



**MIRAMAR**  
RESOURCES LTD.

# Gold and Critical Minerals Exploration

Company Update  
August 2024



[miramarresources.com.au](https://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 Limited

Aiming to create shareholder value through discovery

## Bangemall

- Exploring for giant **Ni-Cu-Co-PGE** deposits in an emerging mineral province - maiden drilling campaign **Sept Qtr**

## Gidji JV

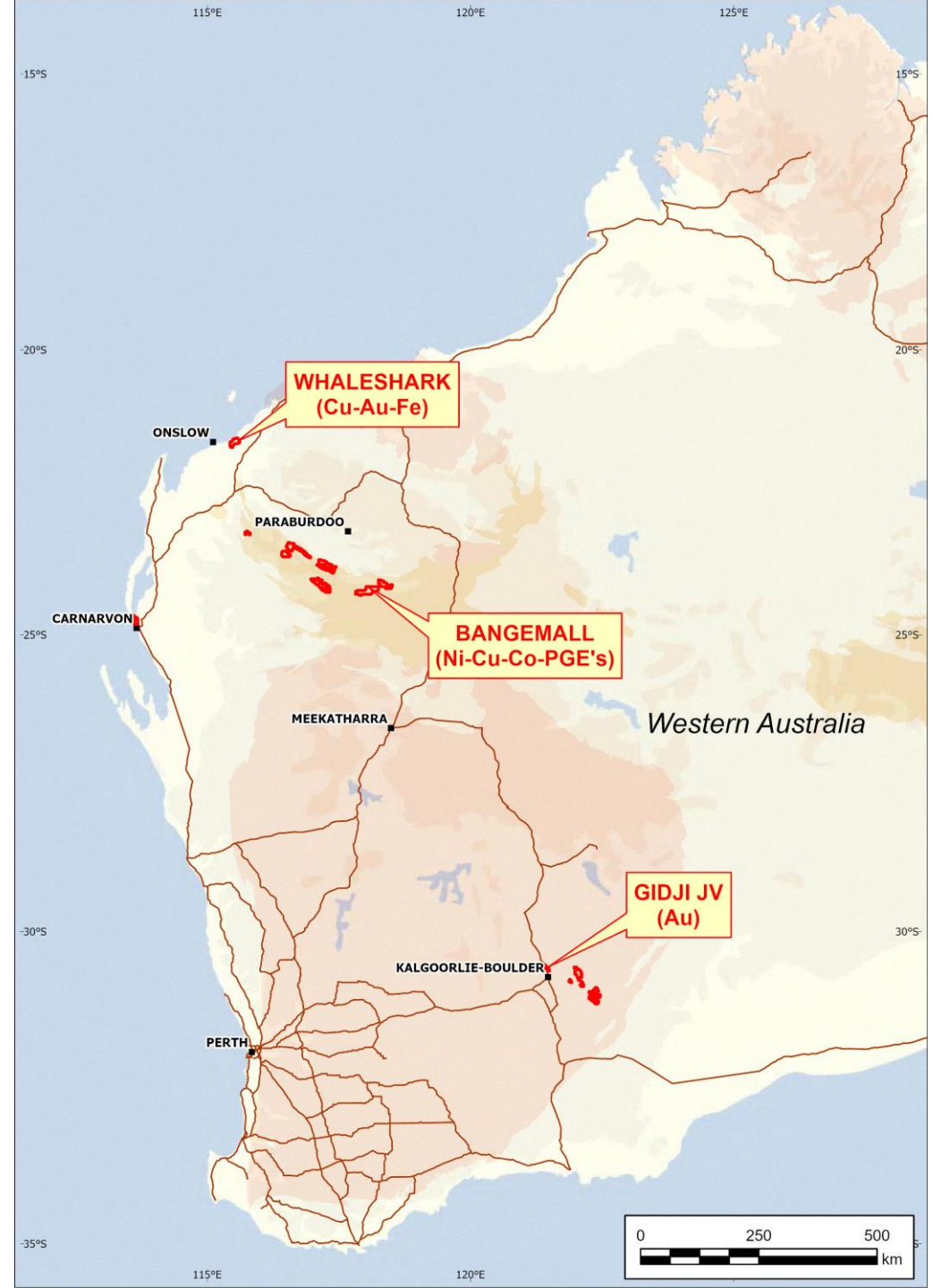
- Potential new gold camp 15km north of Kalgoorlie

## Whaleshark

- Multi-commodity project close to infrastructure

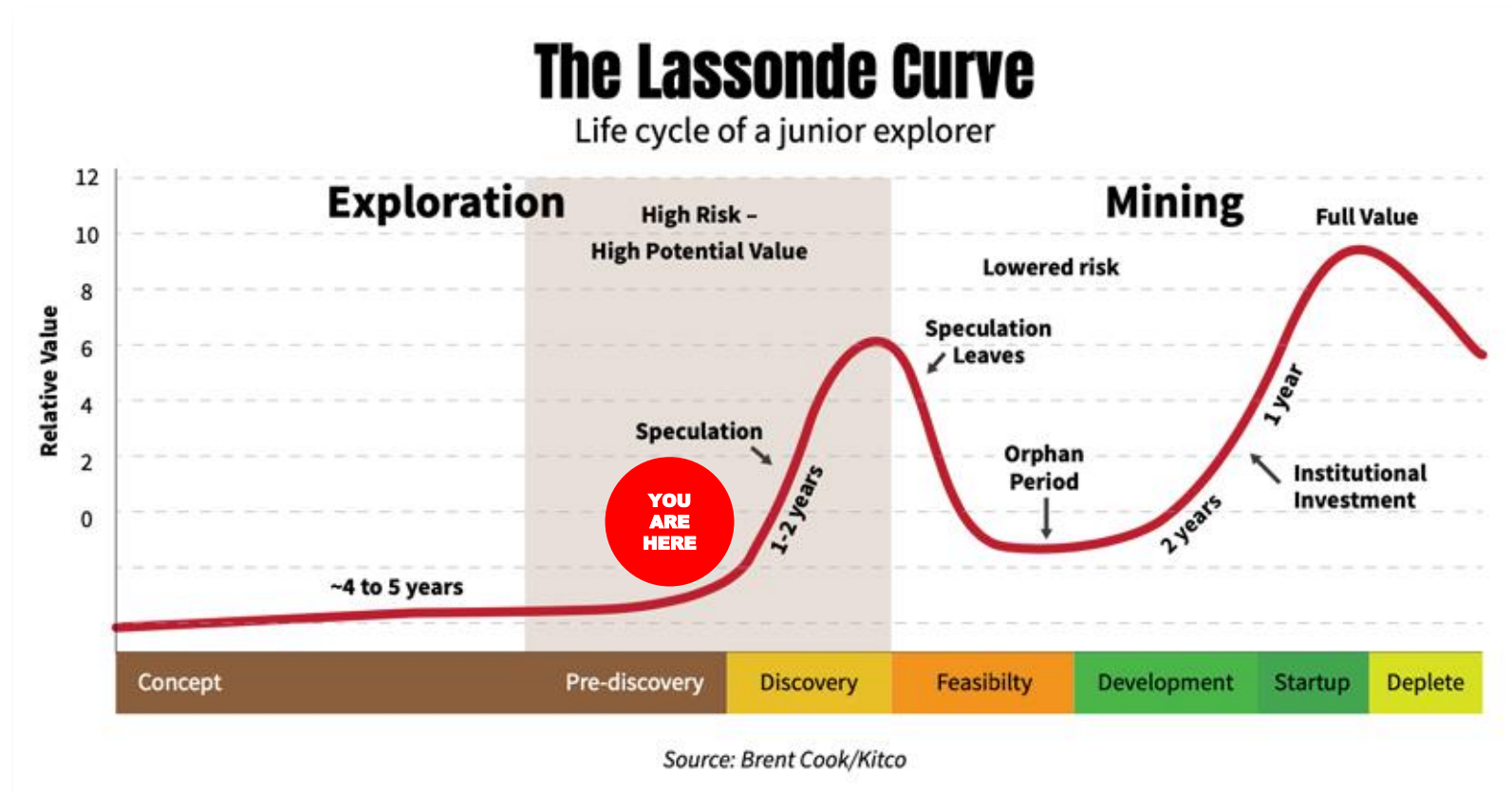
**Board track record of successful discovery, development and production**

**Unmatched share price leverage to exploration success**



# Exploration Strategy

- Acquire underexplored projects in world-class mineral provinces
- Systematic exploration using best practise
- Maximise exploration spend (>70% of cash spent on exploration since listing)
- Leverage off existing mining /processing infrastructure



# Corporate Snapshot



**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	394.8M
<b>Market Capitalisation</b>	<b>\$3.2M</b>
Cash	\$1.7M
EV	\$1.5M

Largest Shareholders	%
Faraday	5.8
XGS/Allorah (Kelly)	5.5
<b>Top 20</b>	<b>44.1</b>

# Strategic landholding in the Capricorn Orogen

## Bangemall

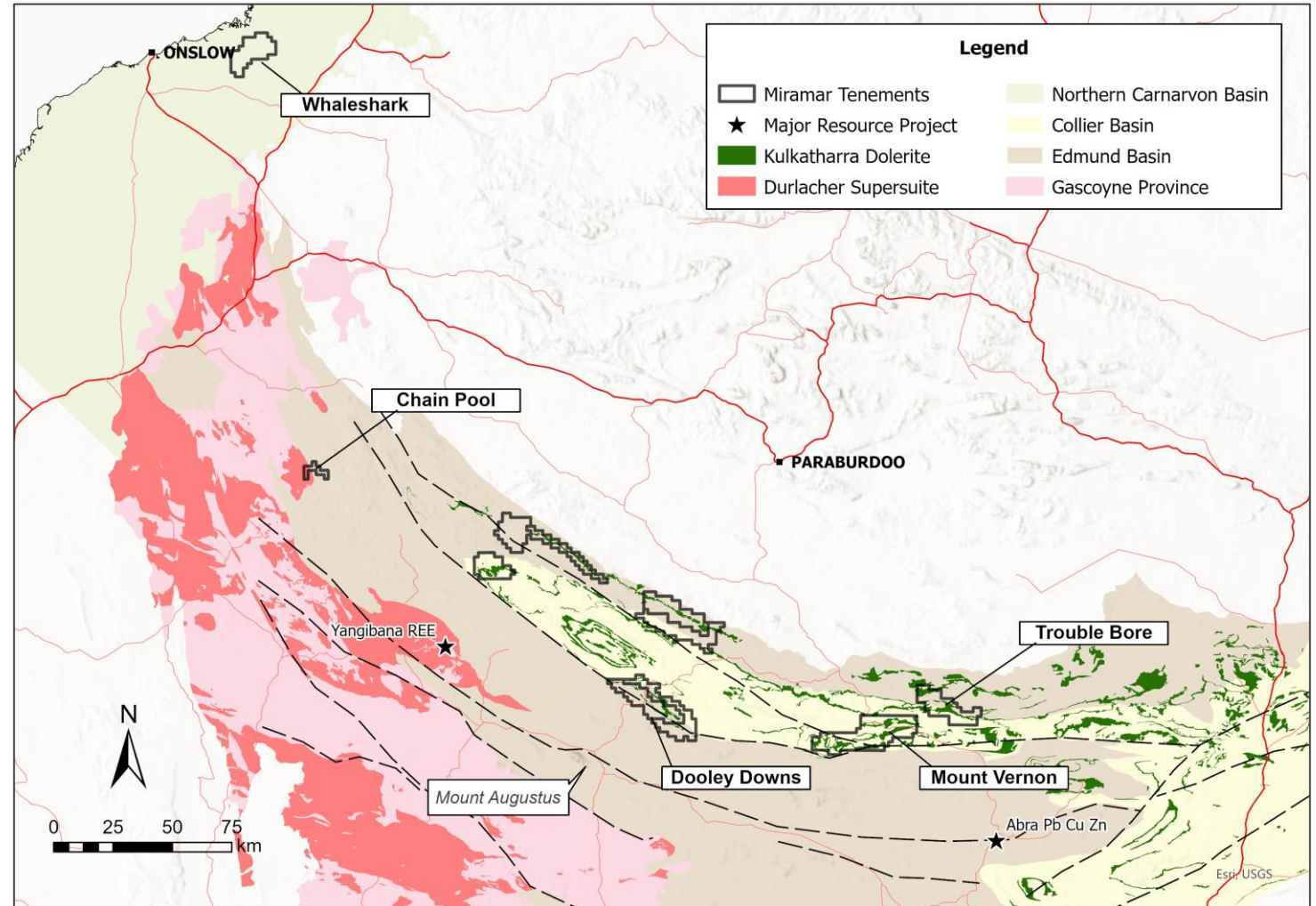
- Exploring for giant Norilsk-style **Ni-Cu-Co-PGE** deposits

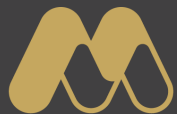
## Whaleshark

- Multi-commodity project (**Cu-Au-Fe**) beneath Carnarvon Basin

## Chain Pool

- Historic high-grade **Cu-Pb-Zn-Ag** occurrence
- U/REE** potential in Durlacher Supersuite





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# Bangemall Projects

Targeting giant Ni-Cu-Co-PGE  
deposits in a new mineral province

Ni

Cu

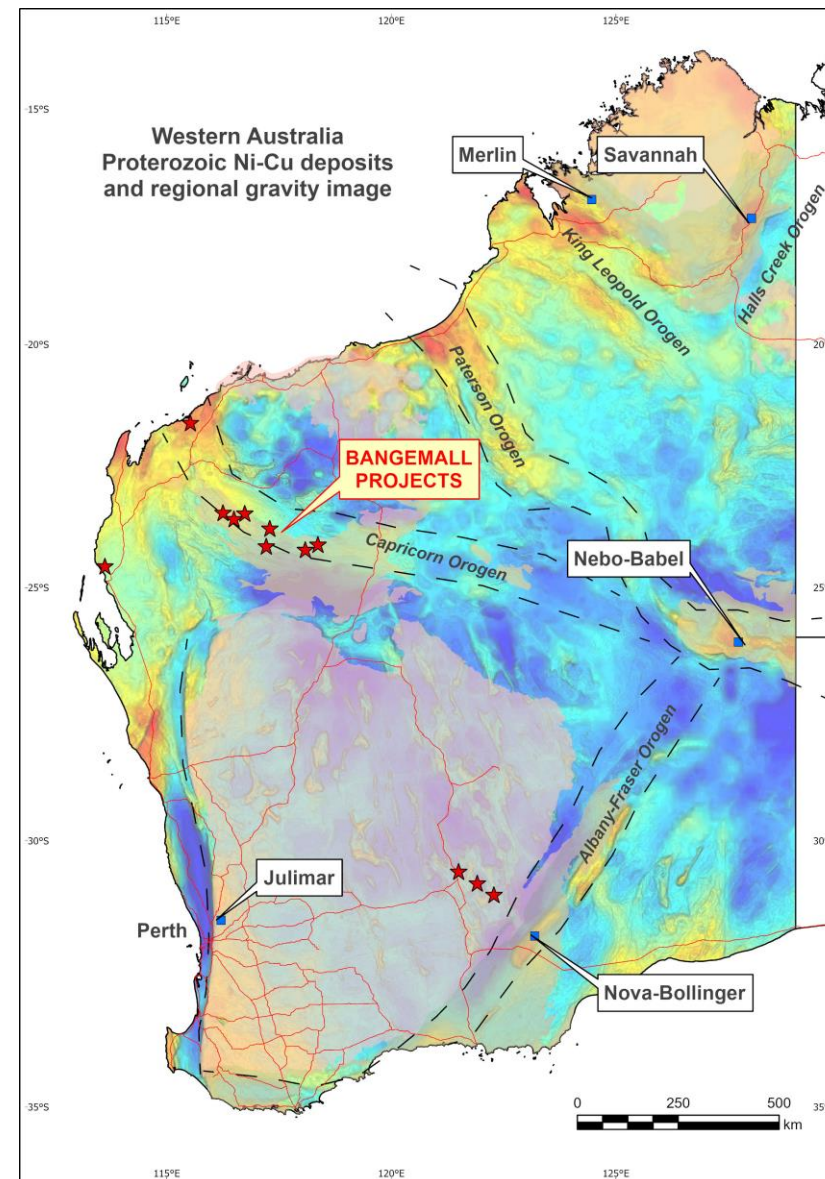


# Bangemall Projects

Miramar is exploring for giant Ni-Cu-Co-PGE deposits in WA's underexplored Proterozoic Capricorn Orogen

Proterozoic orogens host large mafic intrusion-related Ni-Cu-Co-PGE deposits

- Nova-Bollinger
- Nebo-Babel
- Raglan
- Thompson
- Voisey Bay
- Jinchuan





# Mafic intrusion-hosted Ni-Cu-Co-PGE deposits

Amongst the world's largest and most valuable mineral deposits

## ✓ Large

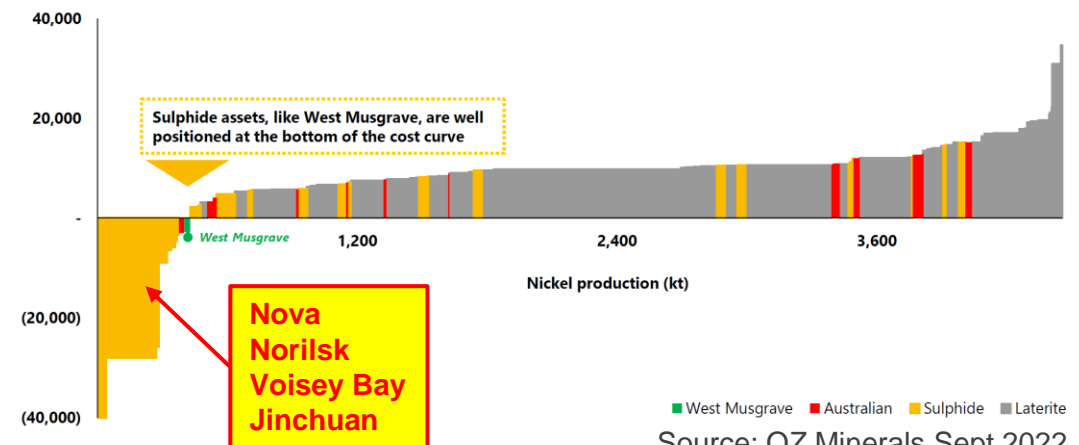
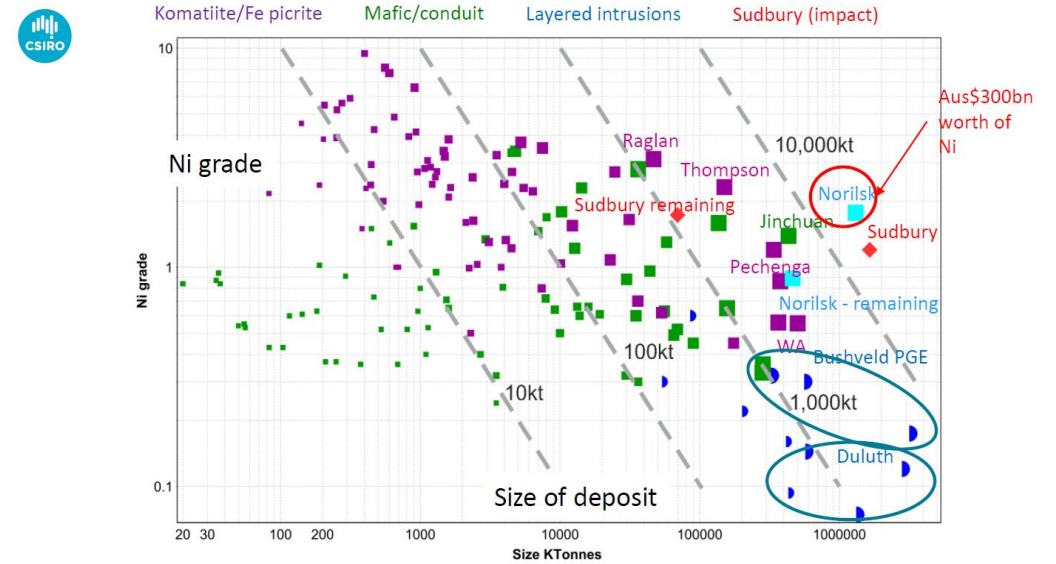
- 100's Mt to >1Bt of ore
- 100'skt to >1Mt of contained Nickel

## ✓ Valuable

- High-grade/tenor

## ✓ Low-cost/high-margin

- High tonnes/vertical metre
- By-product credits (Co and PGE's)

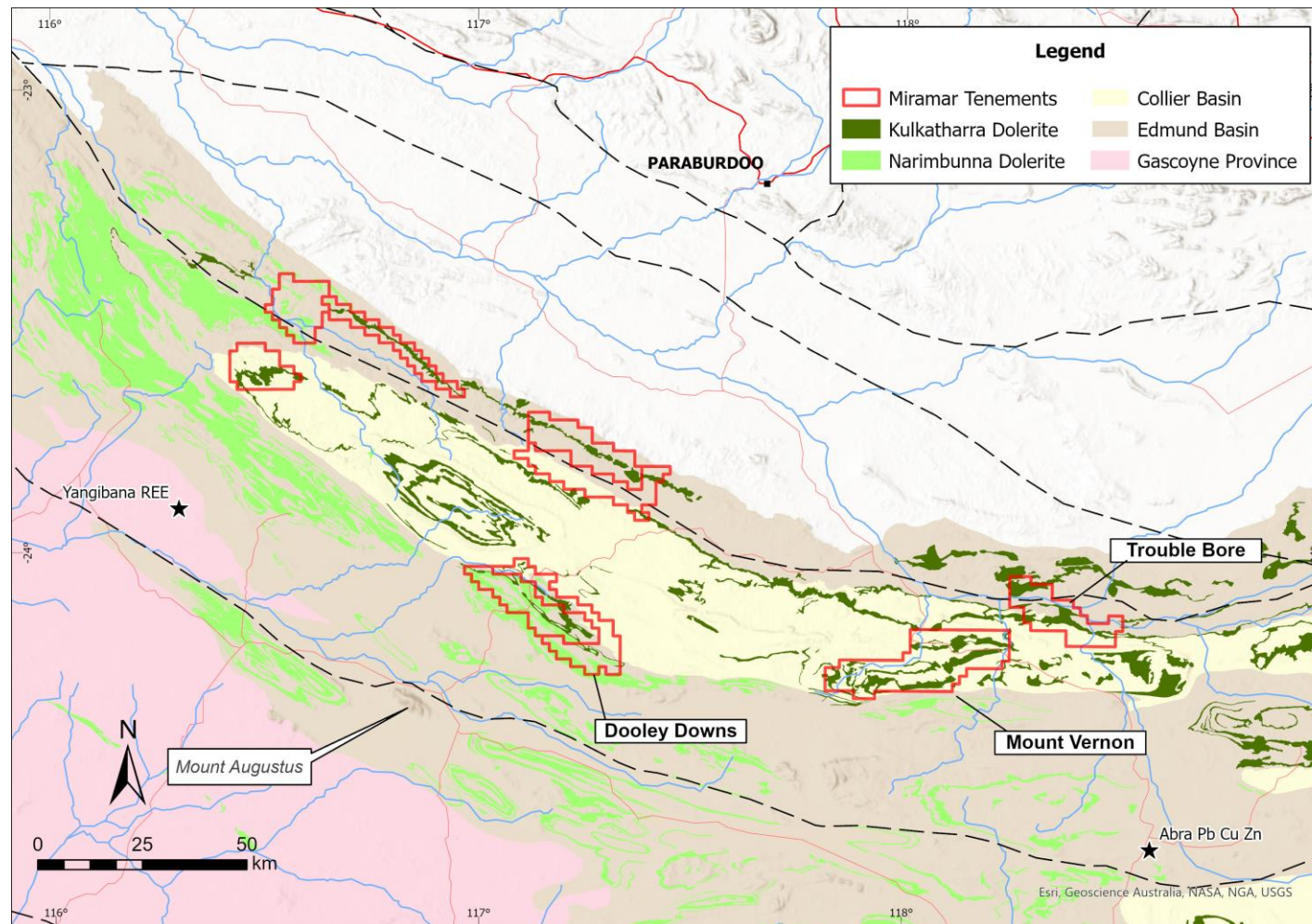


Source: OZ Minerals Sept 2022

# Bangemall Ni-Cu-Co-PGE Projects

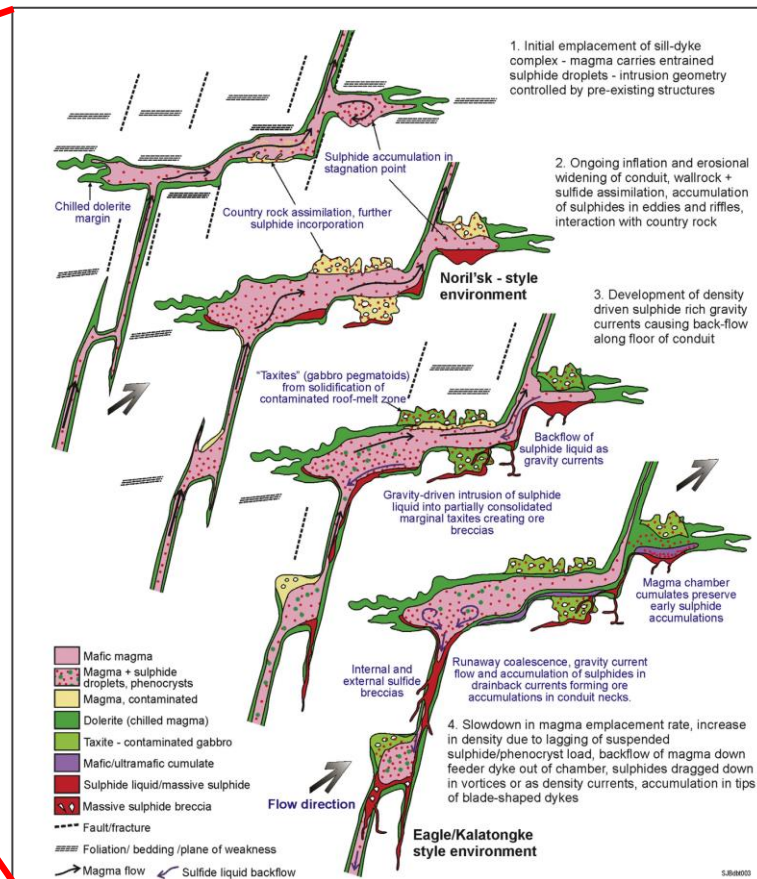
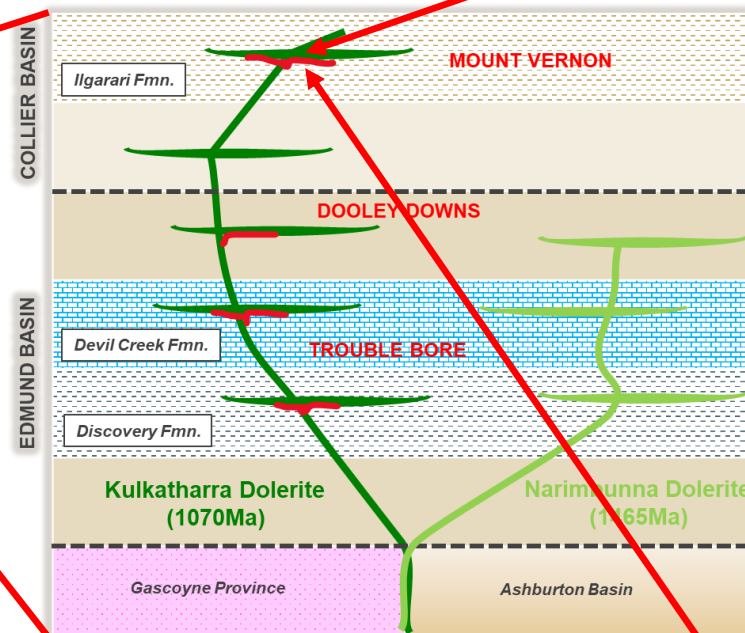
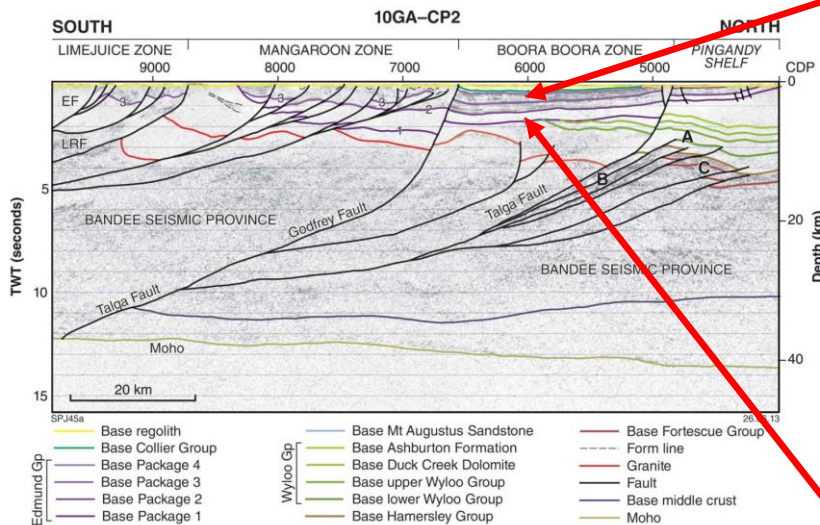
## Key ingredients for Norilsk-style Ni-Cu-Co-PGE's

- ✓ **1070Ma Kulkatharra Dolerite sills** - same age as Nebo-Babel Ni-Cu deposits
- ✓ **Major deep crustal-scale faults** - plumbing systems
- ✓ **Sulphidic/evaporite sediments** – Sulphur source
- ✓ **Regional-scale geochem and EM anomalies**
- ✓ **Prospectivity highlighted by GSWA, Geoscience Australia and CSIRO**



# Bangemall Ni-Cu-Co-PGE deposit model

## Capricorn Orogen Seismic Line CP2



Barnes et al, 2015

# Maiden drill campaign to test multiple targets

2020

Tenement  
Applications

2021/22

Airborne EM  
surveys

2023

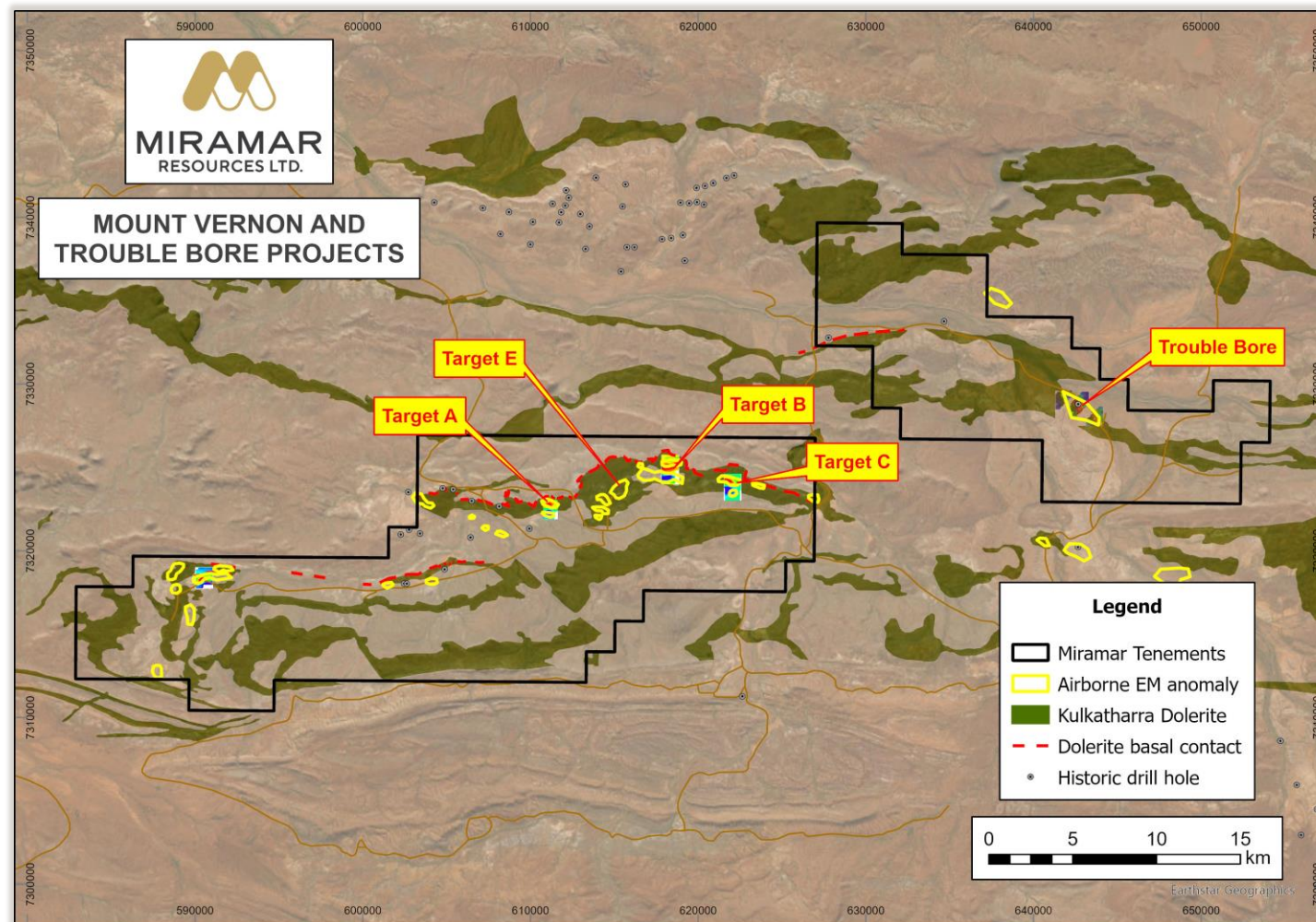
Mapping/sampling

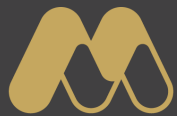
H1 2024

Ground EM surveys

**H2 2024**

**Maiden drilling  
campaign**





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# Gidji JV

Potential new gold camp

Au



# Eastern Goldfields Projects



636km<sup>2</sup> land position in world-class gold province

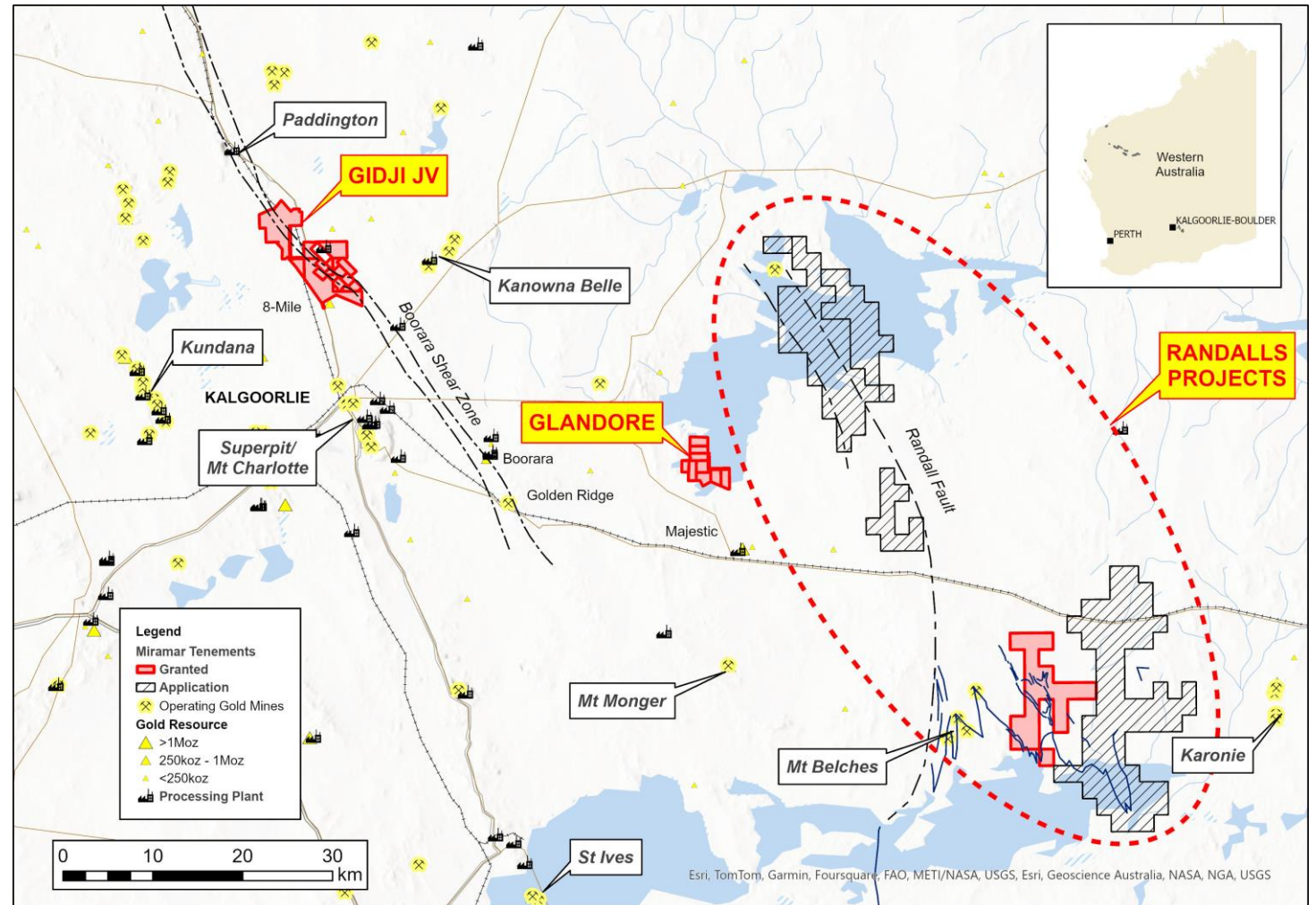


Underexplored camp-scale gold projects

- **Gidji JV (80%)**
- **Glandore**
- **Randalls**



Proximity to multiple gold mining and processing operations



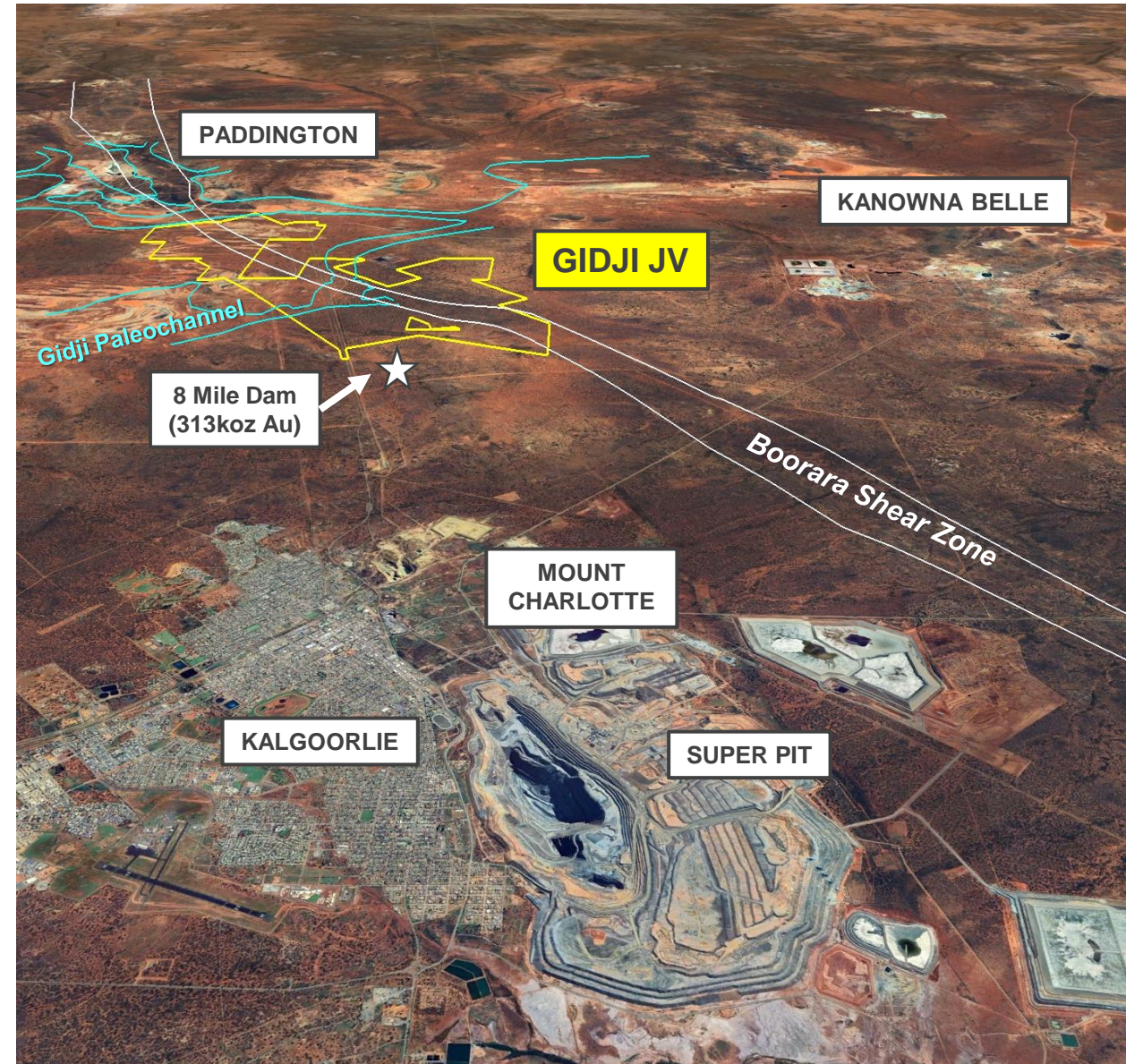
# Gidji JV (80%)

*“The cheapest house in the best street”*

- 15km N of Kalgoorlie via major highway
- Surrounded by multiple major gold deposits and gold processing plants
- Immediately adjacent to “8 Mile Dam” deposit

## Key ingredients for a new gold camp

- ✓ Dilational jog in major mineralised structure – **Boorara Shear Zone**
- ✓ **Underexplored** due to transported cover and **Gidji Paleochannel**
- ✓ **Limited effective historical drilling**
- ✓ **Extensive gold footprint**



# Gidji JV (80%)

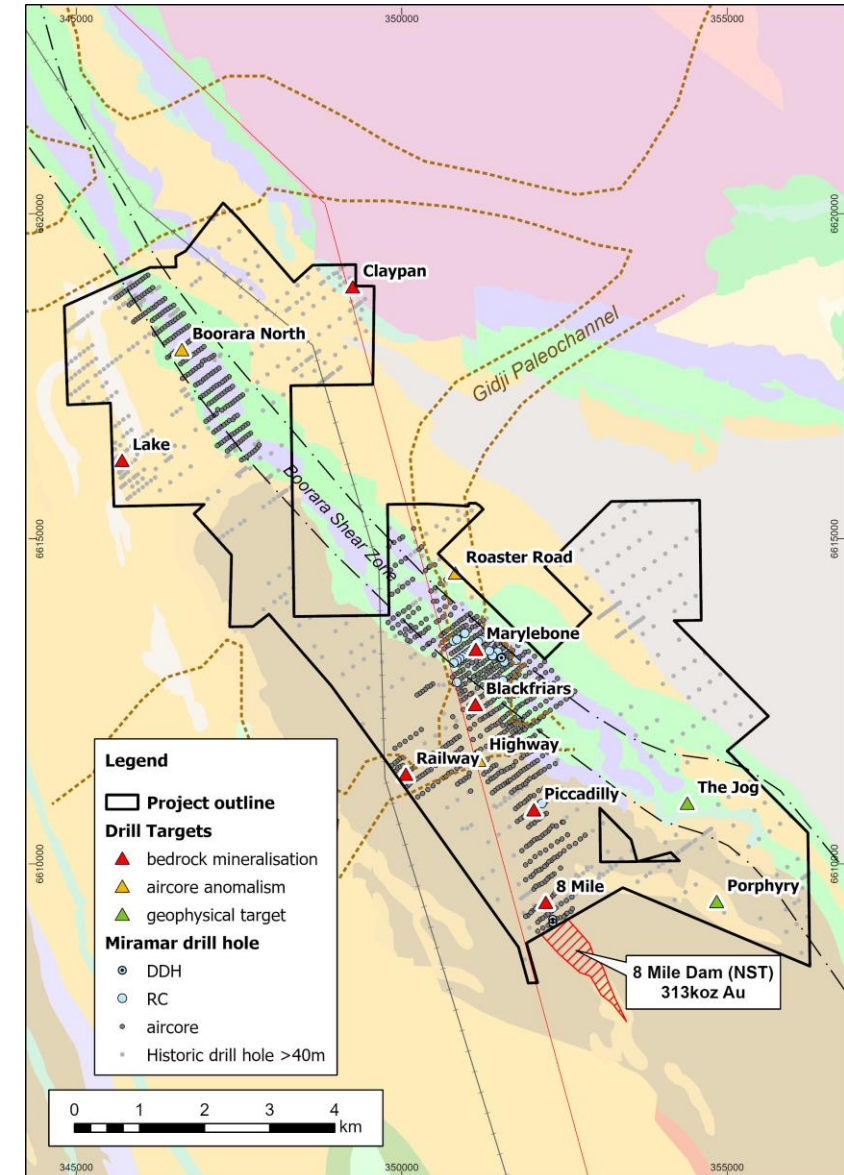
15km strike of major mineralised structure –  
“Boorara Shear Zone”

Multiple aircore gold discoveries under the  
Gidji Paleochannel

- Marylebone
- Blackfriars
- Highway-Piccadilly trend

Key bedrock targets identified for testing

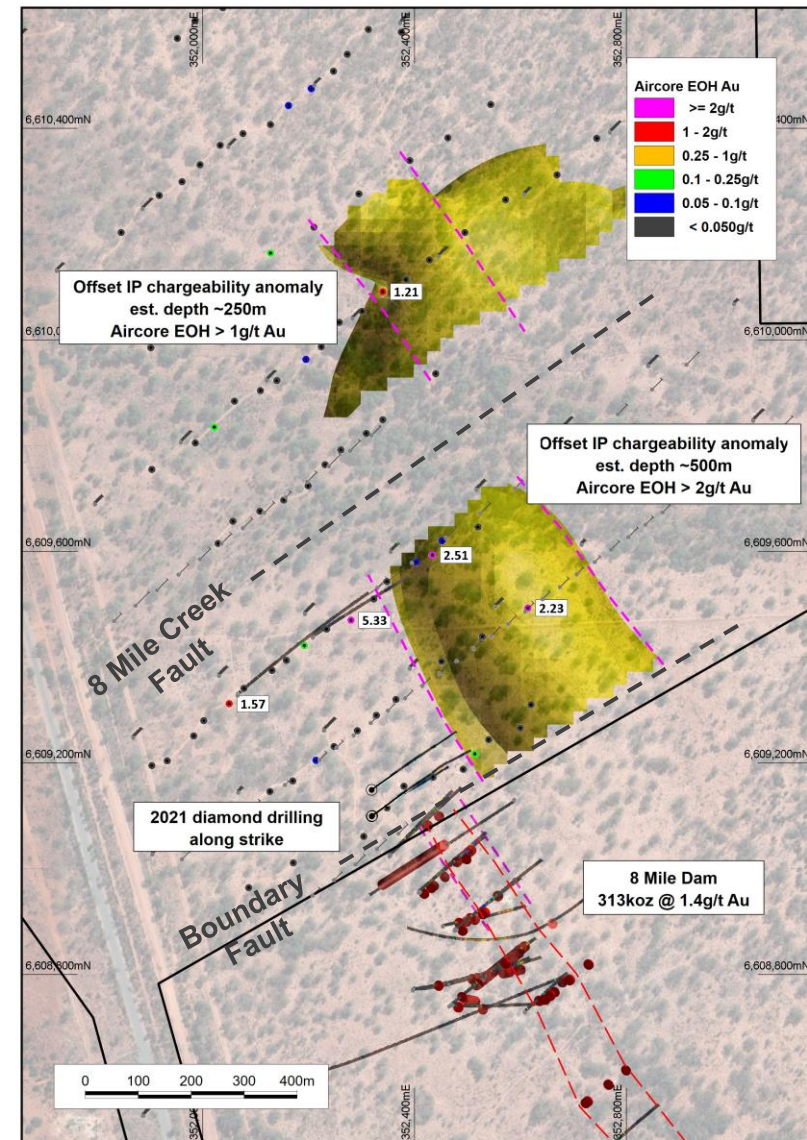
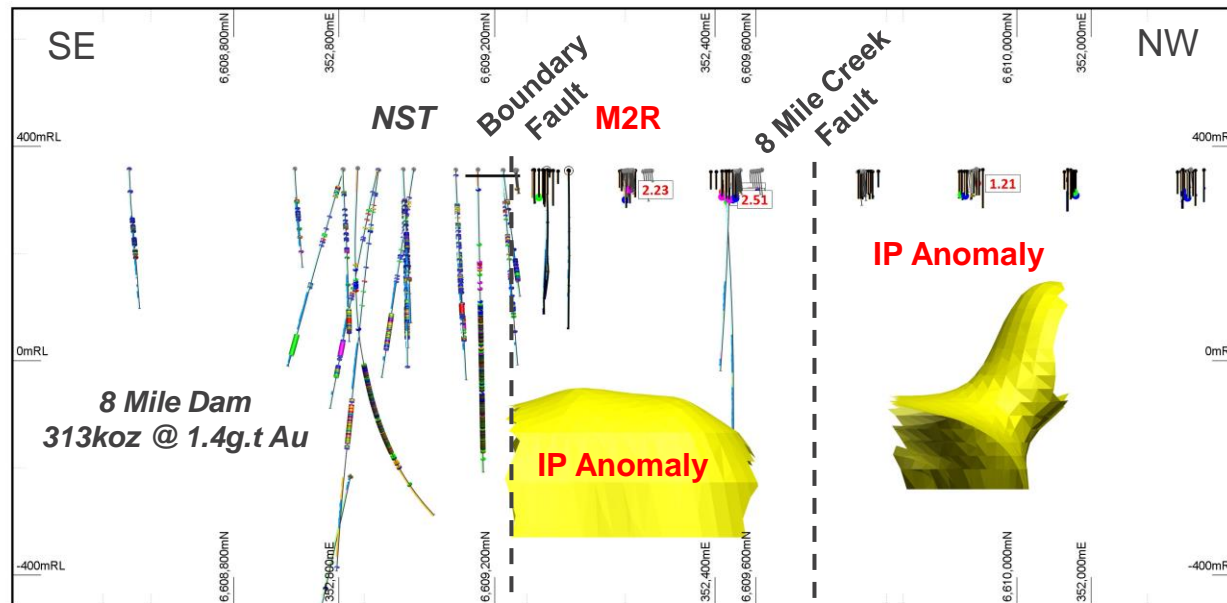
- 8-Mile
- Blackfriars
- Marylebone
- The Jog





# 8 Mile

- Potential extension to Northern Star's 313koz "8 Mile Dam" gold deposit
- IP anomalies and aircore results - offset by faulting
- RC/Diamond drilling planned

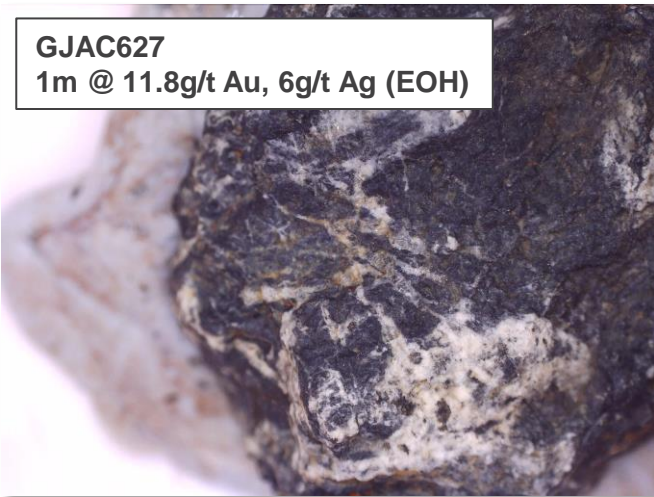


# Blackfriars

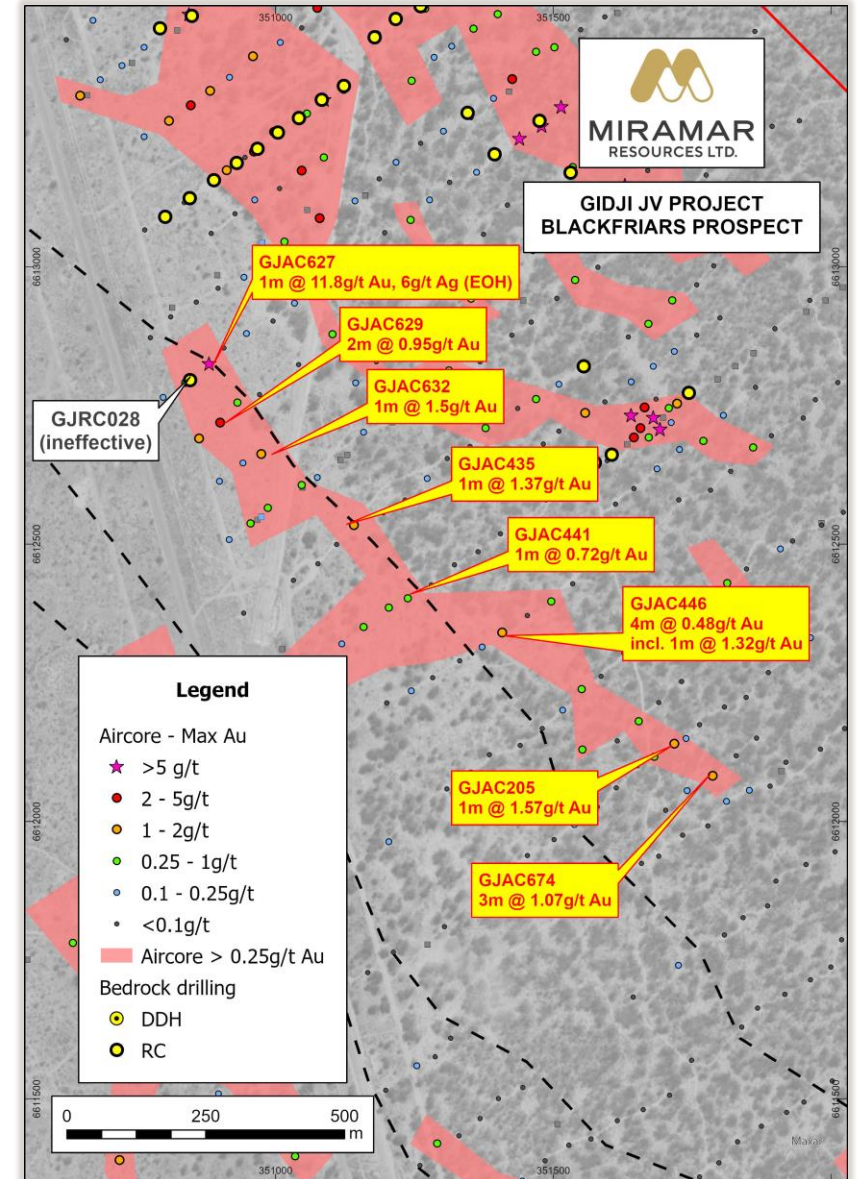
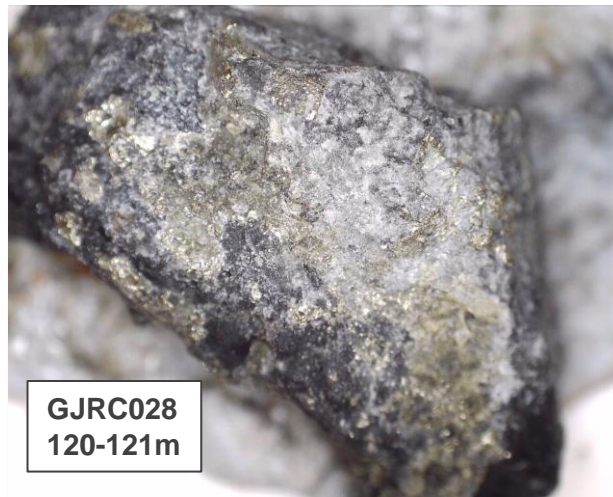
## “Paddington lookalike”

- Dolerite at Black Flag/mafic contact
- 1km long aircore anomaly >1g/t Au
  - **GJAC627– 1m @ 11.8g/t Au, 6g/t Ag (EOH)**
  - **GJAC674 – 3m @ 1.07g/t Au**
- Further drilling planned

**GJAC627**  
1m @ 11.8g/t Au, 6g/t Ag (EOH)



**GJRC028**  
120-121m



# Marylebone

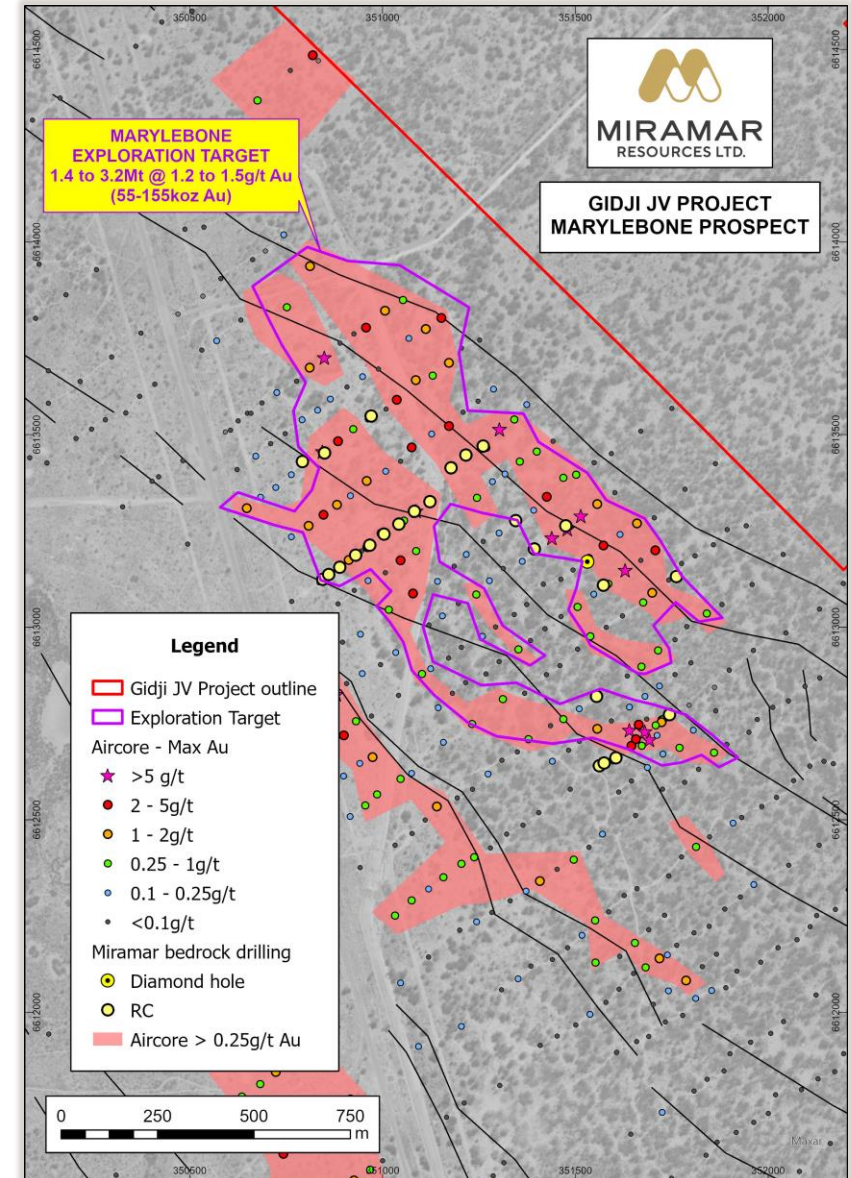
## Large gold footprint beneath paleochannel

- Multiple high-grade aircore gold results
- JORC “Exploration Target”\* outlined from shallow aircore drilling
  - 1.4 – 3.2Mt @ 1.2 – 1.5g/t Au
  - **(55 – 155koz contained Au)**
- Limited bedrock drilling to date – further drilling planned

\*See ASX Release dated 2 February 2023

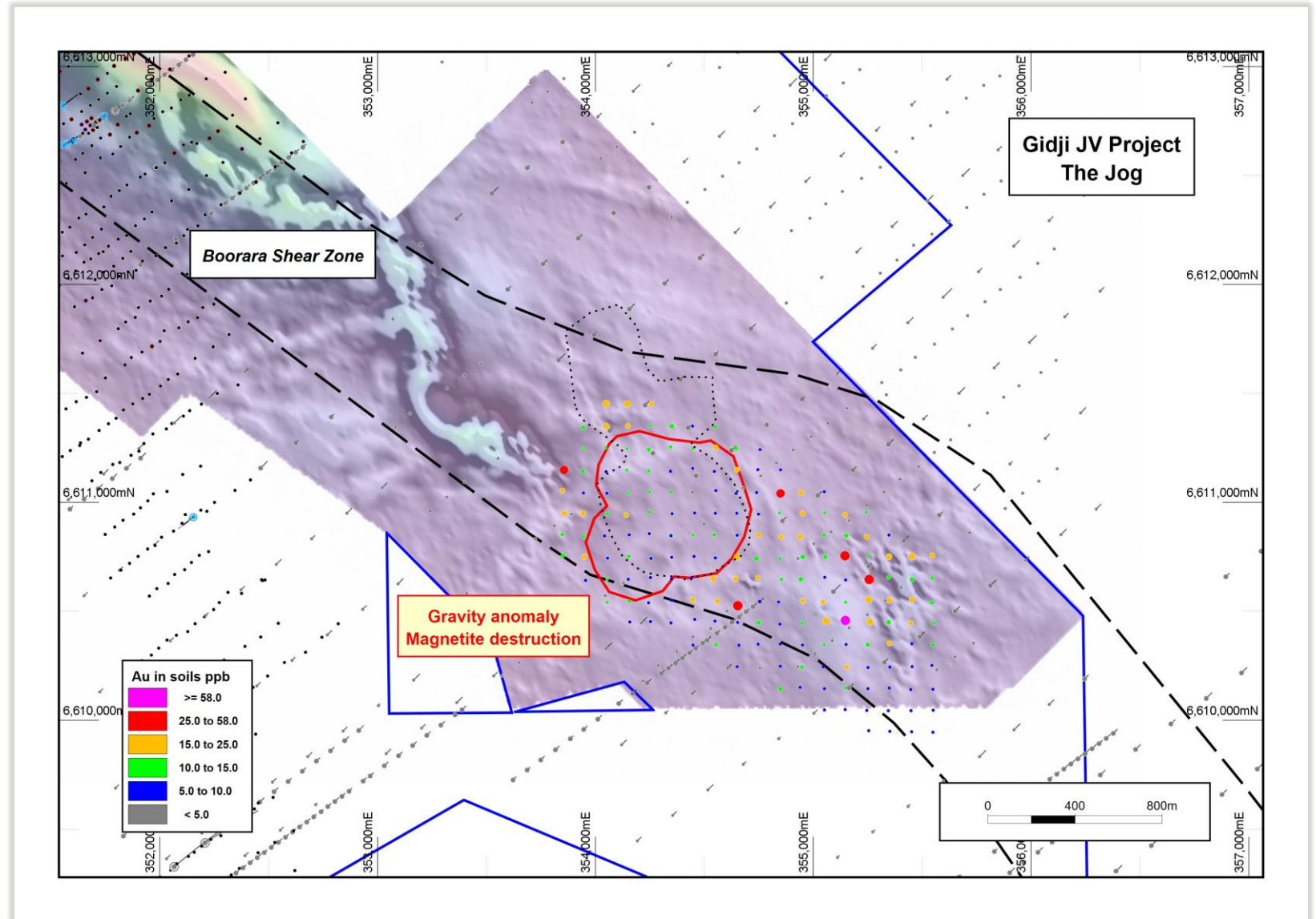
### Cautionary Statement:

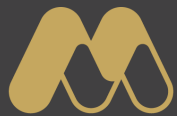
The Exploration Target has been prepared and reported in accordance with the 2012 edition of the JORC Code. The potential quantity and grade are conceptual in nature and there has been insufficient exploration to estimate a Mineral Resource. It is uncertain if further exploration will result in the estimation of a JORC-compliant Mineral Resource



# The Jog

- Dilational jog in Boorara Shear Zone
- Strong gravity anomaly = mafic intrusion?
- Magnetite destruction = hydrothermal alteration?
- Soil Au anomaly
- Diamond drilling planned





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# Whaleshark

Unique multi-commodity project

Cu

Au

Fe



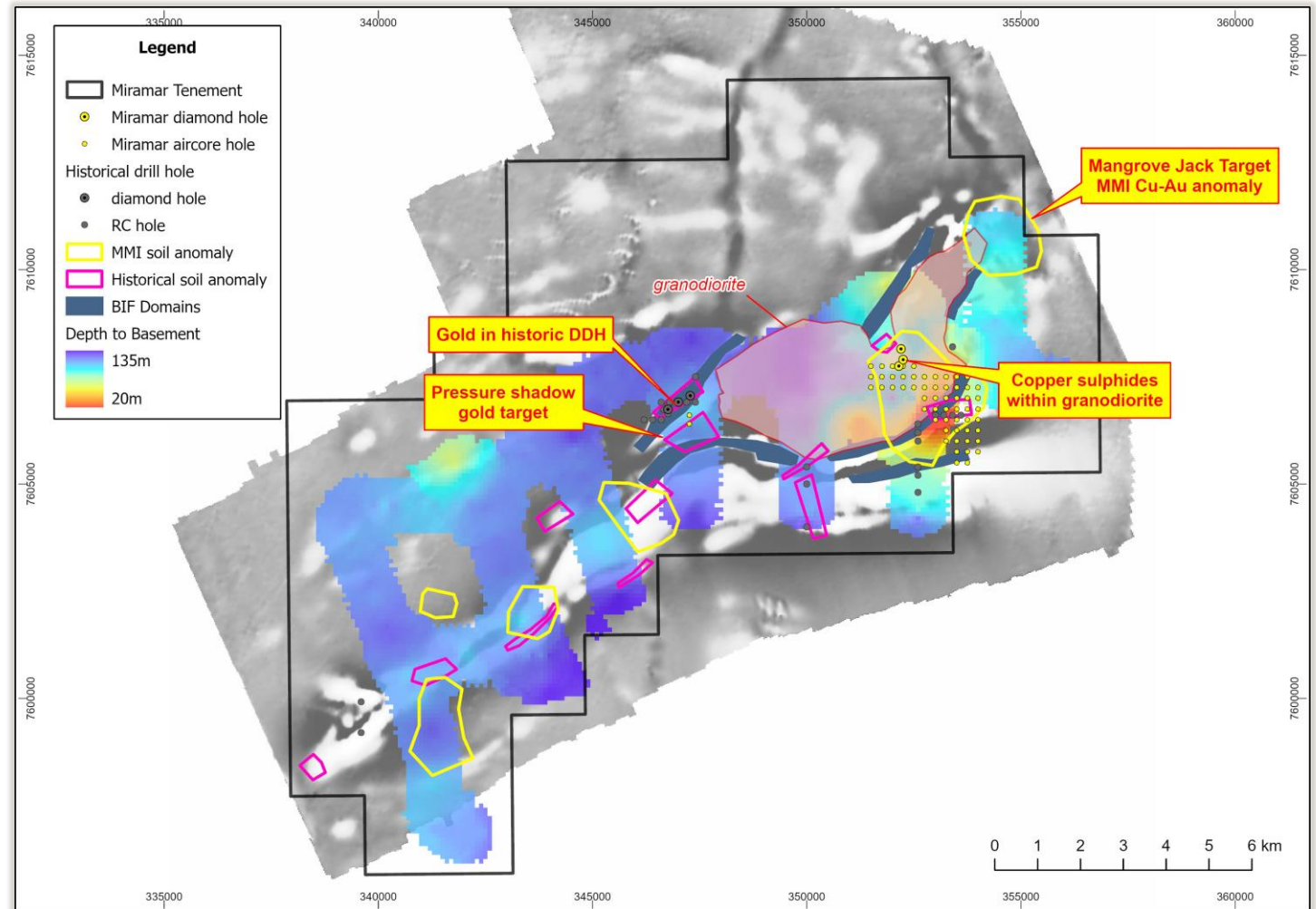
# Whaleshark – multi commodity project

## BIF and granitoid beneath shallow basin cover

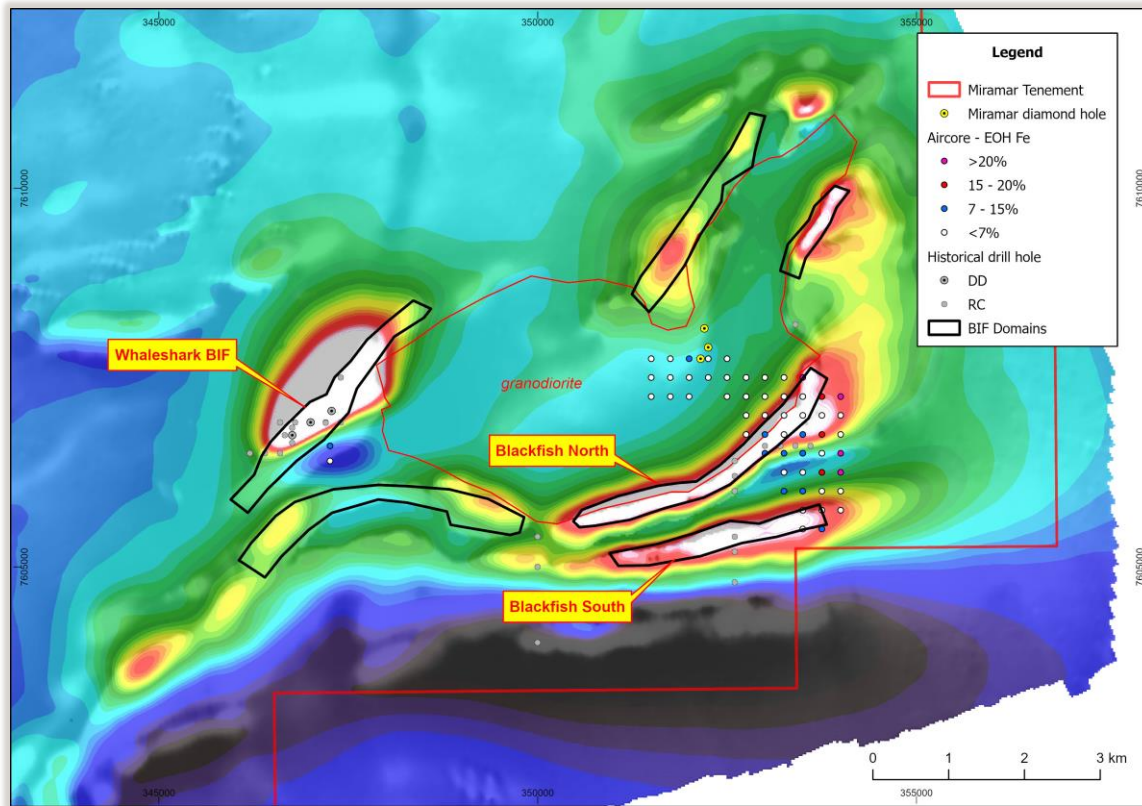
- Anomalous **Au** in aircore and intersected in folded BIF
- **Copper sulphides** intersected in 2023 diamond drilling
- Multiple shallow structural/geochemical targets
- Large **magnetite** targets

## Infrastructure-rich area

- Highway, gas pipeline and port facilities nearby



# Whaleshark Magnetite Exploration Target\*



\*See ASX Release dated 19 June 2024

Domain	Tonnage Range (Mt)		Grade Range (Fe %)	
	Lower	Upper	Lower	Upper
Whaleshark	128	384	25	30
Blackfish North	158	1,050		
Blackfish South	126	919		
<b>TOTAL (Mt)</b>	<b>411</b>	<b>2,353</b>	<b>25</b>	<b>30</b>

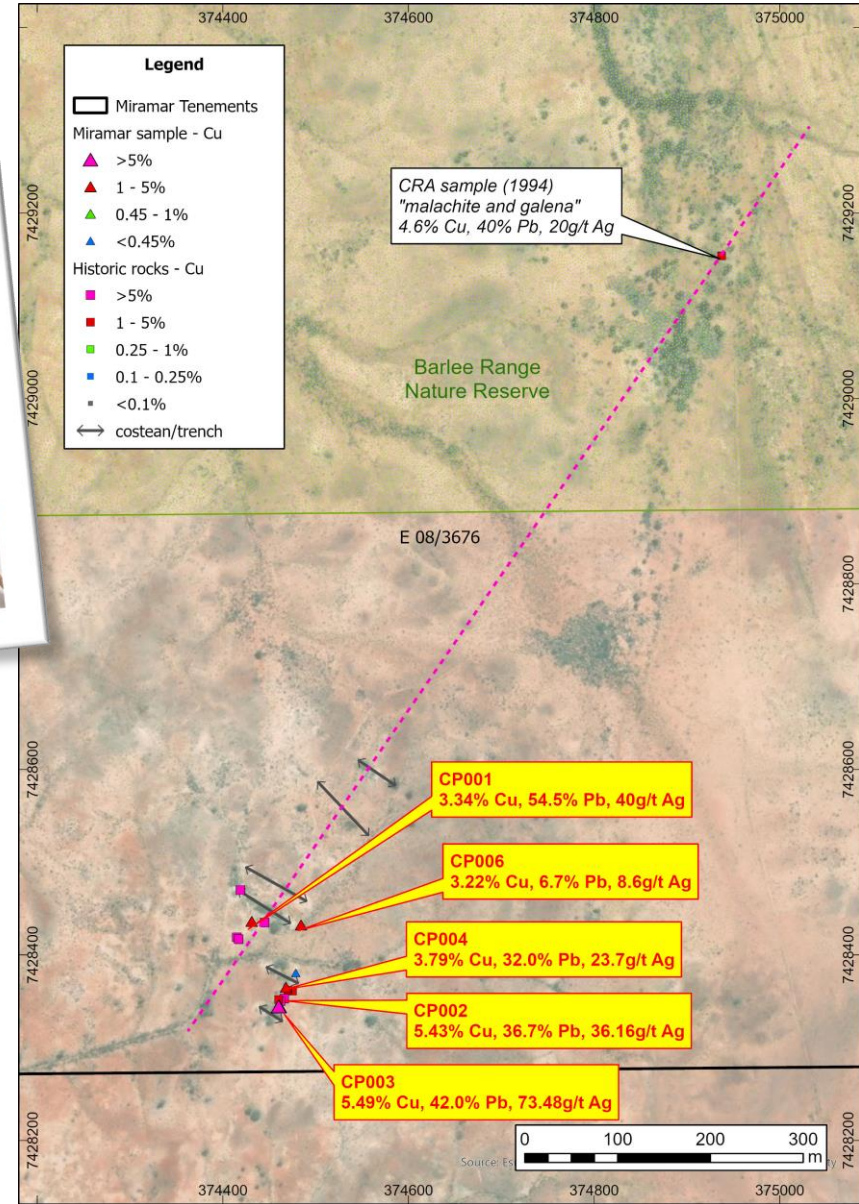
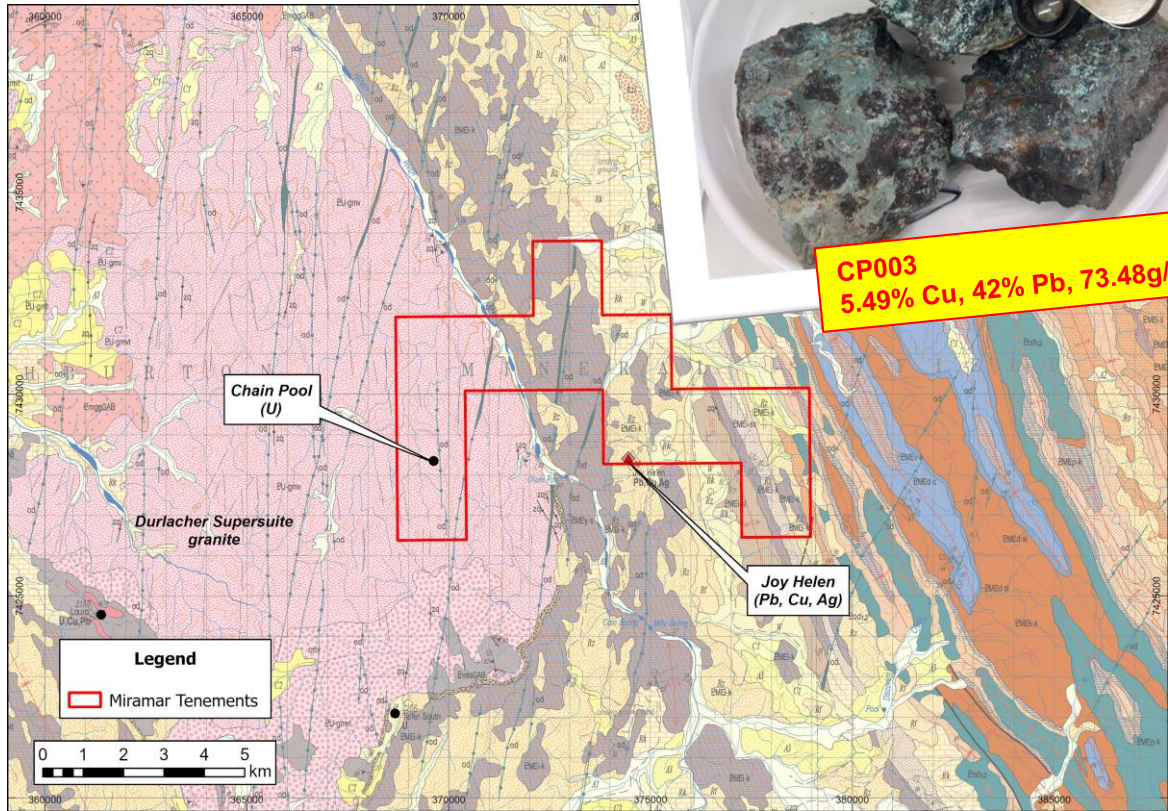
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# New Gascoyne Project – “Chain Pool”



**CP003**  
5.49% Cu, 42% Pb, 73.48g/t Ag



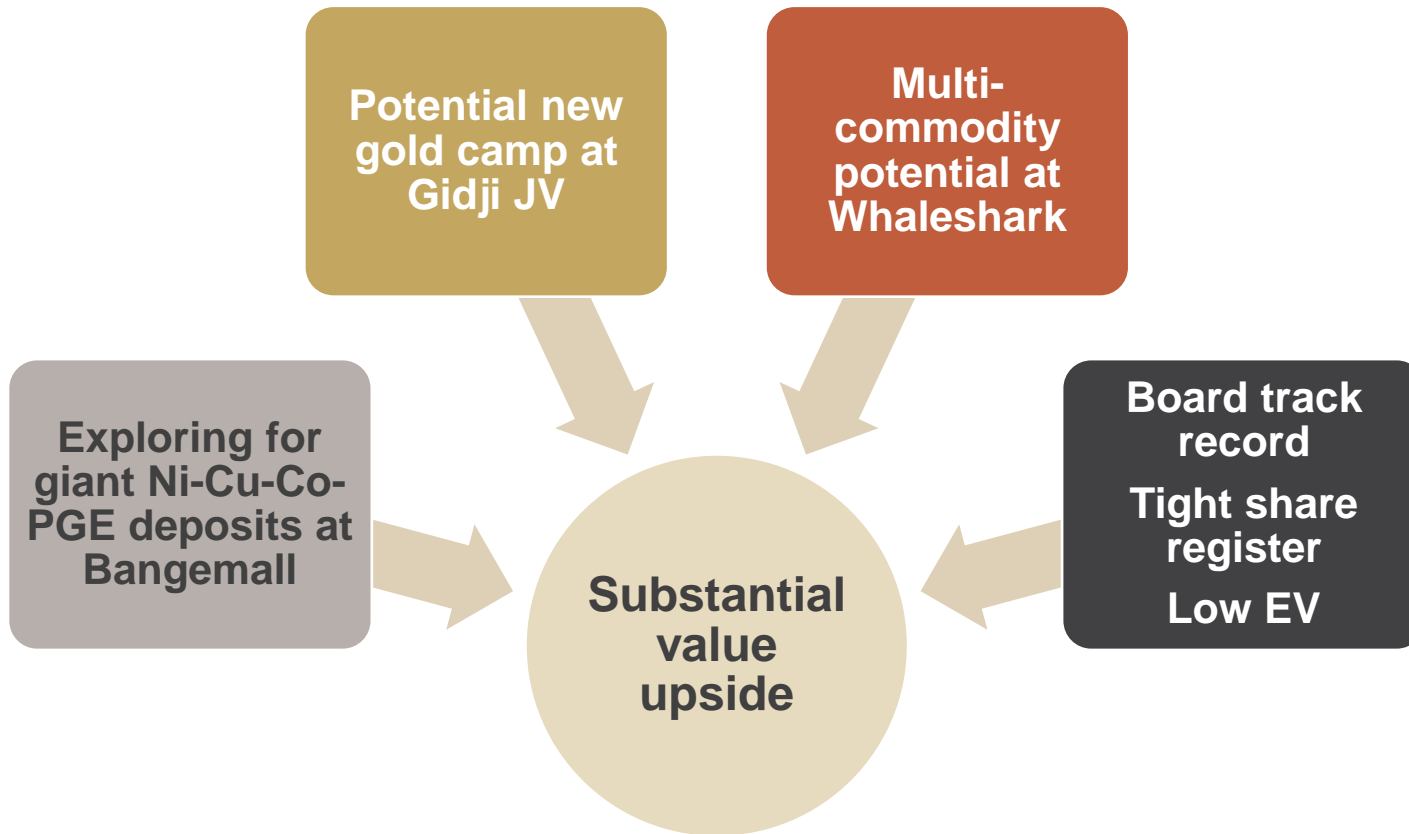


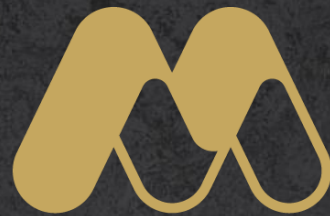
# 2024 Work Programme

	Mar	Jun	Sep	Dec
<b>Bangemall</b>				
Ground EM surveys	✓			
EIS co-funded maiden RC drill programme			✓	
Progress other tenements to grant	<i>ongoing</i>			
<b>Gidji JV/Eastern Goldfields</b>				
<b>Blackfriars</b> RC drilling	✓			
IP survey over <b>8-Mile</b>		✓		
Bedrock drilling ( <b>Blackfriars</b> and <b>8-Mile</b> )				✓
Progress <b>Randalls</b> tenements to grant	<i>ongoing</i>			
<b>Whaleshark</b>				
Passive seismic survey		✓		
Aircore drilling of structural/geochem targets				<b>TBA</b>
Examine <b>magnetite</b> potential	<i>ongoing</i>			
Reconnaissance visit to <b>Chain Pool</b>			✓	



# Why Invest in Miramar?





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