

## Gold and Critical Minerals Exploration

General Meeting Presentation 31 March 2025









## 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 – Highlights

#### **Key Eastern Goldfields Projects**

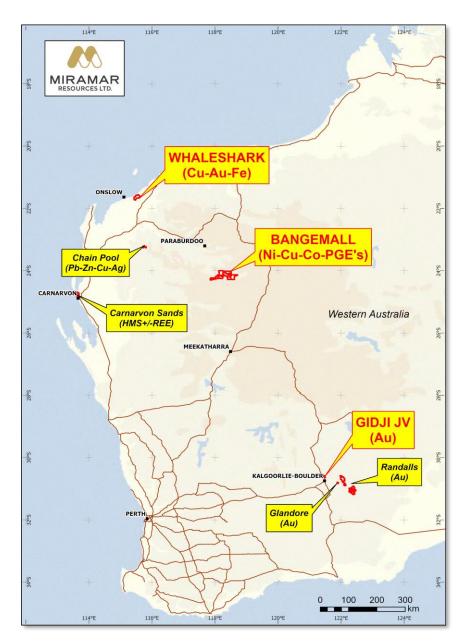
- Gidji JV emerging gold camp 15km north of Kalgoorlie
- Glandore Mining Lease pegged over highgrade gold project
- Randalls major new land position on underexplored regional structure

#### **Potential "Company Makers"**

- Bangemall targeting large Cu-Ni-PGE deposits in a new mineral province
- Whaleshark large Cu-Au and green iron (magnetite) project

#### **Substantial Upside**

- Experienced Board with track record
- Funded for discovery in 2025



## **Aim and Strategy**

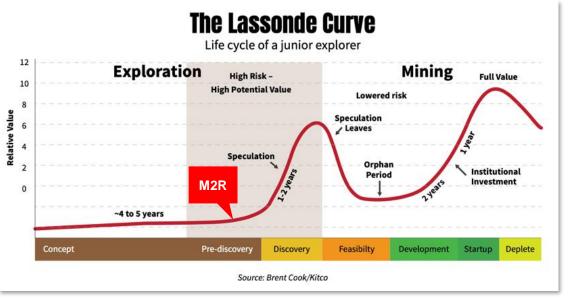
#### Aim:

"To create shareholder value through discovery"

#### **Strategy:**

- Acquire underexplored projects in (potential) world-class mineral provinces
- Recognise similarities with known deposits
- Systematic exploration using best practise
- Maximise in-ground exploration spend
  - ~70% of cash spent directly on exploration since listing in Oct 2020
- Rapidly assess/turnover targets
- Leverage nearby infrastructure if possible







## **Eastern Goldfields**

Strategic land position in worldclass gold province



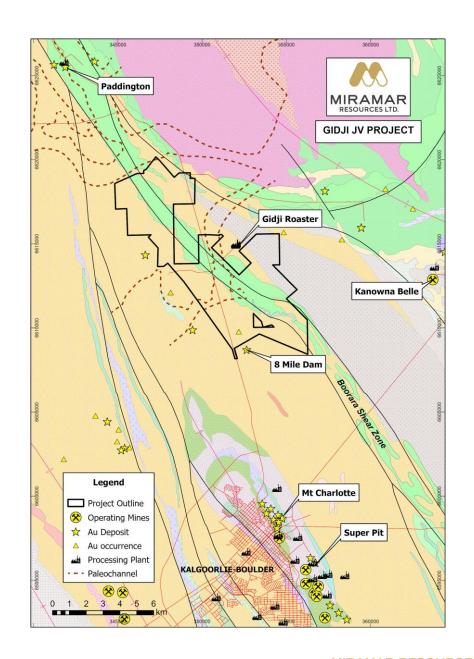
## Gidji JV (80%)

#### "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 Northern Star
   Resources Ltd's 313koz "8 Mile Dam" deposit

#### Key ingredients for a new gold camp

- ✓ Dilational jog in Boorara Shear Zone host to several large gold deposits
- ✓ Underexplored due to Gidji Paleochannel
- ✓ Large gold footprints across multiple targets
- ✓ Gold mineralisation in multiple rock types



## Gidji – an emerging gold camp

#### Marylebone

- Multiple aircore results >5g/t Au
- Large alteration and pathfinder footprints

#### **Blackfriars**

- Black Flag/mafic contact (= Paddington)
- High-grade EOH intersection open to north

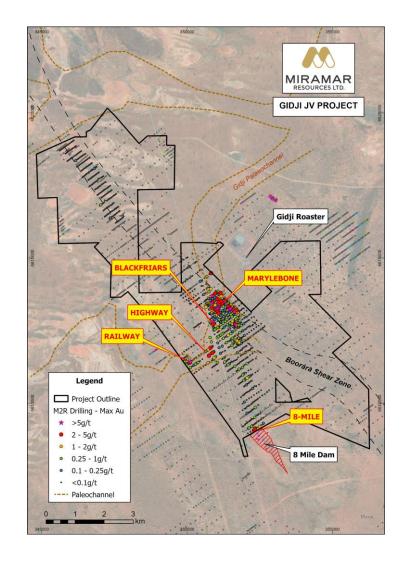
#### **Highway**

- Multiple >1g/t Au results
- Open to north

#### 8-Mile

Potential extension to 8 Mile Dam deposit

#### **Drilling planned for April-May 2025**



## Gidji – multiple discoveries under paleochannel

#### Marylebone

Multiple results >5g/t Au
 within Boorara Shear Zone

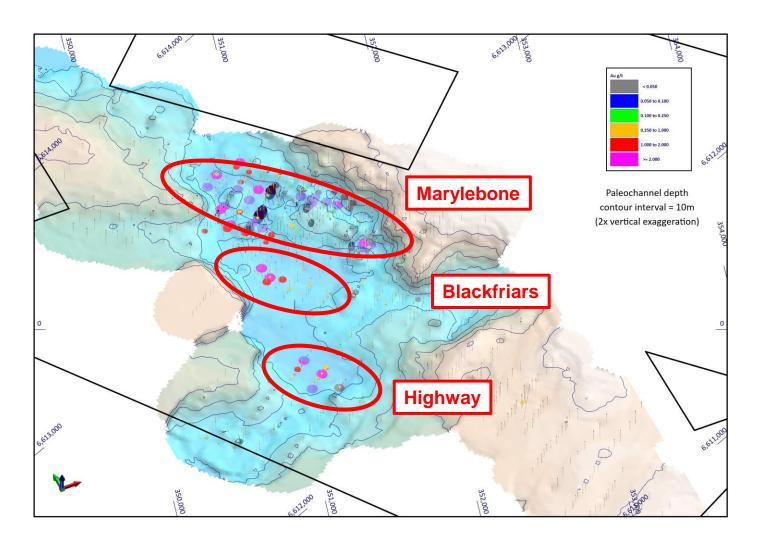
#### **Blackfriars**

- Black Flag/mafic contact
- 11.8g/t Au EOH intersection open to north

#### **Highway**

- Multiple >1g/t Au results
- Open to north

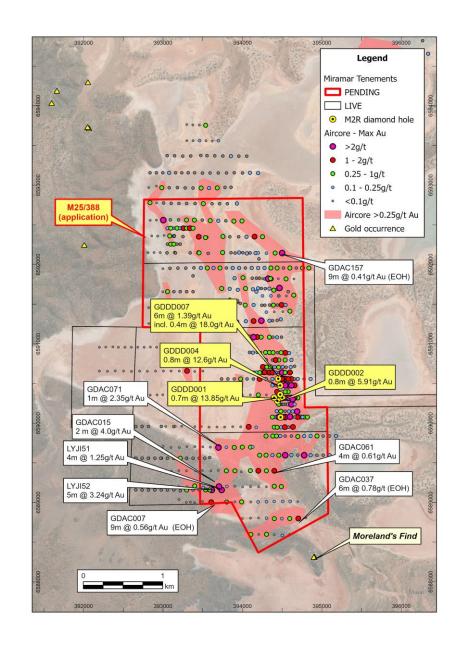
**Drilling in April-May 2025** 



## Glandore (100%)

- 40km east of Kalgoorlie surrounded by existing/proposed processing infrastructure
- High-grade gold results at contact between granite and layered mafic sill
- Large aircore gold footprint under lake
- Mining Lease application pegged Oct '24





## Randalls (100%)

## Major strategic land position (590km²) along underexplored Randall Fault

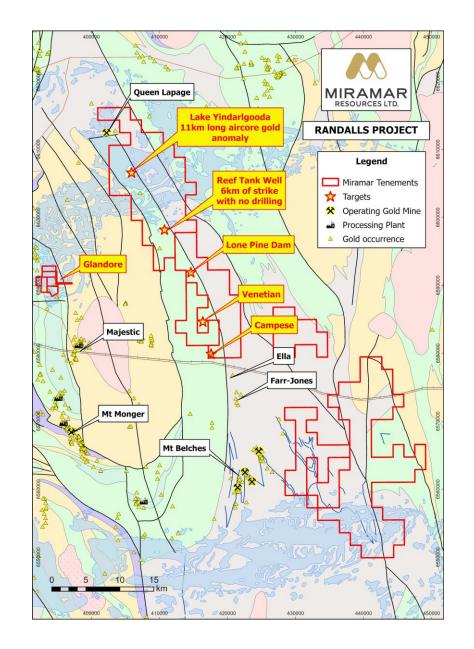
#### **Randalls North**

- Multiple historic gold results over 30km strike:
  - 11km long aircore gold anomaly on salt lake
  - Untested 6km segment at Reef Tank Well
  - Multiple significant RAB/RC intersections at Lone Pine Dam, Venetian and Campese

#### Randalls South

- Folded BIF next to high-grade gold operations
- Gold and lithium potential

**Progressing new applications towards grant** 





# Bangemall Projects Exploring for giant Cu-Ni-CoPGE deposits in a new mineral province



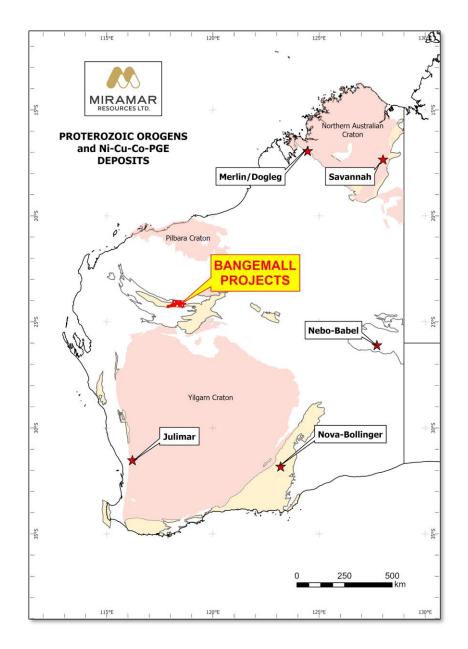


## **Bangemall Projects**

Miramar's Bangemall Projects are located within WA's Proterozoic Capricorn Orogen

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

- Noril'sk/Talnakh the world's largest and most valuable mineral deposits
- Voisey Bay, Raglan, Eagle
- Nova-Bollinger
- Nebo-Babel, Succoth, Manchego
- Savannah, Merlin/Dogleg
- Julimar





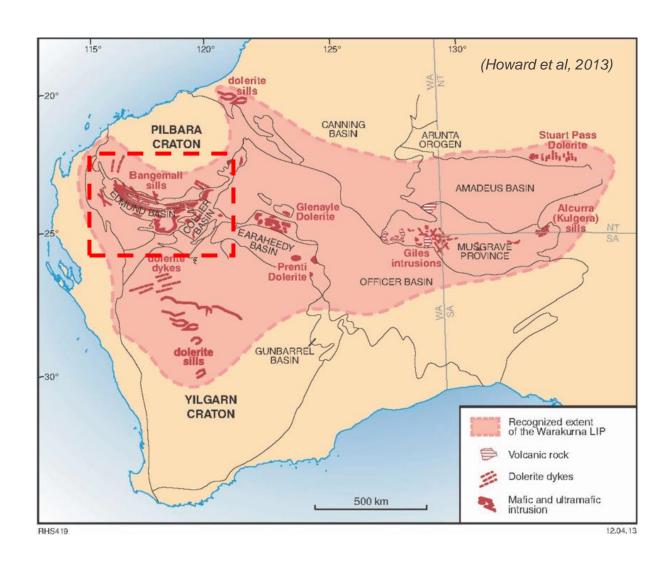
## The Warakurna Large Igneous Province (LIP)

## Widespread mafic intrusive event @ 1070Ma

- West Bangemall -Kulkatharra Dolerite sills
- Glenayle Dolerite
- Giles Complex (Nebo-Babel-Succoth)

## Prospectivity recognised by GSWA, Geoscience Australia and CSIRO

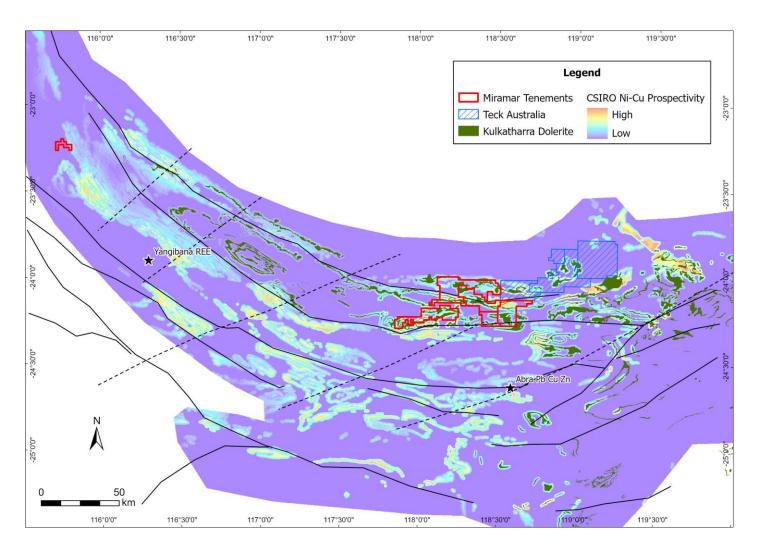
"The Bangemall Supergroup...is considered to be highly prospective for Noril'sk-type Ni-Cu-PGE deposits within the sill complexes" (GSWA, 2005)



## First mover in a new nickel-copper province

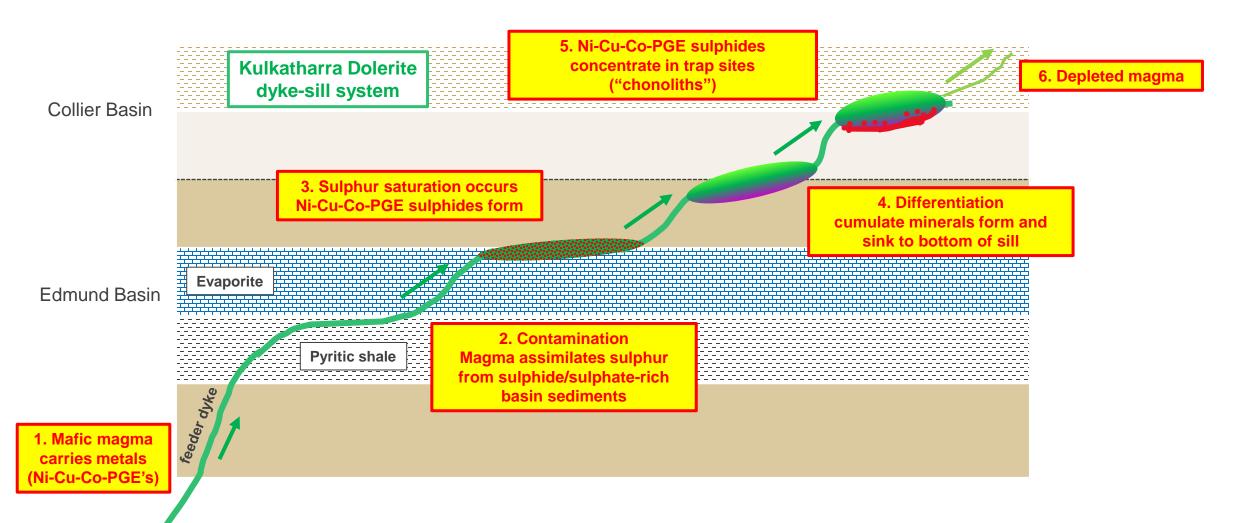
#### **Key ingredients for Noril'skstyle mineralisation:**

- Extensive volume of mafic magma with evidence of crustal contamination
- Deep crustal-scale faults and cross-cutting faults
- ✓ Sulphur-rich sediments
- Regional-scale geochem and EM anomalies
- Differentiated dolerite sills with mafic cumulate rocks
- Nickel and Copper sulphides confirmed





## Bangemall – "Noril'sk-style" deposit model



## **Bangemall – Mount Vernon and Trouble Bore**

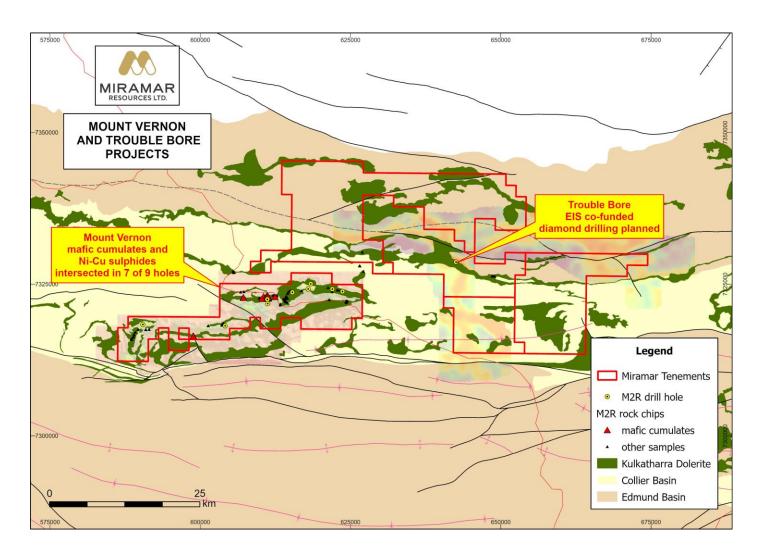
#### **Mount Vernon RC drilling**

- Differentiated dolerite sills
- ✓ Mafic cumulate rocks
- Disseminated pentlandite and chalcopyrite
- ✓ Sulphate minerals

#### **Trouble Bore**

- Historic EM anomaly at intersection of dolerite sill and feeder dyke
- Diamond drilling planned

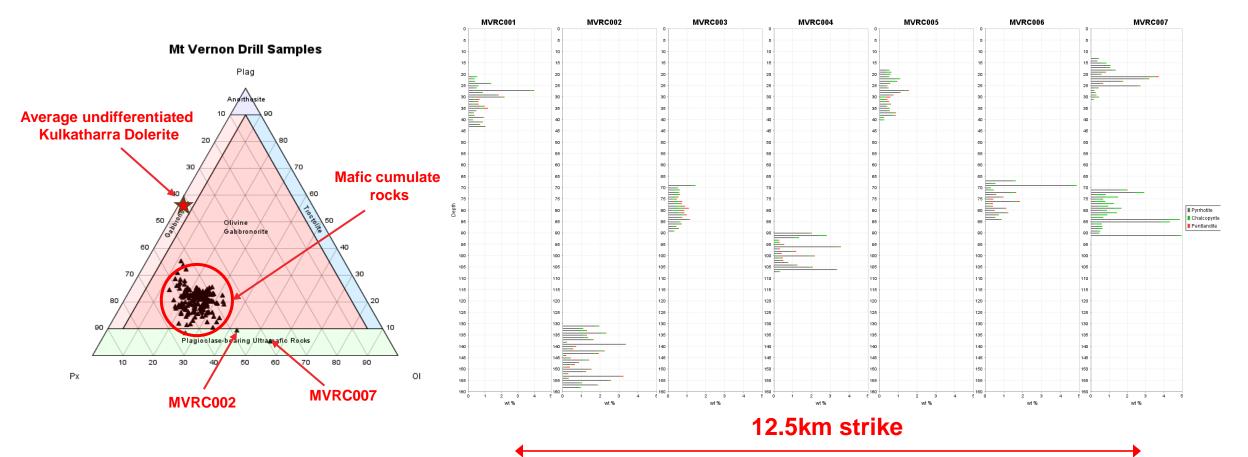
## Detailed mag/EM survey planned for new tenements



## Mt Vernon – cumulate rocks and Ni-Cu sulphides

Mafic/UM cumulate rocks = evidence for differentiation

Micro-XRF analysis confirms presence of disseminated pentlandite and chalcopyrite within mafic cumulate rocks





## Whaleshark

Large copper-gold and magnetite iron project







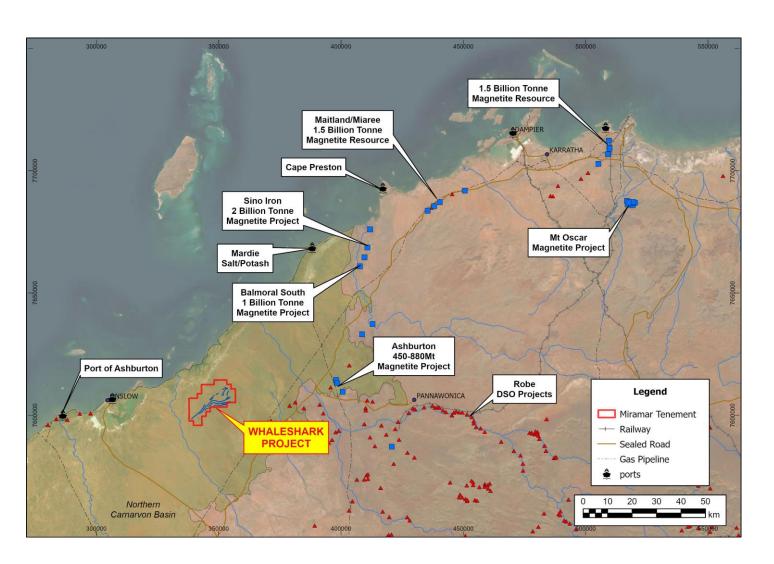






## Whaleshark – copper-gold and magnetite project

- Northwestern extension of Capricorn Orogen
- Proterozoic metasediments, magnetite-BIF, and granitoid beneath Cretaceous sediments
- Basement depth ~100m
- Surrounded by significant infrastructure:
  - Major highway
  - Gas pipeline
  - Public/private port facilities
  - Magnetite and DSO mines/processing plants
  - Haul road







## Whaleshark – large copper and/or gold targets

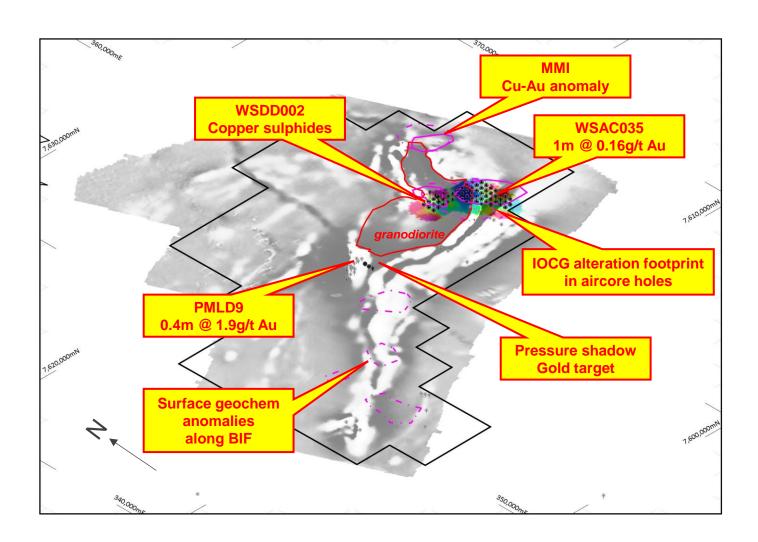
#### Copper-gold (IOCG?)

- MMI Cu-Au-U-REE anomalism
- Anomalous Cu in aircore holes
- Alteration and REE signatures suggest IOCG potential
- Copper sulphides intersected in 2023 EIS diamond drilling

#### Orogenic/Intrusion-related Au

- DDH intersected Au in BIF
- Aircore results up to 0.16g/t Au
- Multiple structural/geochemical targets over 20km of strike

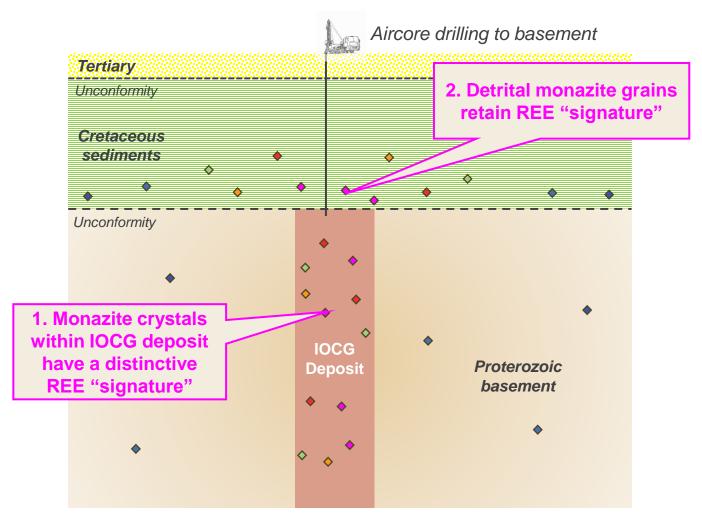
Aircore drilling to be expanded

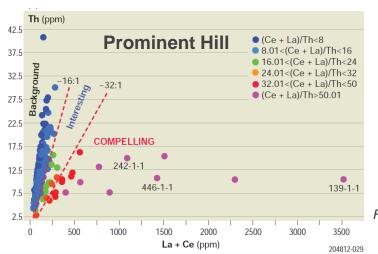




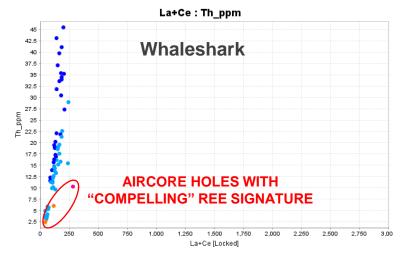


## Interface aircore results indicate IOCG potential













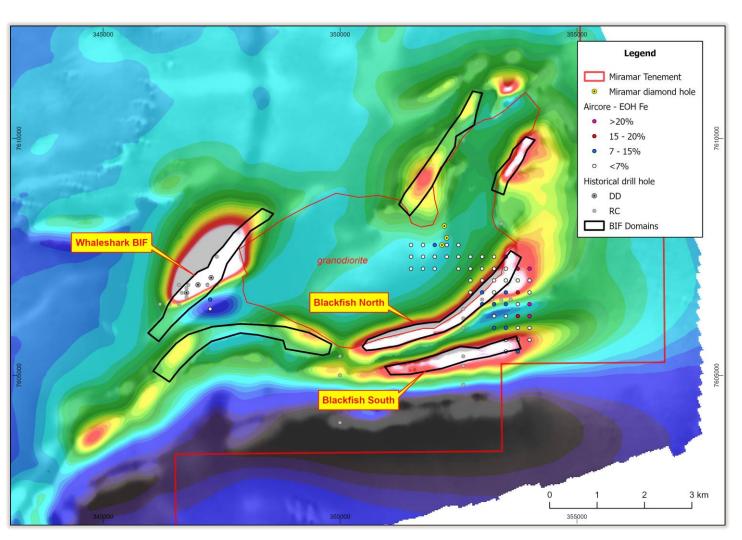
## **Billion tonne magnetite Exploration Target\***

	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

#### **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

\*See ASX Release dated 19 June 2024







## Miramar – (Proforma) 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



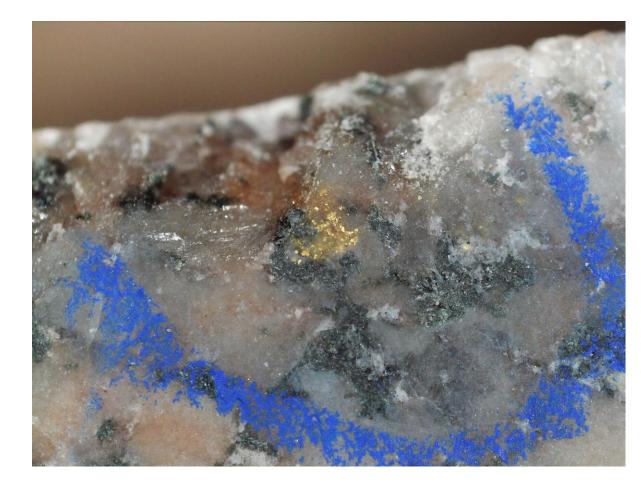
#### Mindy Ku Company Secretary

•15 years' experience with public and private companies

ASX Code	M2R
Current shares on issue	396.8M
T1 Placement (15%)	59.5M
T2 Placement (pending approval)	540.5M
Pro-forma Post Capital Raising	996.8M
Market Capitalisation (@ 0.4c)	\$4.0M
Cash and investments (pro-forma)	\$2.1M
Receivables (EIS)	\$0.2M
Enterprise Value (i.e. projects)	\$1.7M
JEMI Credits Available	\$0.45M

## **Summary - Why Invest in Miramar?**

#### Upside People Funded for Track record discovery in of discovery, 2025 development Huge and leverage to production discovery **Projects** Emerging gold camp at Gidji JV Potential for large Cu-Ni-PGE deposits







## **Proposed 2025 Work Programmes**

#### Gidji JV

- Aircore drilling
  - Marylebone/Blackfriars/Highway
- Bedrock RC/diamond drilling
  - Blackfriars/8-Mile (+/- The Jog)

#### **Bangemall**

- Diamond drilling at Trouble Bore (EIS-funded)
- Airborne Mag/EM survey over new tenements
- Further mapping and rock chip sampling

#### Whaleshark

Extend aircore drilling over copper-gold targets

#### **Chain Pool**

Infill and extensional soil/rock chip sampling





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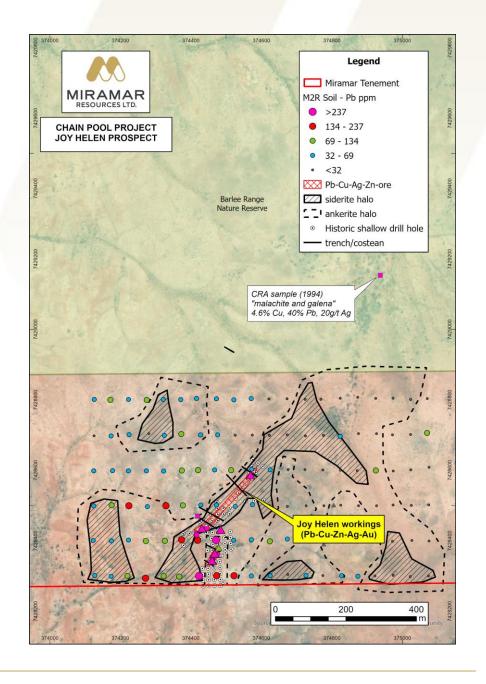
## **Chain Pool**

#### **SEDEX** mineralisation

- "Joy Helen" historic Pb-Zn-Ag-Cu mine
- New high-grade rock chips over 400m strike
  - 5.49% Cu, 42.0% Pb and 73.5 g/t Ag
  - 5.43% Cu, 36.7% Pb and 36.0g/t Ag
- 7.23% Cu, 26.7% Pb, 59.5g/t Ag, 0.8g/t Au
- Geochemistry/alteration consistent with known
   SEDEX deposits (e.g. Lady Loretta)
- Soil anomaly/alteration halo extends northeast of historic workings for up to 700m

#### Ni-Cu-Co-PGE potential

Mundine Well dolerite dykes (e.g. Money Intrusion)



### **Carnarvon Sands**

- Coastal embayment with heavy mineral strandlines north of the mouth of the Gascoyne River
- The 79,000km<sup>2</sup> Gascoyne River catchment contains multiple hard-rock REE deposits (Yangibana, YIN)
- Along with traditional Heavy Mineral Sands, limited previous exploration confirmed the presence of detrital REE minerals including:
  - Xenotime Yttrium phosphate
  - Monazite La, Ce, Nd, Sm, Pr phosphates
- Proximity to proposed green energy projects

