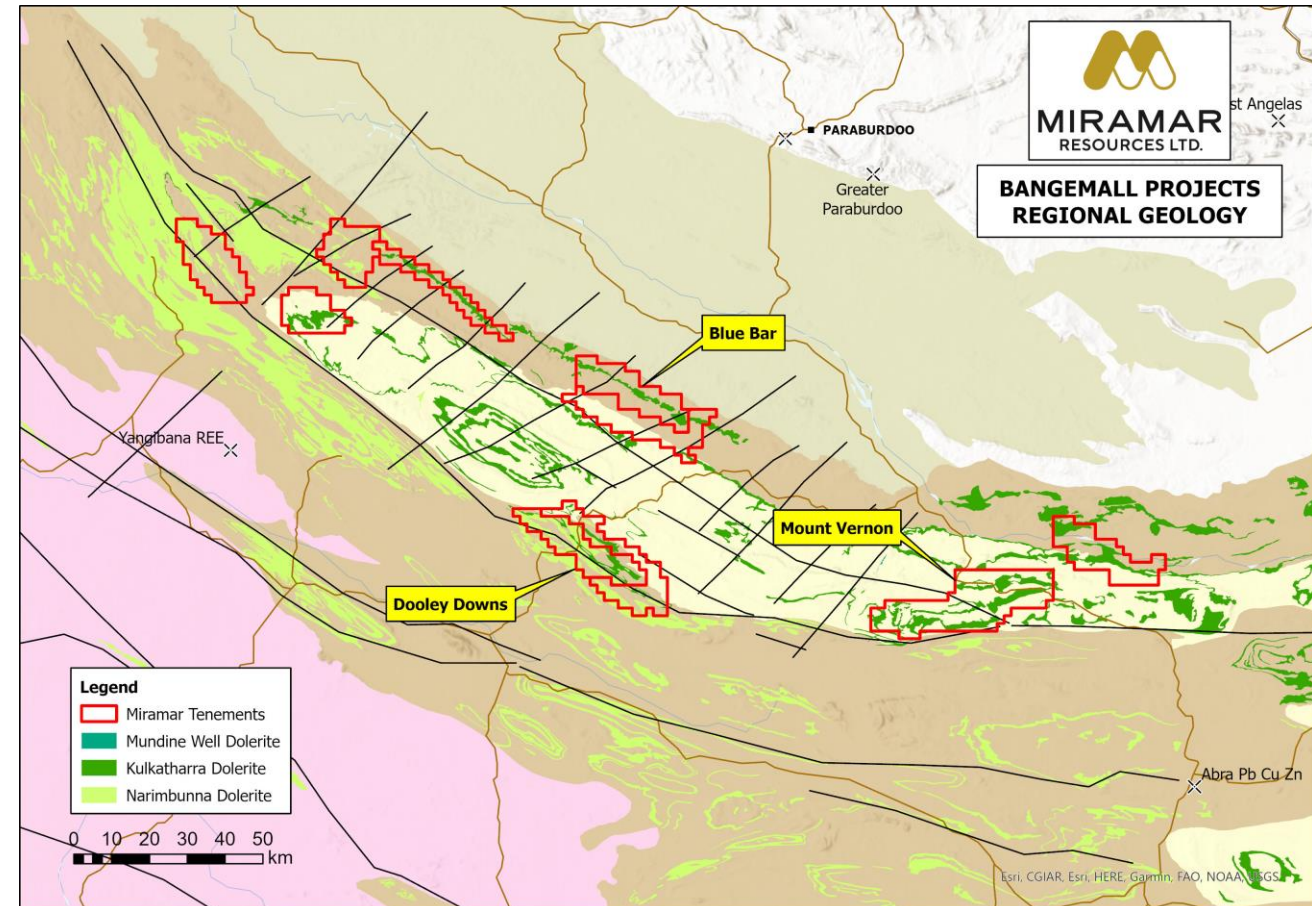


Bangemall Ni-Cu-PGE Projects

- Western end of **Warakurna Large Igneous Province**
- Major crustal-scale faults/conduits
- **Kulkatharra Dolerite** sills - same age as the **West Musgraves Giles Complex**
- Regional geochem and EM anomalies
- No previous **Ni-Cu-PGE** exploration

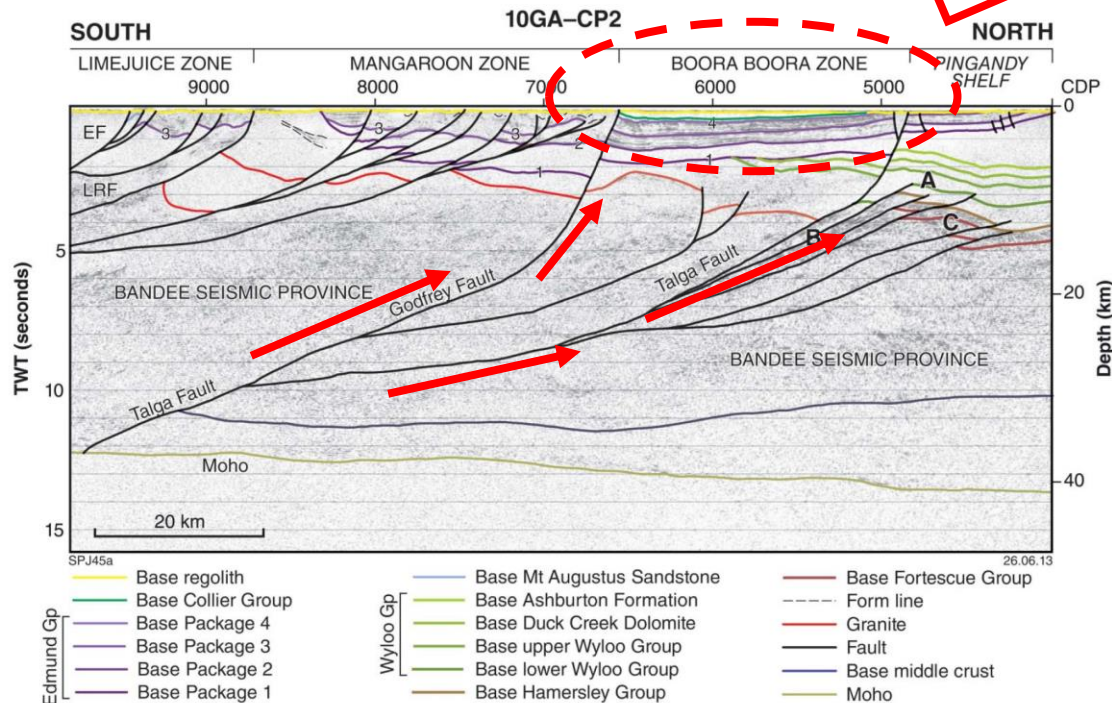


Morris and Pirajno, 2005

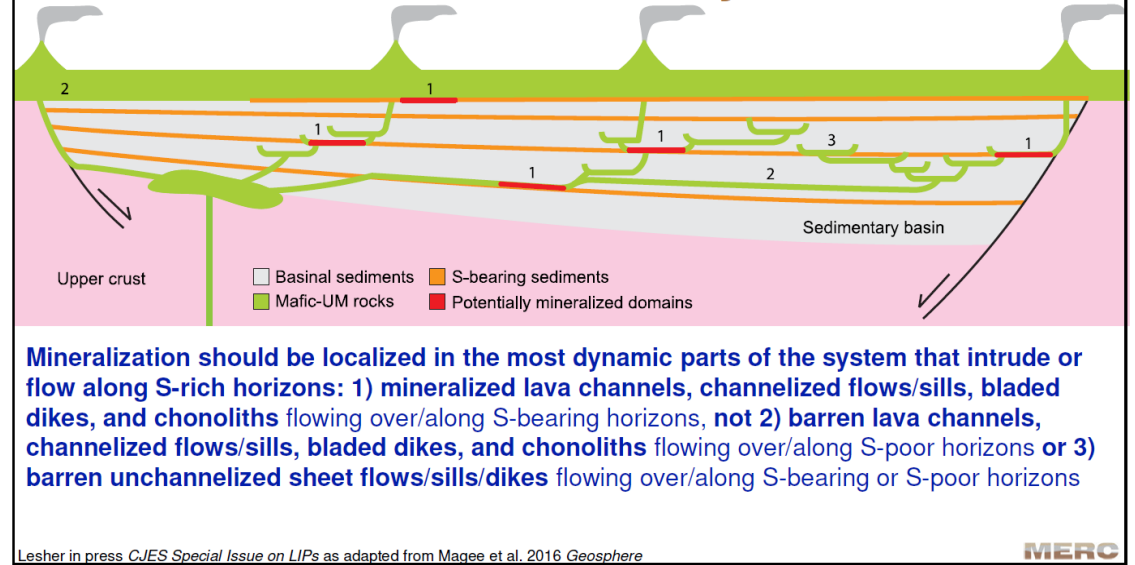


Bangemall Ni-Cu-PGE Model

Capricorn Orogen Seismic Line CP2



Ore Genesis in a Sedimentary Basin

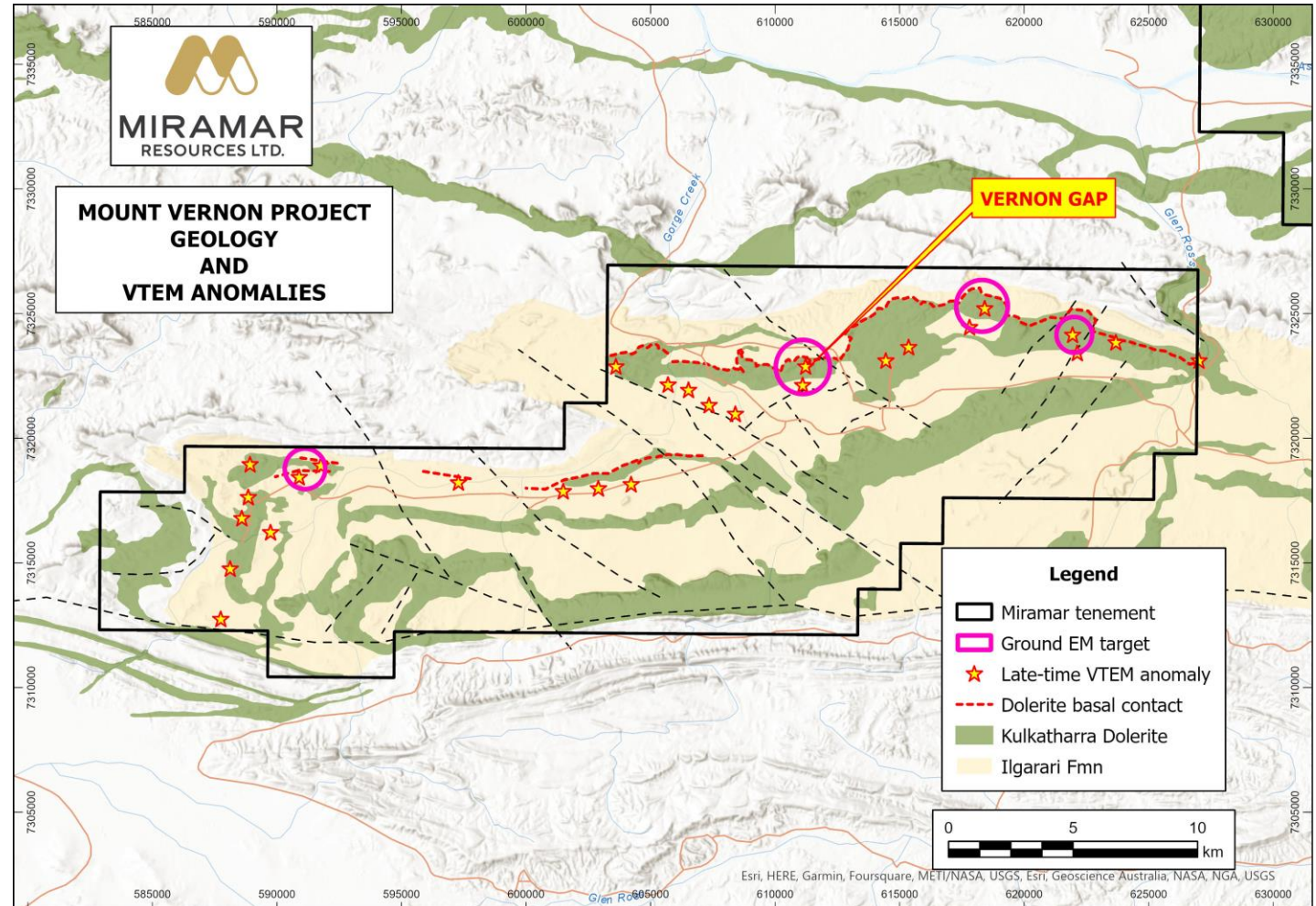


Leshner, 2016

Major crustal-scale faults provide conduits for emplacement of **Ni-Cu-PGE** bearing mafic magma into Collier Basin sediments

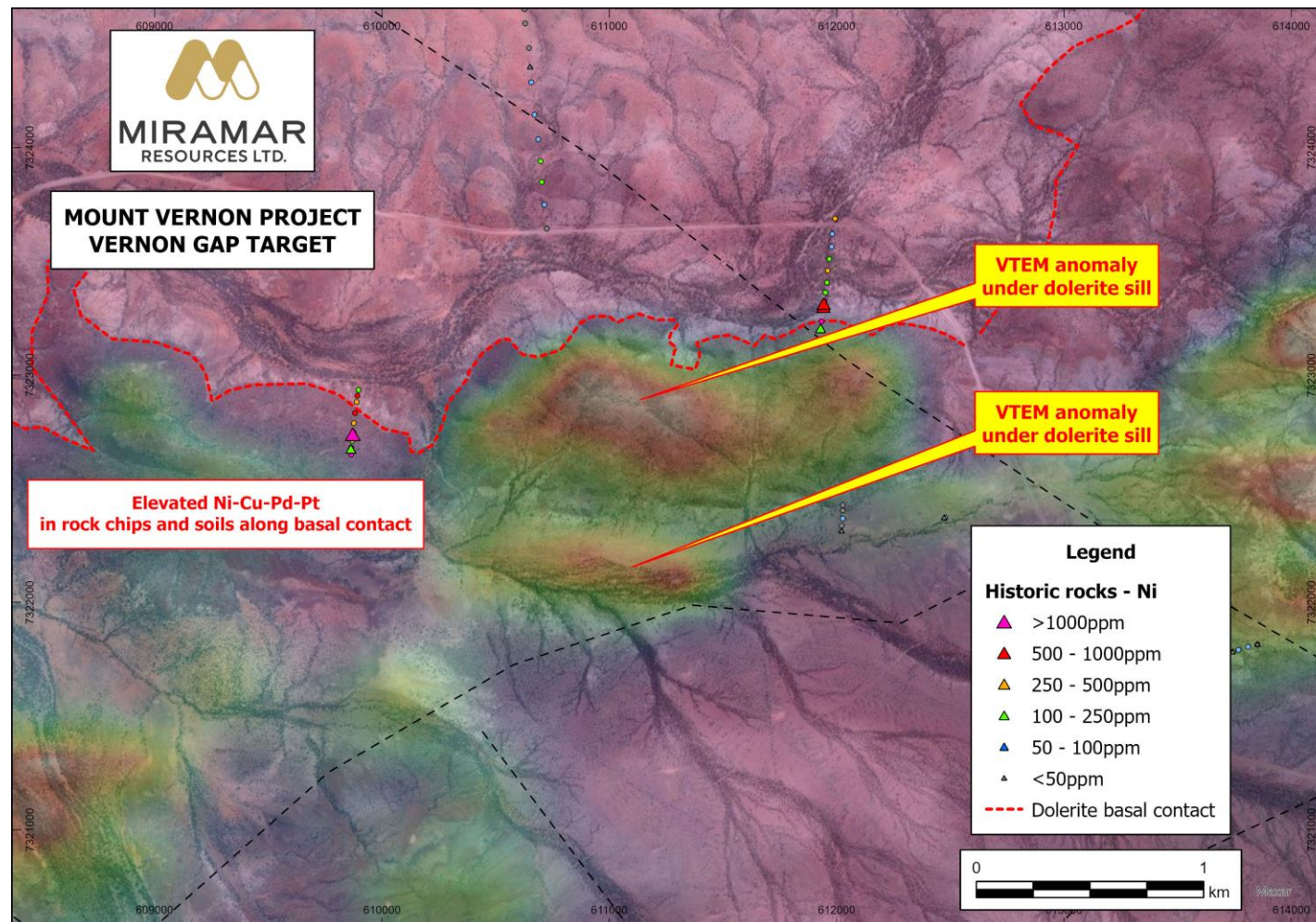
Bangemall - Mount Vernon

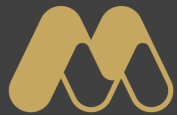
- **Kulkatharra Dolerite** sills intruding into pyritic siltstones (Suphur-source)
- Anomalous **PGE's** in GSWA regional stream sediments
- Elevated **Ni-Cu-Pd-Pt** in historic rock chip and soil samples
- Multiple **late-time VTEM anomalies** along basal contact of dolerite sill
- Ground EM planned



“Vernon Gap” - high priority drill target

- 600m long late-time VTEM anomaly beneath dolerite
- Elevated **Ni-Cu-Pd-Pt** in historic rock chips and soils
- Outcropping sulphides
- Ground EM/drilling planned



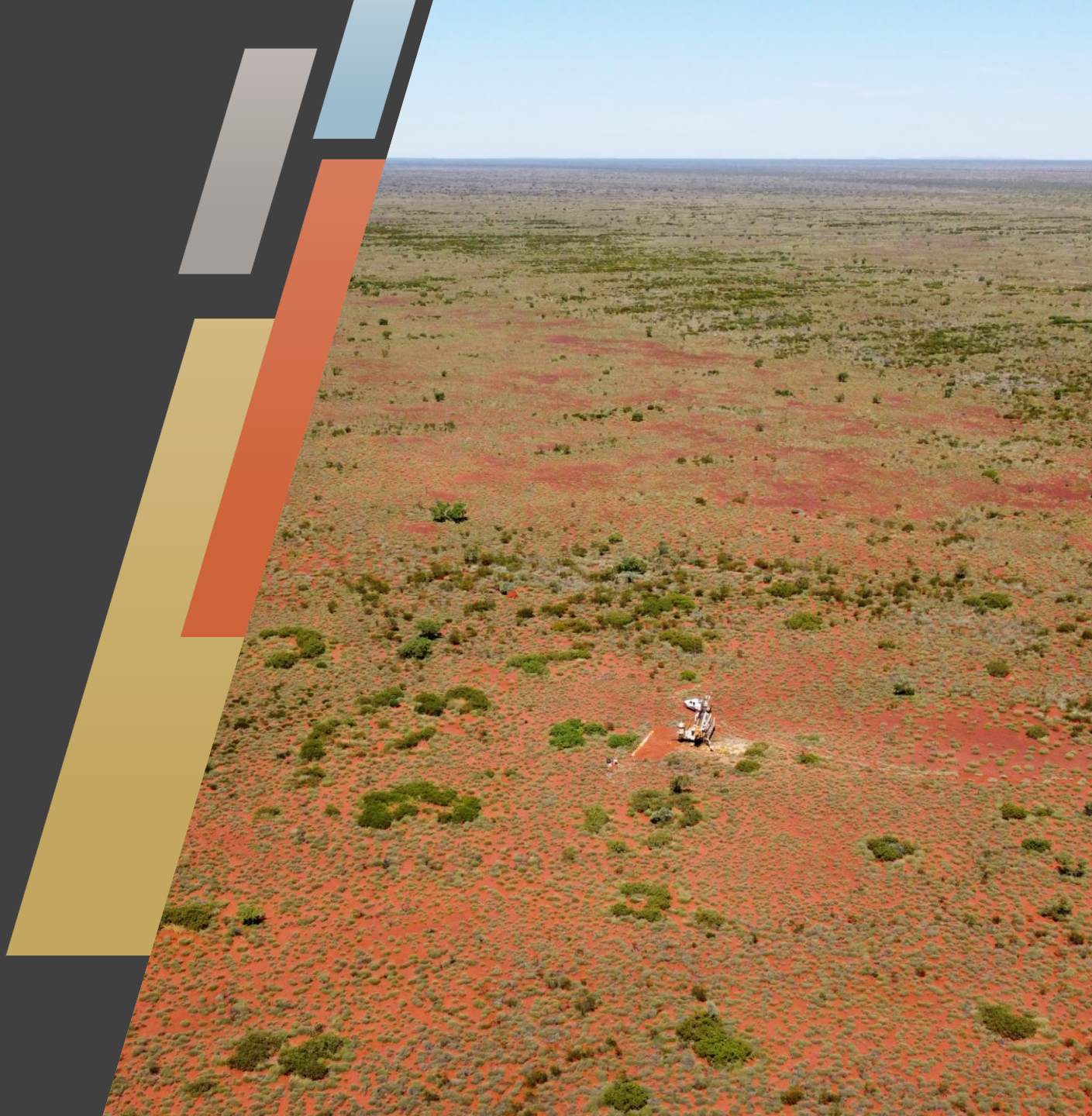


MIRAMAR
RESOURCES LTD.

Whaleshark Project

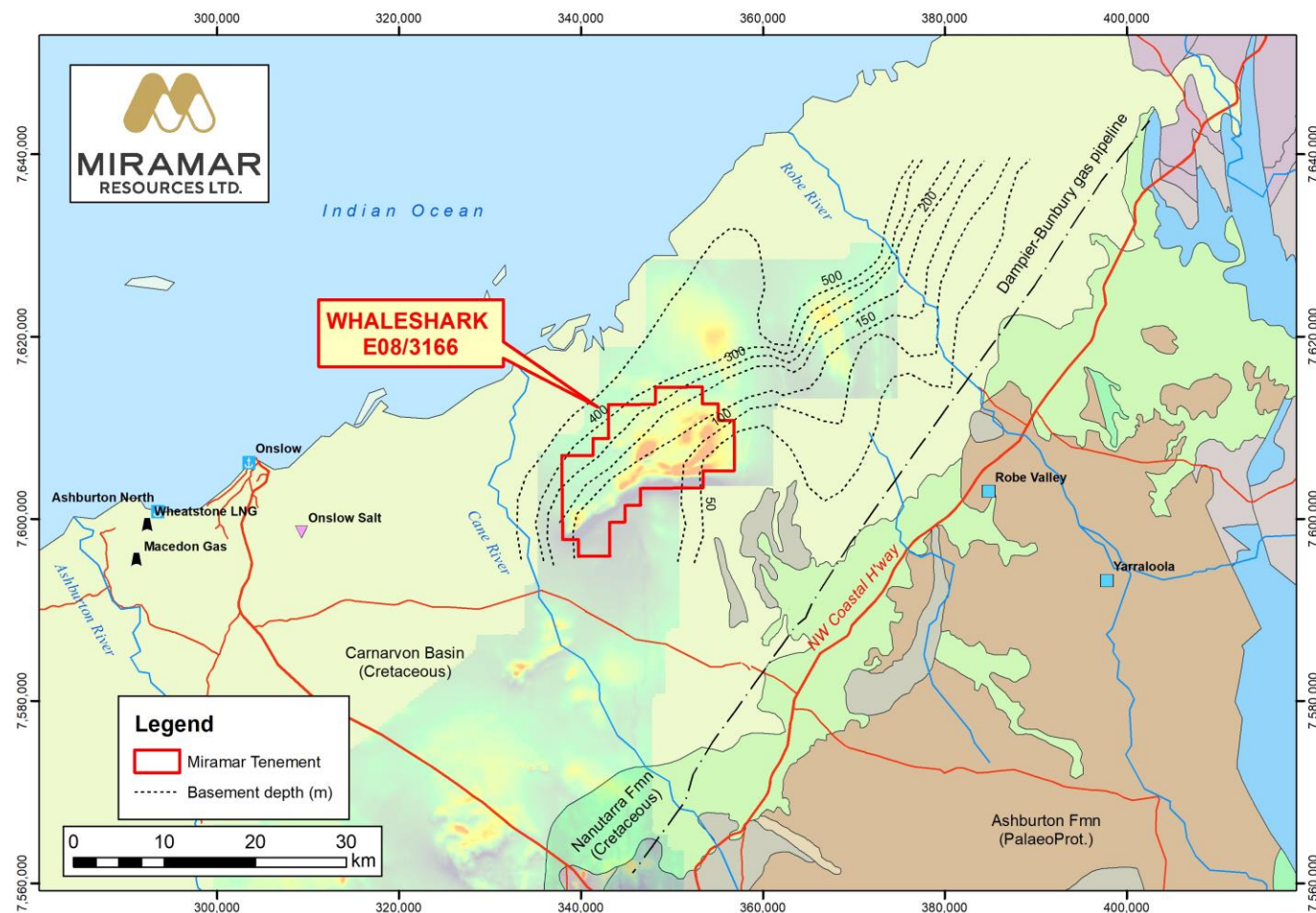
Cu

Au



Whaleshark Project

- Granodiorite and iron formation under Carnarvon Basin
- Multi-commodity potential
 - **Iron oxide copper gold**
 - **BIF - hosted gold**
 - **Intrusion - related gold**
 - **Magnetite iron ore**
- Significant infrastructure:
 - NW Coastal Highway
 - Dampier-Bunbury natural gas pipeline
 - Onslow port facilities



Systematic exploration since tenement grant

2020

- Tenement application

2021

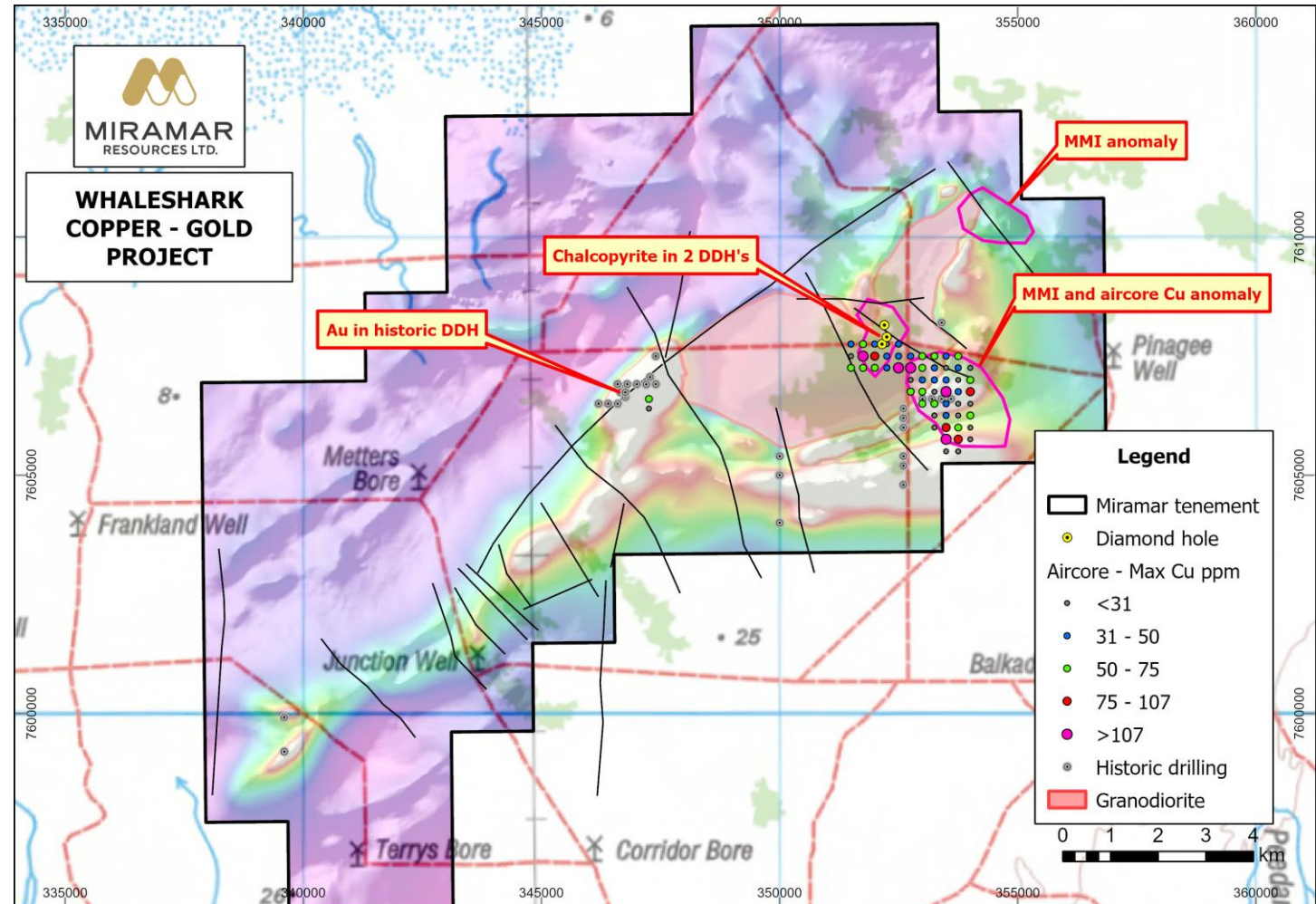
- Tenement granted
- First-pass MMI soil sampling
- Infill MMI soil sampling

2022

- “Interface” aircore drilling intersects **Cu-Au-Ag-Co** anomalism

2023

- EIS diamond drilling intersects **copper sulphides**



2022 Aircore Drilling

- Aircore drilling beneath MMI anomalies successfully intersected basement beneath Cretaceous sediments
- Basement intersected at 20 –126m
- Strongly anomalous **Cu-Au-Co-Mo-U-W** at basement unconformity
 - 435ppm Cu, 889ppm Co and 7.7g/t Ag
 - 0.16g/t Au
- REE signature comparable to Prominent Hill and Carrapateena **IOCG** deposits

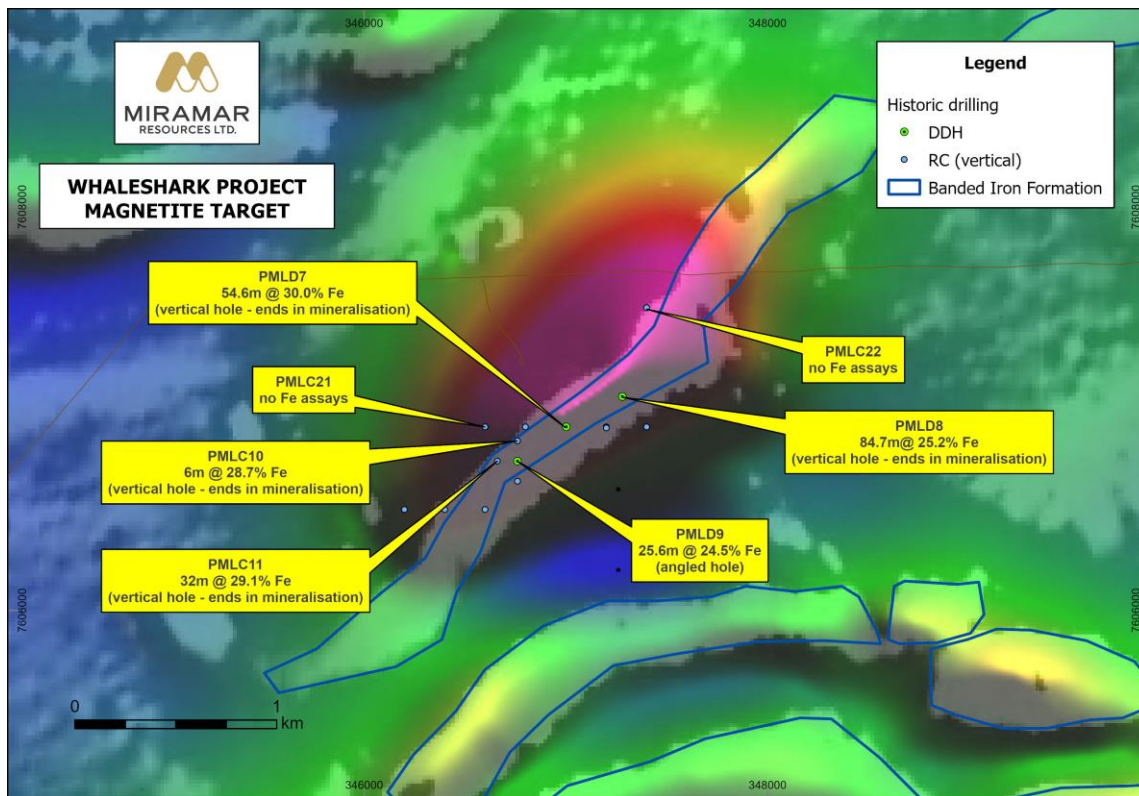


2023 Diamond Drilling

- 3 x EIS co-funded DDH's tested coincident gravity/MMI/aircore anomaly
- Drilling intersected biotite granodiorite with multiple biotite-rich mafic xenoliths
- **Chalcopyrite intersected in 2 holes** - confirmed by XRF and assays
- Anomalous **Cu, Au, Ag, Mo, W** and **REE's**
 - **WSDD001** – 1m @ 0.10g/t Au and 1m @ 31.4ppm Mo and 1022ppm W
 - **WSDD002** – 0.4m @ 0.2% Cu, 1.1ppm Ag
 - **WSDD003** – 1m @ 0.11g/t Au



Magnetite Iron Targets



- Historic drilling intersected magnetite-rich BIF
 - **84.7m @ 25.2% Fe**
 - **54.6m @ 30.0% Fe**
- Similarities to other magnetite iron deposits



Next Steps

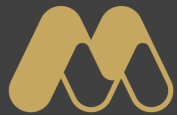
Exploration to date provides evidence of:

- Prospective geology under shallow cover
- Effectiveness of aircore drilling
- Bedrock **copper** and **gold** mineralisation
- Thick intervals of magnetite iron >25% Fe

2024 work programme

- Passive seismic survey to map basement topography across project
- Heritage survey
- Interface aircore drilling to map basement geology +/- mineralisation
- Examine magnetite iron ore potential





MIRAMAR
RESOURCES LTD.

Gidji JV (M2R 80%)

Au

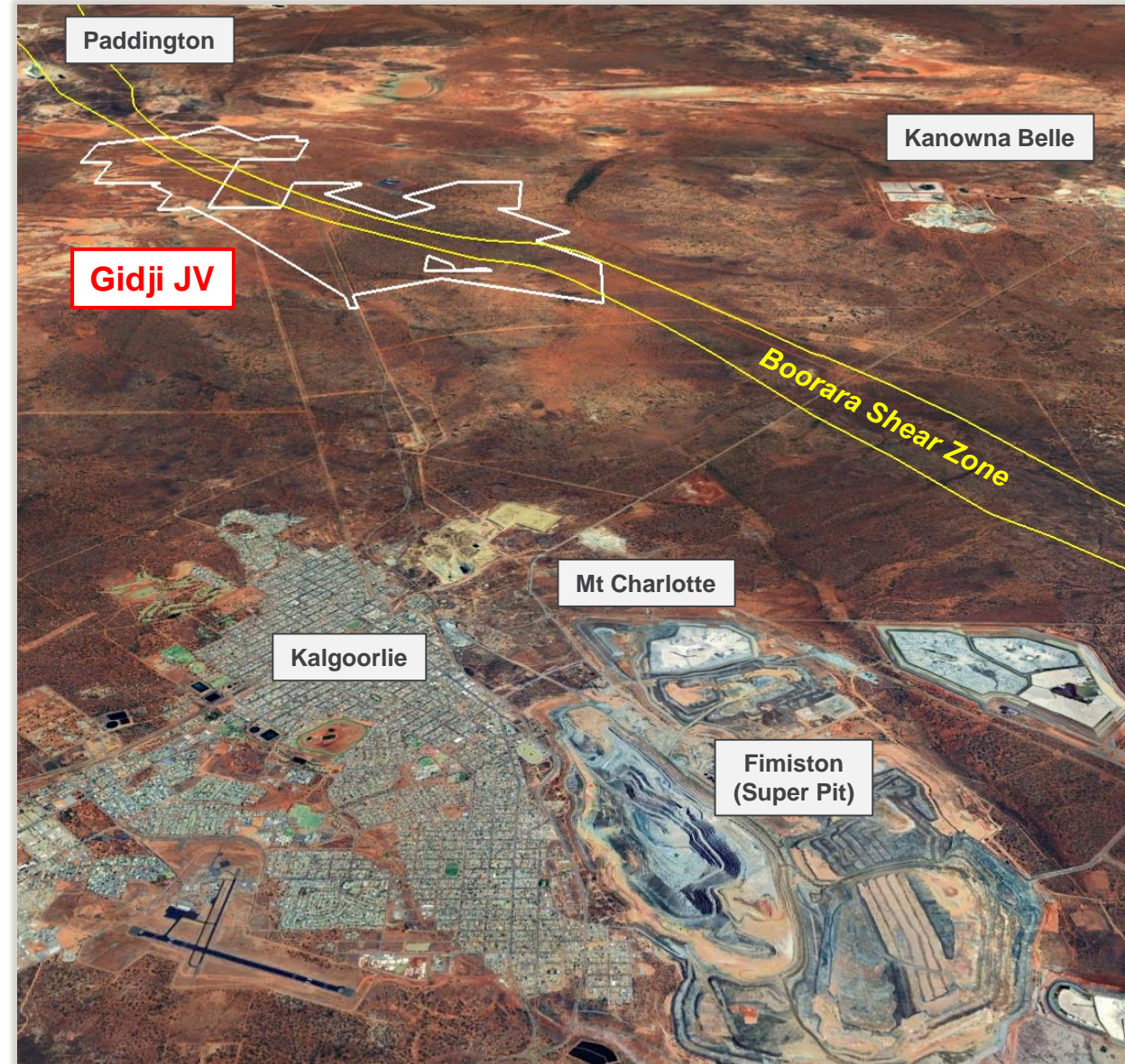
Ni



Gidji JV

Underexplored gold project in prime location

- **15km N of Kalgoorlie** - surrounded by multiple major deposits and processing plants
- Dilational jog in major mineralised structure – **Boorara Shear Zone**
- Previous exploration hampered by transported cover = **minimal effective historic drilling**
- Multiple large new aircore gold footprints discovered with same geology/structure/scale as >1 million ounce Paddington deposit



Gidji JV

Aircore drilling outlines multiple new gold occurrences

■ Marylebone

- 3m @ 7.12g/t Au
- 2m @ 7.69g/t Au
- 6m @ 2.21g/t Au
- 1m @ 12.60g/t Au
- 4m @ 3.00g/t Au
- 1m @ 9.55g/t Au

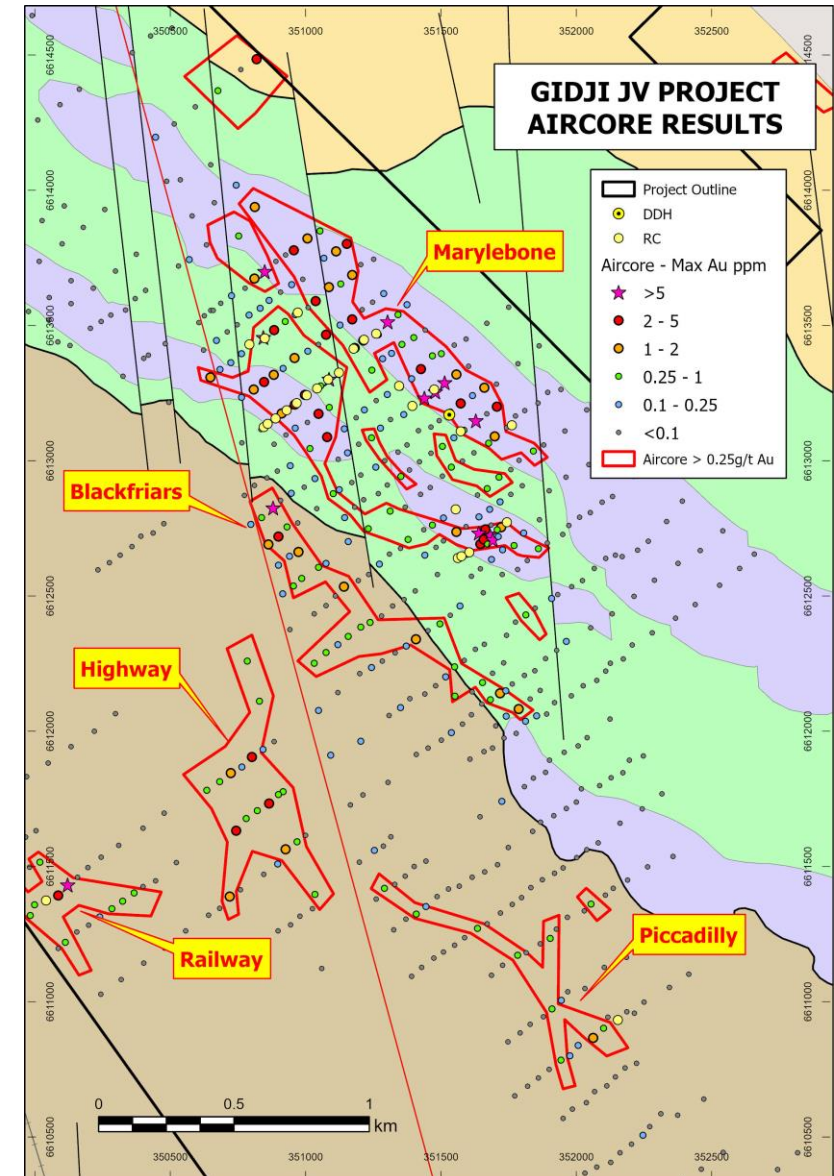
■ Blackfriars

- 1m @ 11.8g/t Au and 6g/t Ag (EOH)

■ Highway

- 3m @ 3.78g/t Au

■ Further aircore and bedrock drilling planned



2024 Work Plan

Bangemall (Mt Vernon)

- Ground EM
- **RC drilling** (EIS funding?)
- Grant of other tenements

Whaleshark

- Passive seismic survey
- Heritage Survey
- **Aircore drilling**

Gidji JV

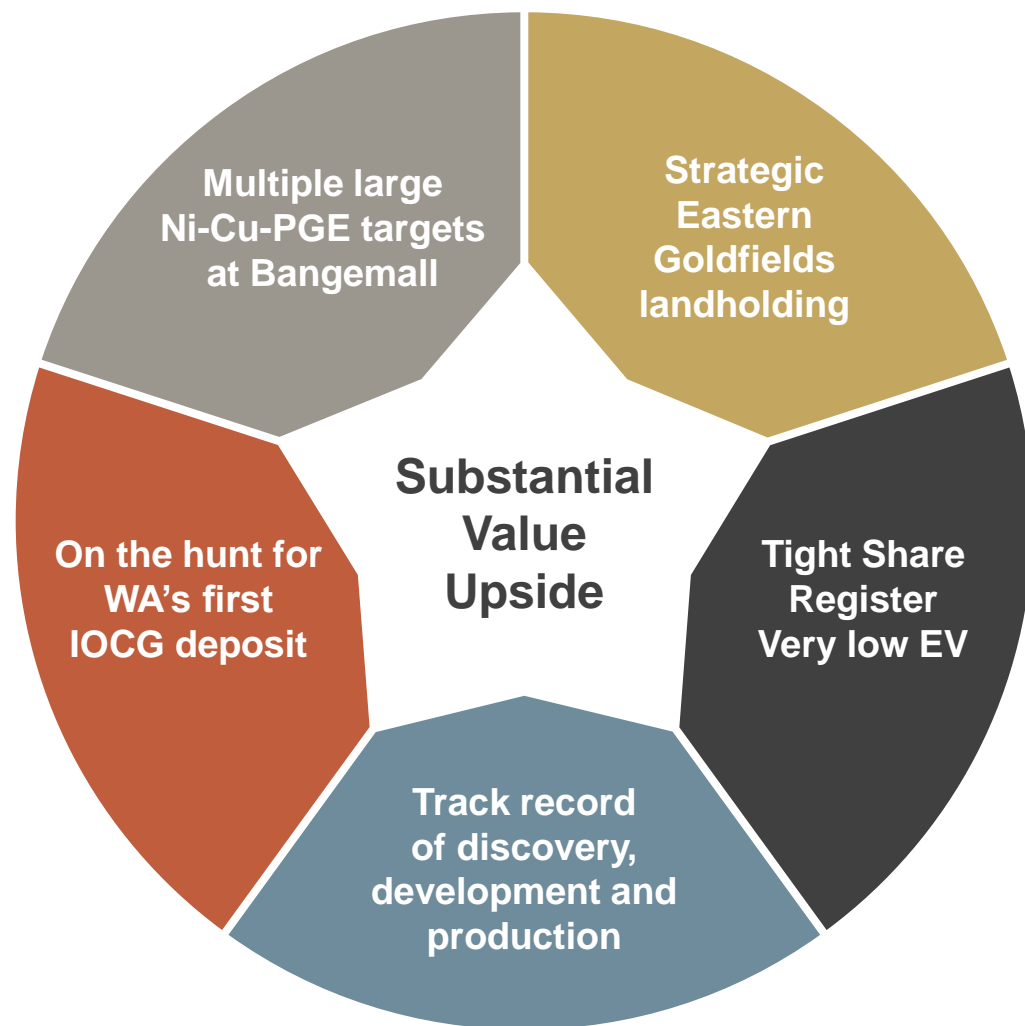
- Work up RC/DD drill targets

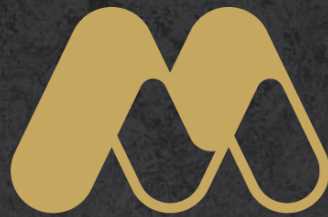
Other

- Project rationalization



Why Miramar Resources?





MIRAMAR

RESOURCES LTD.

T: + 61 8 6166 6302 | E: info@miramarresources.com.au

miramarresources.com.au | ASX: **M2R**

