

Gold and Critical Minerals Exploration

Company Update August 2024













#### **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 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

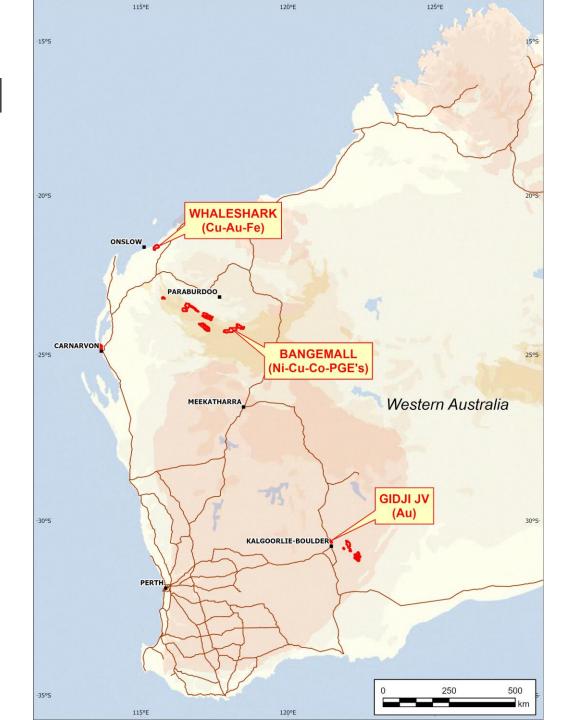
Potential new gold camp 15km north of Kalgoorlie

#### Whaleshark

Multi-commodity project close to infrastructure

Board track record of successful discovery, development and production

Unmatched share price leverage to exploration success



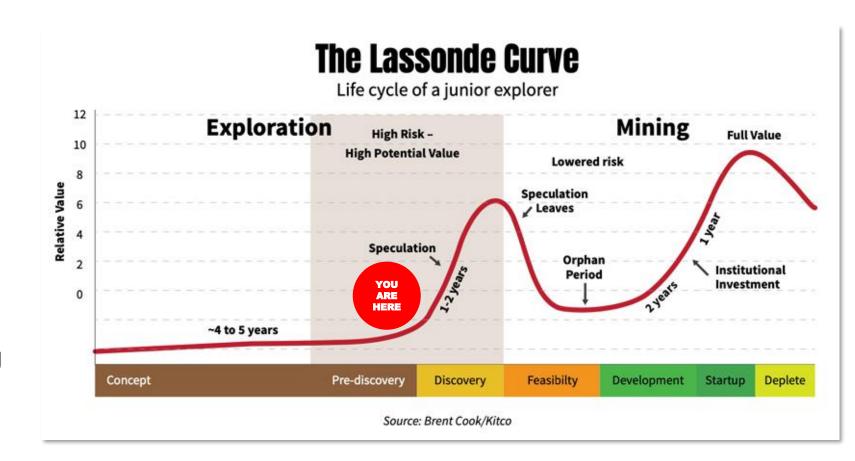
# **Exploration Strategy**

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)

ASX Code	M2R
Shares on issue	394.8M
<b>Market Capitalisation</b>	\$3.2M
Cash	\$1.7M
EV	\$1.5M



### **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

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

# Strategic landholding in the Capricorn Orogen

#### Bangemall

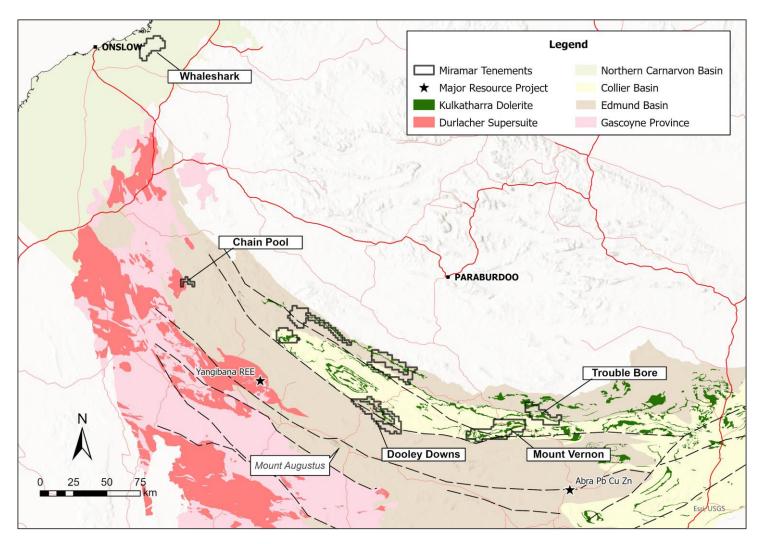
Exploring for giant Norilskstyle Ni-Cu-Co-PGE deposits

#### 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





# **Bangemall Projects**

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





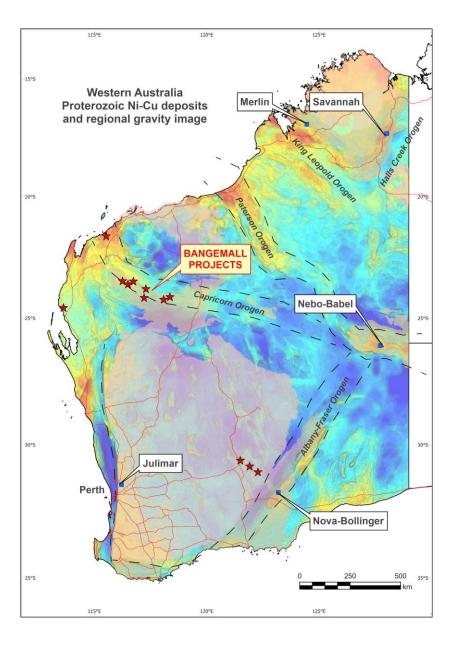


# **Bangemall Projects**

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

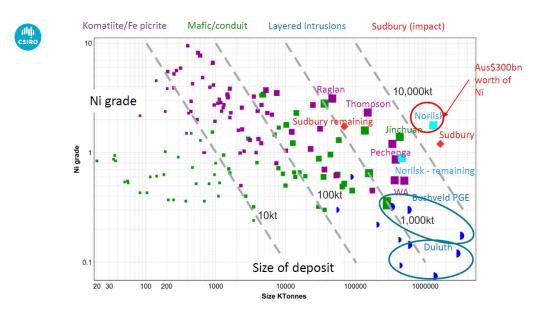
# Amongst the world's largest and most valuable mineral deposits

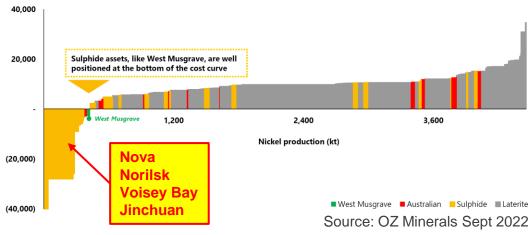
#### Large

- 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)





# **Bangemall Ni-Cu-Co-PGE Projects**

#### Key ingredients for Norilskstyle Ni-Cu-Co-PGE's

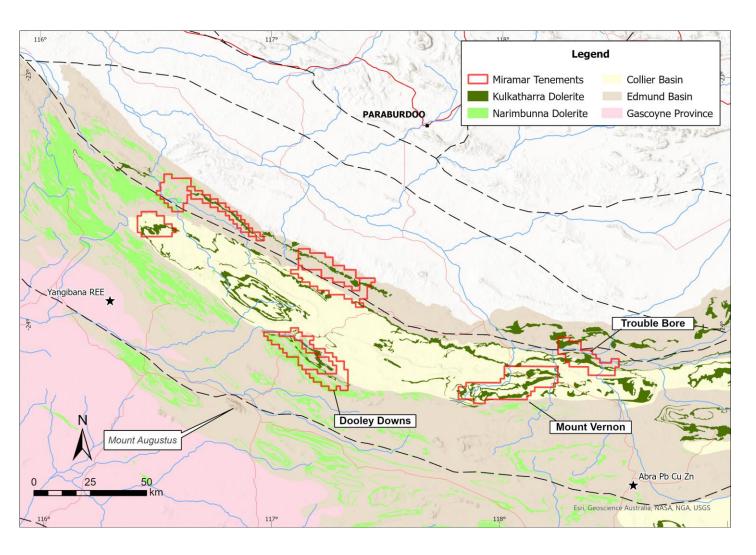
1070Ma Kulkatharra
Dolerite sills - same age as
Nebo-Babel Ni-Cu deposits

Major deep crustal-scale faults - plumbing systems

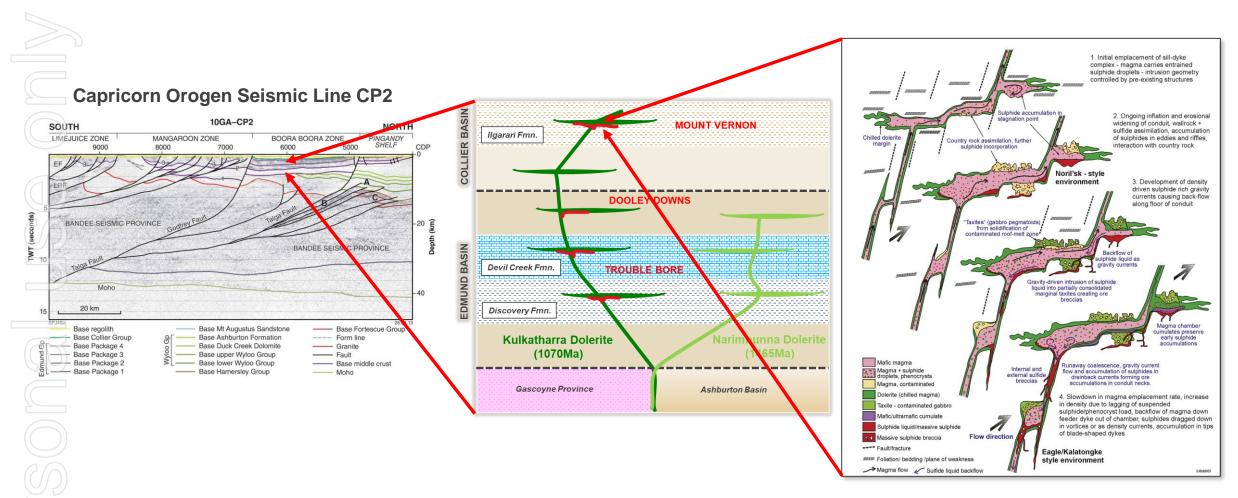
Sulphidic/evaporite sediments – Sulphur source

# Regional-scale geochem and EM anomalies

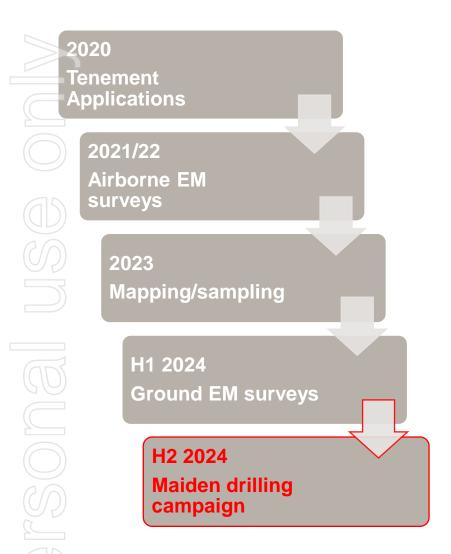
Prospectivity highlighted by GSWA, Geoscience Australia and CSIRO

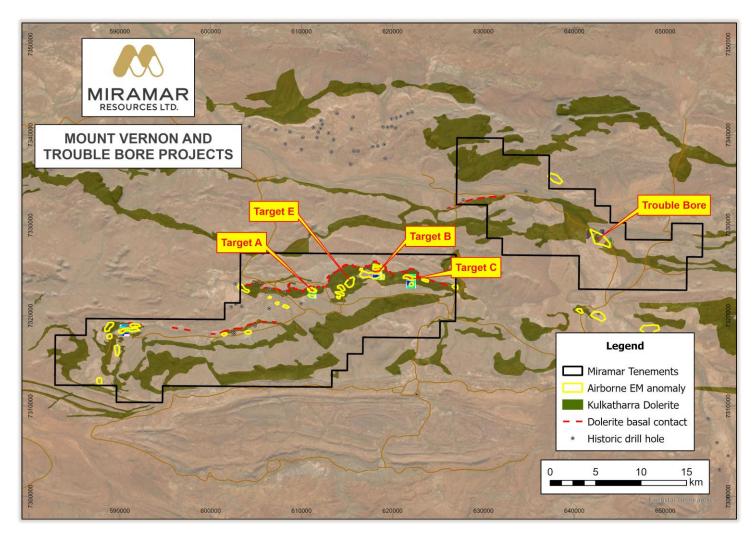


### Bangemall Ni-Cu-Co-PGE deposit model



### Maiden drill campaign to test multiple targets







Gidji JV
Potential new gold camp



# **Eastern Goldfields Projects**



636km² land position in world-class gold province

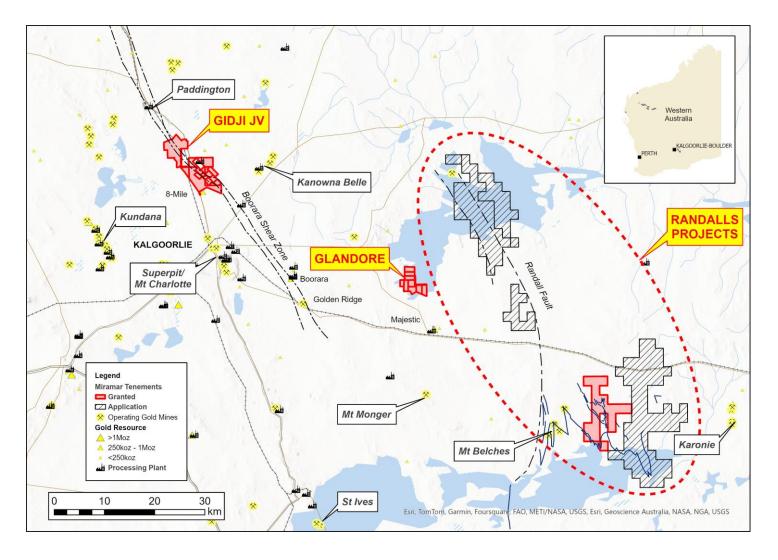


Underexplored camp-scale gold projects

- Gidji JV (80%)
- Glandore
- Randalls



Proximity to multiple gold mining and processing operations



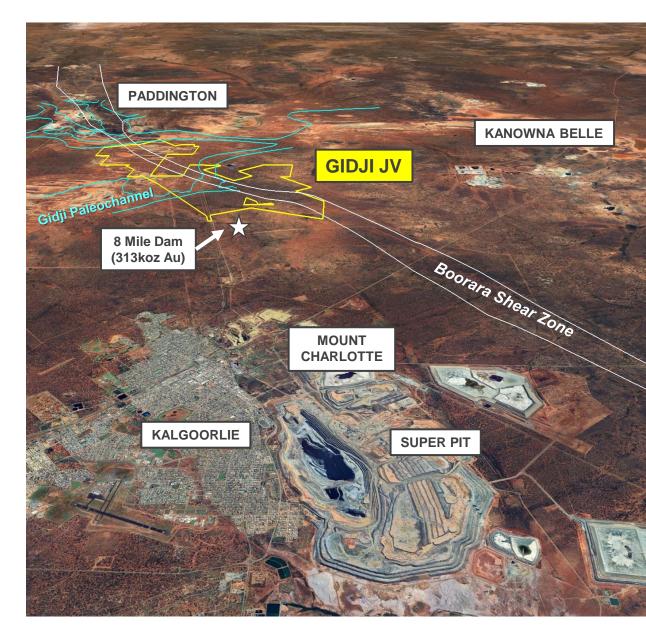
### Gidji JV (80%)

"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%)

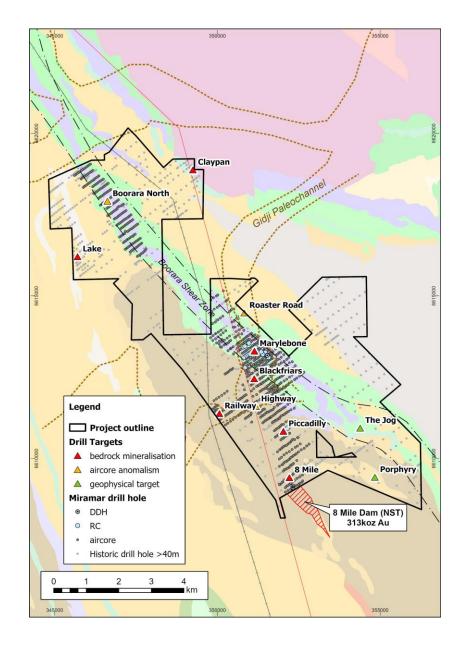
15km strike of major mineralised structure – "Boorara Shear Zone"

Multiple aircore gold discoveries under the Gidji Paleochannel

- Marylebone
- Blackfriars
- Highway-Piccadilly trend

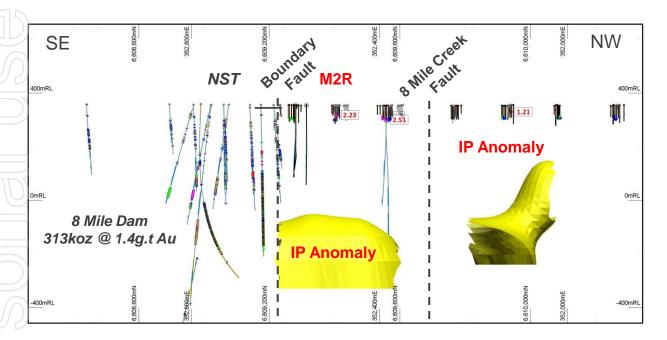
Key bedrock targets identified for testing

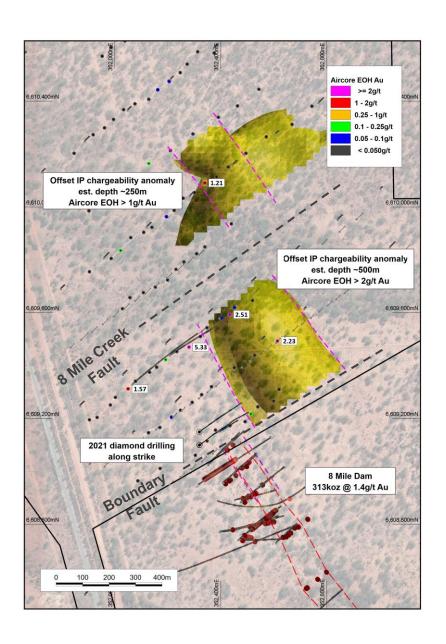
- ₹ 8-Mile
- Blackfriars
  - Marylebone
- The Jog



### 8 Mile

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





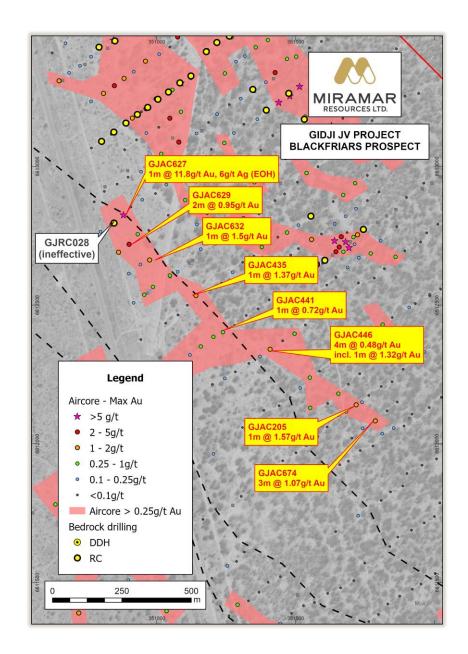
### **Blackfriars**

#### "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







# Marylebone

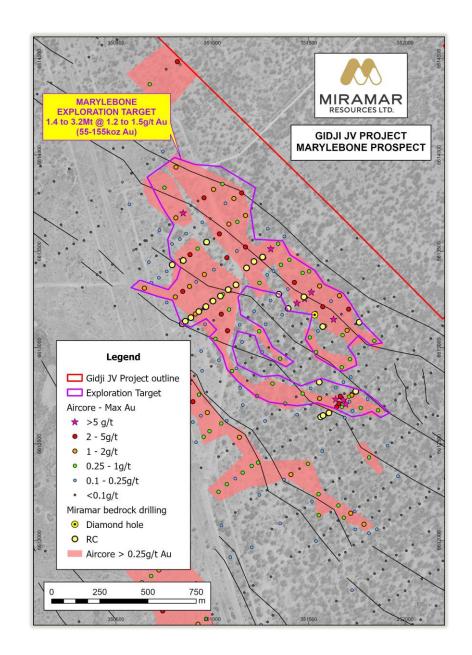
#### Large gold footprint beneath paleochannel

- 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

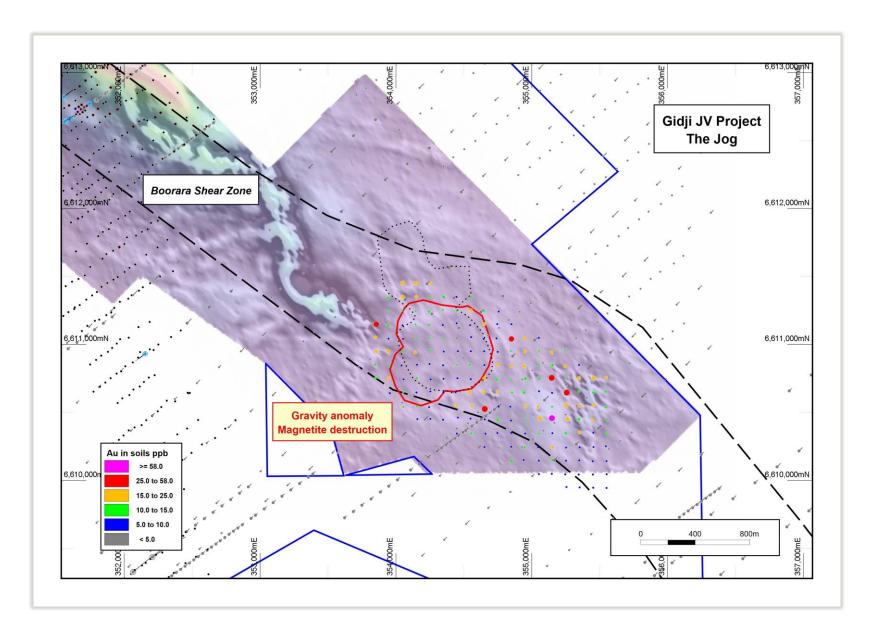
#### **Cautionary Statement:**

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







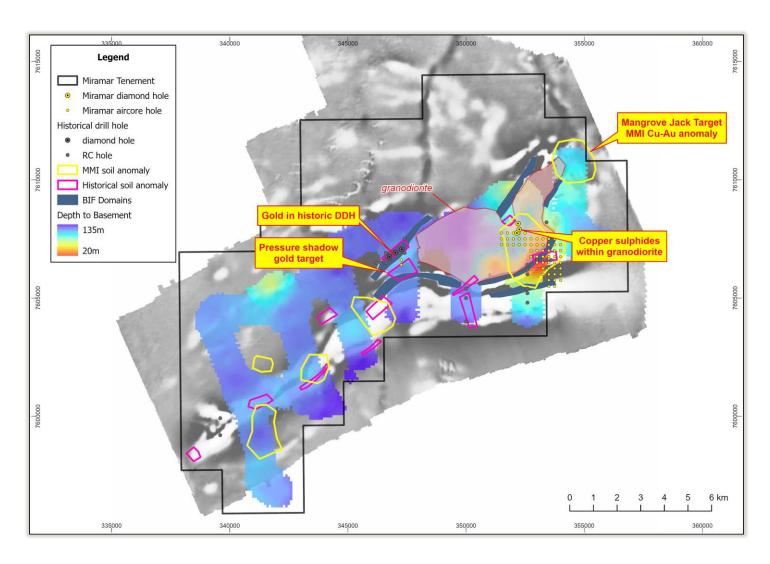
# Whaleshark – multi commodity project

# BIF and granitoid beneath shallow basin cover

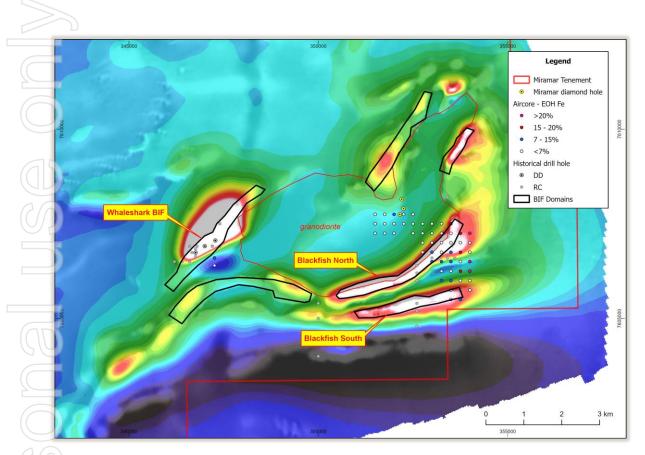
- Anomalous Au in aircore and intersected in folded BIF
- Copper sulphides intersected in 2023 diamond drilling
- Multiple shallowstructural/geochemical targets
- Large magnetite targets

#### Infrastructure-rich area

Highway, gas pipeline and port facilities nearby



# Whaleshark Magnetite Exploration Target\*

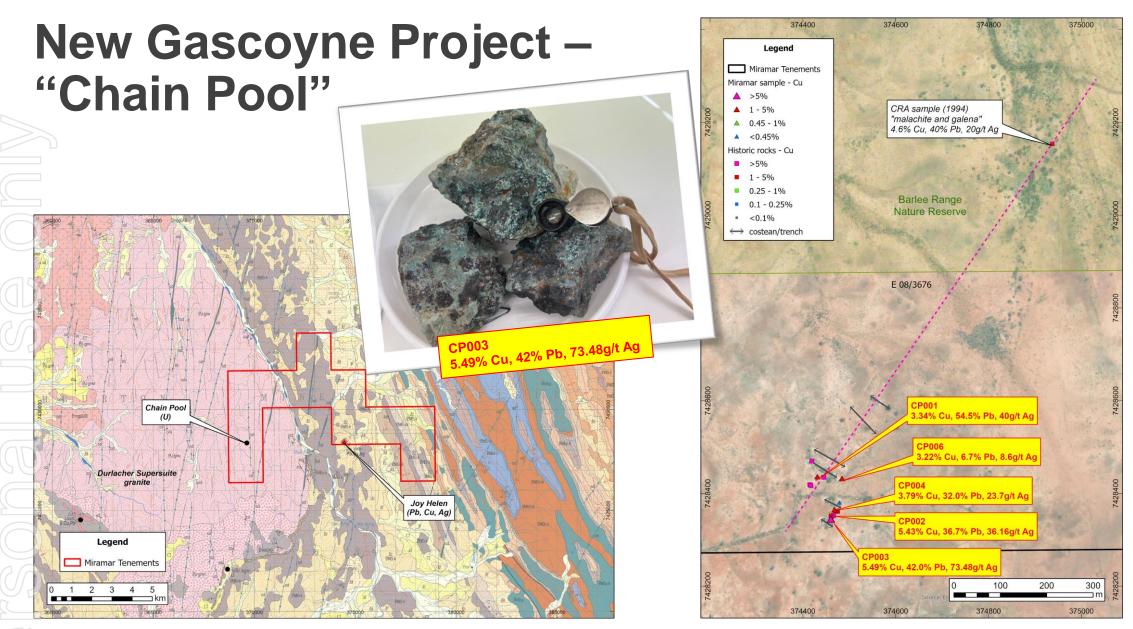


*500	ASX	Release	dated	19	June	2024
<b>0</b> 55	$\Delta \Delta \Lambda$	11CICa3C	ualtu	13	Julie	ZUZ4

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

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# **2024 Work Programme**

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



### Why Invest in Miramar?

Potential new gold camp at Gidji JV

Multicommodity potential at Whaleshark

Exploring for giant Ni-Cu-Co-PGE deposits at Bangemall

Substantial value upside

Board track record
Tight share register
Low EV







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