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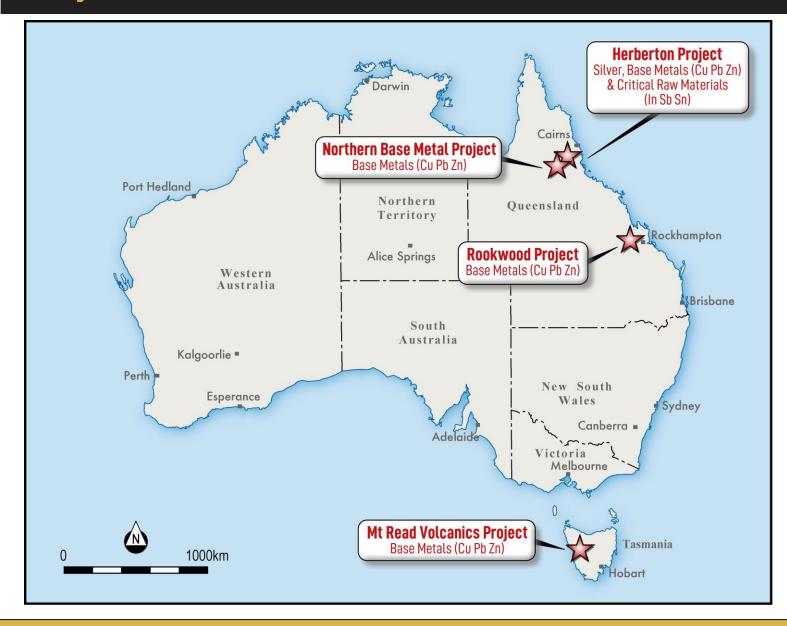
# **Company Overview**

Iltani Resources (ASX:ILT)	
Share price	\$0.32
Shares on issue	41.8 million
Unlisted options	15.4 million
Market capitalisation	\$13.4 million
Cash (31 March 2024)	\$3.0 million
Enterprise value	\$10.4 million
Shareholder Structure	
Board & Management	9.3%
Top 20 (excl Board & Management)	45.4%
Board	
Non-Executive Chairman	Anthony Reilly
Managing Director	Donald Garner
Non-Executive Director & CoSec	Justin Mouchacca

Management & Technical Team	
Donald Garner BSc (Hons) MSc MAusIMM MSEG Managing Director	<ul> <li>25+ years experience geology &amp; finance</li> <li>MD/ED Red River Resources (2014-2021)</li> </ul>
Erik Norum BSc (Applied Geology) MAIG Exploration Manager	<ul> <li>Geologist with 30+ years experience</li> <li>20+ years experience at senior management level in exploration &amp; resource development in Australia &amp; overseas</li> <li>Chief Geologist EV Resources (2022-2024) focusing on Herberton Region</li> </ul>
Bruce Gemmell PhD MA BSc (Hons) FSEG Technical Consultant	<ul> <li>Globally renowned ore deposit geology expert         <ul> <li>epithermal, copper and massive sulphide deposits</li> </ul> </li> <li>Worked at the Centre of Excellence in Ore Deposits and Exploration Science (CODES) at the University of Tasmania, Australia for 30 years, where he served as Head of the School of Earth Sciences and Director of CODES</li> </ul>

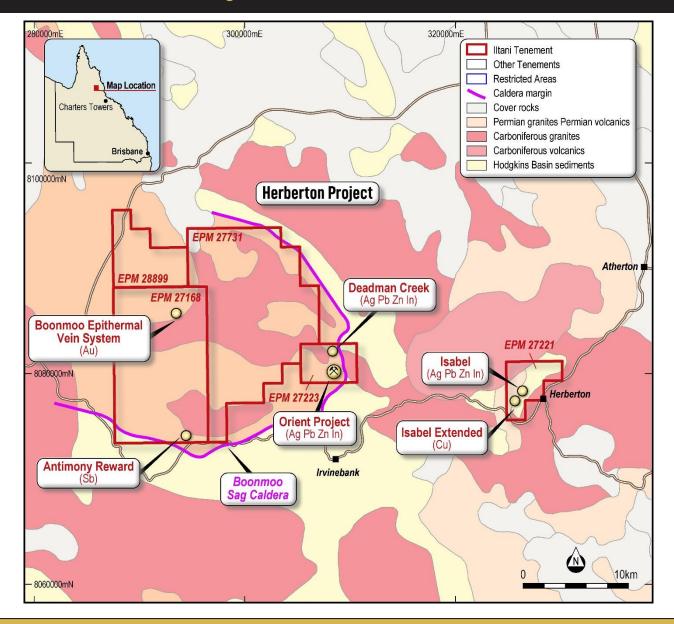


## **Project Portfolio**



- Iltani continues to build a portfolio of advanced Australian Critical Mineral Projects through acquisition and application
- Our exploration and development activities focus on:
  - Silver
  - Indium
  - Copper
  - Zinc
  - Tin
- These metals are all in high demand due to their increasing use in clean energy and sustainable technologies

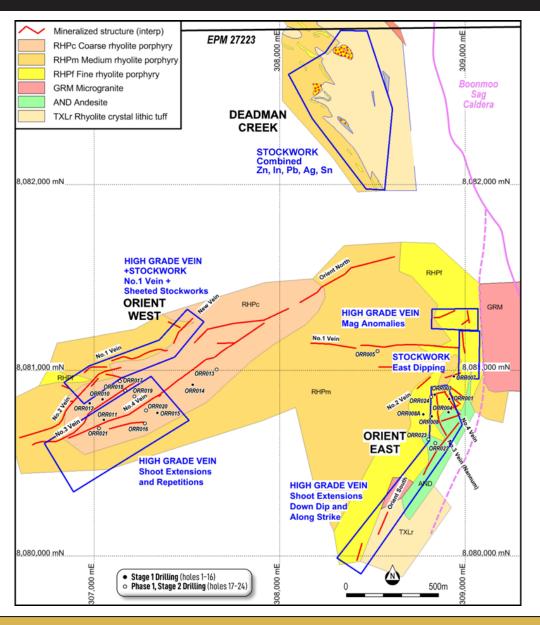
### **Herberton Project North Queensland**



- Strategic tenement holding in highly prospective **Herberton region**
- Multiple advanced exploration projects:
- Orient
  - Ag Pb Zn In Sn epithermal vein system
  - Potential Sn porphyry at depth
- Isabel
  - Exceptional high-grade Ag Pb Zn In Sn massive sulphide pipe
- **Isabel Extended** 
  - High-grade massive Cu Pb Zn Ag sulphides
- Boonmoo
  - Low sulphidation epithermal Au system
- **Antimony Reward** 
  - High-grade antimony rich vein system



## **Orient System**



- Orient is an extensive precious metal-rich epithermal system with a likely intrusion (porphyry) at depth
- Strong similarities to the large Bolivian Ag-Zn-Pb-In-Sn systems
- Hosts multiple high-grade zinc-lead-silver-indium veins and stockworks outcropping over at least 4km<sup>2</sup> area
- **Zoned hydrothermal alteration (phyllic, argillic & propylitic)** surrounding mineralisation
- Three main target areas:
  - **Orient West**
  - **Orient East**
  - **Deadman Creek**
- Mined from 1886 to 1924, with extensive (>200) historical workings – targeted high-grade direct shipping silver-lead oxide ore

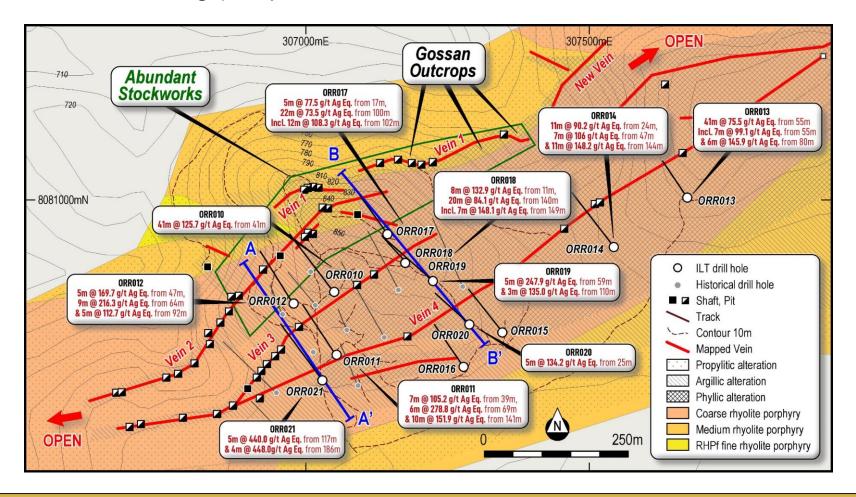
## **Orient System – Iltani Drilling**



- Iltani commenced drilling in August 2023 targeting Orient West & East
- First drilling at Orient since early 1980s
- Completed 20 RC holes (3,310m drilled) in 2023
- Delivered multiple hits of silver-lead-zinc-indium-tin mineralisation confirming potential of Orient System to host a world class discovery
- Current RC program commenced in May 2024
- To date (20 May 2024), we have completed 6 RC holes (1,434m) drilled) from an 11 RC hole (2,300m) program
- Assay results will start being received in approx. 4 weeks time

### **Orient West – Excellent Results from Initial Drilling**

- Multiple stacked vein systems zone of 250m to 300m width
- Estimated strike length in excess of 1,900m (based on drilling and historic workings) - open to SW and NE



### **Open Pit Potential**

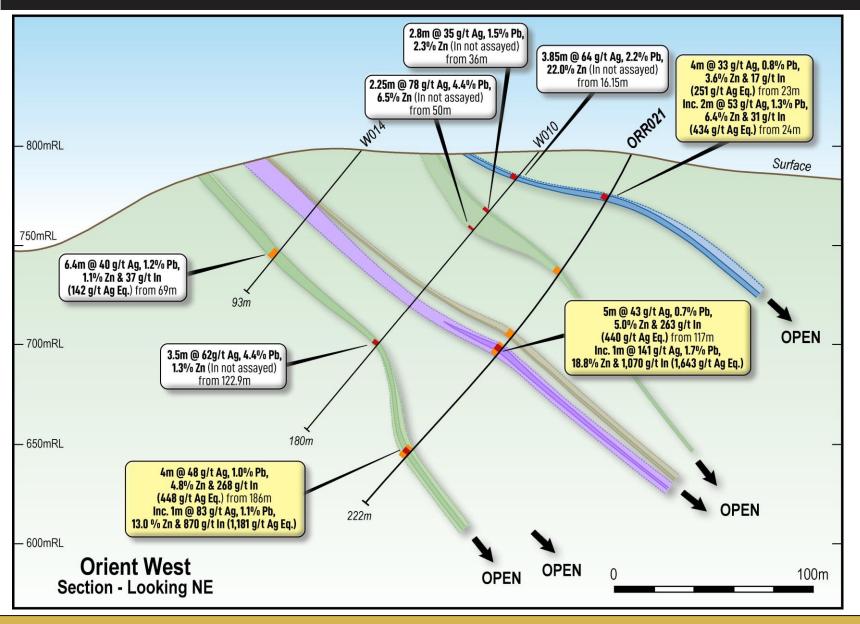
- ORR010: 41m @ 125 g/t Ag Eq. from 60m
- ORR012: 9m @ 216 g/t Ag Eq. from 63m
- ORR014: 11m @ 148 g/t Ag Eq. from 144m
- ORR011: 10m @ 152 g/t Ag Eq. from 141m

### **High Grade UG Potential**

- ORR021: 5m @ 440 g/t Ag Eq. from 117m
- ORR021: 4m @ 448 g/t Ag Eq. from 186m
- ORR012: 3m @ 526 g/t Ag Eq. from 67m
- ORR011: 3m @ 505 g/t Ag Eq. from 71m

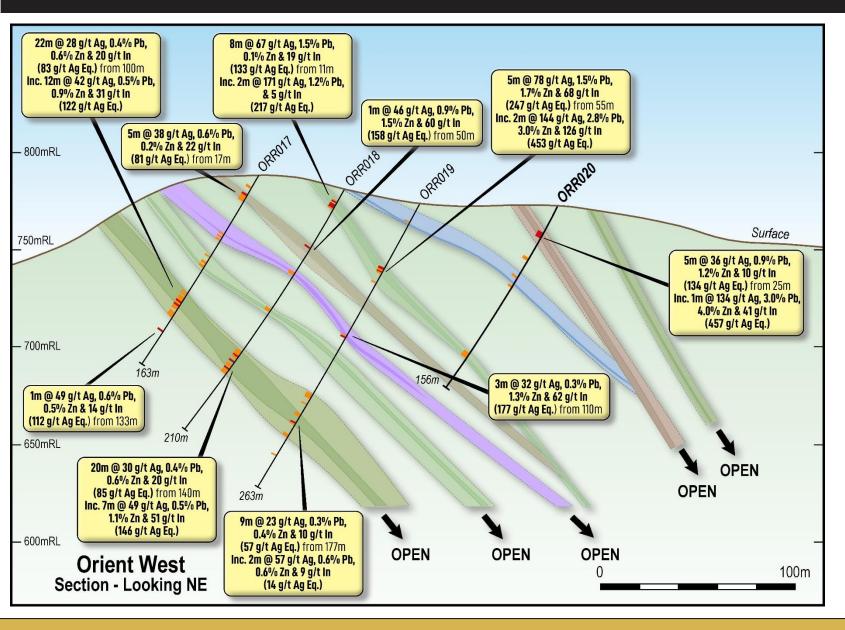


## **Orient West – Cross Section (A to A')**



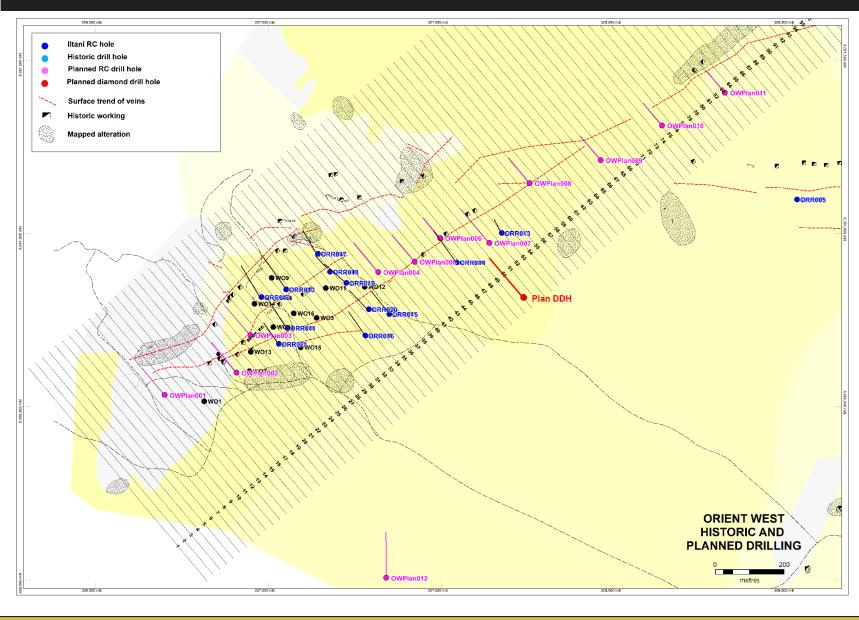
- Highest ever indium drilling results announced on ASX
- 5m @ 43 g/t Ag, 0.7% Pb, 5.0% Zn & 263 g/t In (440 g/t Ag Eq.) from 117m inc.
  - 1m @ 141 g/t Ag, 1.7% Pb, 18.8% Zn & **1,070 g/t In** (1,643 g/t Ag Eq.) from 117m
- 4m @ 48 g/t Ag, 1.0% Pb, 4.8% Zn & 268 g/t In (448 g/t Ag Eq.) from 186m inc.
  - 1m @ 83 g/t Ag, 1.1% Pb, 13.0% Zn & 870 g/t ln (1,181 g/t Ag Eq.) from 187m
- Open in all directions (strike and dip)

## **Orient West – Cross Section (B to B')**



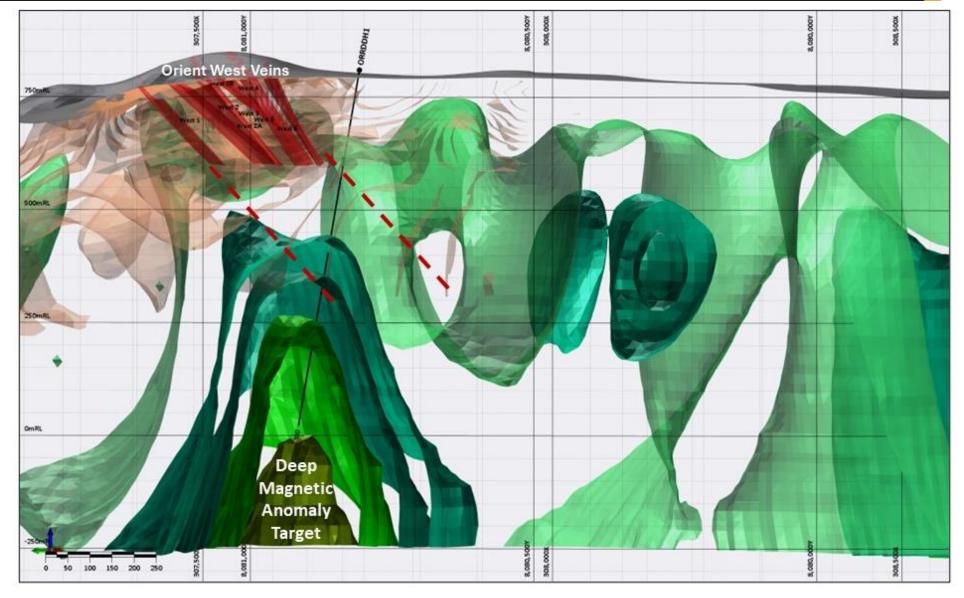
- Outcropping along prominent ridge line
- Open down dip deepest drill intersection to date 220m below surface on Vein 1 (most westerly vein).
- Broad zones of sulphide veinlets and stockworks adjacent to massive sulphide veins intersected in drilling

## May 2024: Next Round of RC Drilling at Orient West



- Drilling underway 11 RC drill holes (2,300m) at Orient West
- To date (20 May 2024), we have completed 6 RC holes (1,434m drilled), assay results will start being received in ~4 weeks time
- Drilling to cover 1,900m strike extent – extending mineralisation to northeast and southwest
- Will support the estimation of an Orient West Exploration Target, forming the basis for subsequent Mineral Resource Estimate drilling
- Iltani will also drill one RC drillhole (250m) to test a high priority geophysical target (A2) near Orient West

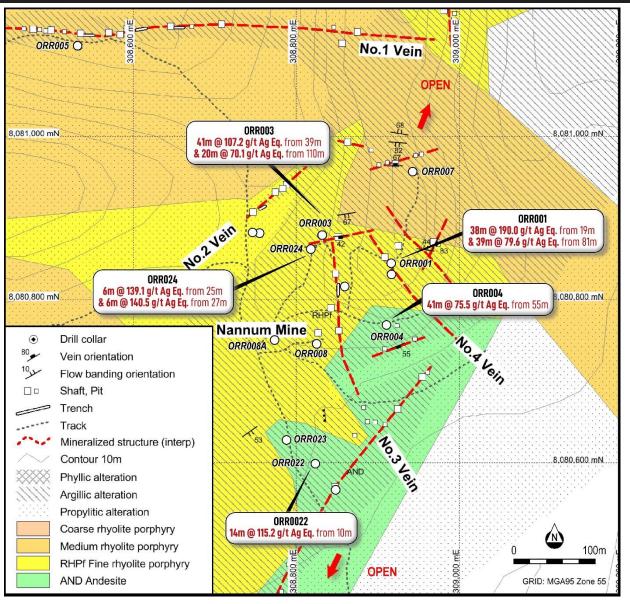
# June to August 2024: Orient West Deep Diamond Hole



- \$300k QLD Gov CEI grant to fund a deep diamond hole (~750m vertical depth) & DHEM survey
- Test down dip extension of Orient West vein system & geophysical anomaly located beneath Orient West system
- Target a deep porphyry

   source of mineralising fluids and potential larger accumulations of mineralisation (copper and/or tin) at depth

# Orient East – Bulk Tonnage Open Pit & UG Potential



- Central stockwork zone (600m x 300m, to 120m depth)
- E-W veins historically worked over 750m strike
- Open in all directions (strike and dip)
- Drilling planned to test vein system strike extensions

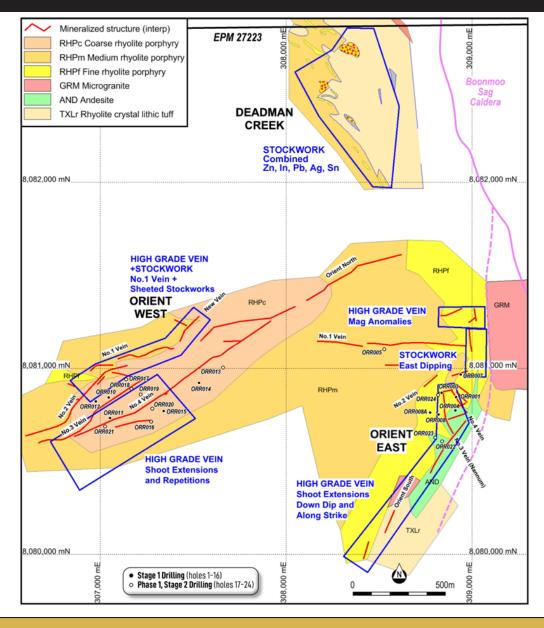
### **Open Pit Bulk Tonnage Potential**

- ORR001: 38m @ 190 g/t Ag Eq. from 19m
- ORR003: 41m @ 107 g/t Ag Eq. from 39m
- ORR022: 14m @ 115 g/t Ag Eq. from 10m

### **High-Grade UG Potential**

- ORR001: 7m @ 454 g/t Ag Eq. from 27m
- ORR003: 5m @ 346 g/t Ag Eq. from 59m

## **Orient System Summary**



#### **Orient West**

- Stacked vein system extends over at least 1,900m strike, zone of 250m to 300m width
- Open along strike and down dip

#### **Orient East**

- Central stockwork complex, vein systems extend over area of 600m x 300m, to 120m depth, as defined to date by drilling
- E-W veins historically worked over 750m strike
- Open along strike (N-S and E-W) and down dip

#### **Deadman Creek**

- Stockwork target (1000m x 400m)
- Attractive target for an open pit resource
- Lack of large veins possibly discouraged historical mining

### **Deep Porphyry Target**

- Orient believed to host a deeper porphyry system
- Drilling planned to test



## Building a material exposure to silver & critical minerals

- We believe Orient is Australia's most exciting silver-indium project
- Orient could become a significant Australian producer of silver & critical minerals
- Historical test work indicates potential to produce high quality concentrates
  - Zinc-indium-silver concentrate (47 to 48% Zn, 2,000 g/t ln & 200 g/t Ag)
  - Lead-silver concentrate (48% Pb & 2,250 g/t Ag)
- Opens pathways for non-dilutive critical minerals related funding (QLD & Federal) going forward

### Indium

- Current price of ~ US\$ 350/kg
- Global production ~ 1,000 tonnes per annum; recovered from zinc-indium concentrates
- Critical in multiple hi-tech applications:
  - Indium Tin Oxide (ITO) ITO thin film coatings are primarily used for electrically conductive purposes in a variety of flat-panel displays—most commonly liquid crystal displays (LCDs)
  - Other indium end uses include alloys and solders, compounds, electrical components and semiconductors, and research
  - InP-based substrates are used in 5G fiber-optic telecommunications networks where InP lasers and receivers send data through fiber-optic lines



# Summary

Iltani Resources	Highly experienced Board & Management team		
	Building an attractive portfolio of base, precious and critical mineral assets		
	Focused on silver, indium, copper, zinc and tin		
	Well positioned to deliver material shareholder value creation		
Orient Project	Australia's most exciting silver-indium exploration project		
	Epithermal-porphyry system – veins/stockwork/alteration over > 4km²		
	Currently drilling – target initial JORC resource by end 2024		
	Targeting open pit & UG potential		
Actively Exploring	RC drilling at Orient West (May 2024)		
	Orient Deep diamond drillhole (June to August 2024)		
	Deadman Creek mapping (May to June 2024)		
	Accelerating copper exploration activities		





### **Disclaimer**

### **Metallurgical Equivalent Calculation**

The metal equivalent formula is: Ag Eq. = Ag + (Pb x 35.5) + (Zn x 50.2) + (In x 0.47)

Metal Equivalent Calculation - Recoveries and Commodity Prices

Metal	Price/Unit	Recovery
Silver	US\$20/oz	87%
Lead	US\$1.00/lb	90%
Zinc	US\$1.50/lb	85%
Indium	US\$350/kg	85%

It is Iltani's opinion that all the elements included in the metal equivalents calculation have a reasonable potential to be recovered and sold.

### **Competent Persons Statement**

### **Exploration Results**

The information in this report that relates to Exploration Results is based on information compiled by Mr Erik Norum who is a member of The Australasian Institute of Geologists (AIG), and is a consultant engaged by Iltani Resources Limited., and who has sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activities being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting Exploration Results, Mineral Resources and Ore Reserves' (JORC Code).

Mr Norum consents to the inclusion in this report of the matters based on the information in the form and context in which it appears.

### **Disclaimer**

This presentation contains information extracted from ASX market announcements reported in accordance with the 2012 edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves" (2012 JORC Code). Further details (including 2012 JORC Code reporting tables where applicable) of exploration results referred to in this ASX announcement can be found in the following announcements lodged on the ASX:

These announcements are available for viewing on the Company's website <u>www.iltaniresources.com.au</u>. Iltani Resources confirms that it is not aware of any new information or data that materially affects the information included in any original ASX announcement.

Date	Announcement
13 October 2023	Iltani hits wide intersections of silver-lead-zinc-indium-antimony-tin mineralisation at Orient
24 October 2023	Iltani confirms significant new discovery of silver-lead-zinc-indium-antimony-tin system at Orient, QLD
13 November 2023	Test work confirms silver-indium production potential at Orient, QLD
19 February 2024	Drilling points to major silver-indium discovery at Orient, QLD
11 March 2024	Iltani achieves highest reported indium grades in drilling at Orient, QLD
26 March 2024	Iltani awarded CEI grant to fund Orient Deep Diamond Hole
8 April 2024	Iltani to restart drilling at Orient Silver-Indium Project, QLD
6 May 2024	Iltani commences drilling at Orient Silver-Indium Project, QLD