



#### Forward looking statements

Some statements in this presentation regarding estimates or future events are forward looking statements. They involve risk and uncertainties that could cause actual results to differ from estimated results. Forward-looking statements include estimates of future production, reserve and mineralised material estimates, capital costs, and other estimates or prediction of future activities. They include statements preceded by words such as "believe", "estimate", "expect", "intend", "will" and similar expressions. Actual results could differ materially depending on such things as political events, labour relations, currency fluctuations and other general economic conditions, market prices for Zenith Minerals Limited products, timing of permits and other government approvals and requirements, change in operating conditions, lower than expected ore grades, unexpected ground and mining conditions, availability and cost of materials and equipment, and risks generally inherent in the ownership and operation of mining properties and investment in foreign countries.

#### Information presented is a summary

This presentation aims to provide a high-level summary of various technical aspects of the Company's projects. For more details on the underlying technical parameters the reader is referred to the ASX Reports on the Zenith Minerals Limited's website: www.zenithminerals.com.au

#### JORC competent persons statements

The information in this report that relates to Exploration Results and Mineral Resources is based on information compiled by Mr Michael Clifford, who is a Member of the Australian Institute of Geoscientists and an employee of Zenith Minerals Limited. Mr Clifford has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking 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'. Mr Clifford consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

The information in this report that relates to Exploration Results and Mineral Resources is based on information compiled by Mr John Horton, who is a Fellow and Chartered Professional of the Australasian Institute of Mining and Metallurgy and a full time employee of ResEval Pty Ltd. Mr Horton has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking 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'. Mr Horton consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

#### Material ASX releases previously released

The Company has released all material information that relates to Exploration Results, Mineral Resources and Reserves, Economic Studies and Production for the Company's Projects on a continuous basis to the ASX and in compliance with JORC 2012. The Company confirms that it is not aware of any new information that materially affects the content of this ASX release and that the material assumptions and technical parameters remain unchanged. Material ASX releases related to the results reported in this report are listed on the respective project pages.

# **Investment Highlights**



#### Focus on building lithium endowment - substantial lithium drilling campaigns funded by JV partner until BFS



Strong balance sheet -

Earaheedy JV (ZNC 25%) expect maiden mineral resource in early 2023 and substantial drilling campaigns funded by JV partner until BFS.





ASX:ZNC



**Share Price** 

\$0.23



**Shares on Issue** 

351.7m



**Market Cap** 

\$82m



Cash<sup>1</sup>

\$5.0m



**Listed Equities**<sup>1</sup>

\$6.8m



**Enterprise Value** 

\$70m

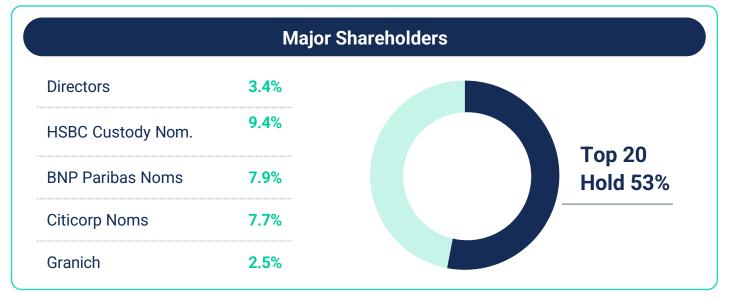
<sup>1</sup> As at 31 December 2022



# **Corporate Snapshot**

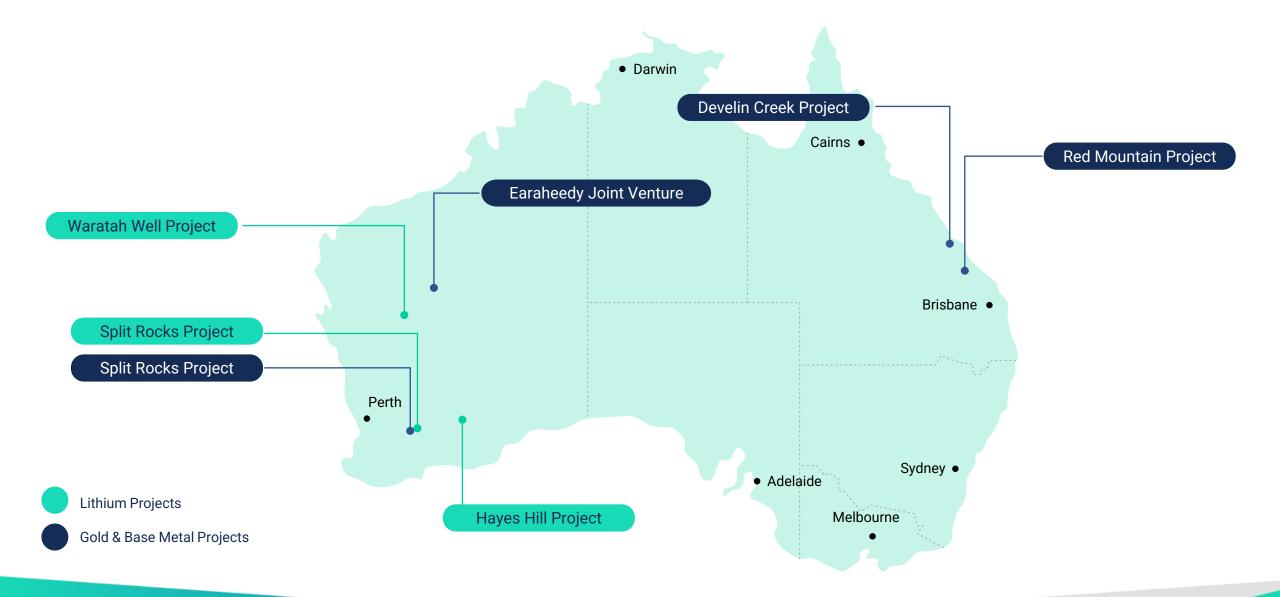
**ASX:ZNC** 

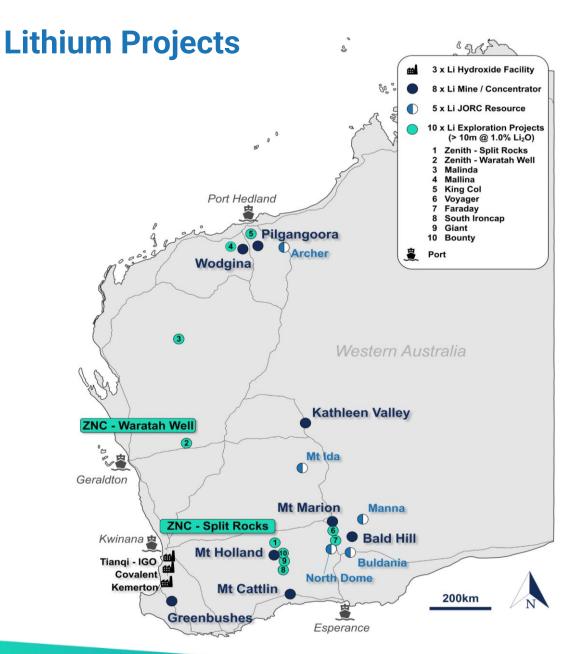


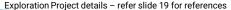


#### **Focused on two areas**













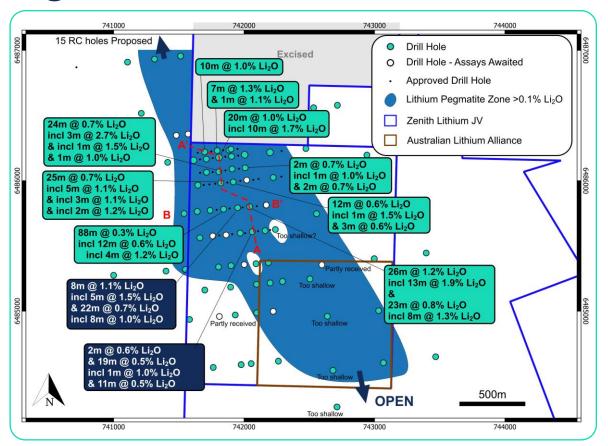


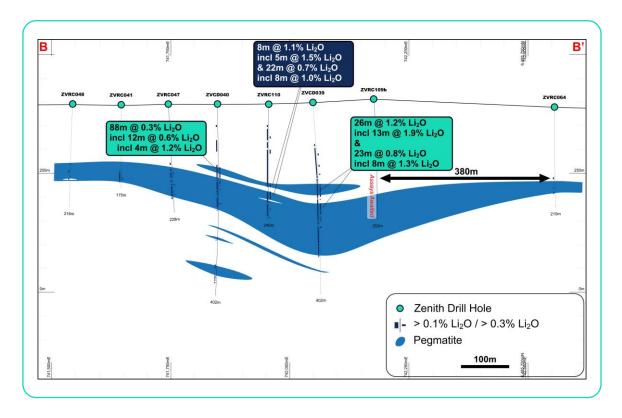
Zenith owns 2 of the 10 best exploration prospects in WA (Split Rocks & Waratah Well)

# **Split Rocks – Lithium Rio Prospect**



- 2022 Program 100 holes for 22,369m
- Assays awaited for approximately 21 holes

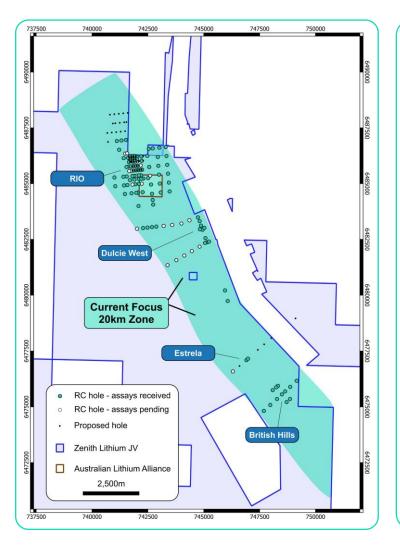


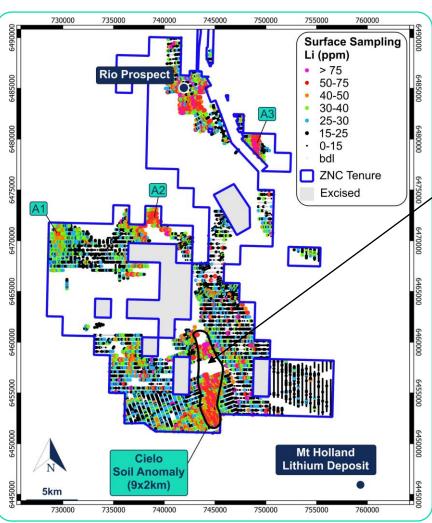


<sup>\*</sup> For full results and intersections refer ASX announcement 20-Sep-22 and 14-Feb-23

# **Split Rocks - Regional - Strong Blue-Sky Potential**







**New Lithium Target – "Cielo"** 

- Large Geochem anomaly 9km in length by 2km wide
- Orill testing early 2023

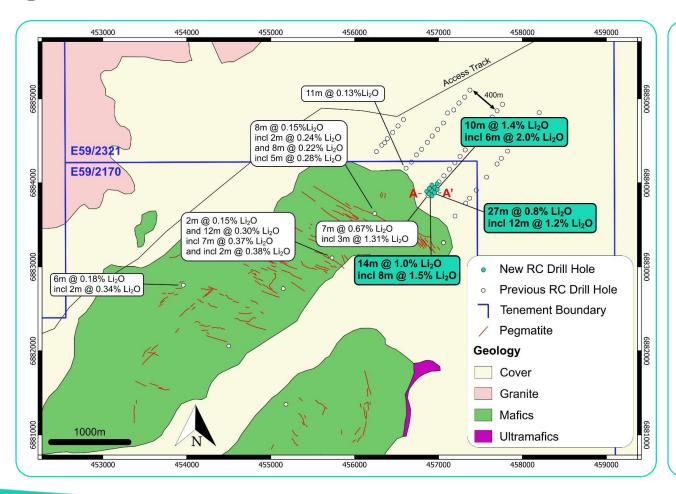
ZNC ASX Release 9-Feb-2023

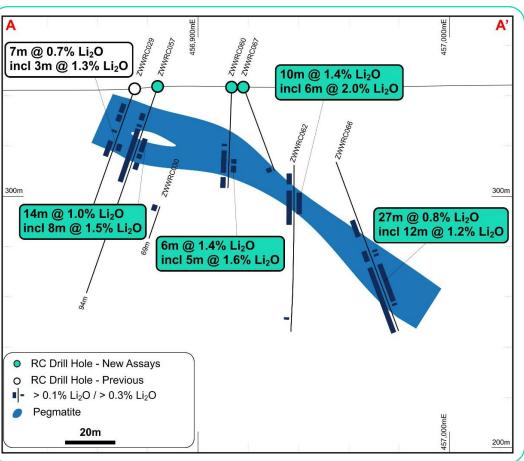
# **Waratah Well - High Grade Lithium Drill Results**



High-grade lithium open to north, south and east under shallow soil cover

Follow-up drilling planned - early 2023

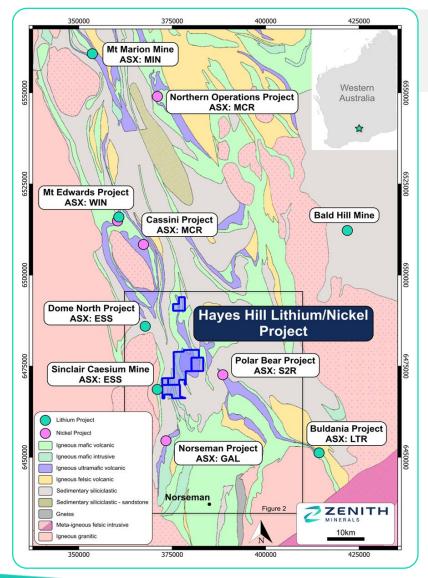




<sup>\*</sup> For full results drill refer ASX Release 24-Jan-23

# **Hayes Hill**





#### **New Lithium – Nickel Project**

- Option to acquire 100% of the project\*
- 2 ELs and 3 ELA's
- SE of the Dome North Li deposits (ESS), immediately east of the Sinclair Cs deposit (ESS), NW of the Buldania Li deposits (LTR)
- Target 2 high-tenor Ni-Cu-Pt-Pd surface geochemical anomalies north of the Calisto Ni-PGE discovery and S2R's Polar Bear Ni prospects

\*Option to acquire - refer ASX Release 19-Jan-23

#### **Gold and Base Metal Assets**



#### Advance, develop or monetise

- Split Rocks Gold: Adjacent to the lithium site in Western Australia 100% interest
- Develin Creek Copper / Zinc: Northern Queensland 100% interest
- Red Mountain Gold: Queensland 100% interest
- Earaheedy Zinc / Lead: Western Australia 25% interest. Rumble Resources 75% (ASX:RTR Mkt Cap \$140m)

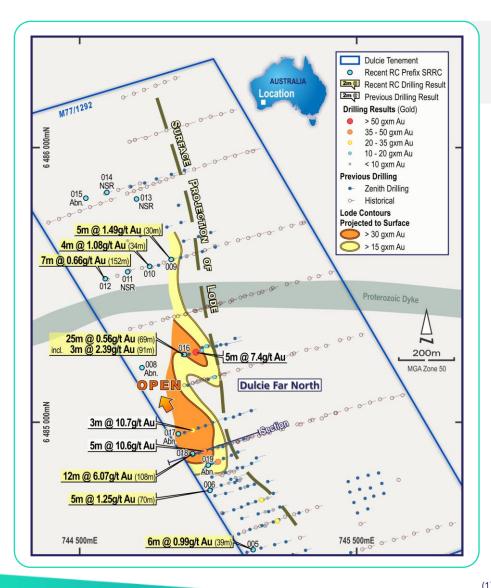
Zenith is exploring these assets with a dedicated team led by Kevin Seymour.





# Split Rocks (Dulcie Far North) - Gold Exploration





#### **Fast Track Dulcie Far North Resource Definition Drilling**

- High grade gold mineralisation intersected, including:
  - 12m @ 6.07 g/t Au <sup>(1)</sup>
  - 5m @ 10.6 g/t Au
  - 12m @ 2.86 g/t Au and
  - 3m @ 10.7 g/t Au
- Mineralisation targeted over 460m strike
- 40m x 40m infill drilling planned for maiden JORC resource @ June 2023
- 1,890m RC drilling from 19 holes + 800m from 15 Diamond tails planned
- Orilling scheduled to commence in March, subject to approvals

<sup>(1)</sup> ASX ZNC Release dated 25 January 2023

# Red Mountain Gold-Silver; Intrusion Related Breccia Pipe



Located 400km NW of Brisbane in central Queensland

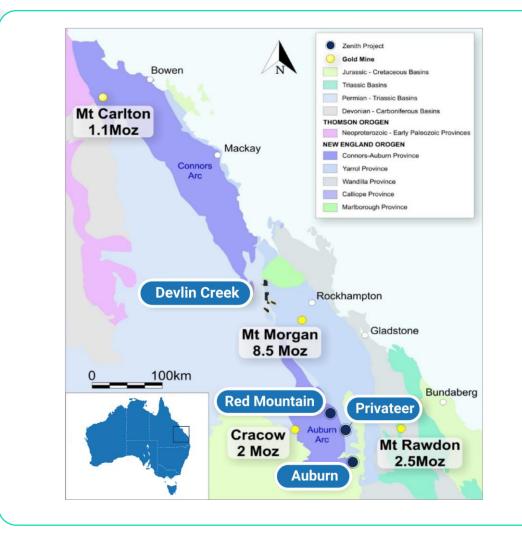
**Nestled between Cracow (Aeris Resources) and Mt Rawdon (Evolution Mining)** 

 $\bigcirc$ 

Zenith's drilling has returned compelling high-grade gold and silver intersections including:

- 13m @ 8.0g/t Au from surface incl. 6m @ 16.7 g/t Au
- 15m @ 3.5 g/t Au incl. 2m @ 22.4 g/t Au
- 12m @ 4.9 g/t Au incl. 6m @ 9.4 g/t
- 5m @ 10.4 g/t Au incl. 1m @ 49.9 g/t Au
- 5m @ 3.5 g/t Au and 54.3 g/t Ag
- 10m @ 2.7 g/t from surface incl. 4m @ 4.9 g/t Au
- (V)

Deeper RC/Diamond drilling in 2023 will target the depth extensions of the breccia pipe @ 400mbs.



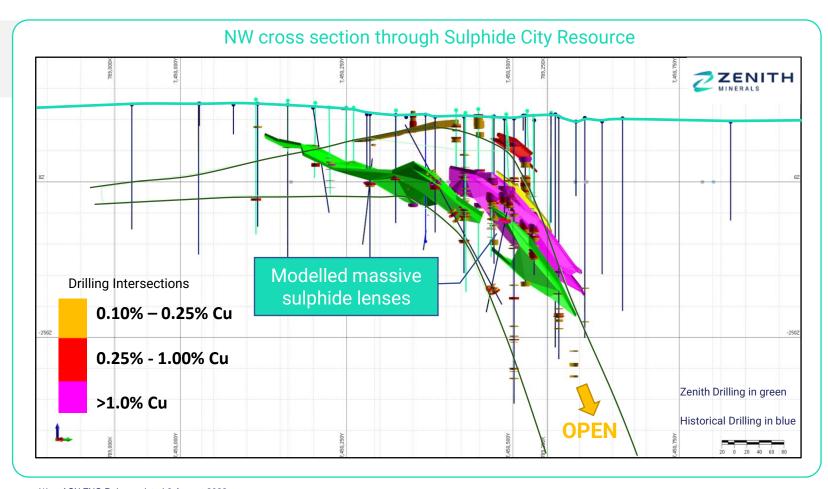
<sup>\*</sup> For full results drill refer ASX Release 19-May-21

# **Develin Creek - Copper - Zinc; Emerging VHMS Field**



# Located 80km NW of Rockhampton, QLD within the Rookwood Volcanics

- Sulphide City JORC (2012) Inferred Mineral Resource of:
  - 4.9Mt @ 1.2% Cu, 1.4% Zn, 0.2 g/t Au & 7 g/t Ag <sup>(1)</sup>
- New folded stratigraphy model will target high grade copper extensions along NW trending transfer faults
- 2023 planned exploration:
  - Deeper resource extension RC/DDH drilling over Sulphide City
  - Ground EM to refine VTEM plates around Sulphide City
  - RC drilling of ground EM plates + drilling the depth extensions to Snook (30km south of Sulphide City)

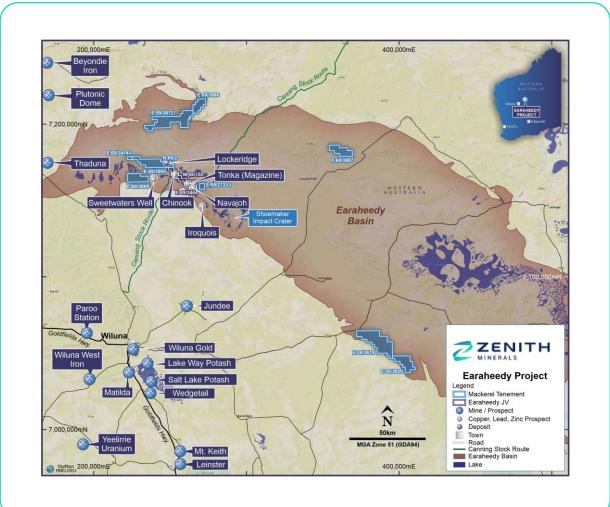


(1) ASX ZNC Release dated 8 August 2022

## Earaheedy - Zinc/Lead/Silver (25% free carry to Competion of BFS)



- Zenith Minerals Ltd (ASX: ZNC) holds a 25% free carried interest in the Earaheedy Joint Venture (EJV) an emerging Tier-1 base metal province
- Maiden EJV Zn-Pb-Ag resource scheduled for the first half 2023
- High-grade polymetallic copper-silver-tungsten mineralisation announced by funding partner Rumble Resources (ASX: RTR): (ASX: RTR Release 3 Nov 2022) including:
  - 40cm @ 4450 g/t Ag, 3.37% Cu, 0.52% W from 115.3m in EHD010
  - 60cm @ 861 g/t Ag, 3.20% Zn from 81m in EHD009 and
  - 20cm @ 1100 g/t Ag, 0.27% Cu, 0.34% W from 83.8m in EHD018
- Outstanding initial flotation testwork results from zinc sulphide dominant ores (ASX: RTR Release 17 Nov 2022) including:
  - High zinc recoveries to 90% Zn in cleaner concentrates
  - Course primary grind size of 150 microns
  - Zinc concentrate grades to 59% Zn with no significant deleterious elements
- Outside the EJV, Zenith is looking to sell/JV its 100% owned Earaheedy Zinc Project encompassing 9 EL's with 100km strike around the basin margin



### **Board and Management**



#### **David Ledger Executive Chairman**

- Over 35 years in investment banking, with experience working in the United Kingdom and Australia.
- Former Executive Director of a major European Bank and has been advising institutional and corporate clients throughout his career.
- Currently works in Sydney as a Corporate Advisor with MST Financial, a specialist investment firm that provides research, sales trading and corporate finance solutions for domestic institutional clients and corporates.

#### Michael Clifford Chief Executive Officer

- Geologist (BSc (Hons) MSc) 30+ years' exploration.
- Senior technical and business development roles whilst at BHP Billiton Australia, Acacia Resources and AngloGold Ashanti rising to Regional Exploration Manager Australia.
- Former MD of ASX listed PacMag Metals from 2005, until its takeover in 2010, when he co-founded private explorer S2M2 Coal Pty Ltd.
- International exploration experience in the USA, Indonesia, Brazil, PNG, Angola, DRC, Mexico and Mongolia.

#### **Kevin Seymour** General Manager Discovery

- Highly experienced and credentialled exploration geologist with broad experience across different commodities and geological terrains.
- Former MD of Woomera Mining and General Manager of Exploration at Ramelius Resources.
- Held senior exploration roles with Glengarry Resources, Sons of Gwalia and Delta Gold. Kevin has a track record of bringing projects into development and monetizing them.

#### **Andrew Bruton Non-Executive Director**

- Experienced director, listed company CEO and corporate advisor.
- Over 20 years of direct experience in advancing complex mining, oil & gas and energy projects and transaction within Australia and overseas.
- Former CEO of MacArthur Minerals delivering the feasibility study on their iron ore assets.
- Previously a specialist lawyer for 20 years for one of the leading national firms and was awarded "Most Trusted Mining and Resource CEO 2022" by CEO Monthly Magazine.
- Bachelor of Business and a Bachelor of Laws from Queensland University and is a Member of the AICD.

#### **Stan Macdonald Non-Executive Director**

 Associated with the mining and exploration industry for many years, having been instrumental in the formation of numerous ASX listed companies, including Giralia Resources NL, where he was Director for over 23 years.

#### **Lithium Joint Venture**



#### Strategic Investment

Shifted focus to exploration of lithium tenements having entered into a joint venture agreement with EV Metals Group, an international organisation committed to becoming a global leader in battery chemicals and technology. On signing of that agreement, EV Metals invested an initial \$6m into Zenith.



#### Earn In

EV Metals can earn a **60**% interest in the lithium projects represented by two initial **100**% owned Zenith Projects, Waratah Well and Split Rocks, by spending a minimum of **\$7m** within 24 months and delivering a Bank Feasibility Study.



#### **Financing**

EVM is required to arrange 100% of the financing for the capital costs of development, construction and commissioning of any future mine, processing plant and related infrastructure.



\* For details refer ASX Release 13-Jan-22

# References



Western Australian Lithium Exploration Projects with drill intersections >10m @ 1%Li2O		
Name	Reference	Owner
Bounty	ASX: KDR 19 December 2017	Westfarmers & SQM JV - Covalent Lithium
South Ironcap	ASX: WSA 22 April 2016	IGO - Western Areas
Giant	ASX: MZN 20 December 2016	Forrestonia
Faraday	ASX: WIN 9 January 2023	Widgie Nickel
Voyager	ASX: WIN 17 January 2023	Widgie Nickel
Kangaroo Hills	ASX: AOU 24 November 2022	Auroch
Rio	ASX: ZNC 4 April 2022	ZNC
Waratah Well	ASX: ZNC 24 January 2023	ZNC
King Col	ASX: DEG 15 November 2018	DeGrey
Mallina	ASX: 1MC 7 December 2022	Morella Corporation
Malinda	ASX: RDT 20 January 2023	Red Dirt



# AUSTRALIAN-BASED MINERALS EXPLORER FOR THE PRODUCTS OF TOMORROW

Zenith Minerals Limited (ASX:ZNC) Investor Presentation February 2023

David Ledger Executive Chairman david@zenithminerals.com.au +61 413 621 964

www.zenithminerals.com.au

