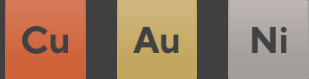




MIRAMAR
RESOURCES LTD.

Investor Update

February 2024



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.

Miramar Resources

Bangemall (Ni-Cu-PGE)

- First mover in potential new **Ni-Cu-PGE** province

Whaleshark (Cu-Au-Fe)

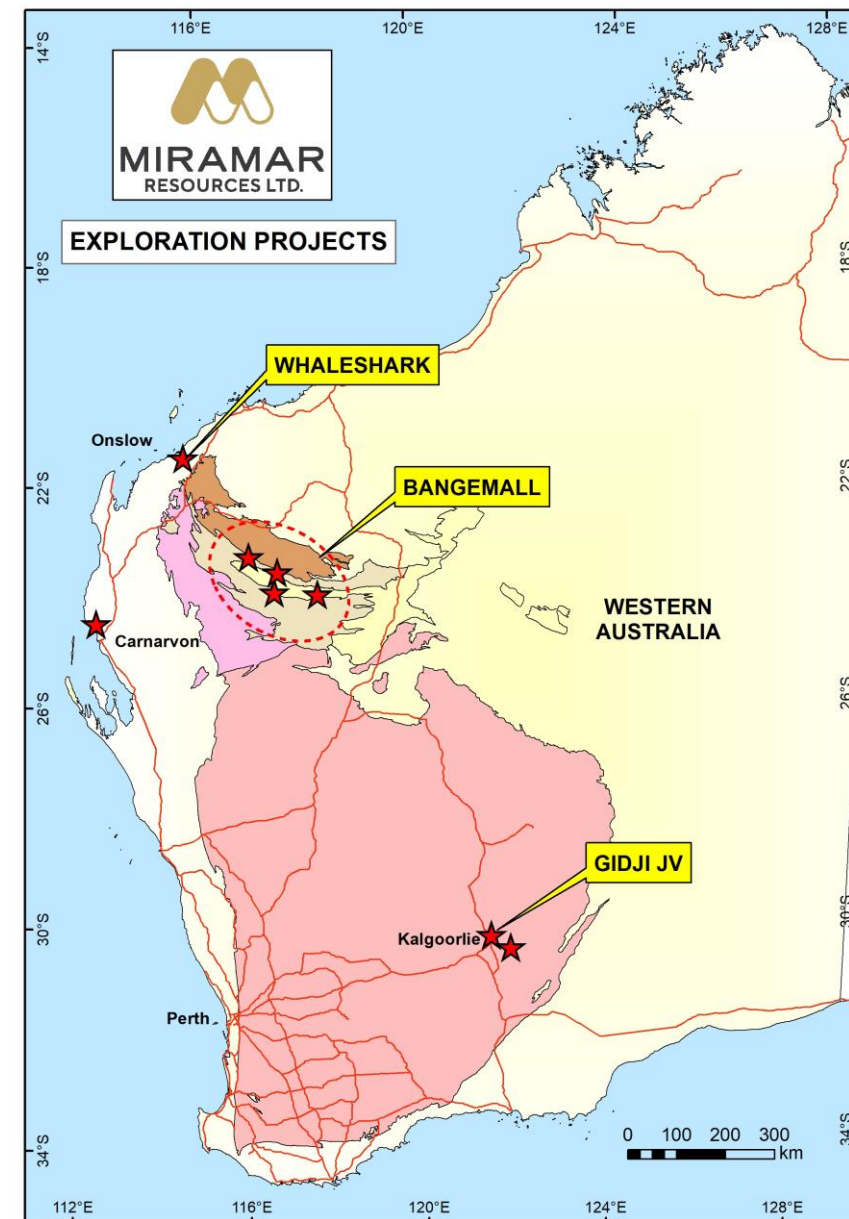
- Unique project with multi-commodity potential

Gidji JV (Au-Ni)

- Potential new gold camp 15km north of Kalgoorlie

Corporate

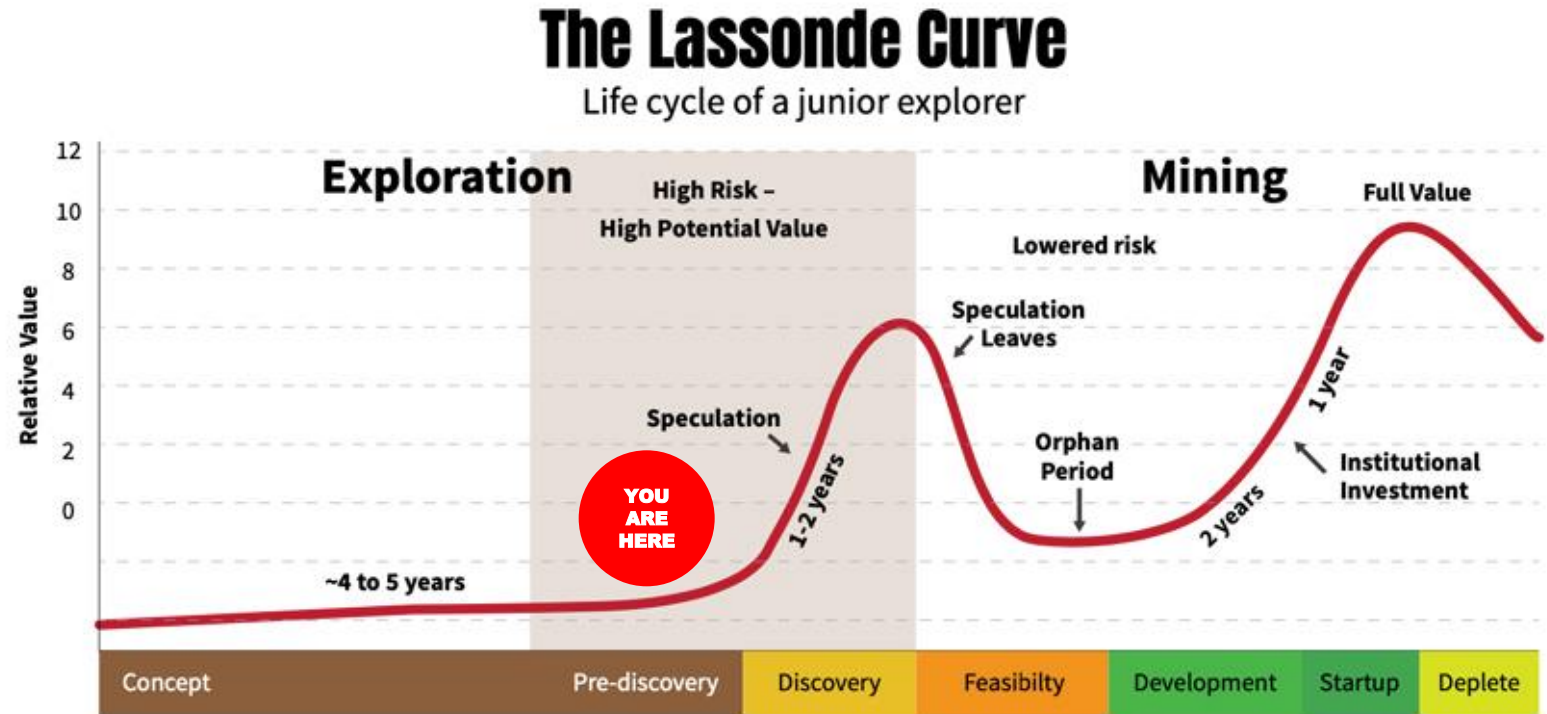
- Track record of discovery, development and production
- Substantial share price leverage to exploration success



Aiming to create value through discovery

Miramar is exploring for:

- In-demand commodities
 - Nickel
 - Copper
 - Gold
- Large and valuable mineral deposit styles
 - Norilsk-style Ni-Cu-PGE's
 - Iron Oxide Copper-Gold
 - Mesothermal lode gold



Source: Brent Cook/Kitco

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 (@ 2c)	\$3.0M
Cash (Dec '23)	\$0.5M
Enterprise Value	\$2.5M

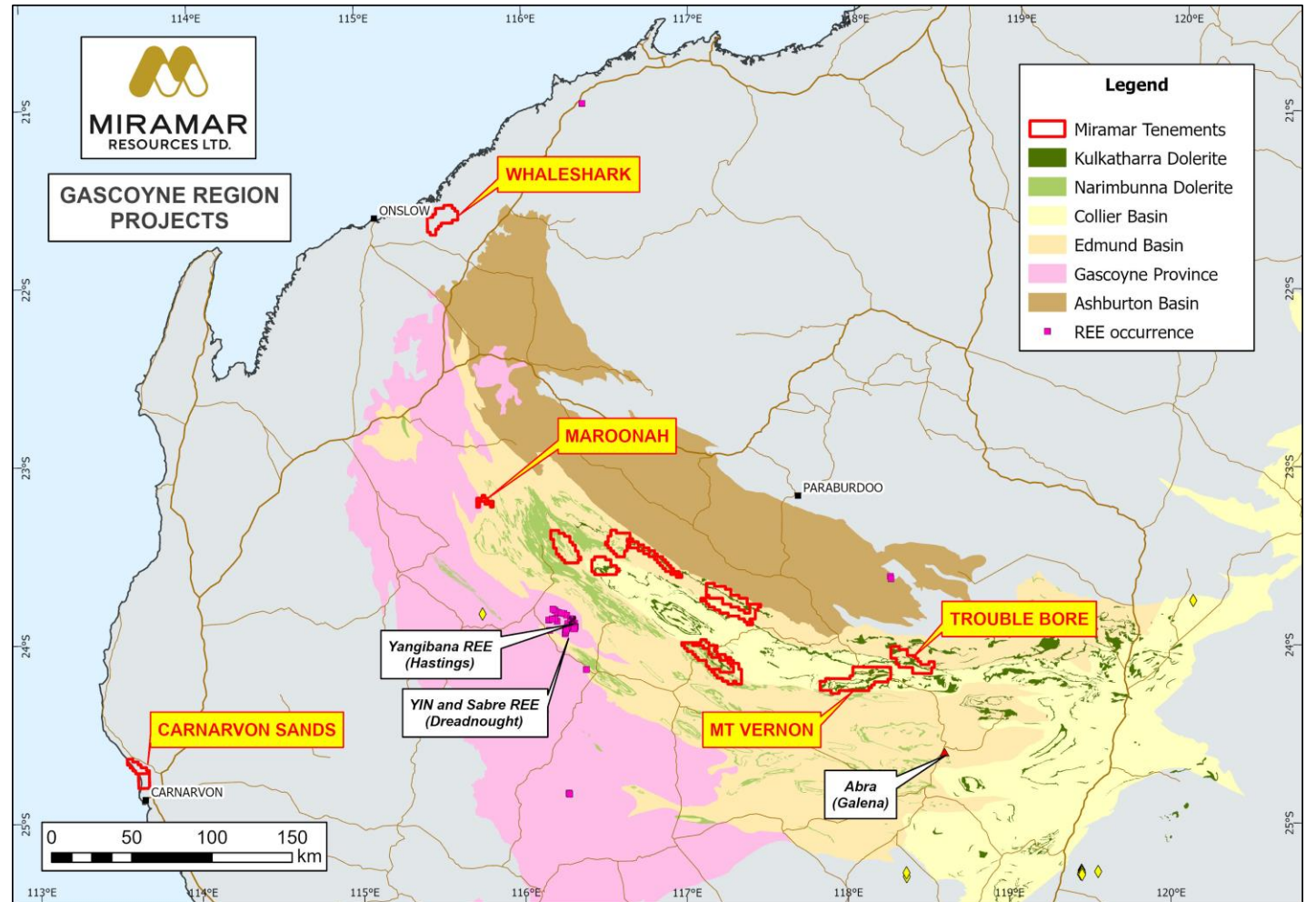
Major shareholders	%
XGS Pty Ltd (Allan Kelly)	9.4
Faraday Investments	6.5
Valorem Capital	5.0
<u>Top 20</u>	<u>47.7</u>
Combined Board	10.2

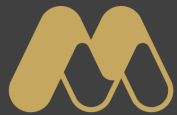
Gascoyne Region Projects

Capricorn Orogen - rapidly emerging mineral province

Multi-commodity potential

- Ni-Cu-PGE's
- Cu-Au (IOCG/SEDEX)
- REE
- Uranium
- Lithium pegmatites
- Magnetite iron
- Heavy mineral sands (+/- REE's)





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Bangemall Ni-Cu-PGE Projects

Ni

Cu

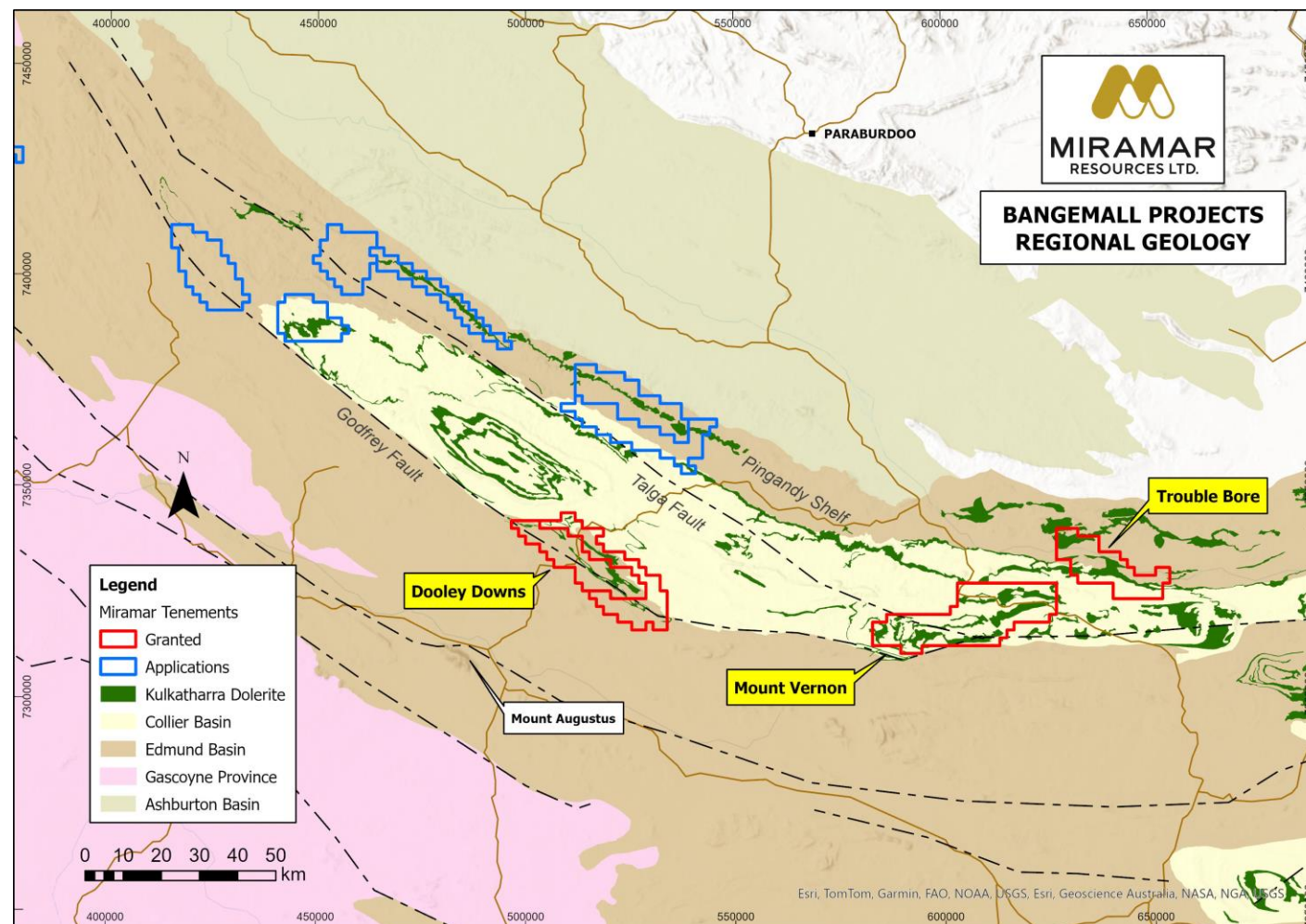


Bangemall Ni-Cu-PGE Projects

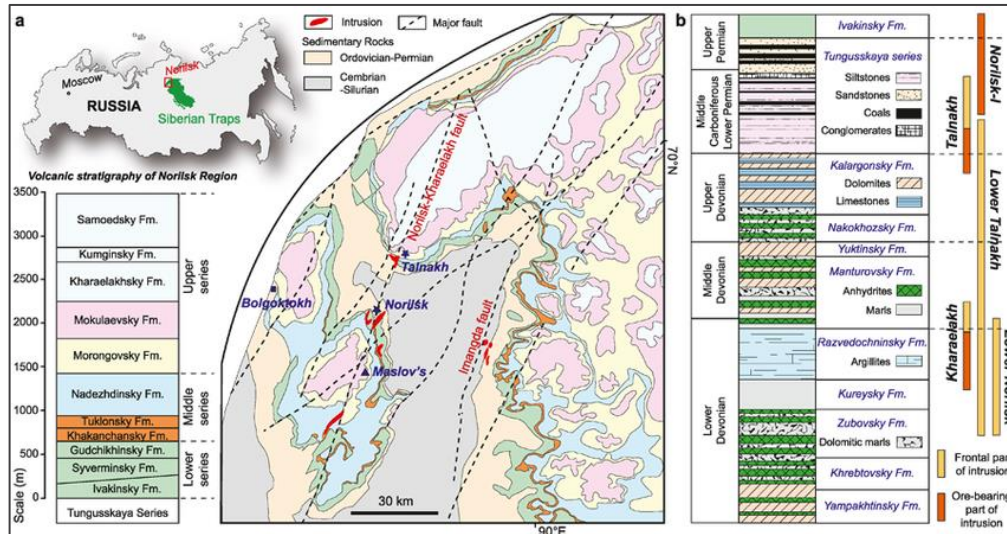
First mover in potential new Ni-Cu-PGE Province

Key ingredients for Norilsk-style Ni-Cu-PGE deposits

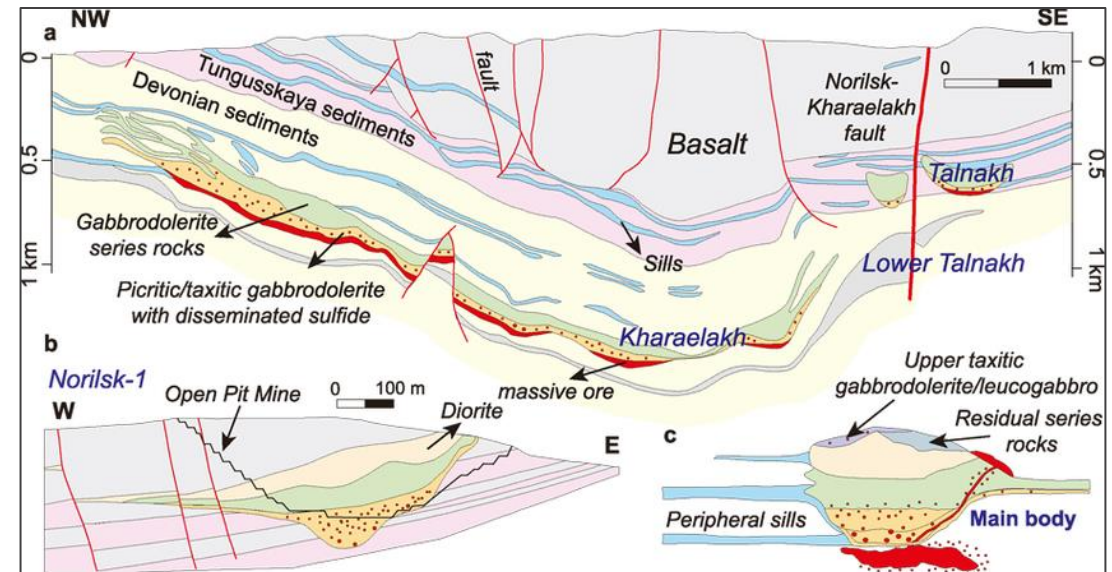
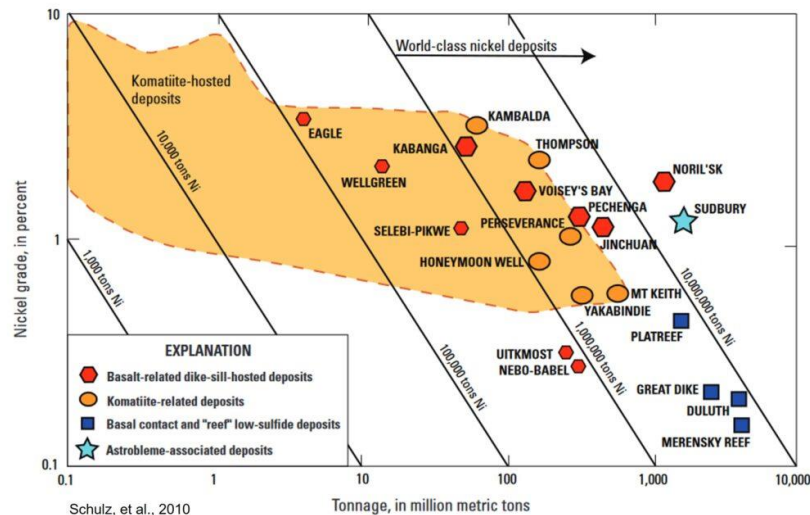
- ✓ Kulkatharra Dolerite sills – part of Warakurna LIP
- ✓ Major crustal-scale faults
- ✓ Sulphidic sediments
- ✓ Regional-scale geochem and EM anomalies



The Giant Norilsk-Talnakh Ni-Cu-PGE Deposits



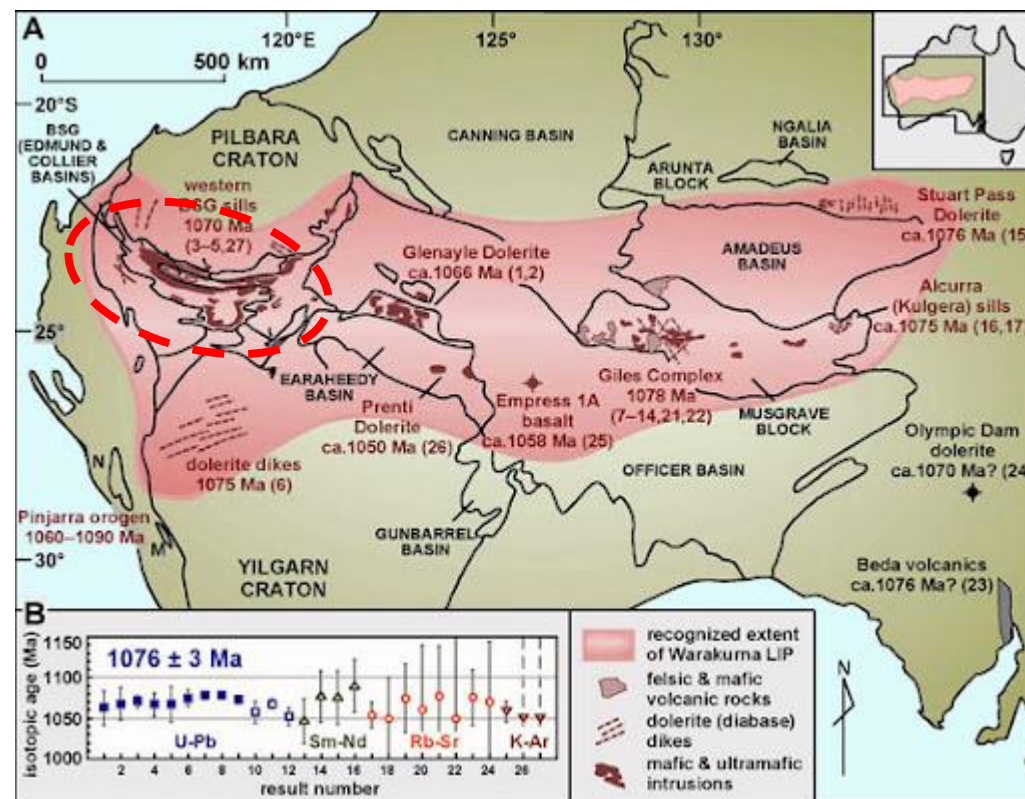
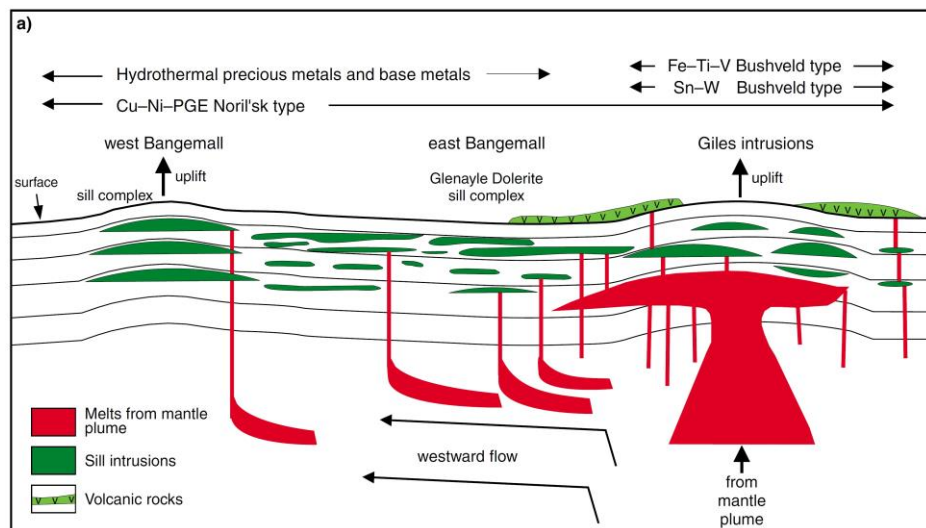
- Gabbro-dolerite sills related to the Siberian Traps basalts
- World's largest Ni-Cu-PGE deposits
- > 2 Billion Tonnes @ 1% Ni and 1% Cu



Warakurna Large Igneous Province (LIP)

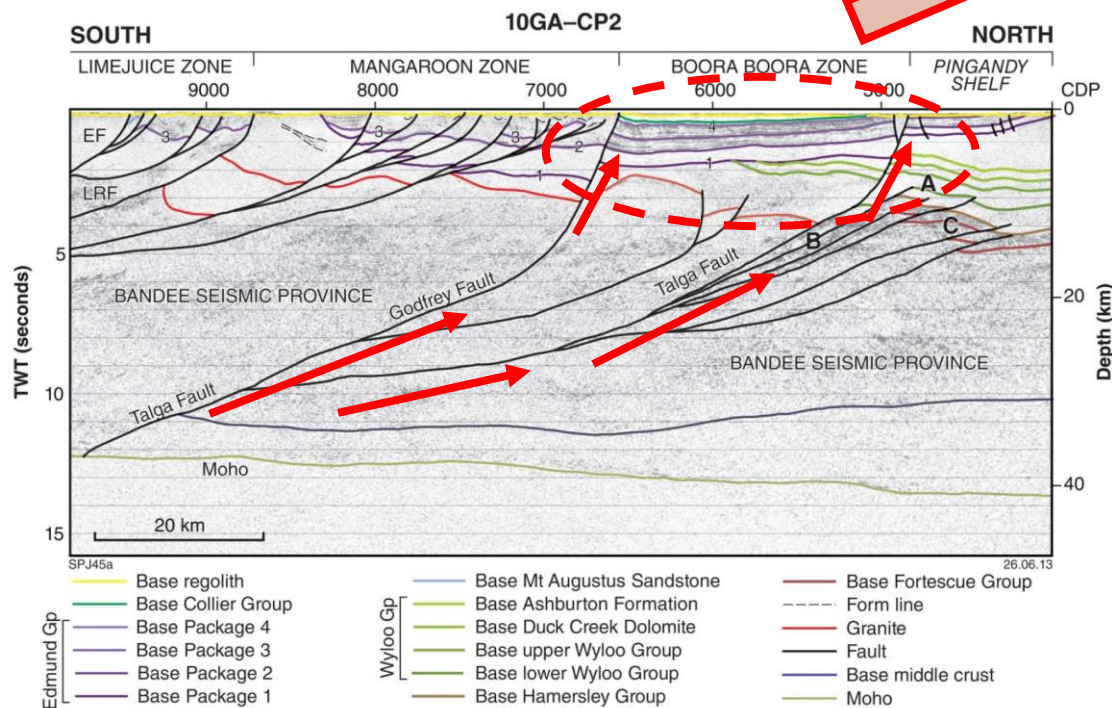
Continental-scale mafic magmatism event related to 1078-1070Ma mantle plume

- Bangemall mafic sills
- Giles Complex - layered mafic/ultramafic intrusions - **Nebo-Babel** and **Succoth**
- Multiple other mafic dyke swarms

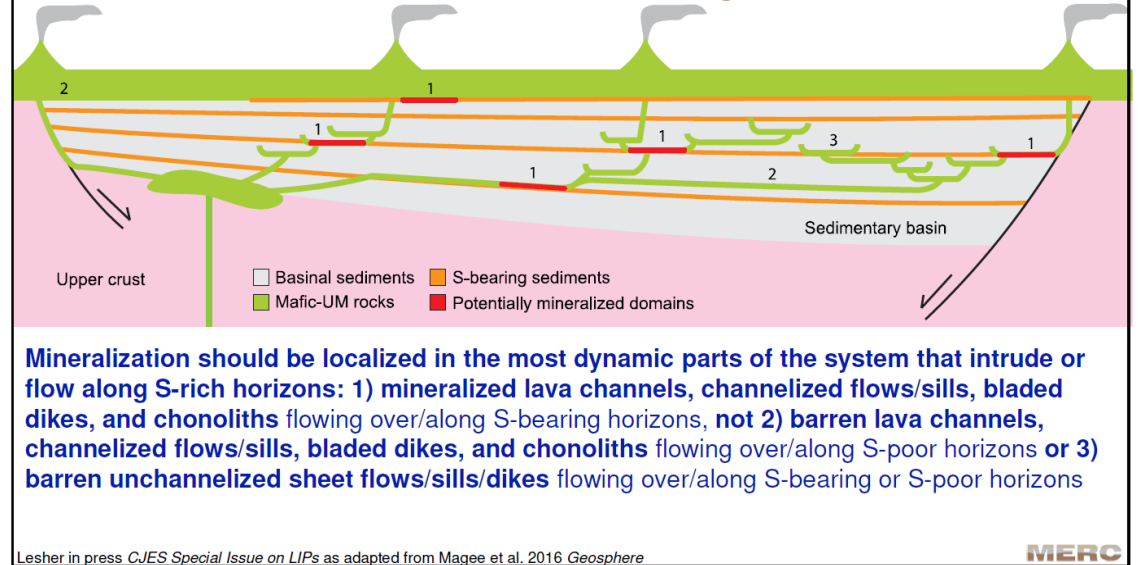


Bangemall Ni-Cu-PGE Model

Capricorn Orogen Seismic Line CP2



Ore Genesis in a Sedimentary Basin

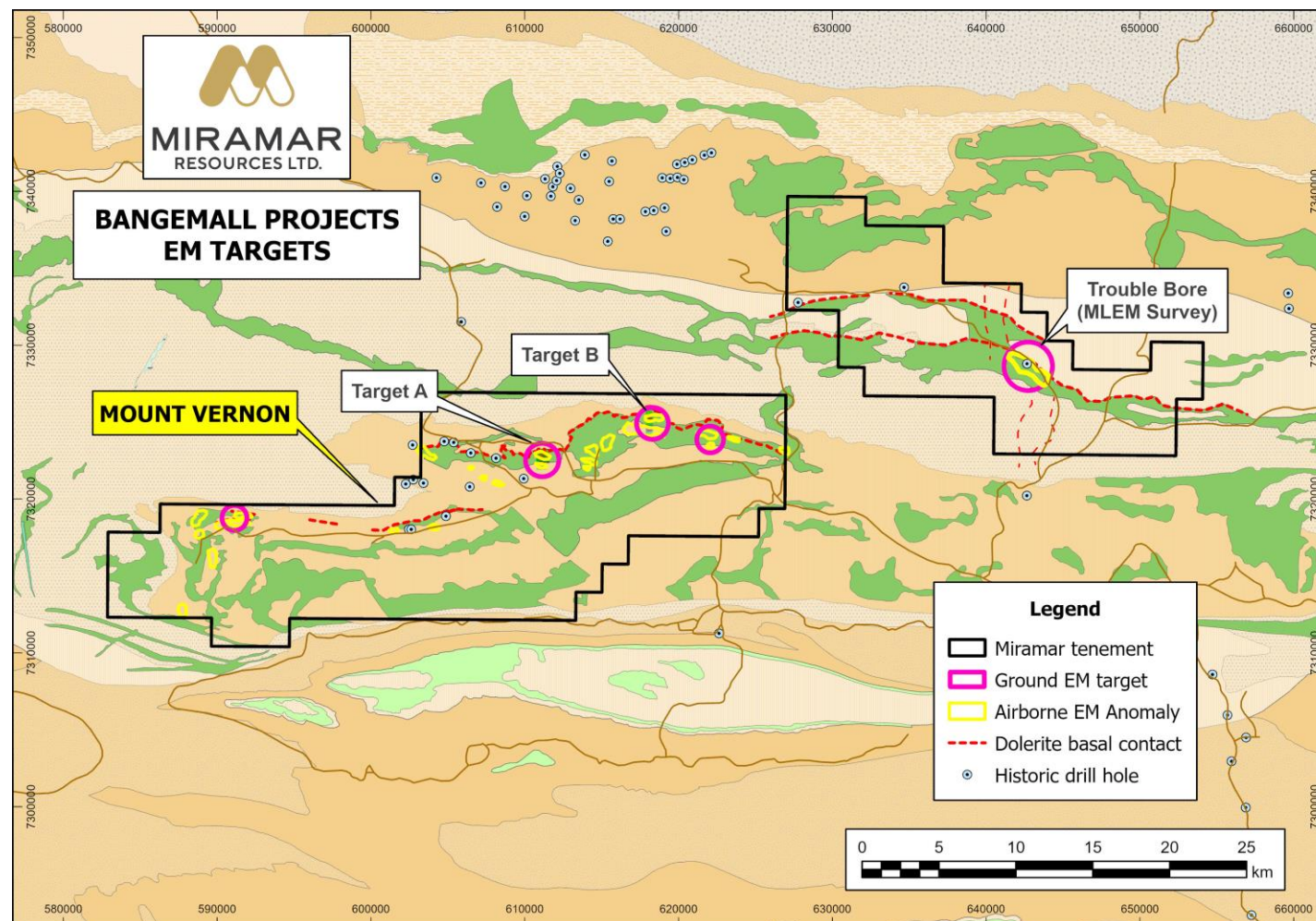


Leshner, 2016

Major crustal-scale faults provide conduits for emplacement of mafic magma carrying **Ni-Cu-PGE's** into sulphidic sediments

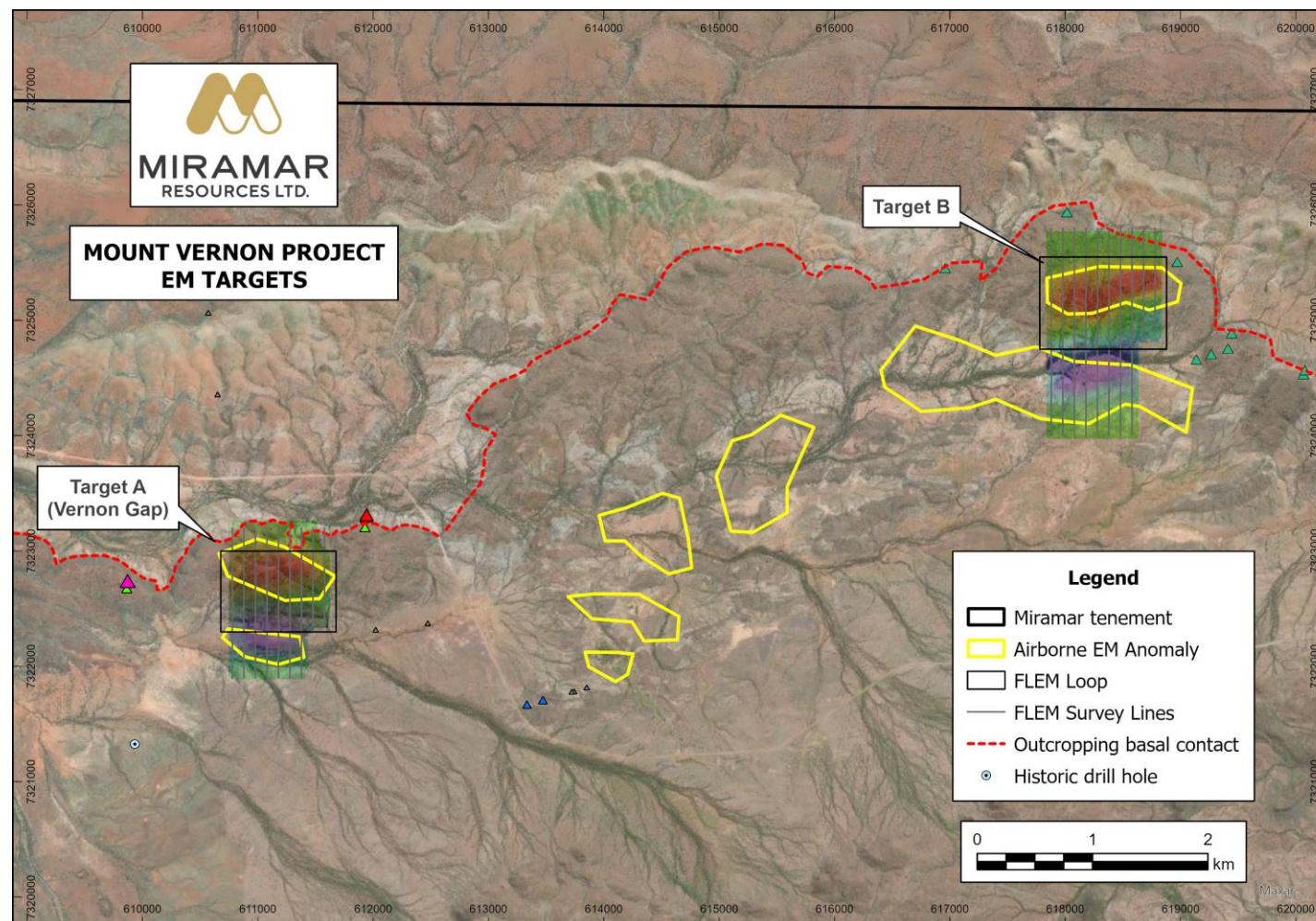
Bangemall Ni-Cu-PGE Projects

- 1070Ma **Kulkatharra Dolerite** sills intruding into sulphidic sediments
- Outcropping sulphides
- Multiple **late-time airborne EM anomalies**
- **Ground EM underway** to refine drill targets



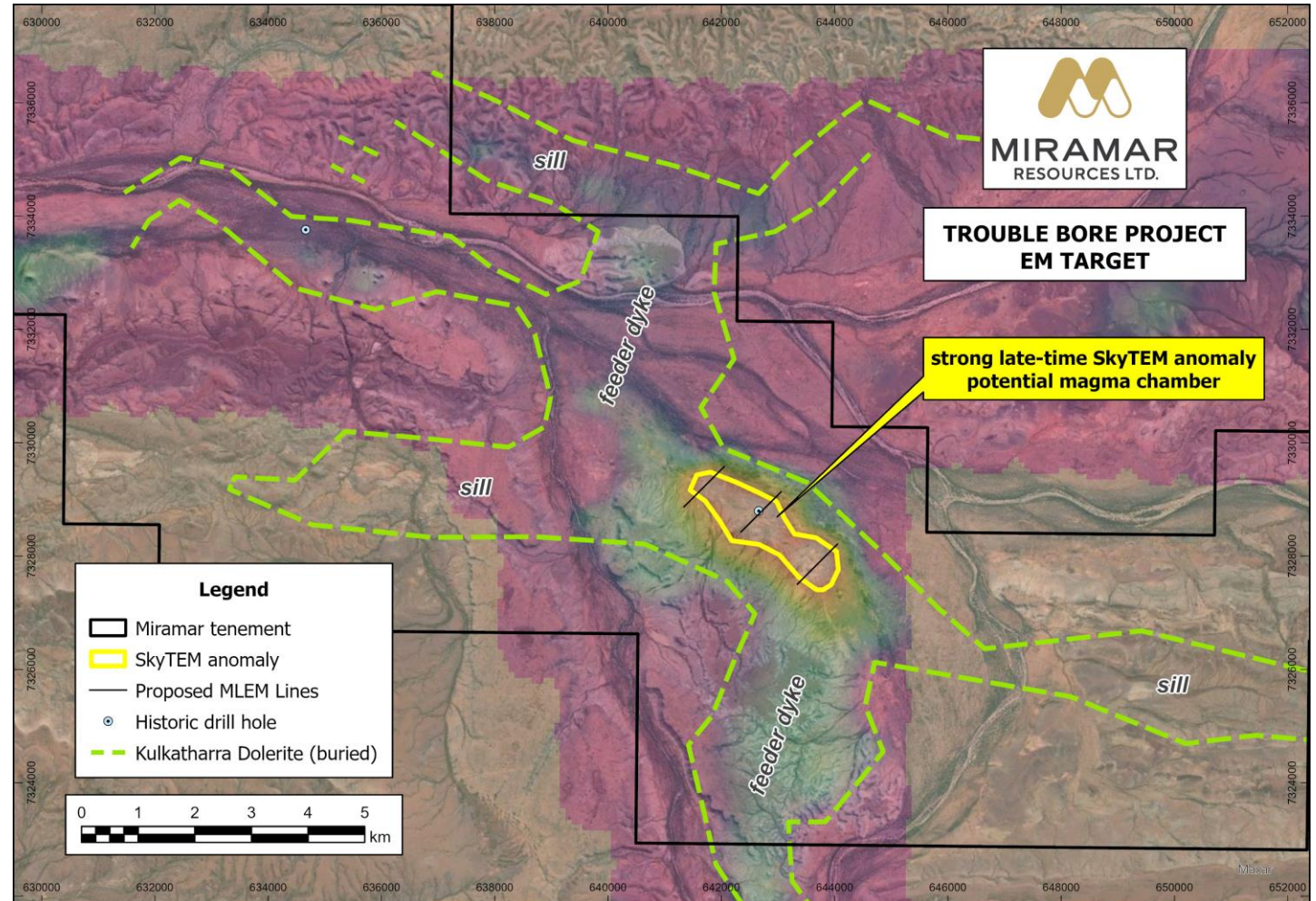
Mount Vernon

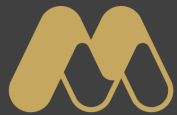
- Elevated **Ni-Cu-Pd-Pt** in historic rock chips/soils
- Disseminated sulphides in differentiated sill
- Evidence of mafic cumulate rocks
- Ground EM survey identifies **multiple large conductors**



Trouble Bore

- **Kulkatharra Dolerite sills** intruding into sediments
- **Strong late-time EM anomaly** at intersection of dolerite sill and potential feeder dyke
- Moving Loop EM underway
- Mapping/sampling planned



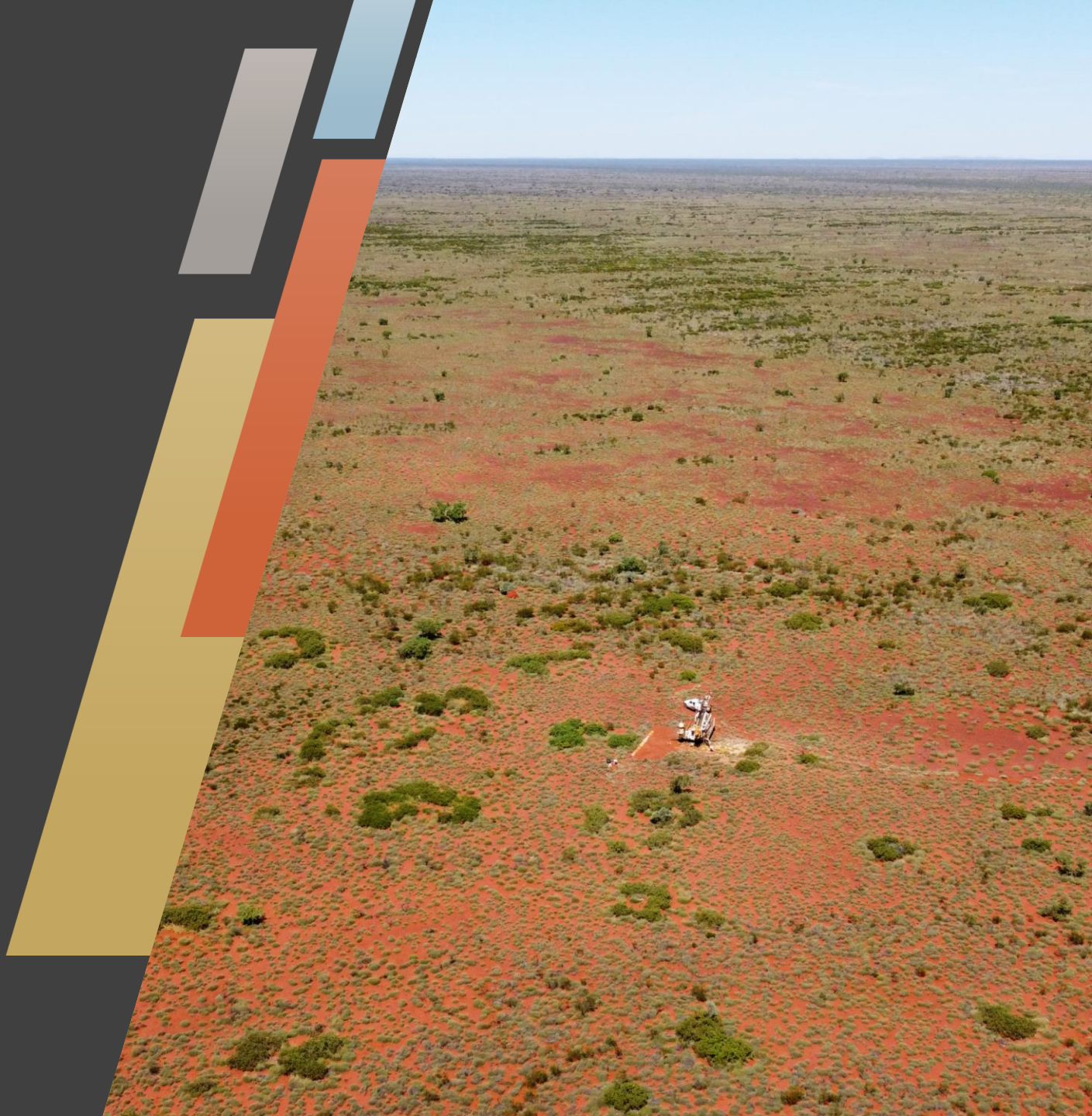


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Whaleshark Project

Cu

Au



Whaleshark Project

Multi-commodity potential

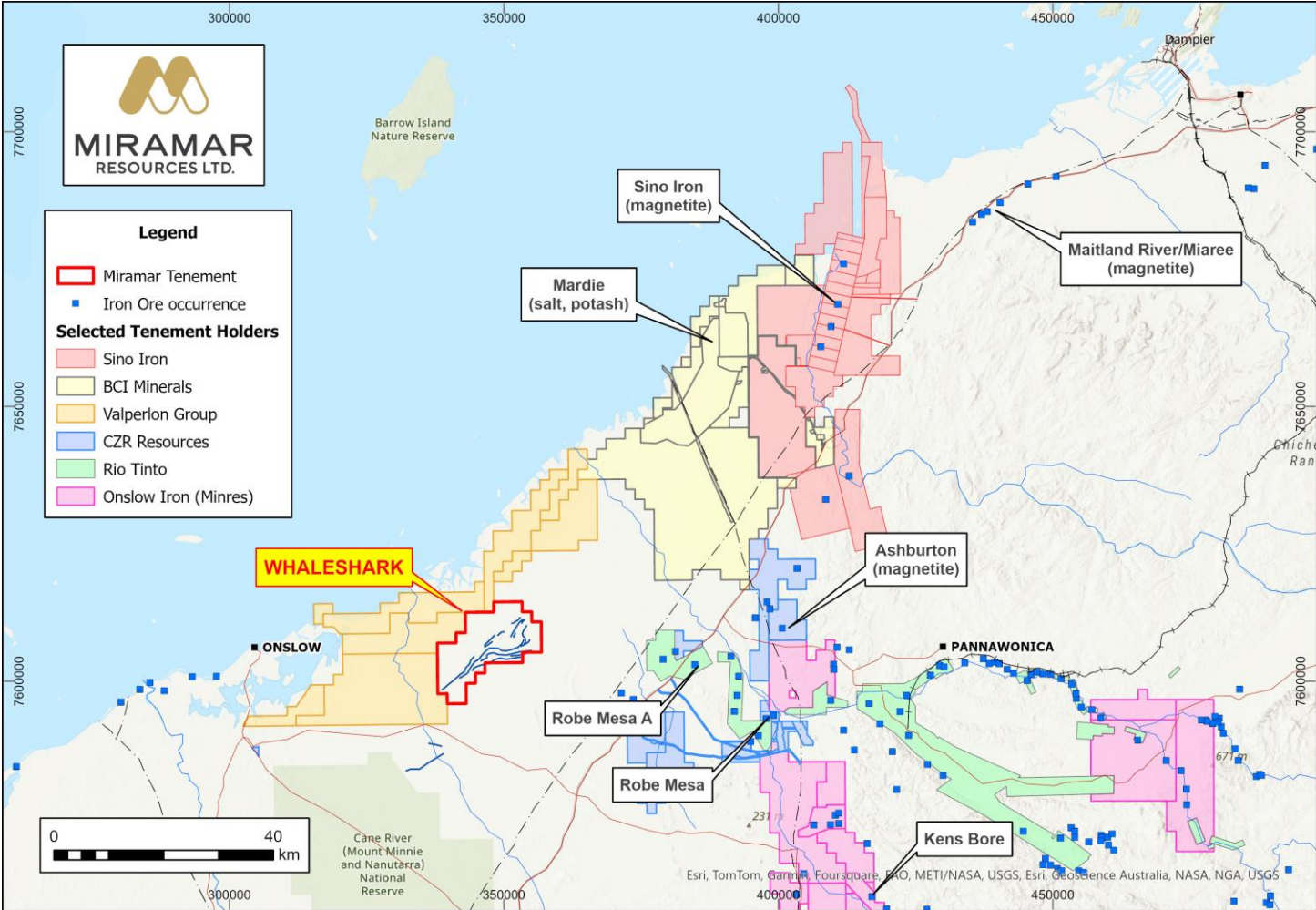
- Copper-gold
- Magnetite iron

Infrastructure-rich area

- Major highway
- Gas pipeline
- Port facilities
- Operating magnetite mine

Recent Corporate Activity

- CZR sale of 85% of Robe Mesa for \$102M

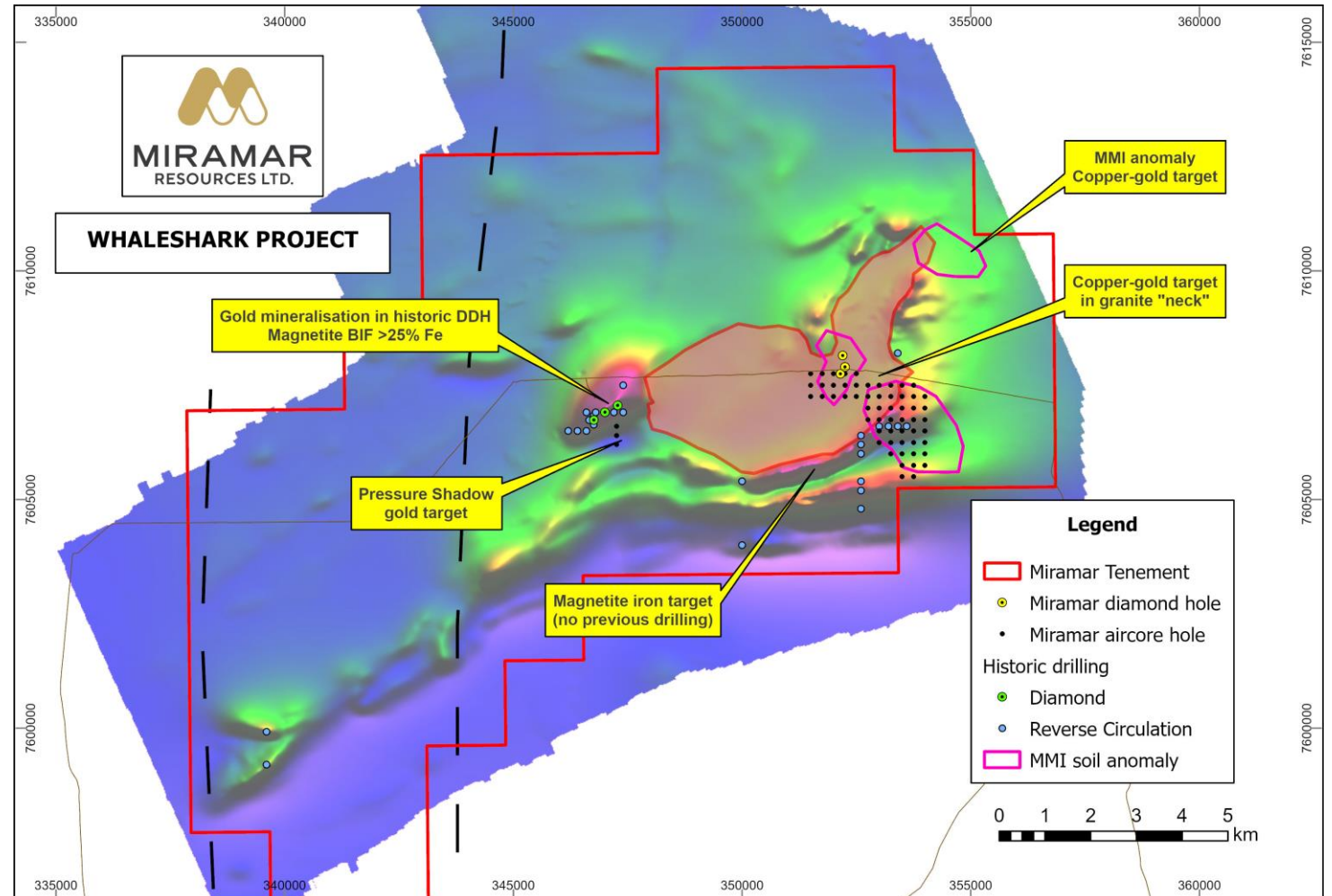


Whaleshark Project

- Banded iron formation and granodiorite under Carnarvon Basin sediments
- Shallow cover (mostly <100m)
- Large surface MMI anomalies
- Geochemical anomalism at basement unconformity

Multi-commodity potential

- Discovery of **copper sulphides** in bedrock (Aug '23)
- **Gold** mineralisation in BIF
- **Magnetite** iron potential



Whaleshark Project - drilling

2022 Aircore drilling

- Intersected basement at depths of 20 –126m beneath Cretaceous sediments
- Anomalous **Cu-Au-Co-Mo-W** at unconformity
- Evidence of sodic/potassic alteration
- REE signatures comparable to IOCG deposits

2023 Diamond Drilling

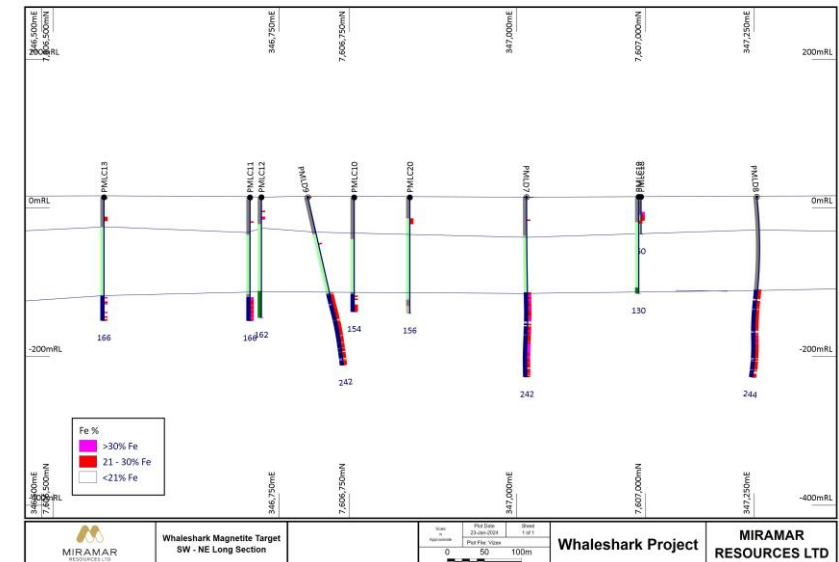
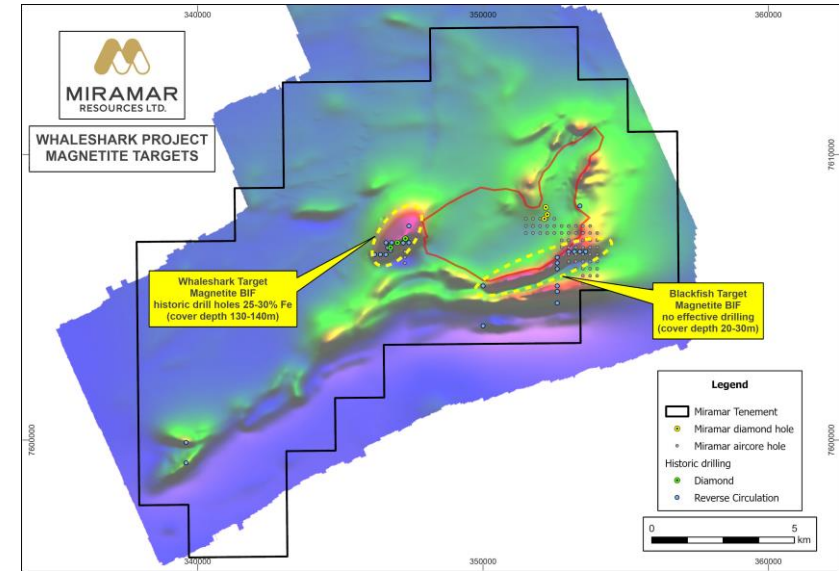
- 3 EIS co-funded DDH's
- **Chalcopyrite** in shear within granodiorite
 - **0.4m @ 0.2% Cu and 1.07g/t Ag**
- Anomalous **Cu-Au-Ag-Mo-W** and REE's

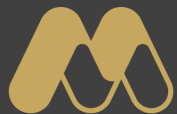


Magnetite Potential

- Historic drilling intersected **magnetite-rich BIF** beneath Cretaceous sediments
 - **84.7m @ 25.2% Fe (from 140m)**
 - **54.6m @ 30.0% Fe (from 175m)**
- Shallower BIF south of granodiorite **untested**
 - Basement depths estimated 20-30m
 - Multiple aircore holes ending in **>21% Fe**
- Similar scale to nearby magnetite deposits
 - **Maitland River/Miaree - 1.5Bt @ 30% Fe¹**
 - **Ashburton - 450Mt–880Mt @ 24-30% Fe²**

1. Iron Ore Holdings Ltd 13 August 2012 and Iron Mountain Ltd 13 Aug 2012
 2. CZR Resources Ltd 2 August 2023





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Gidji JV Project

Au

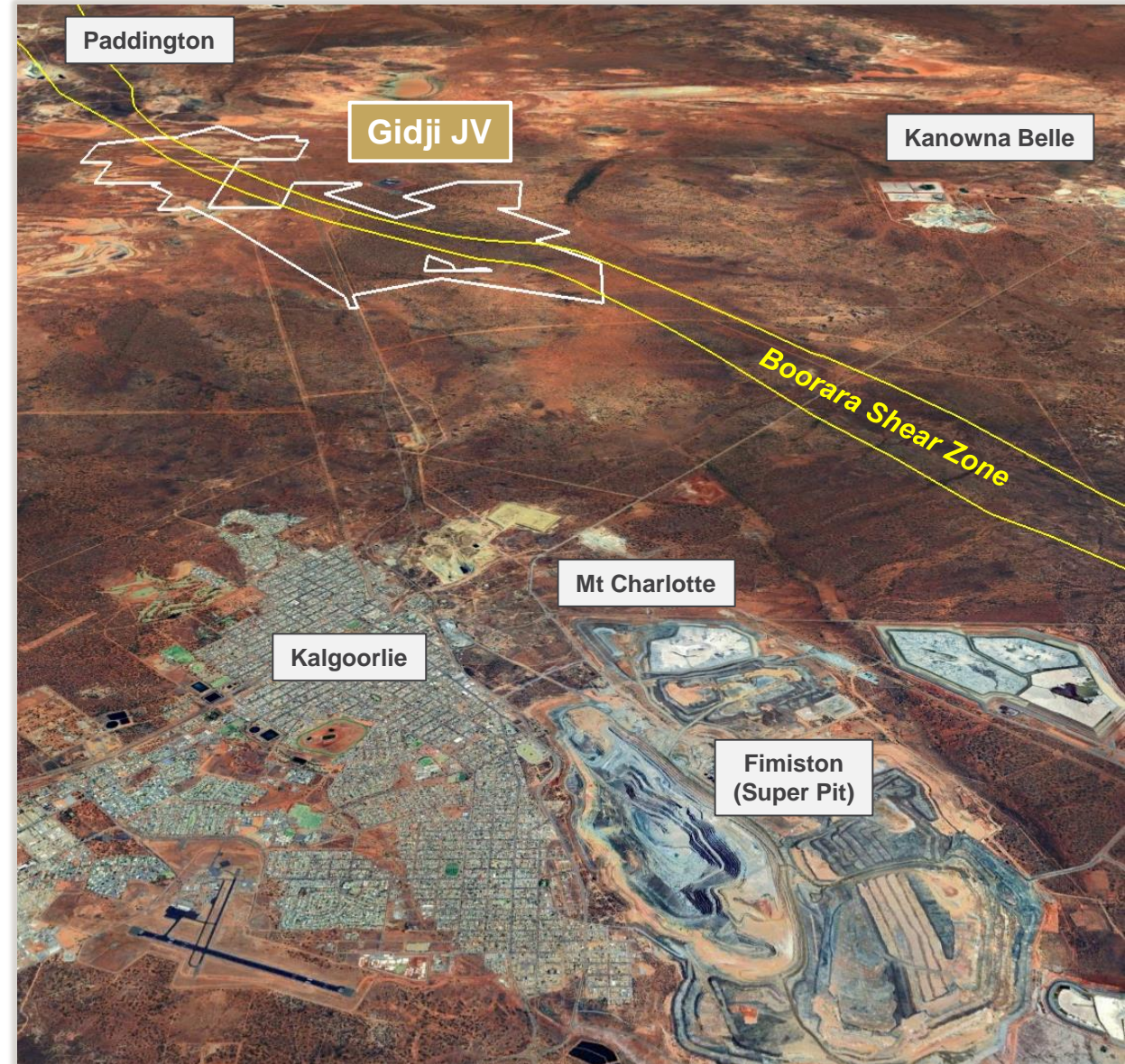
Ni



Gidji JV (Miramar 80%)

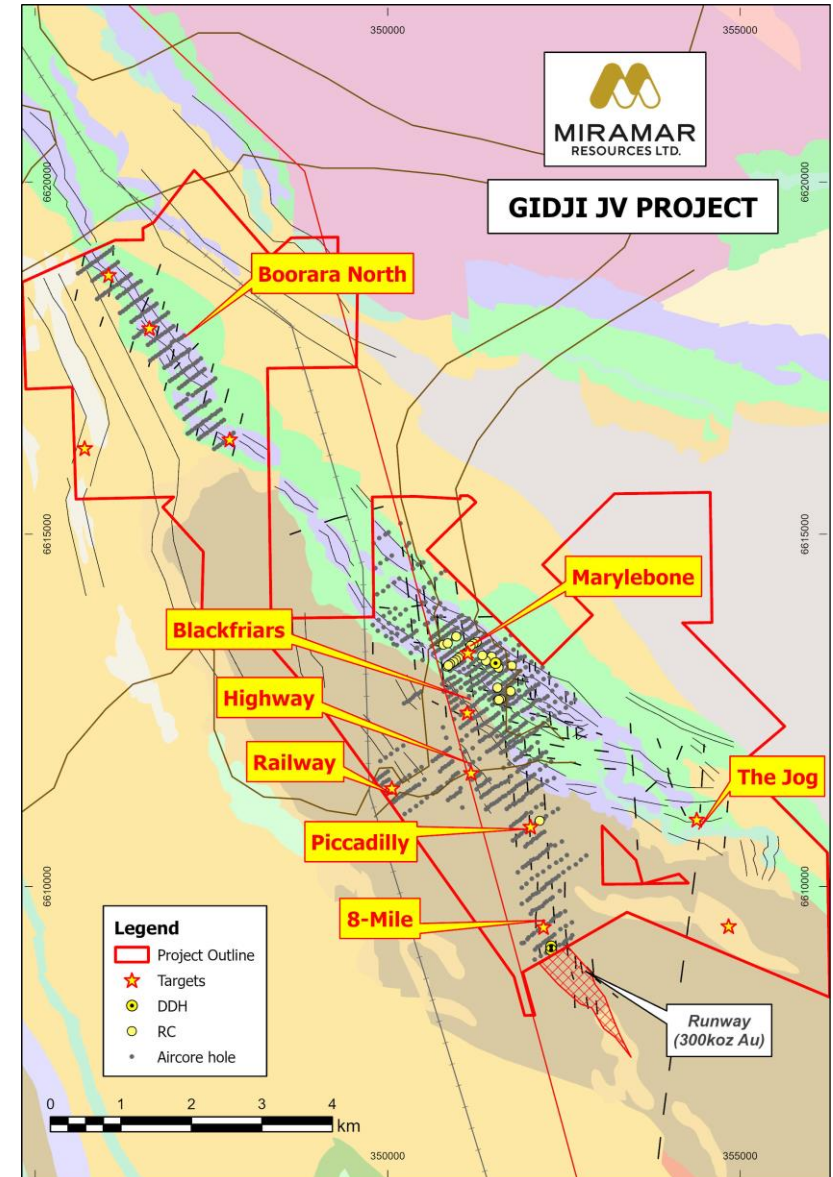
Underexplored gold project in prime location

- 15km N of Kalgoorlie via major highway
- Surrounded by multiple major gold deposits and/or processing plants
- Dilational jog in major mineralised structure – **Boorara Shear Zone**
- Previous exploration hampered by transported cover/paleochannel = **minimal effective historic drilling**



Gidji JV (Miramar 80%)

- 15km strike of **Boorara Shear Zone**
- **Multiple large aircore gold footprints** discovered under transported cover +/- Gidji Paleochannel
 - **Marylebone**
 - **Blackfriars**
 - **Highway**
 - **Railway**
- Further bedrock RC/diamond drilling required



Gidji JV (Miramar 80%)

Significant aircore intersections outline multiple new gold discoveries under cover

■ Marylebone

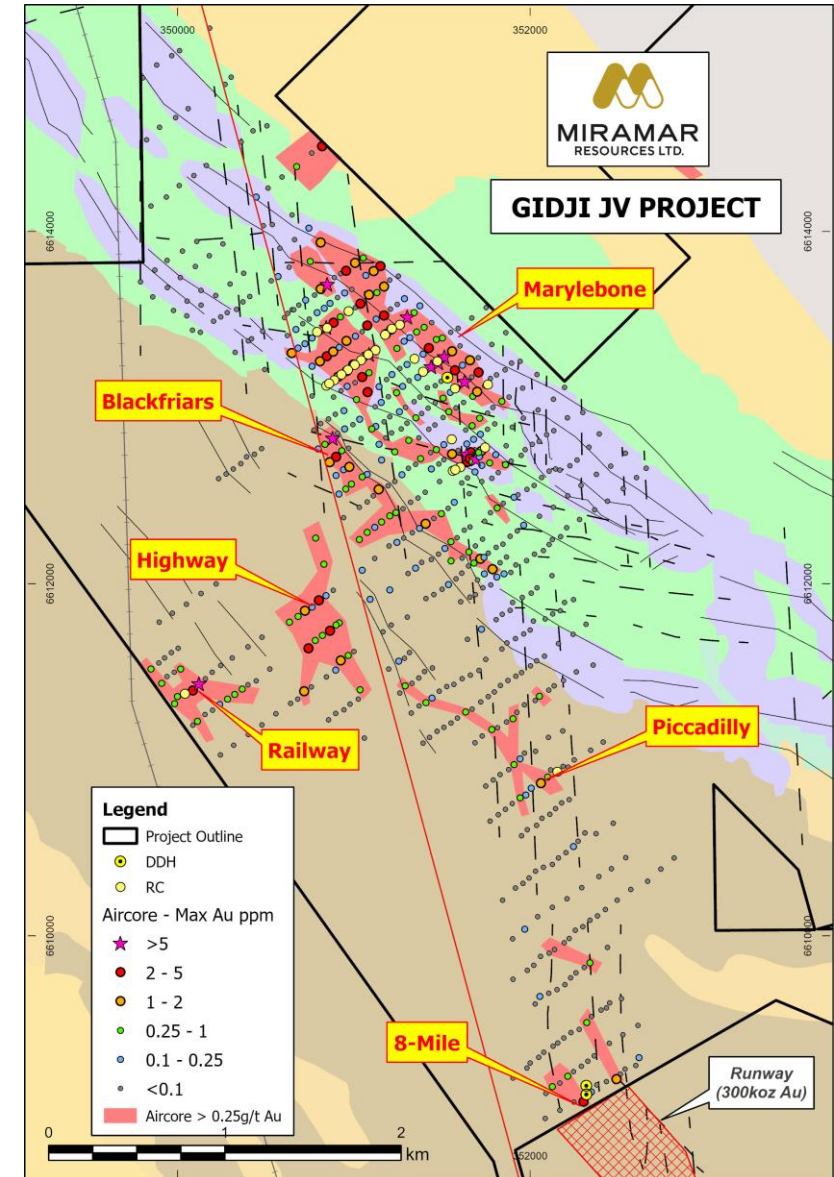
- 3m @ 7.12g/t Au
- 2m @ 7.69g/t Au
- 6m @ 2.21g/t Au
- 1m @ 12.60g/t Au
- **4m @ 3.00g/t Au, 13.45g/t Ag**
- 1m @ 9.55g/t Au

■ Blackfriars

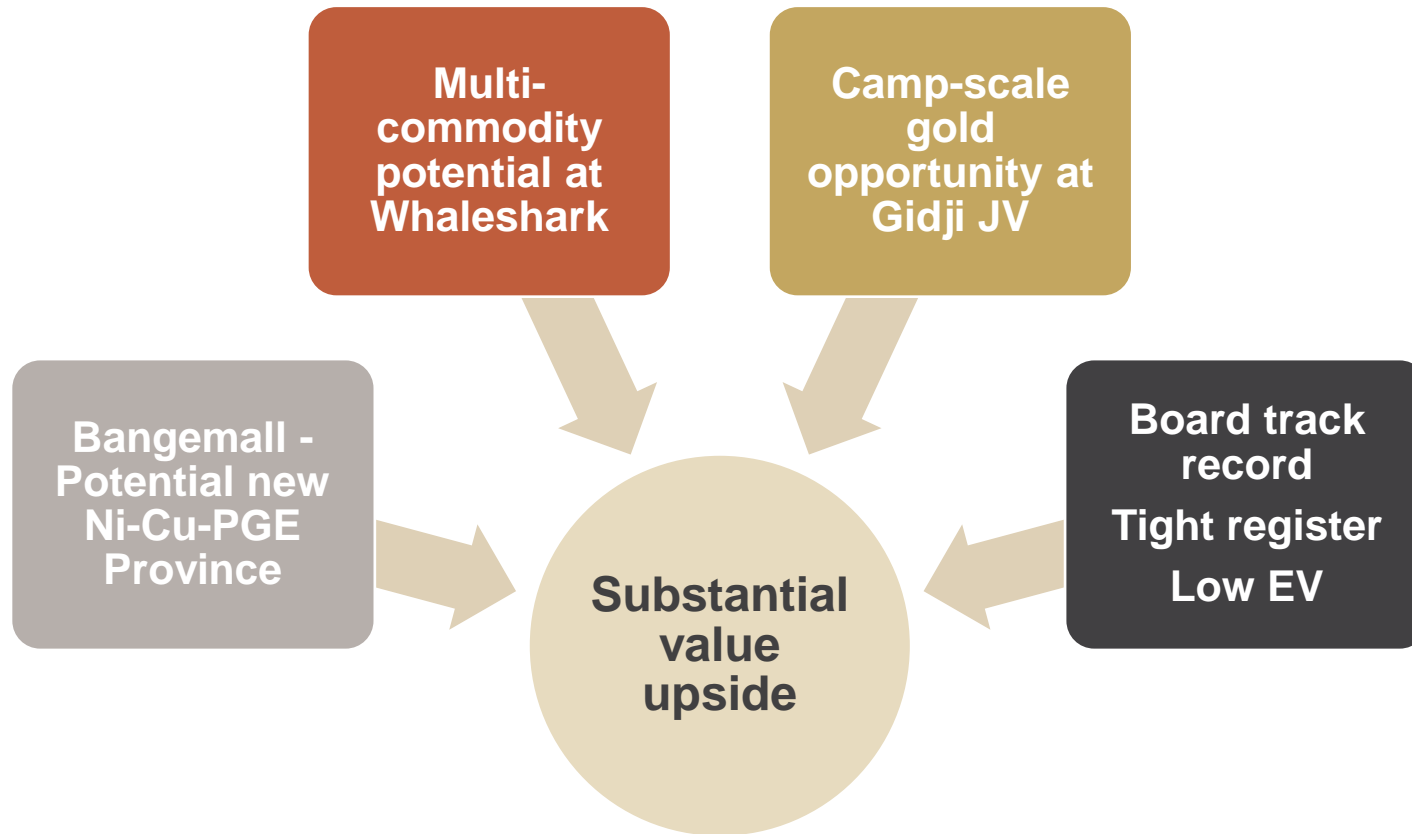
- **1m @ 11.8g/t Au and 6g/t Ag (EOH)**

■ Highway/Piccadilly

- 3m @ 3.78g/t Au



Why Invest in Miramar?



2024 Work Plans

Bangemall (Ni-Cu-PGE)

- Ground EM surveys at Mt Vernon/Trouble Bore
- Rock chip sampling
- **RC drilling** (EIS application)
- Grant of other tenements

Whaleshark (Cu-Au-Fe)

- Passive seismic survey
- Examine **magnetite iron** potential

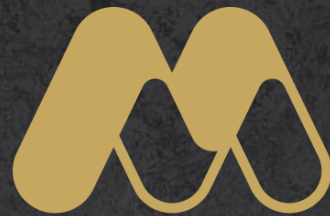
Gidji JV (Au-Ni)

- Work up further **RC/DD drill targets**

Other Projects

- Recon trips to Carnarvon Sands and Maroonah
- Project rationalisation





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