



MIRAMAR
RESOURCES LTD.



INVESTOR UPDATE – SEPTEMBER 2023

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

Targeting large discovery opportunities

- Large shallow **IOCG** targets at **Whaleshark**
 - (e.g. *Ernest Henry, Carrapateena*)
- Multiple **Ni-Cu-PGE** targets at **Bangemall**
 - (e.g. *Nova, Nebo-Babel, Savannah*)
- Potential **new gold camp** at **Gidji JV**
 - (e.g. *Paddington, Mt Charlotte*)
- Lithium potential identified at **Randalls**

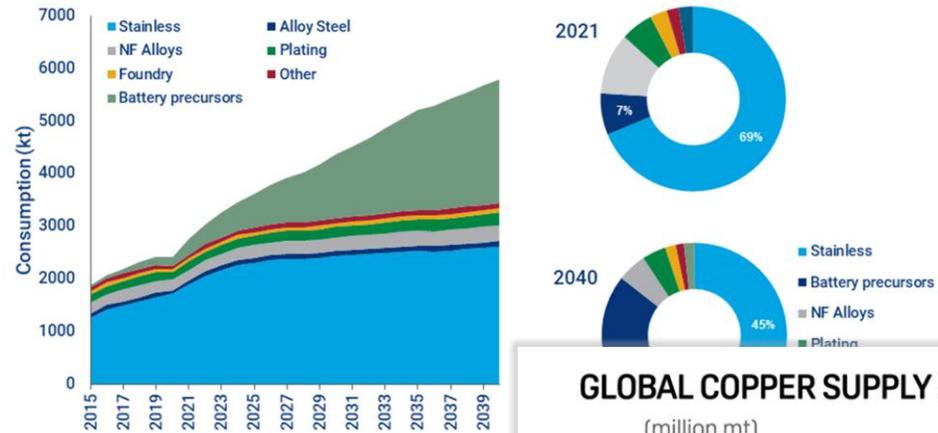
Unmatched leverage to exploration success

- Tight share register and very low EV



Exploring for in-demand commodities...

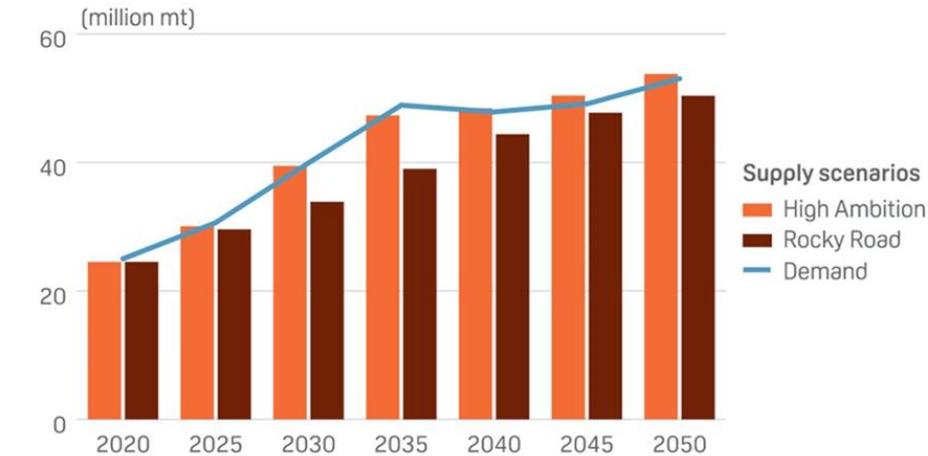
Use in batteries will double global nickel demand by 2040



10 Year Gold



GLOBAL COPPER SUPPLY SCENARIOS AND DEMAND



...in an emerging mineral province

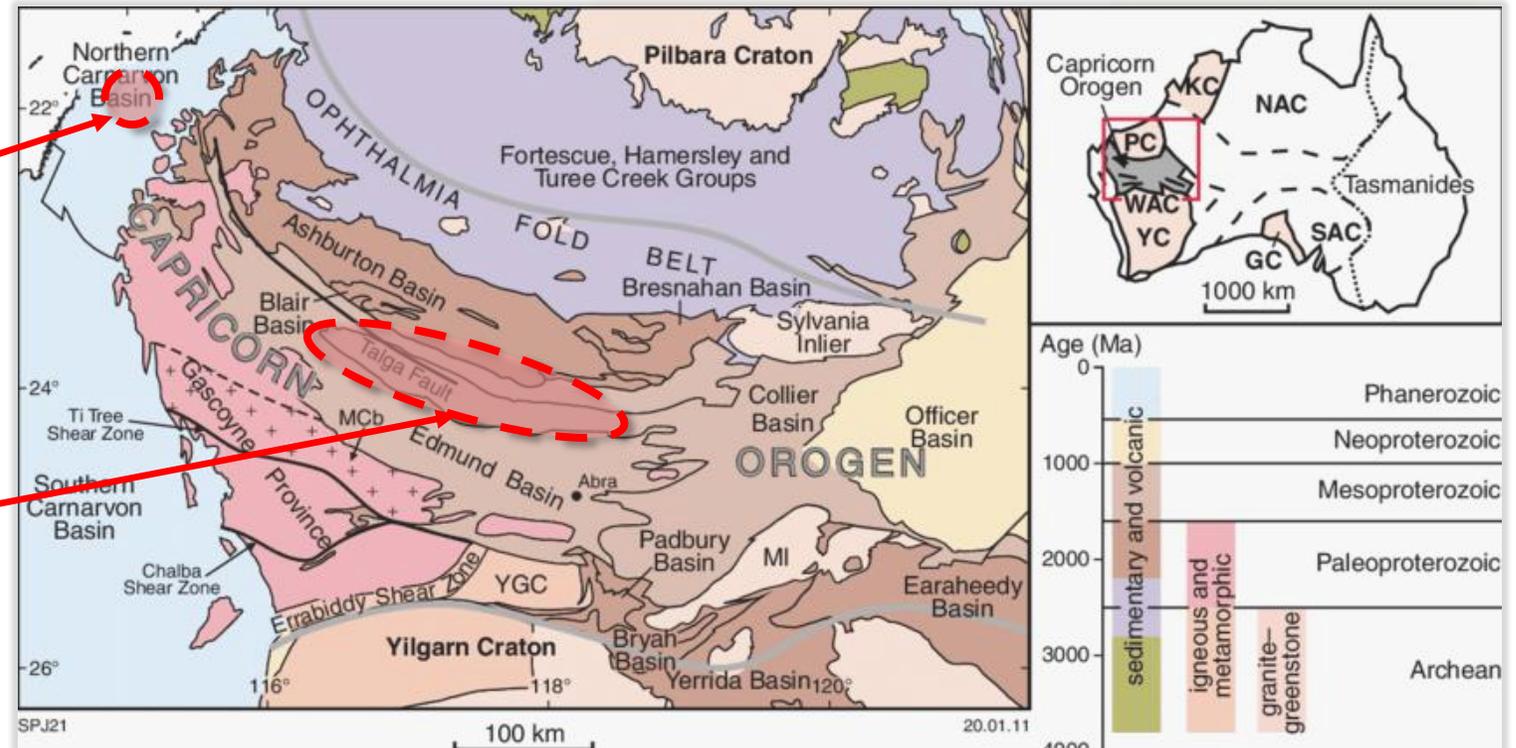
Capricorn Orogen

Whaleshark

- Targeting a large **IOCG** deposit under the Carnarvon Basin

Bangemall

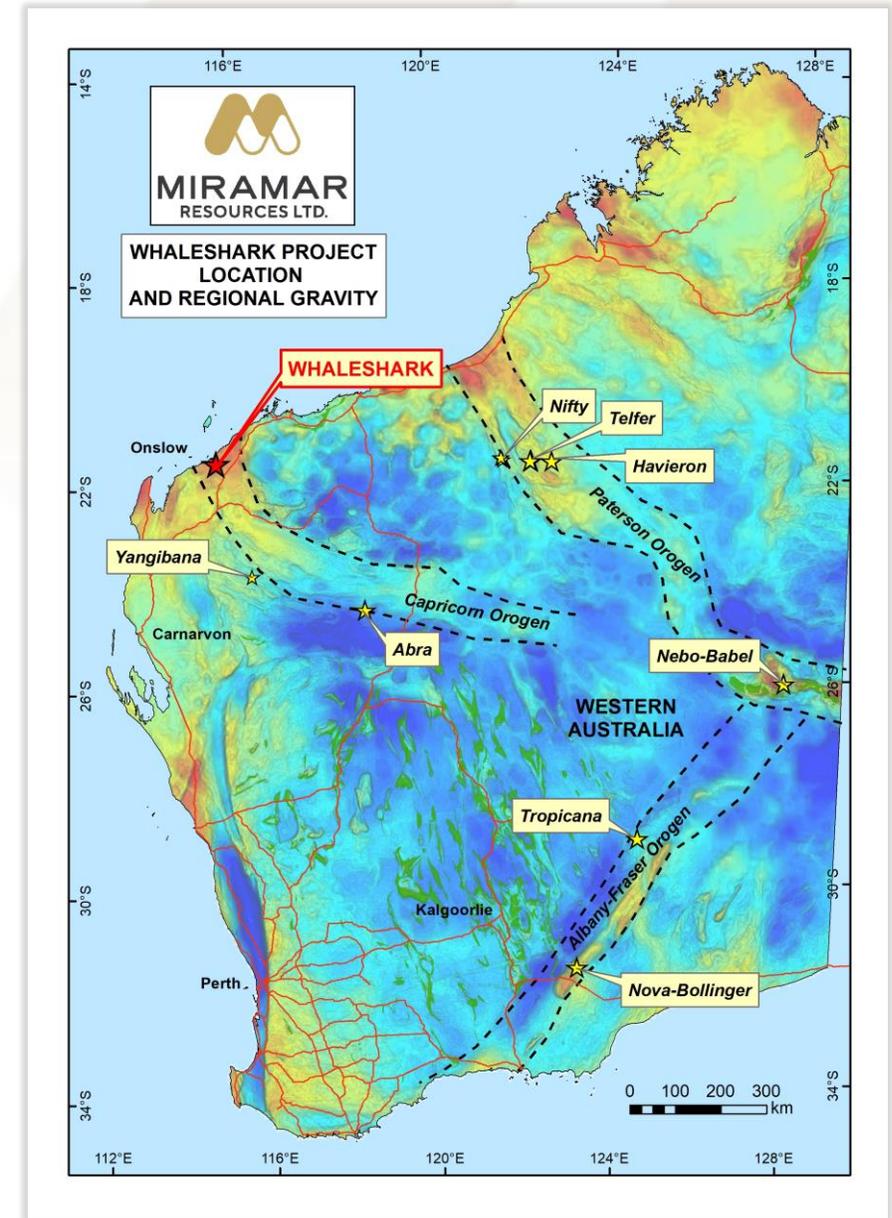
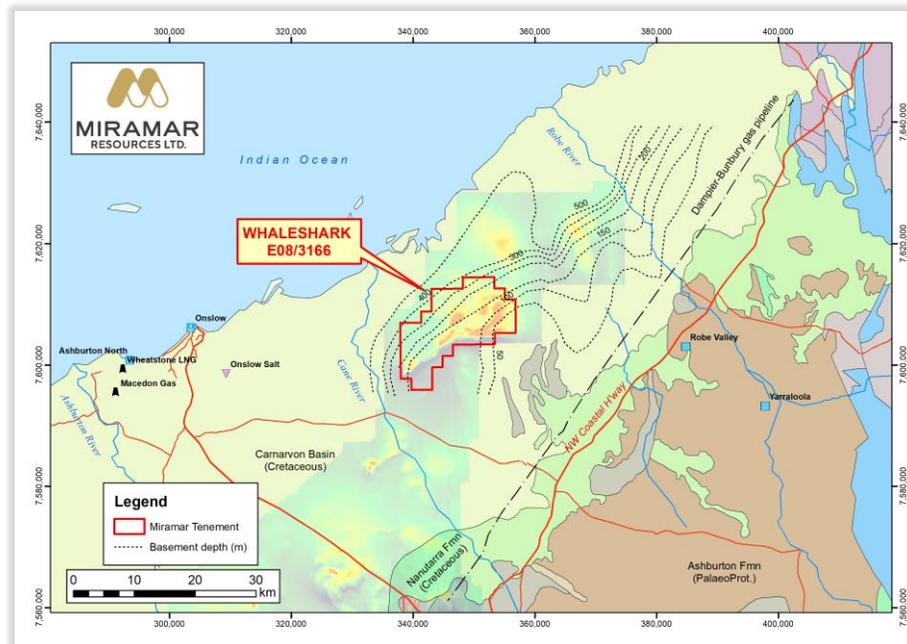
- Multiple large **Ni-Cu-PGE** targets associated with dolerite sills



GSWA

Whaleshark Project

- Proterozoic orogens host major mineral deposits
- Whaleshark is located at the northern end of the Capricorn Orogen under shallow basin sediments
- Whaleshark has many similarities to large **IOCG** deposits in South Australia and Queensland

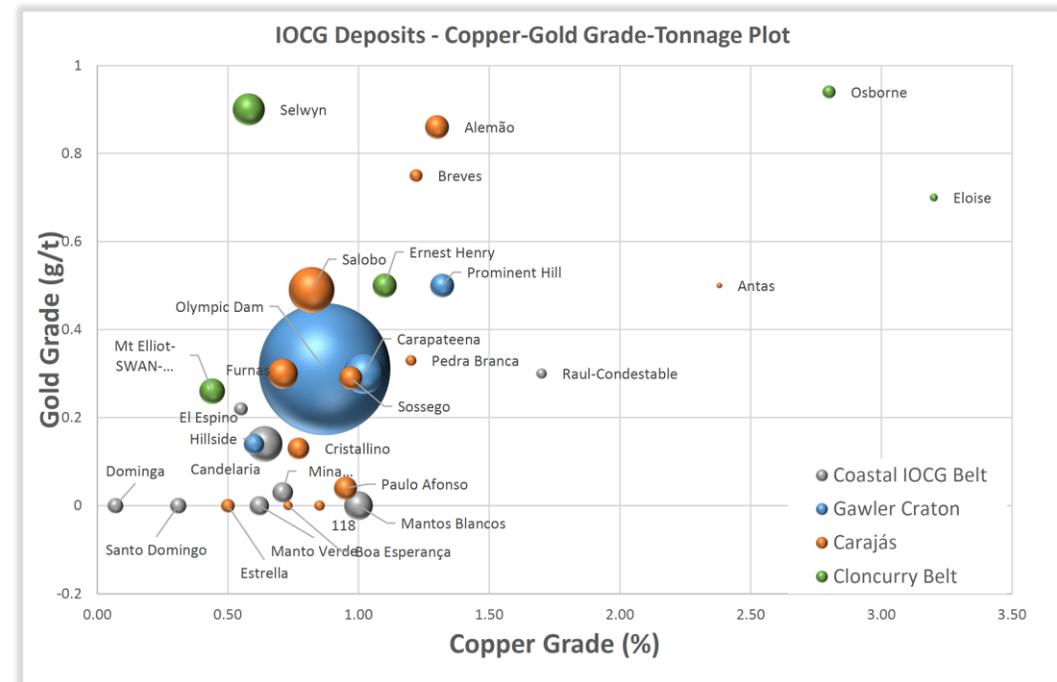


Why explore for IOCG deposits?



- **VERY BIG and VERY VALUABLE**

- 10's of Mt to >1Bt
- average grade of **1% Cu** and **1g/t Au**
- = Mt's of **Cu** + Moz's of **Au**



Dow, 2019

Whaleshark – large shallow IOCG targets

2021

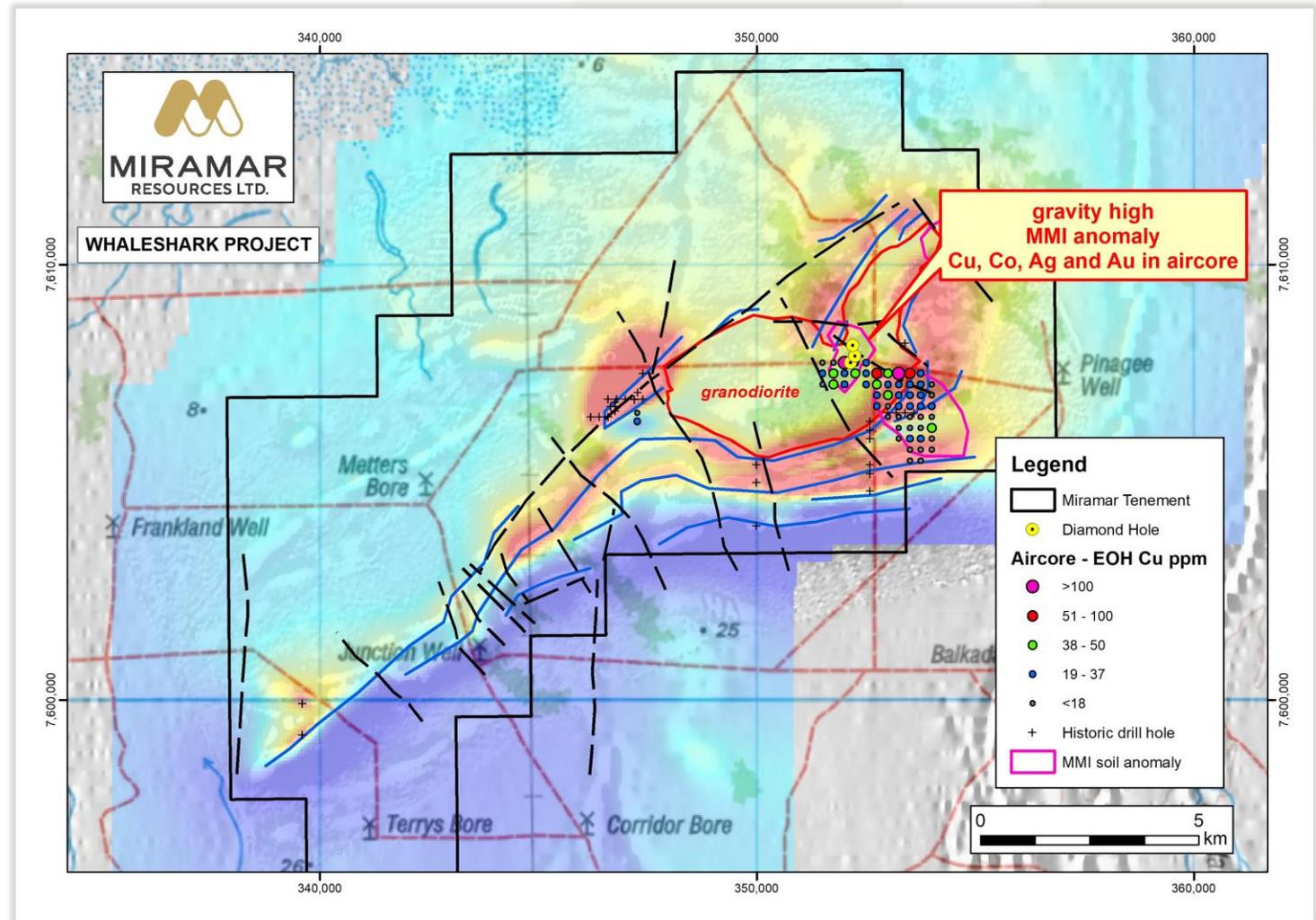
- Tenement granted
- **MMI soil sampling outlines large Cu-Au-Ag-Mo-REE anomalies**

2022

- Infill gravity surveys
- **Aircore drilling outlines large Cu-Co-Au-Ag-REE anomalies at top of basement**

2023

- EIS funding
- Heritage survey
- **Diamond drilling intersects copper sulphide mineralisation**
- **Follow-up drilling planned**



Whaleshark – bedrock copper confirmed

EIS co-funded Diamond Drilling

- 3 DDH's tested coincident aircore, gravity and MMI anomalies in granite crosscut by NW-trending structure
- Predominantly biotite granodiorite
- **Chalcopyrite** observed in two holes
- Core being processed - **assays pending**
- **Further diamond drilling planned**

WSDD002
Chalcopyrite within shear



WSDD001
Chalcopyrite associated with biotite-rich rafts

Whaleshark – significant IOCG potential



Whaleshark has all the key ingredients for a large shallow IOCG deposit

- ✓ Proterozoic granitoid
- ✓ Iron-rich rocks nearby
- ✓ Overlapping gravity/magnetic anomalism
- ✓ MMI and aircore **Cu-Au-Co-Ag-U** anomalism
- ✓ **Bedrock copper mineralisation**
- ✓ Alteration and REE signatures suggest **IOCG** source
- ✓ **Significant scale**

Whaleshark – next steps

Further diamond drilling along NW structure

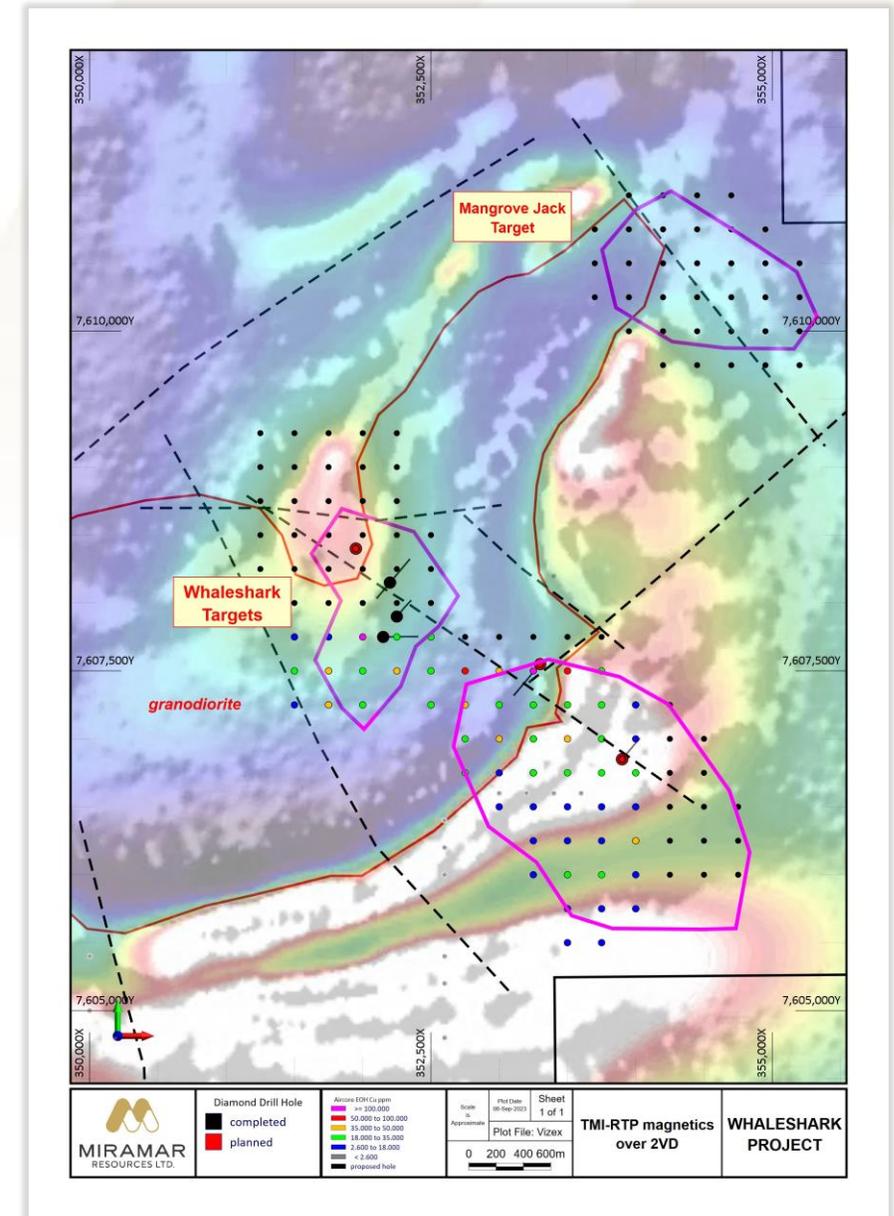
- MMI/magnetic anomaly
- Cu-Au aircore/MMI/gravity anomalies
- MMI and Aircore REE anomaly

“Interface” aircore drilling over MMI anomalies

- NW structure and magnetic anomaly
- “Mangrove Jack” target – MMI anomaly

Investigate geophysical/other targeting methods

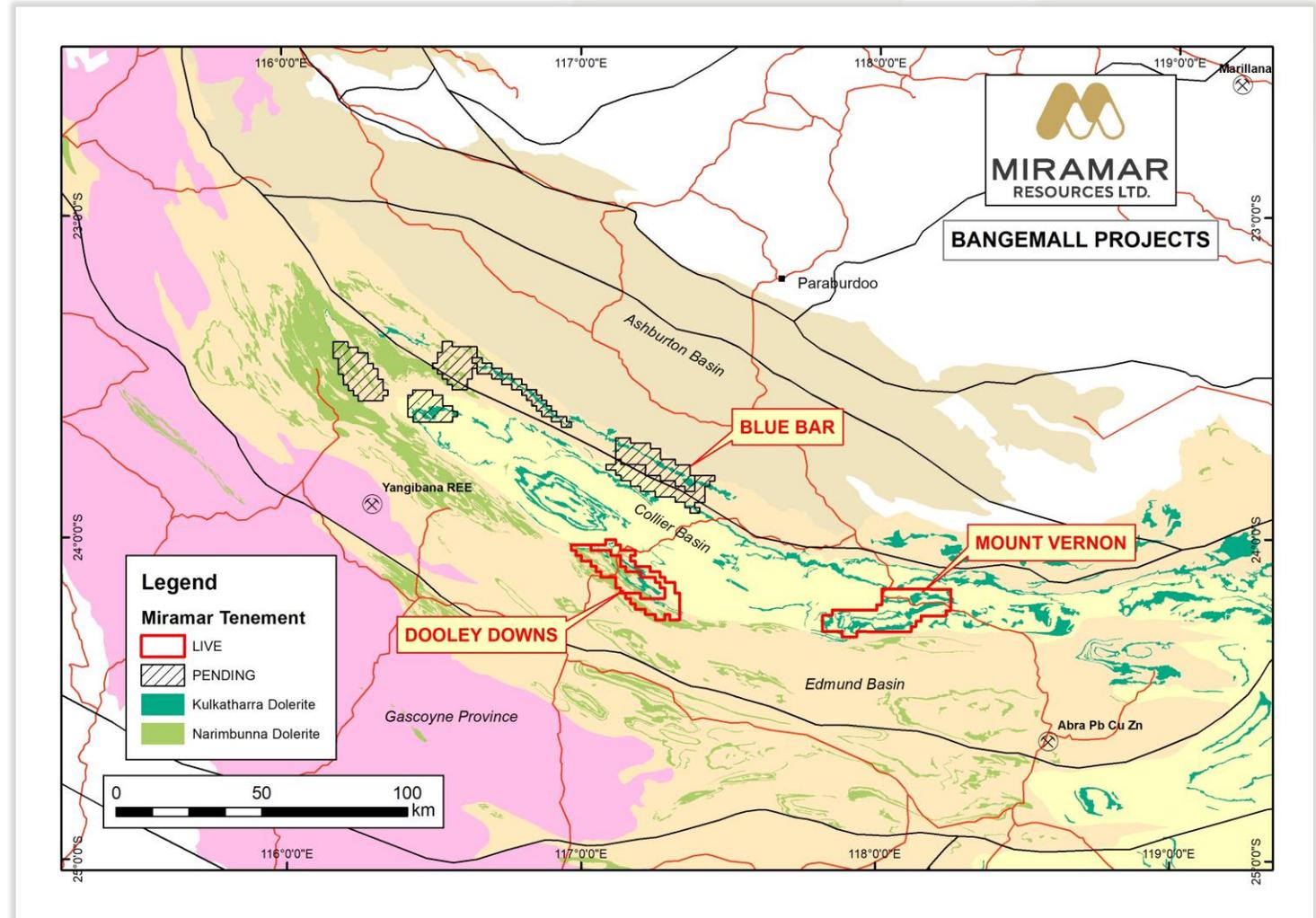
- EM/IP
- Detailed ground/drone magnetics



Bangemall Ni-Cu-PGE Projects

Potential for Norilsk-style Ni-Cu-PGEs

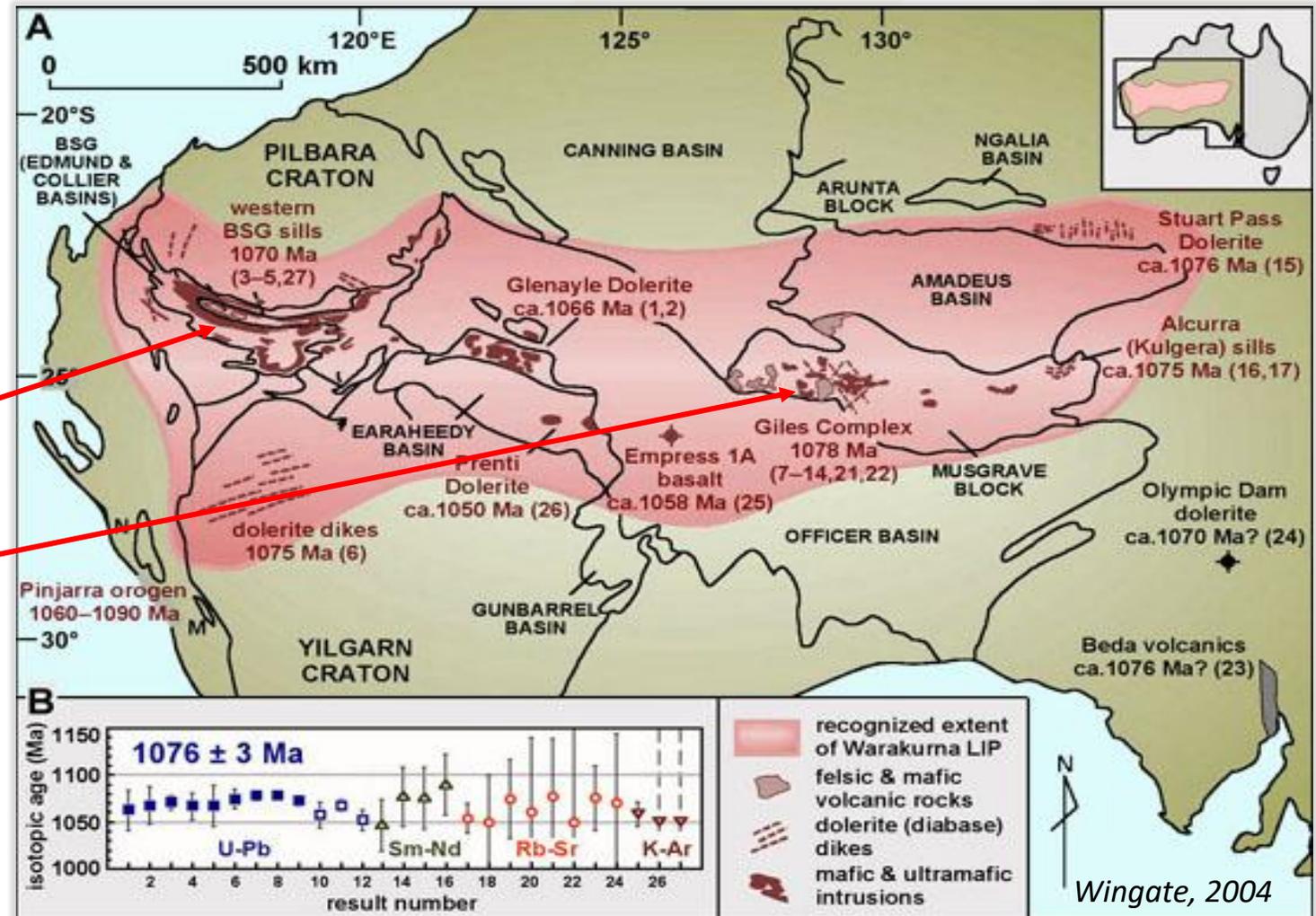
- ✓ Craton margin
- ✓ Crustal-scale structures and cross-cutting faults
- ✓ Extensive volumes of mafic magma
- ✓ Sulphidic sediments
- ✓ Regional signatures
 - GSWA geochem
 - Capricorn EM



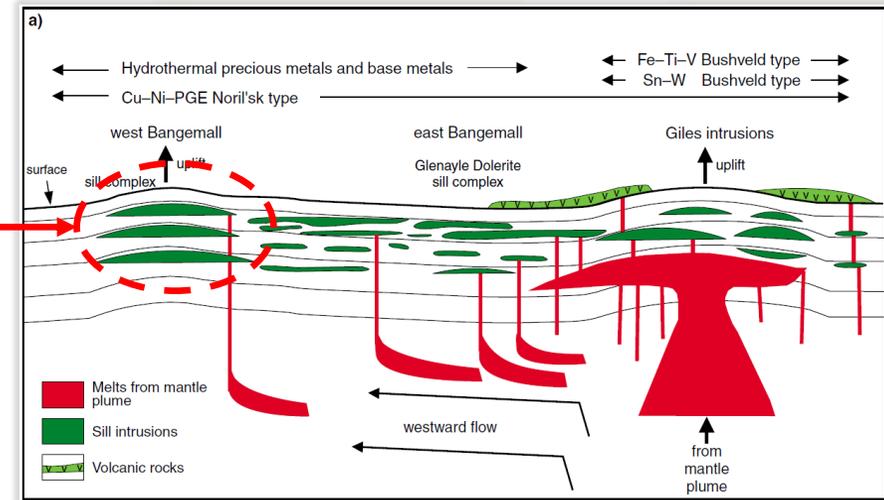
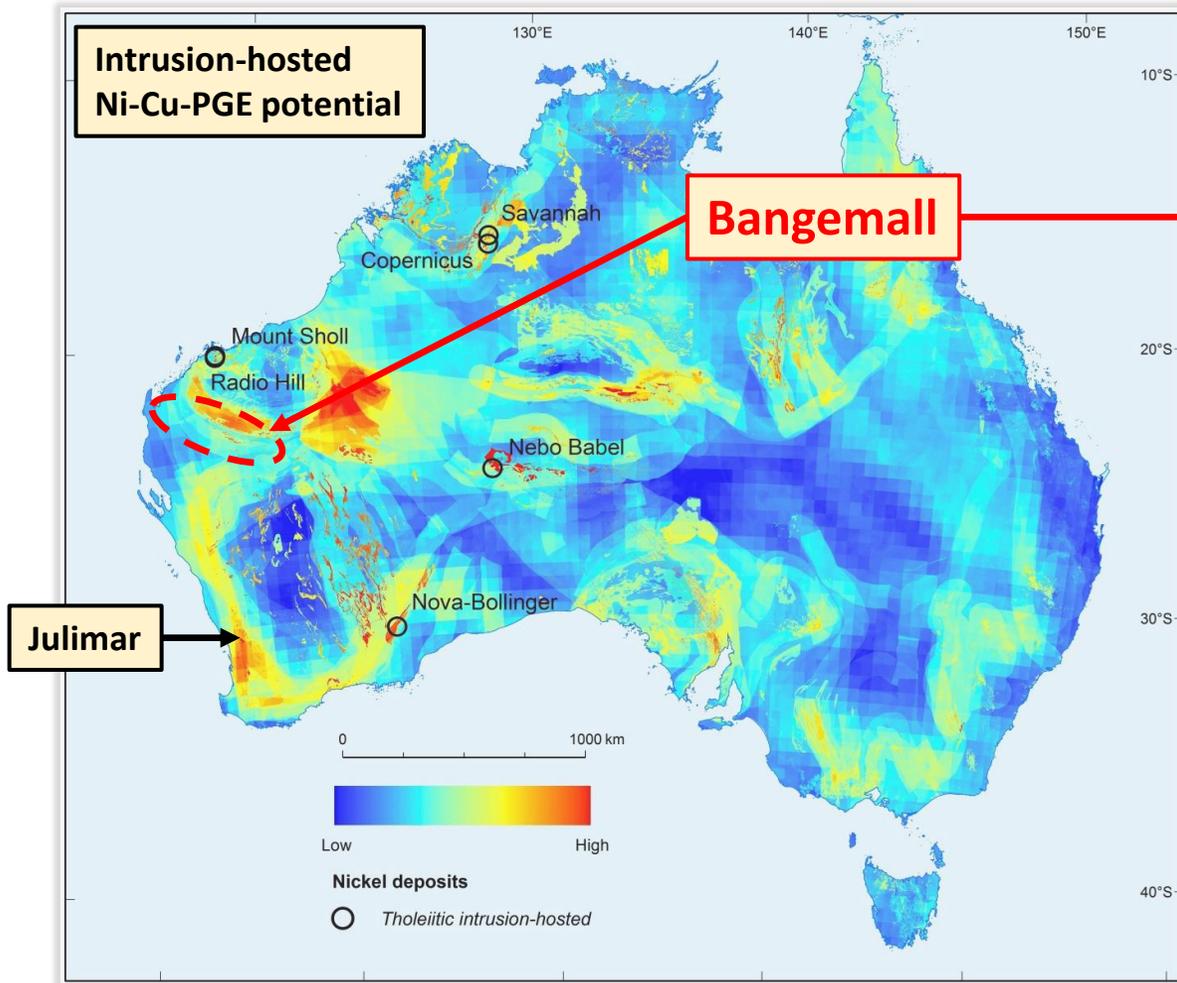
Bangemall Ni-Cu-PGE model

Warakurna Large Igneous Province (LIP)

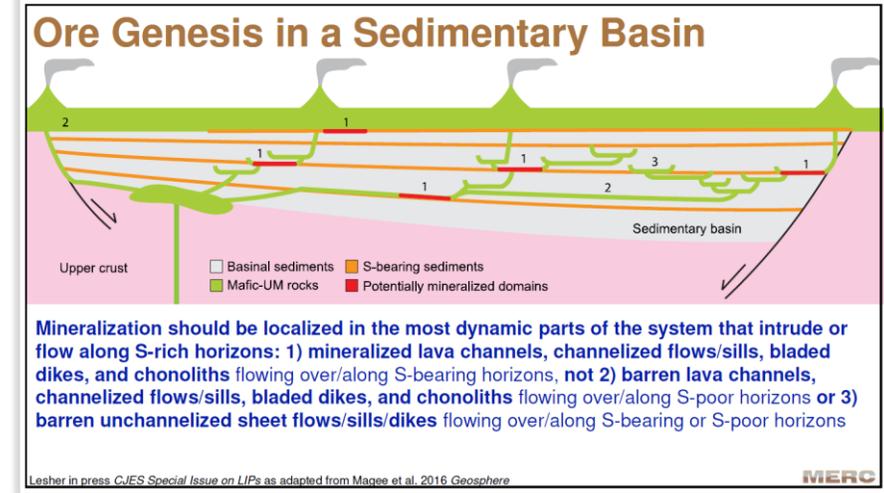
- Widespread mafic intrusive event related to mantle plume
- **Bangemall** – 1070Ma
Kulkatharra Dolerite
- **West Musgraves** – 1078Ma
Giles Complex
 - **Nebo and Babel** deposits (1.2Mt Ni, 1.3 Mt Cu)



Bangemall Ni-Cu-PGE model



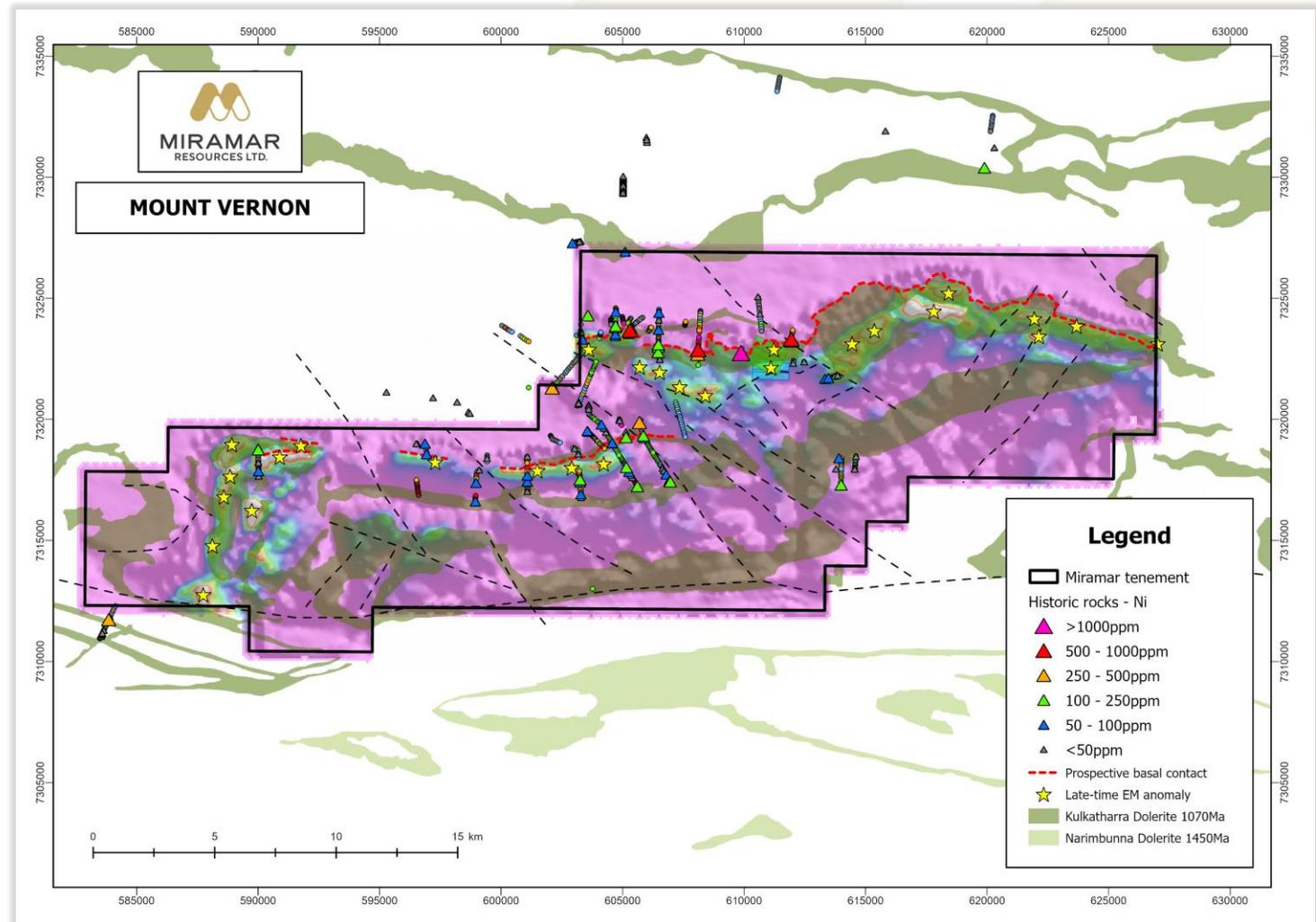
Morris and Pirajno, 2005



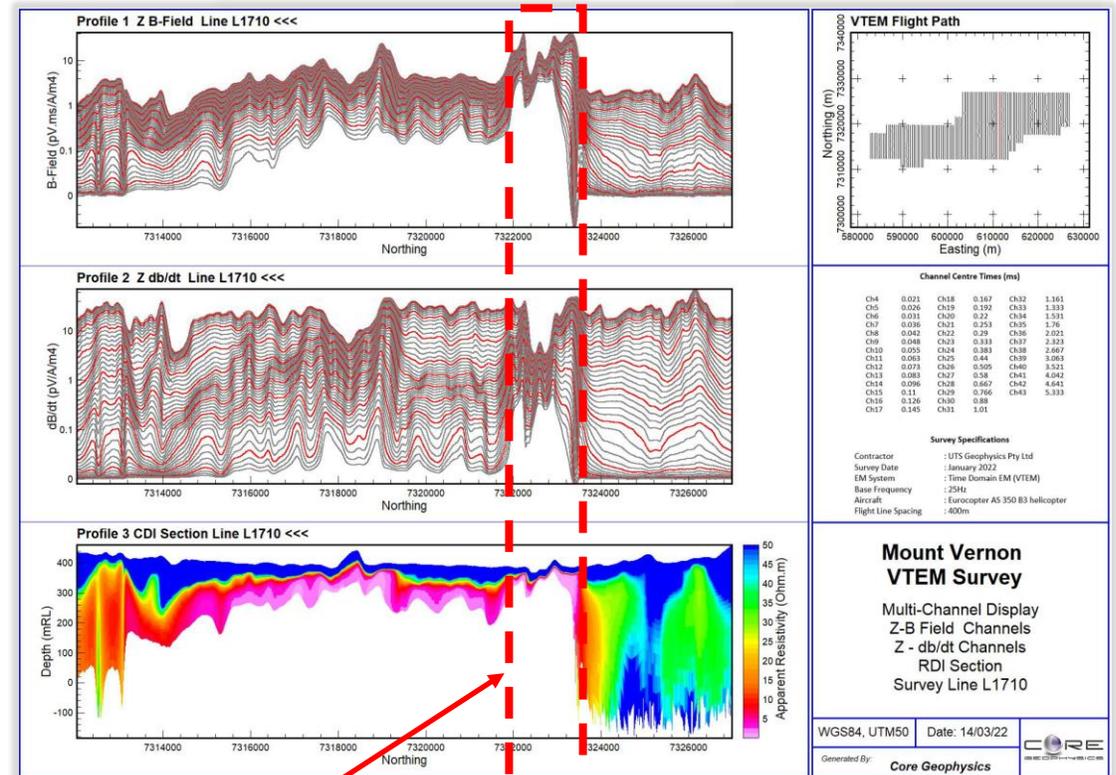
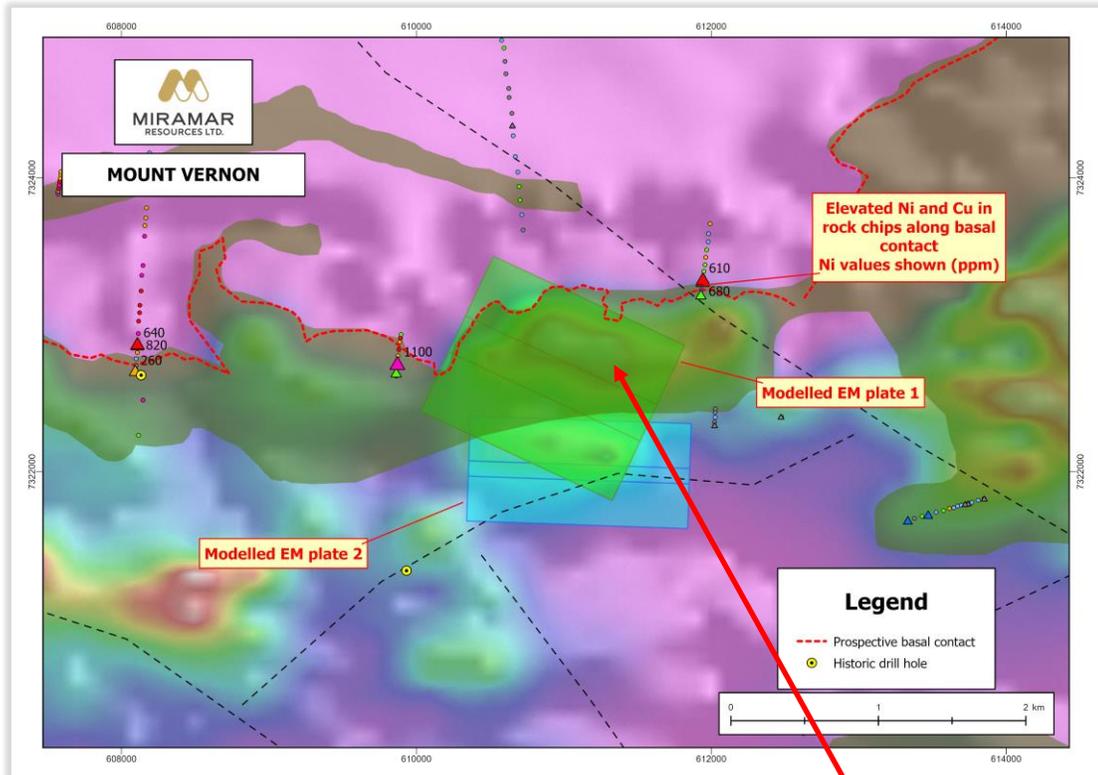
Leshner, 2016

Bangemall - Mount Vernon

- **Kulkatharra Dolerite** sills intruding into sulphidic sediments
- **>30km** of basal contact
- Multiple rock chips with elevated **Ni** and **Cu**
- Limited historic drilling targeted Cu-Pb-Zn
- 2022 VTEM survey identified multiple **late-time anomalies**
- RC/DD drilling planned



Bangemall - Mount Vernon



Large late-time EM anomaly at base of dolerite sill above sulphidic sediments

Eastern Goldfields Projects

Strategic land position in world-class gold province

Gidji JV

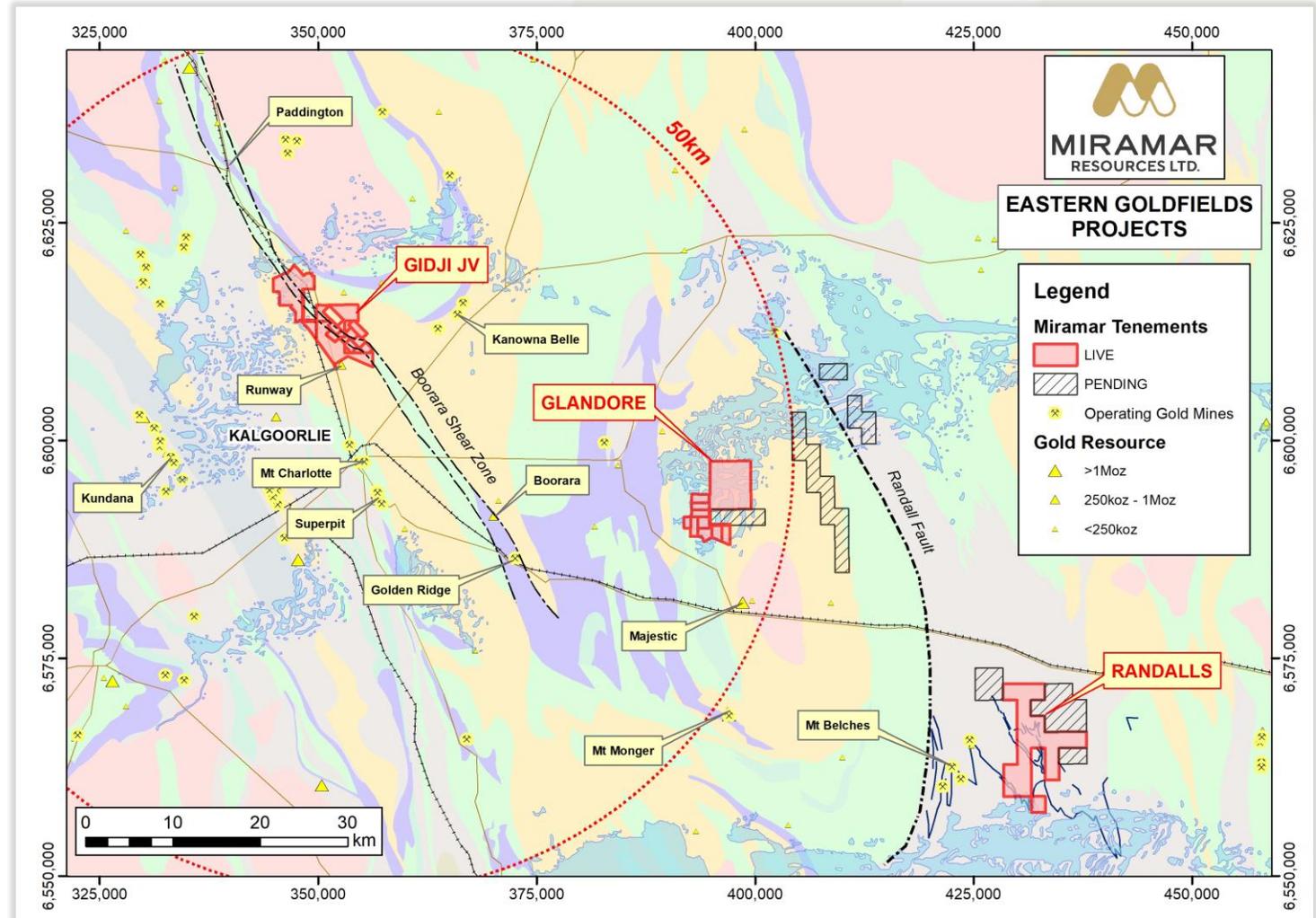
- Potential new gold camp close to Kalgoorlie

Glandore

- Multiple high-grade gold results from lake drilling

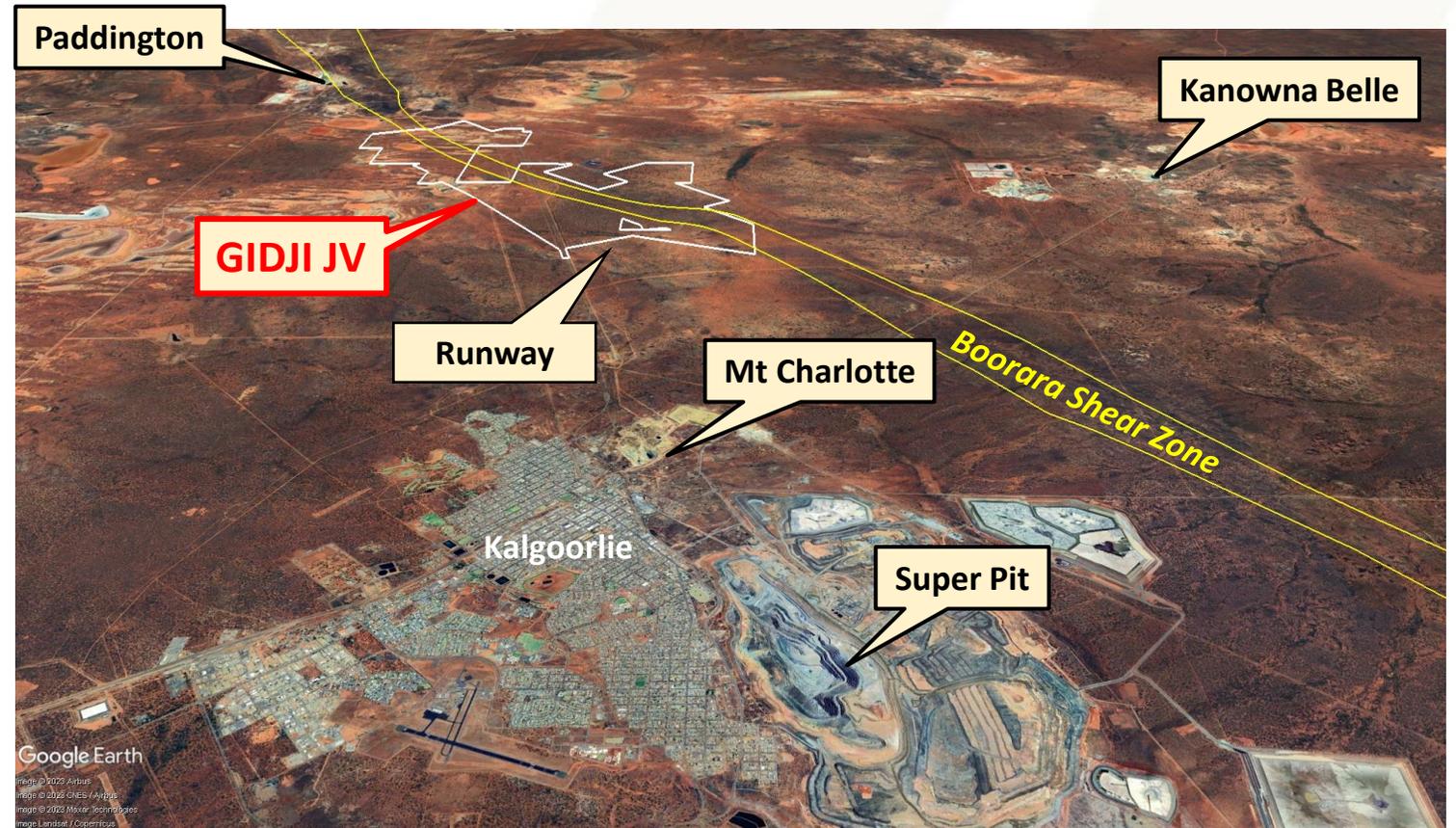
Randalls

- Gold and/or lithium potential



Gidji - “cheapest house on the best street”

- 15km N of Kalgoorlie
- **Dilational jog** within major regional structure
- Proximity to multiple large gold deposits
- Multiple large aircore gold footprints outlined beneath shallow cover
- Targeting significant bedrock gold mineralisation



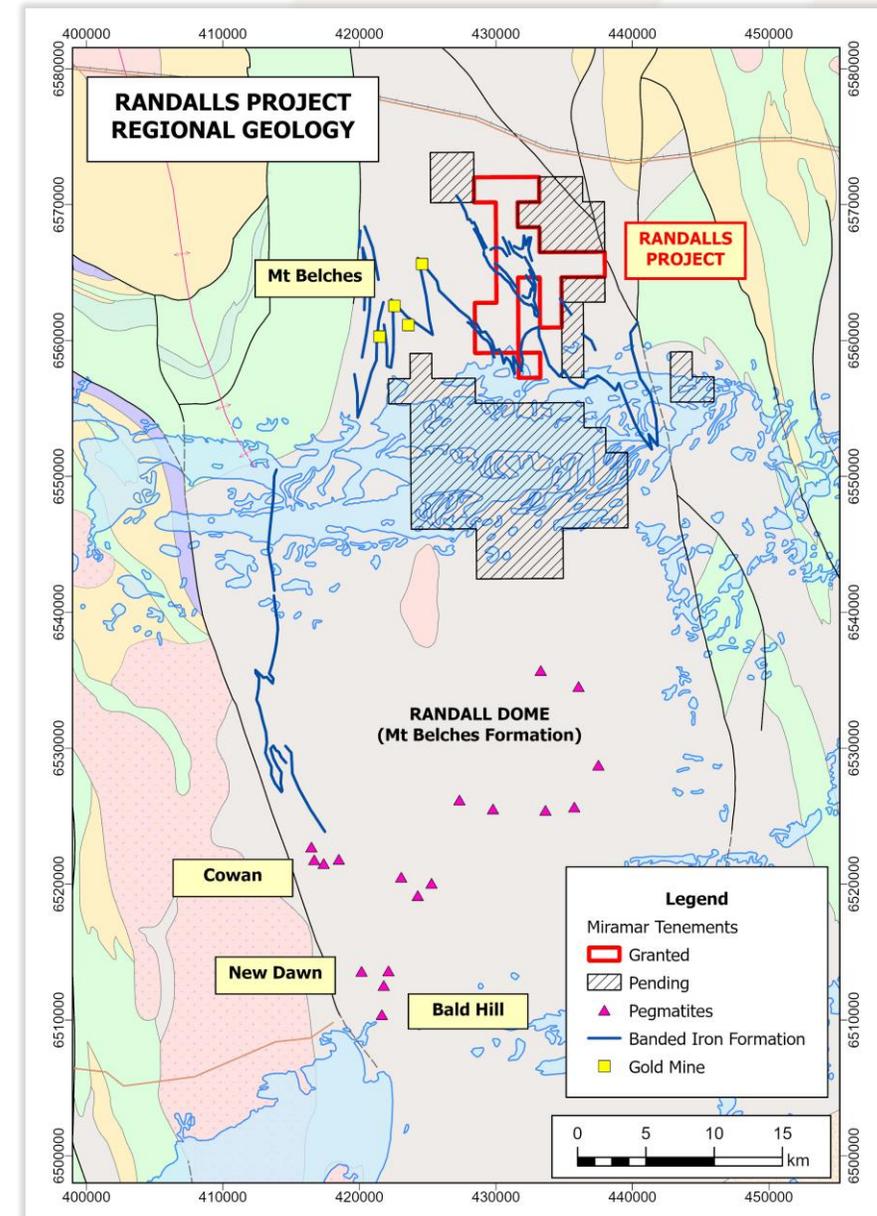
Randalls (Au/Li)

Lithium potential within “Randall Dome”

- Same geological setting as **Bald Hill**
- No previous lithium exploration
- New applications consolidate land position over prospective geology
- Soil sampling planned

Gold targets

- Folded BIF adjacent to multiple high-grade gold mines



Exciting Exploration Target Portfolio

		Exploration Stage ->				
		Target Generation	Geochem/Geophys anomalism	Initial Drill Testing	Bedrock mineralisation	Resource Delineation
Opportunity Size ->	<ul style="list-style-type: none"> • Blue Bar 	<ul style="list-style-type: none"> • Mt Vernon 			<ul style="list-style-type: none"> • Whaleshark • Marylebone 	
	<ul style="list-style-type: none"> • Randalls • Dooley Downs 	<ul style="list-style-type: none"> • The Jog • Gidji Nickel 	<ul style="list-style-type: none"> • Highway • Glandore West 	<ul style="list-style-type: none"> • Blackfriars • 8-Mile • Glandore East 	<ul style="list-style-type: none"> • Gidji Lake 	

Corporate Snapshot

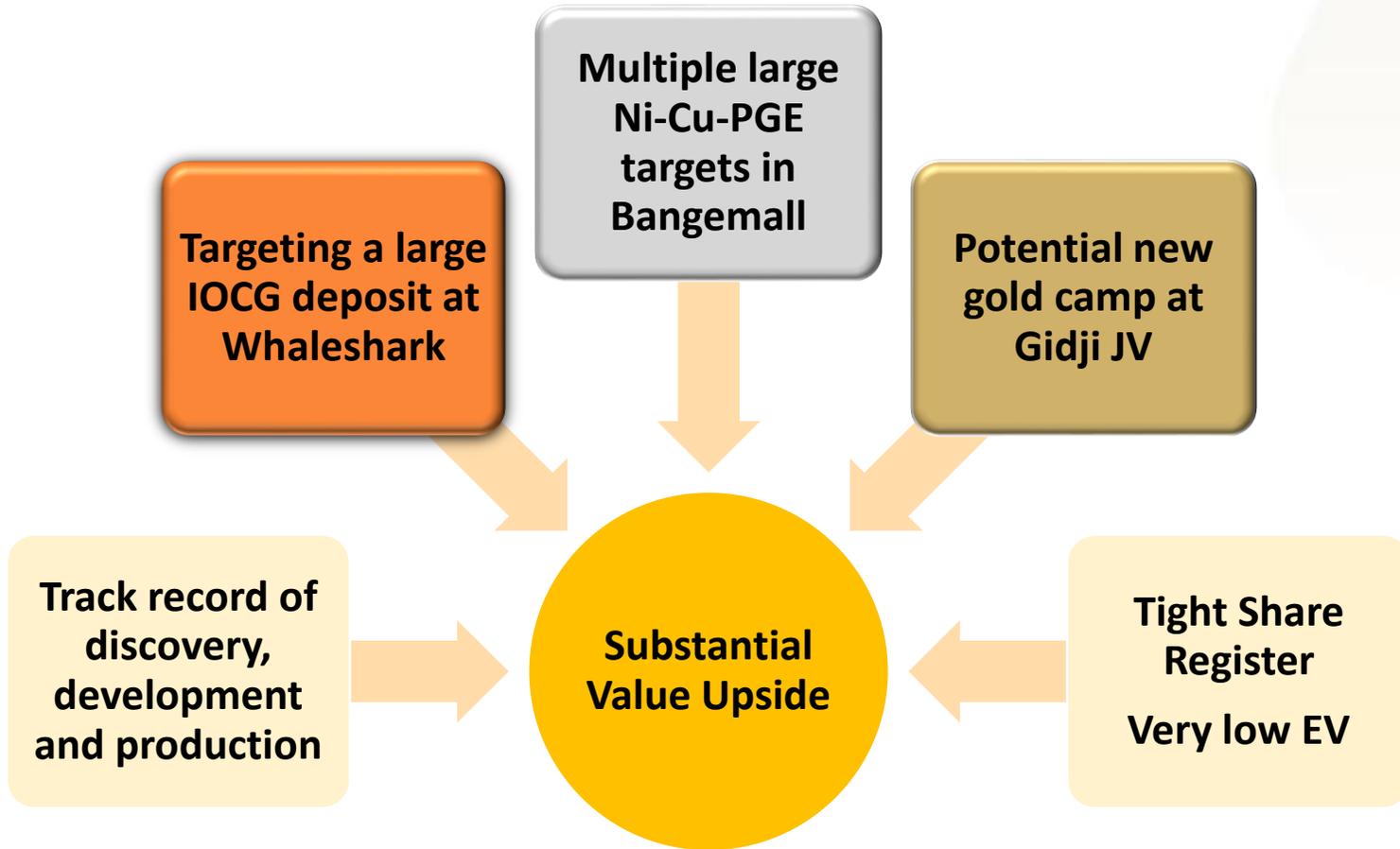
ASX Code	M2R
Shares on Issue	148.9M
Listed Options (@25c)	59.7M
Market Cap (@ 5c)	\$7.4M
Cash/Investments	\$1.5M
Enterprise Value	\$5.9M

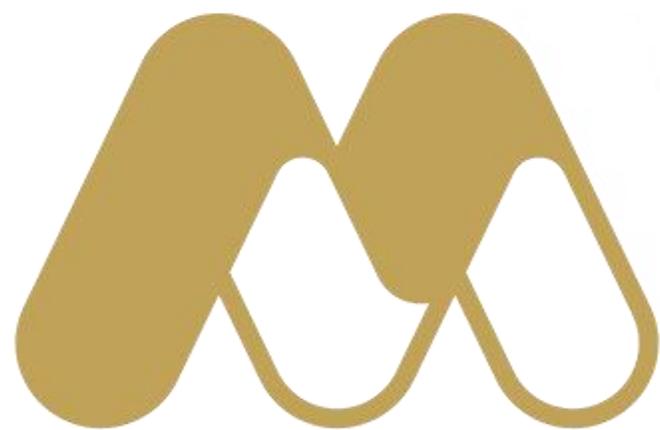
Substantial Shareholders	%
XGS Pty Ltd (Allan Kelly)	9.4
Faraday Nominees Pty Ltd	6.5
Top 20 Holders	46.2
Combined Board	10.2
No. of Shareholders	985

Experienced Board – with track record of successful discovery, development and production

Allan Kelly (Exec. Chairman)	<ul style="list-style-type: none"> • Geologist/Geochemist/Manager/Brewer • 30 years' experience in mineral exploration, development, production and management • Founding MD, Doray Minerals Ltd (2009-2016) • AMEC “Prospector” Award – 2014
Marion Bush (Technical Director)	<ul style="list-style-type: none"> • Geologist/Analyst/Manager • 25 years' experience in exploration, management, directorship and marketing
Terry Gadenne (Non-Exec. Director)	<ul style="list-style-type: none"> • 30 years' experience in military/civil aviation, agriculture and mining services • Former MD of Mining Logic Pty Ltd and Chief Pilot of Mackay Helicopters Pty Ltd.
Mindy Ku (Co. Sec/CFO)	<ul style="list-style-type: none"> • 15+ years' experience with public and private companies

Why Miramar Resources?





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