

ASX ANNOUNCEMENT



MIRAMAR TO PRESENT AT 121 MINING INVESTMENT ONLINE CONFERENCE

Miramar Resources Limited (ASX:M2R, “Miramar” or “the Company”) is pleased to advise that the Company will be participating in the 121 Mining Investment APAC Online Event from 22-24 March 2022.

A copy of Miramar’s latest Investor Update presentation is attached and will also be available on the Company’s website.

Miramar’s Executive Chairman, Mr Allan Kelly, said the Company looked forward to speaking to existing and potential shareholders about exploration activities across its various Western Australian gold, IOCG and Ni-Cu-PGE projects.

“We are just about to kick off drilling again at our Gidji and Glandore projects and this will be the start of another busy 12 months for the Company,” Mr Kelly said.

“Come mid-year, our focus will shift to our northern projects, including drill testing large MMI soil anomalies at Whaleshark where we think there is potential for discovery of a large IOCG system,” he added.

For more information on Miramar Resources Limited, please visit the company’s website at www.miramarresources.com.au, follow the company on social media on social media (Twitter @MiramarRes and LinkedIn @Miramar Resources Ltd) or contact:

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Margie Livingston
Ignite Communications
margie@ignitecommunications.com.au

This announcement has been authorised for release by Mr Allan Kelly, Executive Chairman, on behalf of the Board of Miramar Resources Limited.



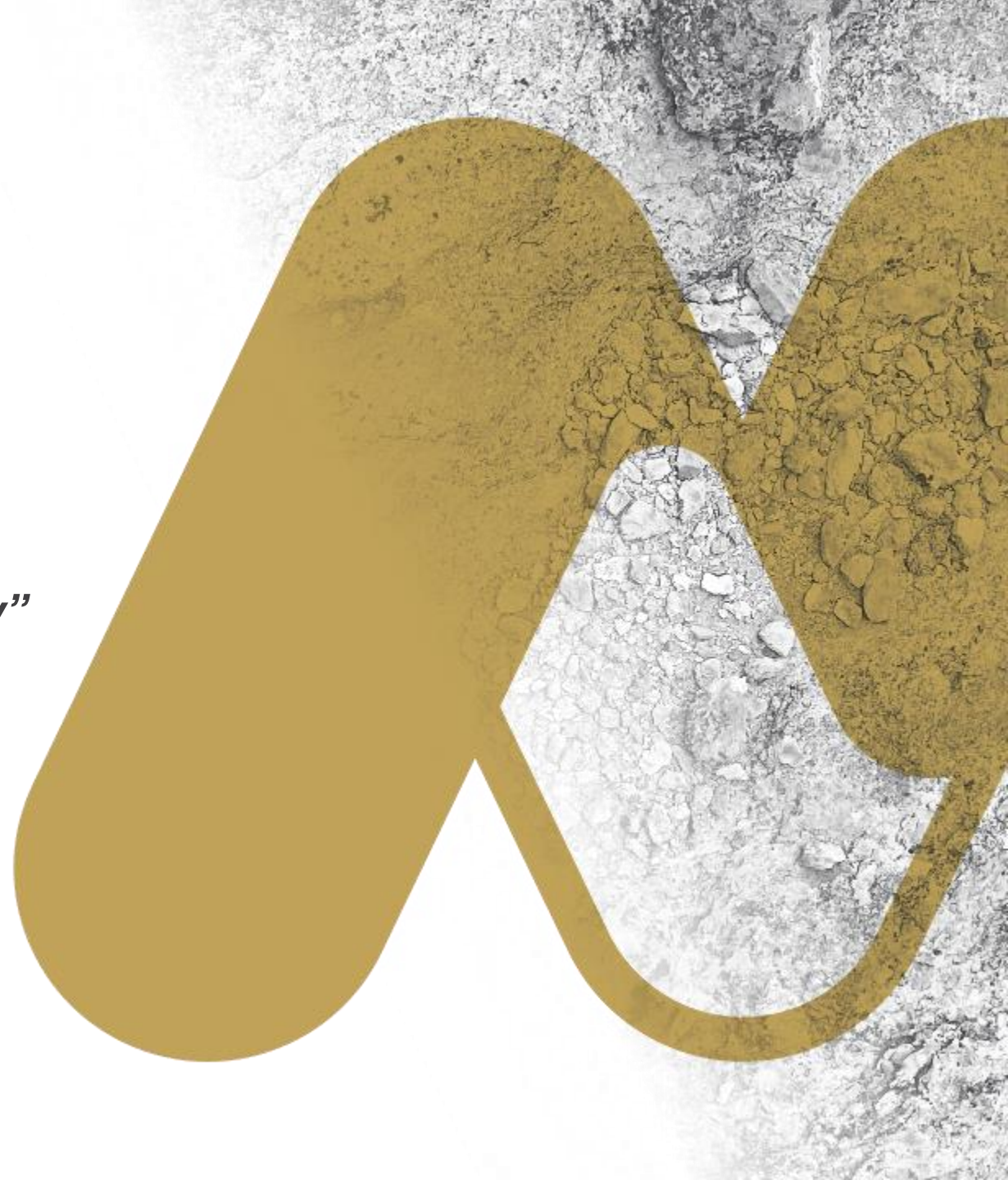
MIRAMAR
RESOURCES LTD.

Miramar Resources Ltd

“Creating shareholder value through discovery”

Investor Update – March 2022

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 - Investment Highlights

WA focussed gold, IOCG and Ni-Cu-PGE explorer

- Strategic landholding at **Gidji JV** with potential for a new **gold** camp **15km N of Kalgoorlie**
- Very large **gold** system outlined at **Glandore** with historic DDH results up to **4m @ 44.3g/t Au**
- Large **IOCG** targets identified at **Whaleshark**
- First mover in emerging **Bangemall Ni-Cu-PGE** province

Substantial share price upside

- Regular news flow from active exploration programs across multiple projects
- Board track record of successful discovery, development and production
- Tight capital structure, Low EV



Corporate Snapshot

ASX Code	M2R
Shares on Issue	56.3M
Shareholders	~760
Market Capitalisation (@ 18c)	\$10.1M
Cash (@ 31 Dec 21)	\$3.0M
Enterprise Value	\$7.1M

Substantial Shareholders	%
XGS Pty Ltd (Allan Kelly)	11.9
Faraday Nominees Pty Ltd	6.3
Top 20 Holders	43.0
Combined Board	13.0

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

Allan Kelly (Exec. Chairman)	<ul style="list-style-type: none"> • Geologist/Geochemist/Manager • ~30 years experience in mineral exploration, development and gold production • 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"> • Rescue helicopter pilot and former Army and Navy Officer • 25+ years experience in the defence forces, aviation, agriculture and mining services
Mindy Ku (Co. Sec/CFO)	<ul style="list-style-type: none"> • 15+ years experience with public and private companies

Project Portfolio



Gidji JV (80%) – Au and Ni

- Potential new gold camp **15km N of Kalgoorlie**
- Paddington “lookalike” target at **Marylebone**
- Multiple drill targets identified for testing
- Nickel sulphide potential



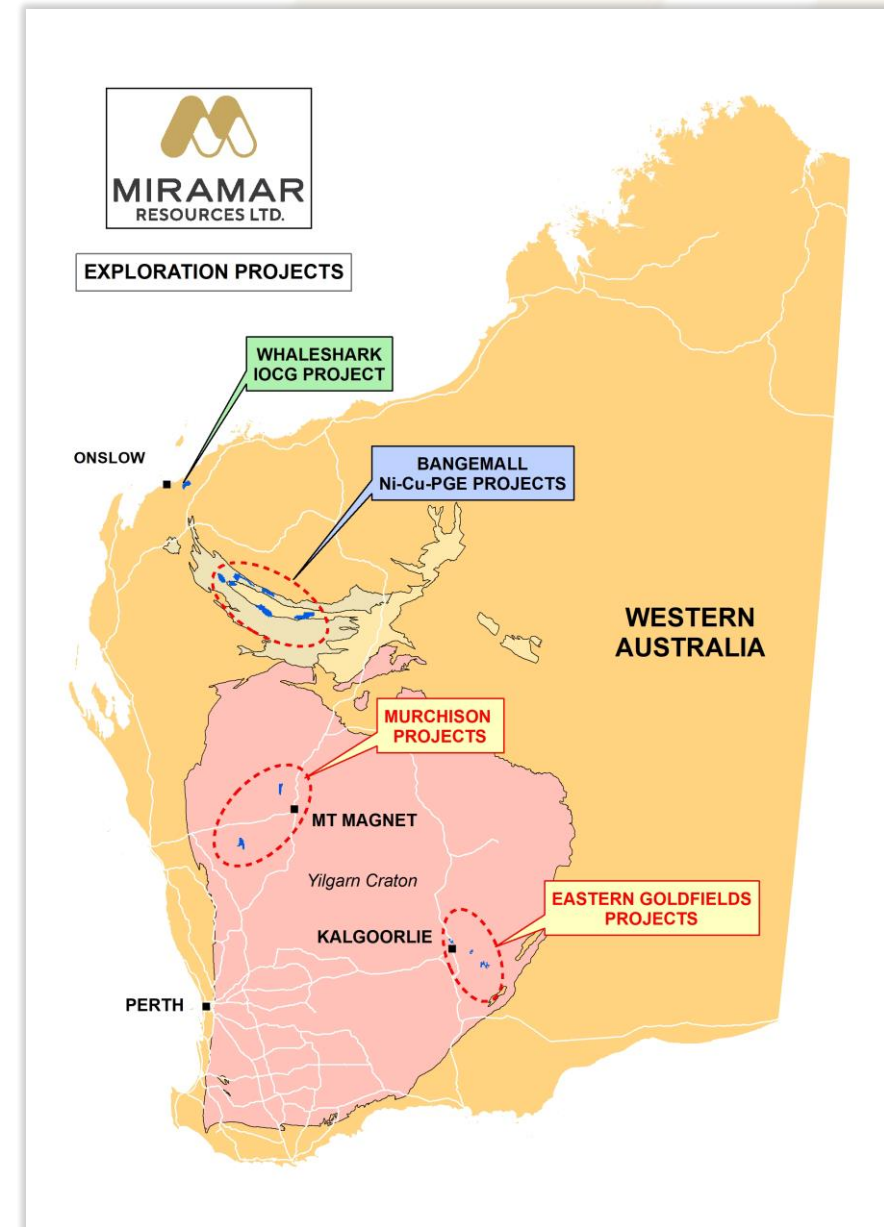
Glandore - Au

- Underexplored project **40km E of Kalgoorlie**
- High-grade DDH results up to **4m @ 44g/t Au**
- Very large new aircore gold footprint outlined



Additional discovery opportunities

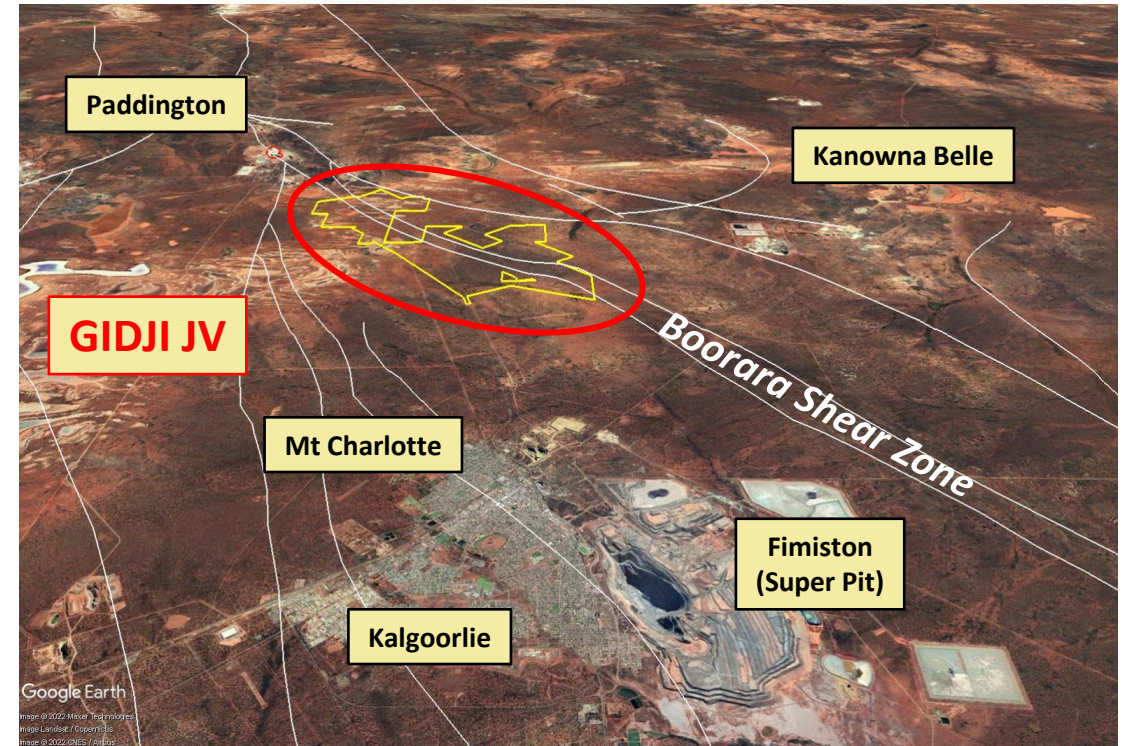
- Large **IOCG** targets outlined at **Whaleshark**
- Multiple **Ni-Cu-PGE** targets in **Bangemall** region
- Mineralised BIF at **Randalls**
- Underexplored **Murchison** region projects



Gidji JV (80%) – Au and Ni potential

Underexplored strategic land position
15km north of Kalgoorlie, WA

- 15km long segment of major regional structure – “**Boorara Shear Zone**”
- Along strike from large gold deposits:
 - **Paddington (4 Moz)**
 - **Aphrodite (1.7 Moz)**
 - **Zoroastrian/Excelsior (0.8 Moz)**
 - **Boorara/Golden Ridge (0.5 Moz)**
- Ideal location in proximity to multiple gold mining and/or processing operations
- Underexplored due to transported cover



Marylebone

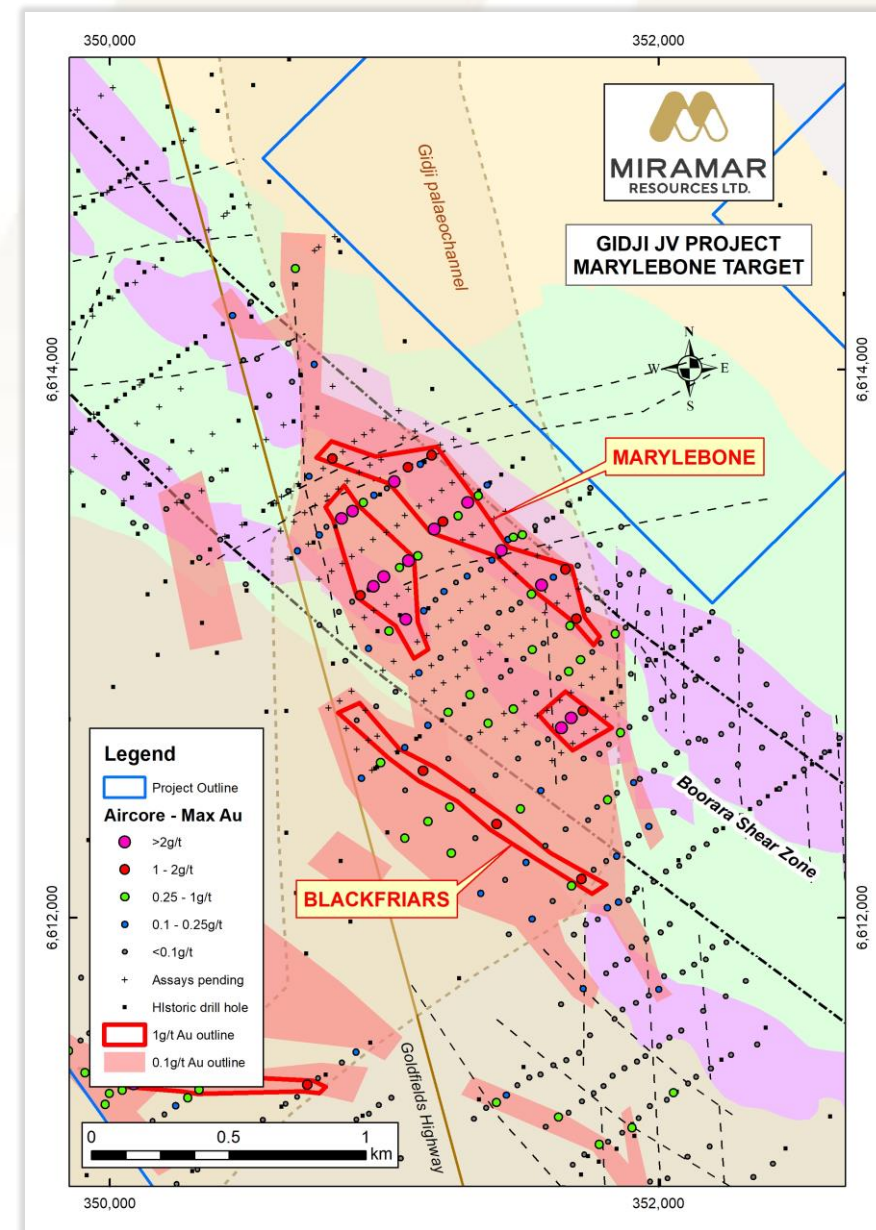
Potential for a large new gold discovery under transported cover

- >2km long aircore gold footprint with multiple results **>2g/t Au**
- **Open to NW** – assays pending
- Similar geology, structure and scale to 4Moz Paddington deposit along strike

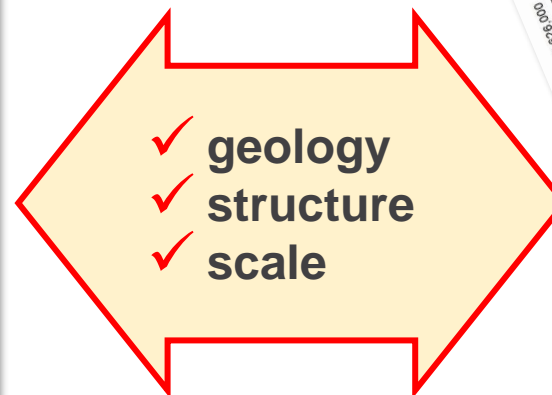
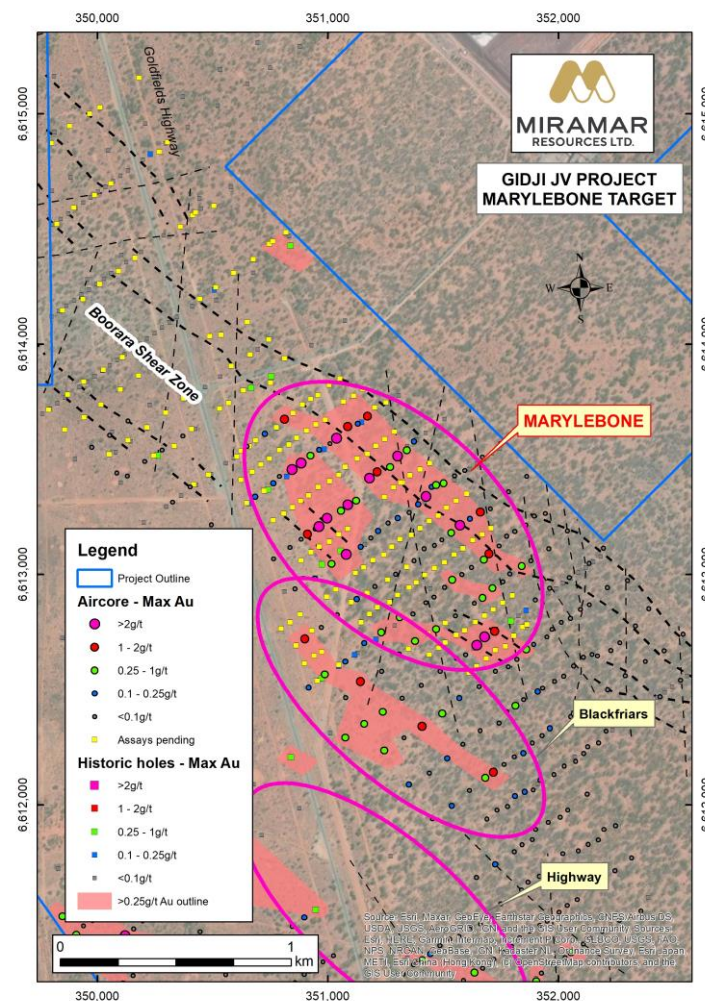
Additional targets

- **Blackfriars** - multiple +1g/t Au results over 1km of strike – **open to NW**
- **Highway** - 1km long untested auger Au anomaly

Nickel sulphide potential within Highway U/M



Marylebone vs Paddington



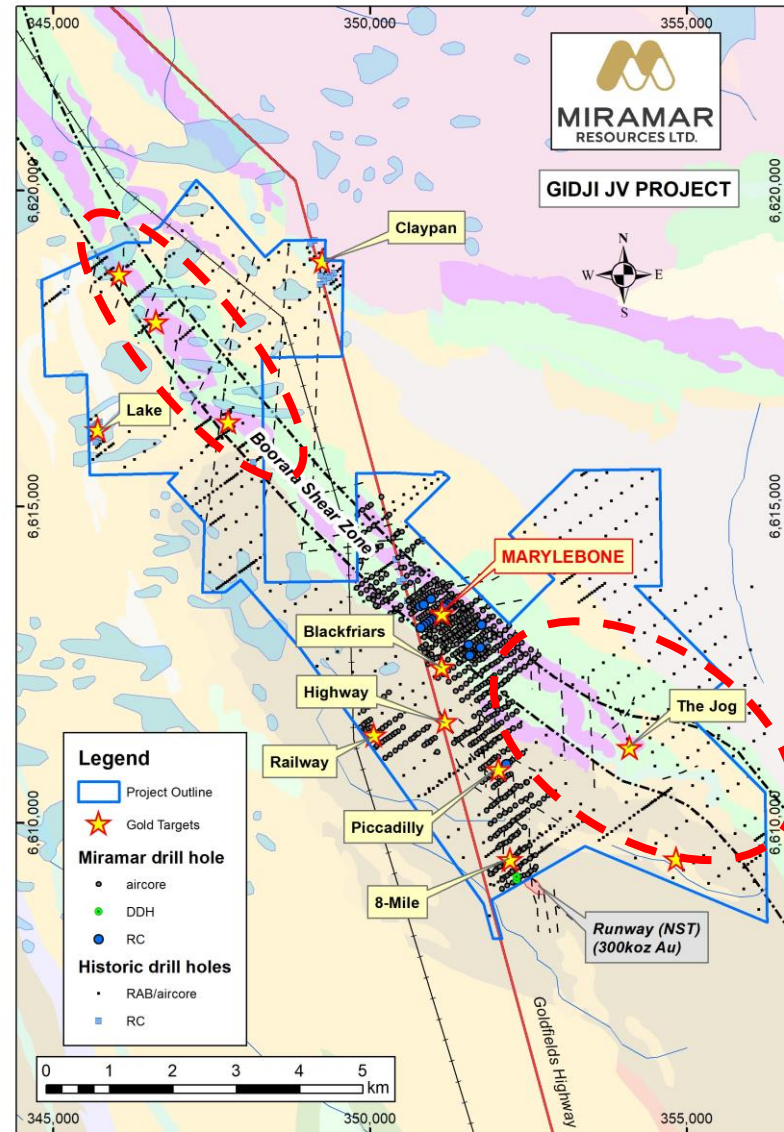
Paddington

- Discovered in **1982** beneath historic workings
- Dilational jog in Boorara Shear Zone crosscut by late N-S faults
- Quartz veins in dolerite sandwiched between seds/basalt
- 30m depleted zone above mineralisation
- Approx. **4Moz Au produced** since 1985

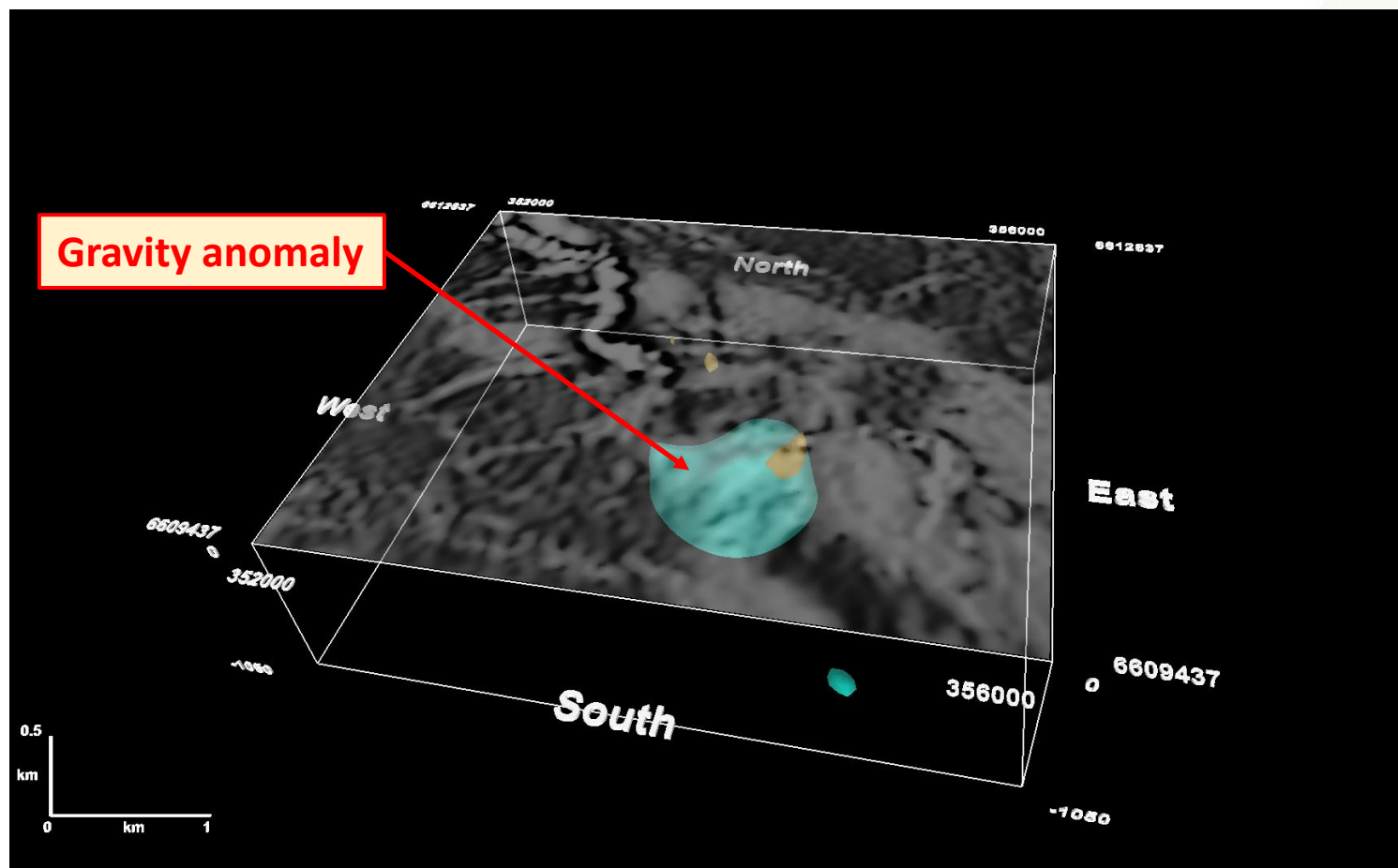
Gidji – Upside

Underexplored strategic land position with potential for a new gold camp

- Transported cover hampered previous exploration - most previous drilling <50m
- **Multiple gold targets** to be tested in 2022
 - **Marylebone** – RC/aircore assays pending
 - **Blackfriars/Highway** aircore – Q2
 - **Boorara North** – drone mags/aircore
 - **Boorara South** - EIS drilling applications for **8-Mile** and “**The Jog**”



Gidji JV – The Jog



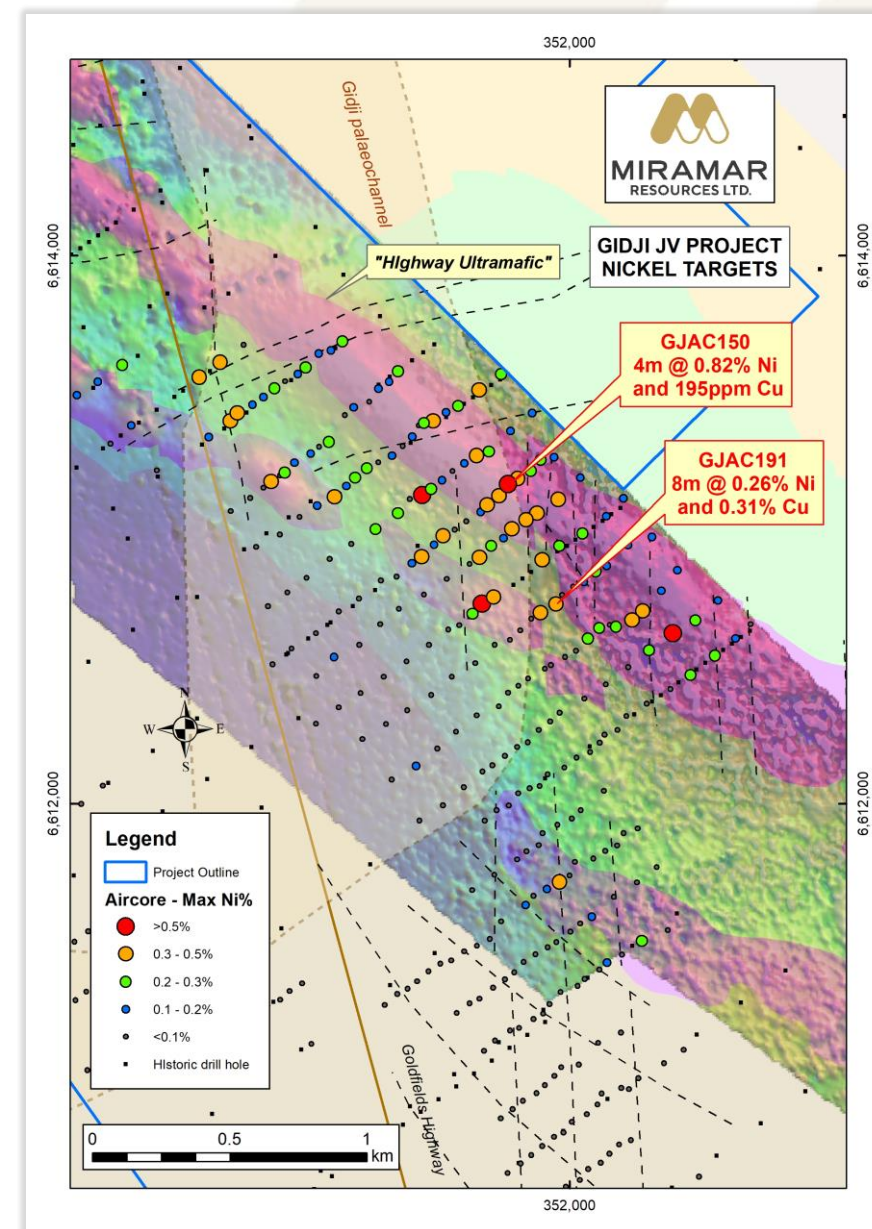
Large dilational jog within Boorara Shear Zone

- Dense body at 150m depth
- Magnetite destruction indicates potential alteration +/- gold mineralisation
- Never drill tested
- Soil sampling followed by RC/Diamond drilling

Gidji JV - Nickel

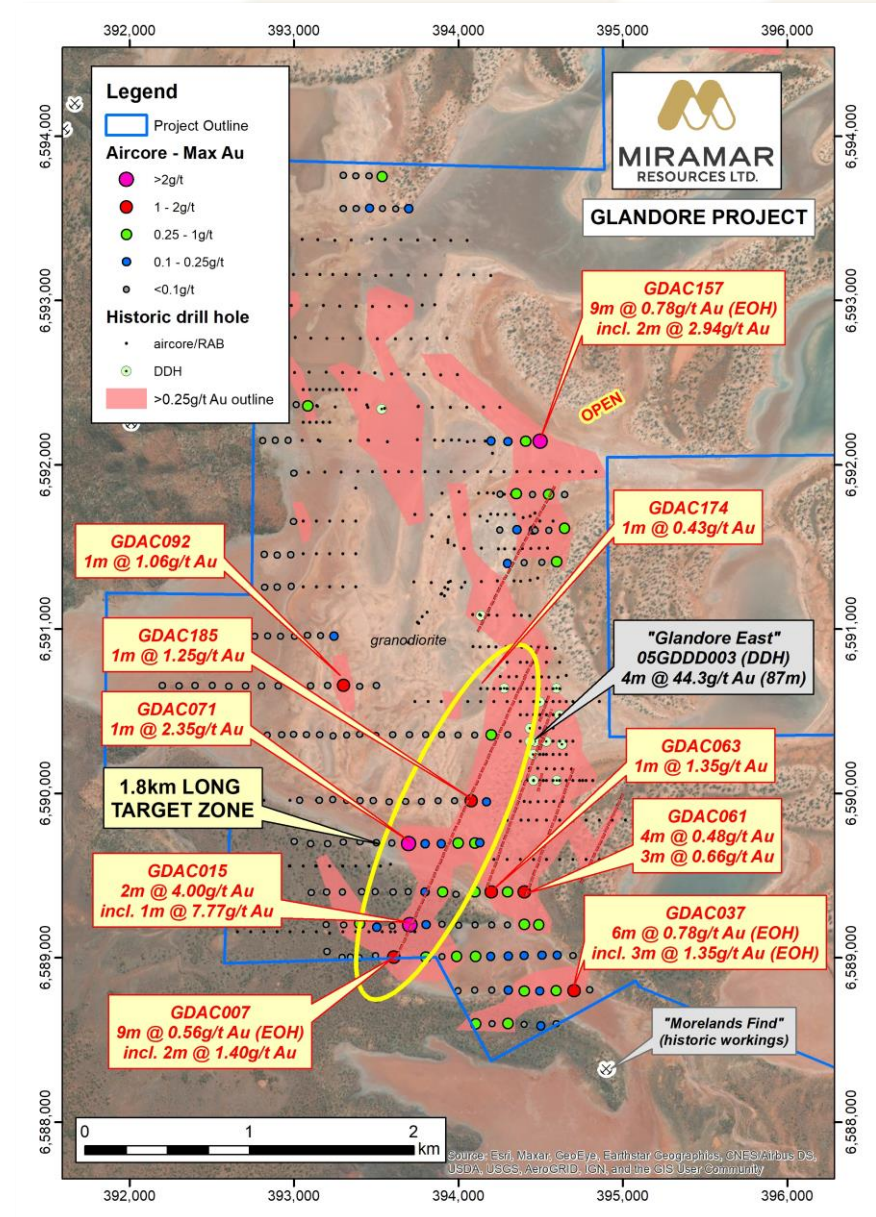
15km strike of “*Highway Ultramafics*” - host to Scotia and Saints Ni deposits

- Highly anomalous **Ni** and **Cu** results from gold-focussed aircore drilling
- Increasing **MgO** content towards east with **cumulate textures observed**
- Elevated “*Kambalda Ratio*” indicates potential for mineralised channel facies
- No existing EM data
- Infill aircore drilling and EM planned



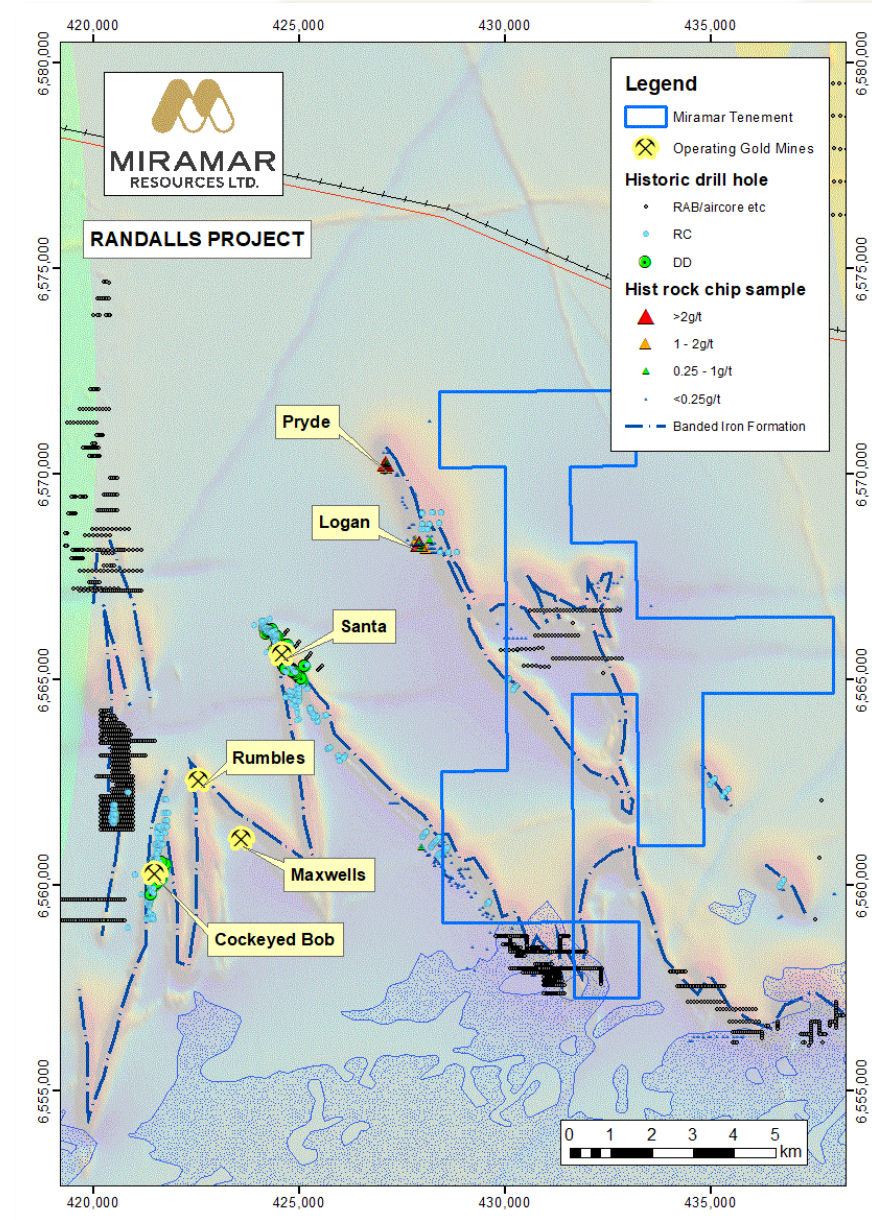
Glandore - Au

- Very large aircore gold footprint outlined under salt lake
- Multiple aircore holes ending in $>0.25\text{g/t Au}$
- Historic DDH results incl. **4m @ 44.3g/t Au**
- Multiple NE-striking structures in granodiorite = potential for Majestic -style gold mineralisation



Randalls - Au

- Located 70km E of Kalgoorlie
- Folded BIF adjacent to Silver Lake's high-grade **Mt Belches** gold mines
- High-grade rock chips along strike – Pryde and Logan prospects
- Minimal previous exploration/drilling
- Reconnaissance aircore drilling to test BIF fold hinges



Capricorn Orogen Projects

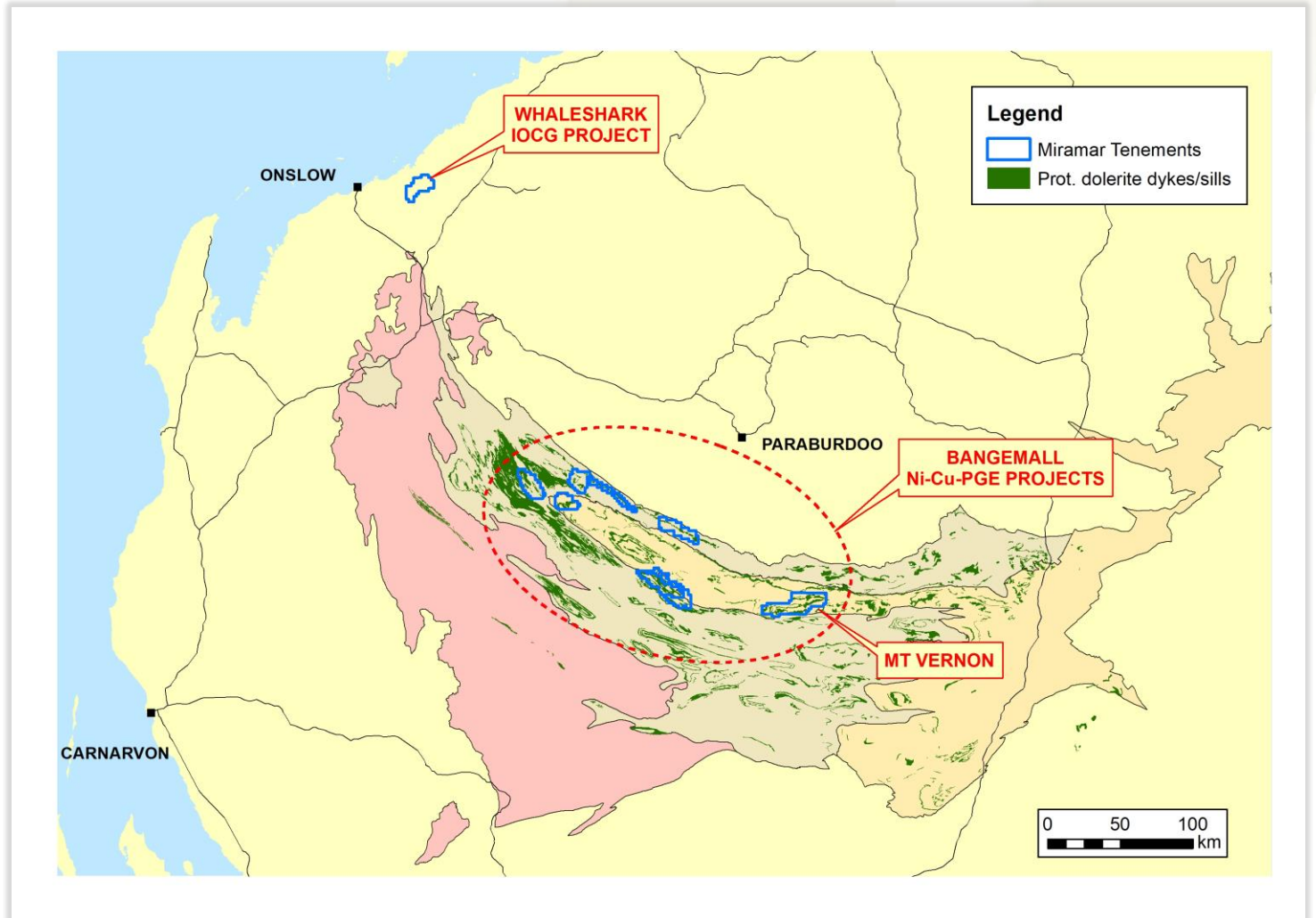
- WA's Proterozoic Orogens host multiple major gold and base metal deposits
- The Capricorn Orogen is vastly underexplored

Whaleshark

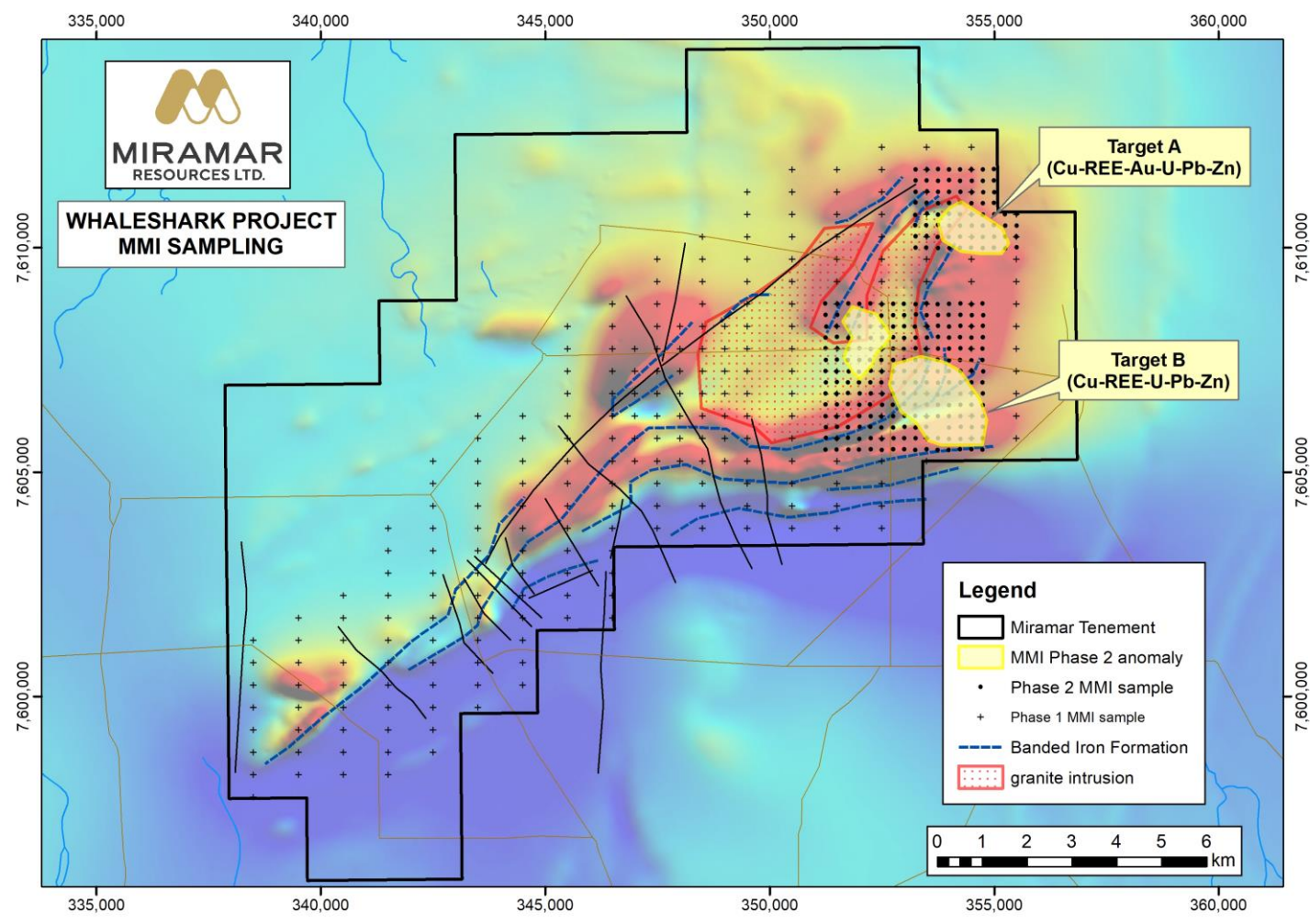
- Large **IOCG** targets under shallow cover

Bangemall Projects

- Strategic land position in emerging craton-margin **Ni-Cu-PGE** province



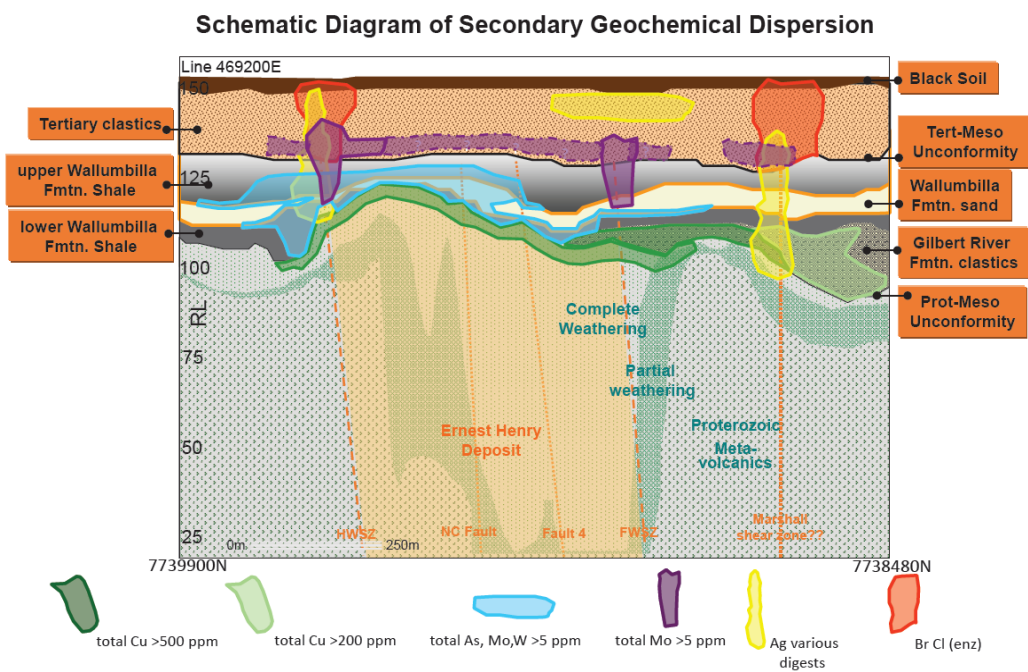
Whaleshark – large IOCG targets



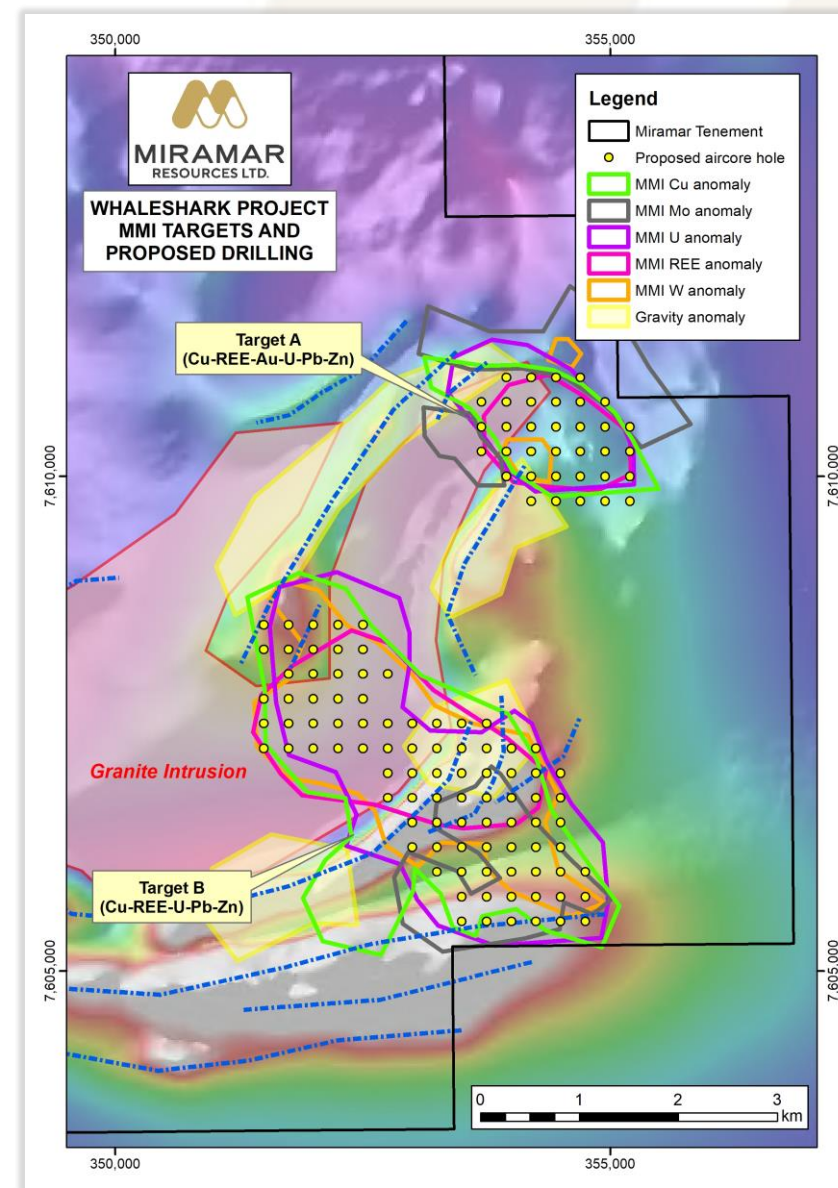
- 40km E of Onslow, WA
- Folded BIF intruded by granite
- Basement mostly <100m
- Overlapping gravity and magnetic anomalies
- Large MMI **Cu-REE-U** soil anomalies
- Planned work (Q2-Q3)
 - Infill gravity +/- EM
 - Interface drilling

Whaleshark IOCG

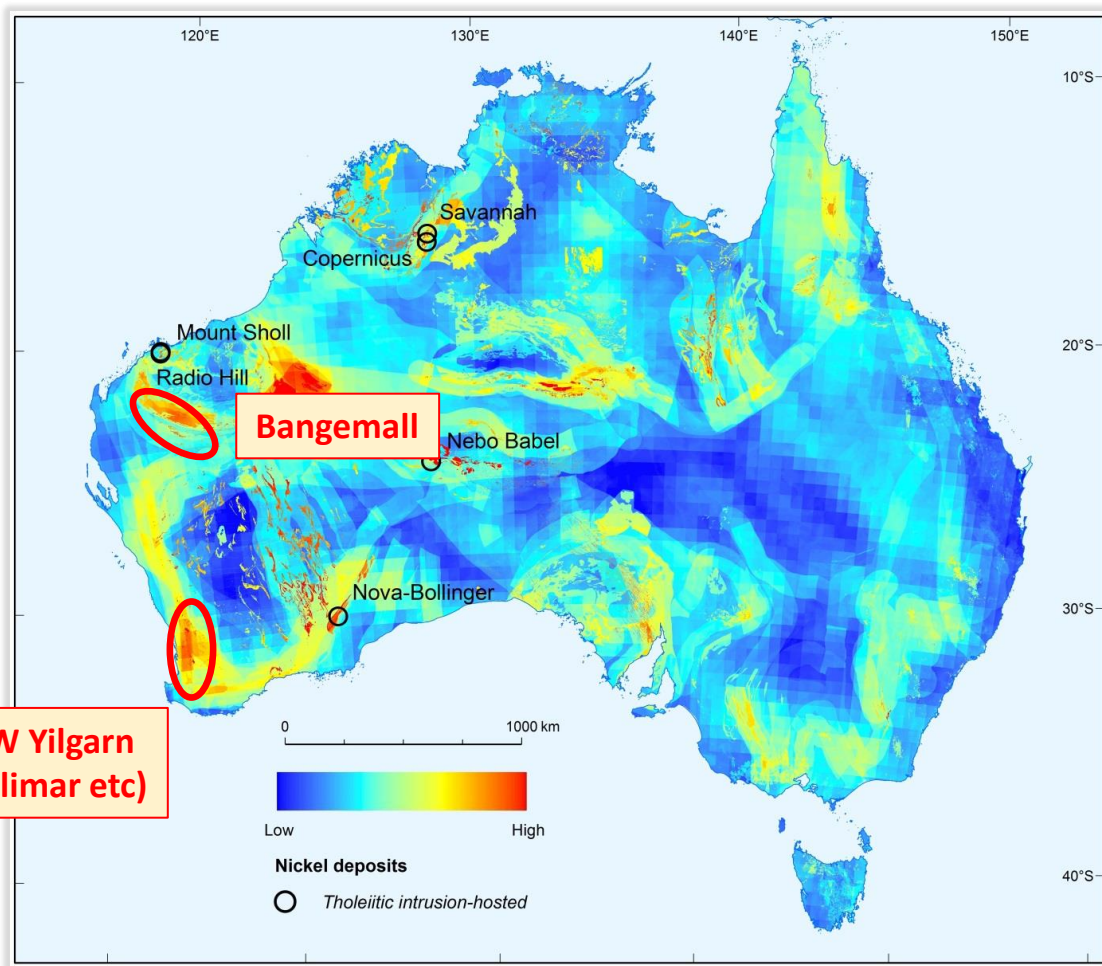
“Interface” aircore drilling targeting geochemical anomalism at unconformity between Proterozoic basement and overlying sediments



Ernest Henry IOCG Deposit, Queensland (Lilley and Hannan, 2016)



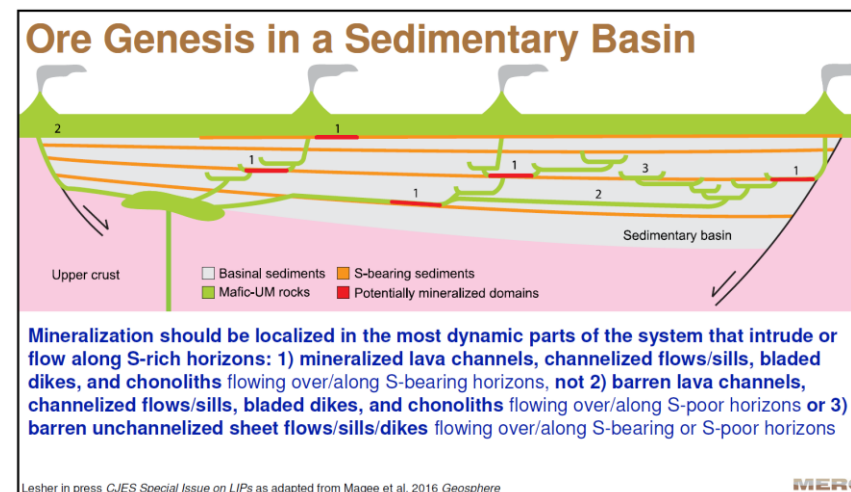
Bangemall Ni-Cu-PGE Projects



Source: Geoscience Australia Record 2016/001

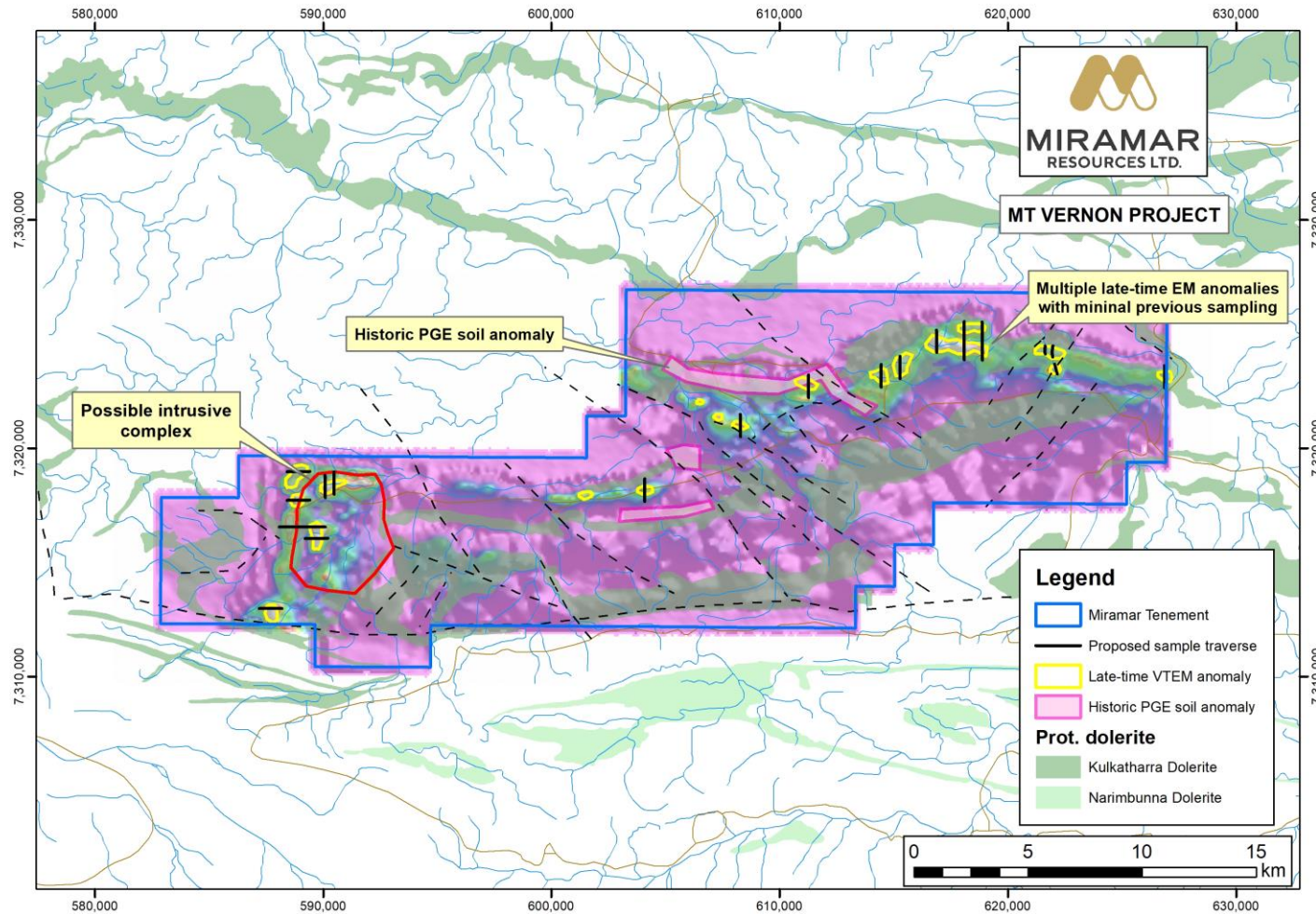
Key ingredients for Ni-Cu-PGE's

- ✓ Craton margin and/or crustal-scale faults
- ✓ Large volumes of S-undersaturated magma
- ✓ External S source (e.g. sulphidic sed)
- ✓ Dynamic high-flow environment
- ✓ Favourable site(s) for deposition



Leshner, 2019

Bangemall - Mt Vernon



- Historic **Ni-Cu-PGE soil anomalies** related to Prot. dolerite sills
- Jan 22 **VTEM** survey
 - **Multiple late-time anomalies**
 - Possible intrusion
- Follow-up work (Q2-3)
 - Soil/rock chip traverses
 - Ground EM
 - RC/DD Drilling

Project pipeline = significant value upside

Project	Applications	Target Generation	Aircore Drilling	Bedrock Testing
GIDJI JV			MARYLEBONE	
			Railway 8-Mile The Jog Piccadilly	
		Claypan Lake	Blackfriars Highway Boorara North	
		Nickel targets		
GLANDORE			GLANDORE EAST	
			Lake targets	
RANDALLS		Randalls		
MURCHISON		Lang Well		
	Lakeside			
BANGEMALL	Various	Mt Vernon Dooley Downs		
WHALESHARK		IOCG targets		



Active exploration = regular news flow

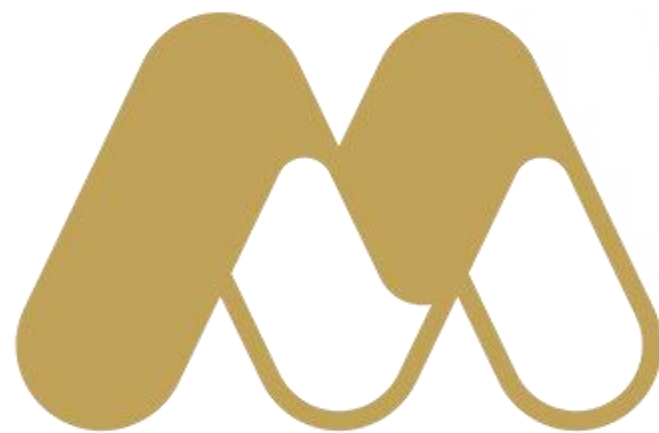
Project	Target	Mar Qtr	Jun Qtr	Sep Qtr	Dec Qtr
GIDJI JV	MARYLEBONE	RC	Aircore/RC		
	Blackfriars Highway		Aircore/RC		
	Boorara North	Drone mags	Heritage survey - Aircore		
	Boorara South/The Jog	Soil sampling	Heritage survey	RC/DDH	
	Nickel targets		Aircore		
GLANDORE	GLANDORE EAST		DDH		
	Lake Targets		Aircore		
RANDALLS	Randalls		Aircore		
WHALESHARK	IOCG targets			Aircore	
BANGEMALL	Mt Vernon		Geochem/EM		
	Dooley Downs		Geochem		
	Other targets				
MURCHISON	Lang Well				Aircore
	Lakeside				

Miramar Resources - Summary

Regular news flow from active exploration across multiple gold, Ni-Cu-PGE and IOCG projects

- Uncovering a **potential new gold camp** at **Gidji** including a ***“Paddington lookalike”*** at **Marylebone**
- Multiple additional discovery opportunities
 - Large gold footprint and high-grade DDH results at **Glandore**
 - Underexplored mineralised BIF at **Randalls**
 - **Large IOCG targets** outlined at **Whaleshark**
 - First mover in **Bangemall Ni-Cu-PGE** province
- **Experienced Board** with track record of successful discovery, development and production
- **Substantial upside** with further exploration success





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